

# **ΠΑΝΤΕΙΟ ΠΑΝΕΠΙΣΤΗΜΙΟ** ΤΜΗΜΑ ΔΗΜΟΣΙΑΣ ΔΙΟΙΚΗΣΗΣ

# ΥΠΟΤΙΜΗΣΗ & ΕΙΣΑΓΟΜΕΝΟΣ ΠΛΗΘΩΡΙΣΜΟΣ : Η ΠΕΡΙΠΤΩΣΗ ΤΗΣ ΕΛΛΑΔΑΣ. ΜΙΑ ΑΝΑΛΥΣΗ ΕΙΣΡΟΩΝ ΕΚΡΟΩΝ



# ΚΑΤΣΙΝΟΣ ΑΠΟΣΤΟΛΗΣ ΕΠΙΒΛΕΠΩΝ ΚΑΘΗΓΗΤΗΣ: ΘΕΟΔΩΡΟΣ ΜΑΡΙΟΛΗΣ

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2009 - 2011

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# 1.Πρόλογος

Όπως είναι γνωστό κάθε κράτος έχει στη διάθεσή του δύο εργαλεία άσκησης της οικονομικής του πολιτικής, την νομισματική και την δημοσιονομική πολιτική. Οι κυβερνήσεις χρησιμοποιούν αυτές τις πολιτικές για να βοηθήσουν την χώρα σε περιόδους οικονομικής διαταραχής. Η πολιτική που θα χρησιμοποιηθεί έγκειται στη κρίση της κυβέρνησης και μπορεί να είναι ακόμα και συνδυασμός των δύο πολιτικών. Στη παρούσα εργασία μας αφορά άμεσα η νομισματική πολιτική, έτσι θα ασχοληθούμε μόνο με αυτή.

Η νομισματική πολιτική υπαγορεύεται από την κυβέρνηση της χώρας και την αρμοδιότητα εκτέλεσής της την έχει η κεντρική τράπεζα της χώρας. Δύο από τις βασικότερες έννοιες αυτής της πολιτικής είναι η υποτίμηση και η ανατίμηση του νομίσματος. Υποτίμηση (devaluation) ονομάζεται η μείωση στην συναλλαγματική ισοτιμία (ανταλλακτική αξία) ενός νομίσματος σε σχέση με ένα ξένο νόμισμα ενώ ανατίμηση (revaluation) είναι η αύξηση στην συναλλαγματική ισοτιμία.

Η υποτίμηση του νομίσματος μιας χώρας όπως μας εξηγούν στο βιβλίο τους οι Krugman Paul R. και Obstfeld Maurice «Διεθνής Οικονομική – Θεωρία και Πολιτική» είναι αποδεδειγμένα ένας τρόπος για βελτιωθεί ισοζύγιο τρεγουσών συναλλαγών1 να το και η ανταγωνιστικότητα της χώρας. Οι θετικές όμως επιδράσεις της υποτίμησης, γρήγορα περιορίζονται και μακροχρόνια αντικαθίστανται με αύξηση του «κόστους» παραγωγής<sup>2</sup>. Αυτή η αύξηση του «κόστους» έχει ως αποτέλεσμα να γάνει η οικονομία παραγωγής σε ανταγωνιστικότητα και το ισοζύγιο τρεχουσών συναλλαγών να επιδεινώνεται. Βέβαια εκτός από τις επιδράσεις της υποτίμησης στο «κόστος» παραγωγής μακροχρόνια υπάρχουν και επιπτώσεις στις τιμές των προϊόντων (που θα αναλύσουμε στη εργασία μας), στην κατανομή του εισοδήματος και στην απασχόληση<sup>3</sup>.

<sup>&</sup>lt;sup>1</sup>Krugman Paul R. & Obstfeld Maurice, (2002), Διεθνής Οικονομική – Θεωρία και Πολιτική, Αθήνα, Εκδόσεις «Κριτική», σελίδα 207και 237 – 239

<sup>&</sup>lt;sup>2</sup>Θεόδωρος Μαριόλης – Χαράλαμπος Οικονομίδης – Γιώργος Σταμάτης – Νίκος Φουστέρης, 1997, Ποσοτική εκτίμηση των επιπτώσεων της υποτίμησης στο «κόστος» παραγωγής, Αθήνα, Εκδόσεις «Κριτική» σελίδα 1

<sup>3</sup>Για μία θεωρητική ανάλυση των μακροχρόνιων επιπτώσεων της υποτίμησης στις τιμές, στην κατανομή του εισοδήματος και στην απασχόληση, σε συστήματα απλής παραγωγής (single production) και συμπαραγωγής (joint production), βλ. Metcalfe and Steedman (1981) και Mariolis (2008), αντιστοίχως.

Πως όμως μεταβάλλεται το γενικό επίπεδο τιμών μετά από μία υποτίμηση; Ποίος είναι ο μηχανισμός μετάδοσης της επίδρασης της υποτίμησης στην ανταγωνιστικότητα και το ισοζύγιο τρεχουσών συναλλαγών; Η απάντηση στο πρώτο ερώτημα είναι ότι η μεταβολή του επιπέδου τιμών εξαρτάται από το μέγεθος της υποτίμησης αλλά και από το πόσο η παραγωγή της οικονομίας εξαρτάται από το εξωτερικό (ενδιάμεσες εισροές). Σχετικά με το δεύτερο ερώτημα που ειπώθηκε ο μηχανισμός μετάδοσης της επίδρασης της υποτίμησης έχει ως εξής: Η υποτίμηση του νομίσματος έγει αρχικά ως αποτέλεσμα να γίνονται φτηνότερα τα προϊόντα που παράγει η χώρα σε σχέση με τα προϊόντα των άλλων χωρών αλλά και τα προϊόντα των άλλων χωρών να γίνονται ακριβότερα για τους κατοίκους της χώρας που έκανε υποτίμηση. Αυτό αυξάνει τη ζήτηση των εγχώριων προϊόντων από το εσωτερικό (αφού η τιμή των εισαγόμενων προϊόντων αυξάνεται) και το εξωτερικό (άρα το εμπορικό ισοζύγιο βελτιώνεται). Ταυτόχρονα όμως γίνονται ακριβότερες οι εισαγωγές της χώρας αφού για να εισάγει τα ίδια προϊόντα απαιτούνται περισσότερες μονάδες εγχώριου νομίσματος. Οι ακριβότερες εισαγωγές και ειδικότερα τα ακριβότερα εισαγόμενα προϊόντα που χρησιμοποιούνται για την παραγωγή άλλων προϊόντων (ενδιάμεσες εισροές) έχει ως αποτέλεσμα να εκτινάσσει το «κόστος» παραγωγής των προϊόντων και να αυξάνει τον πληθωρισμό. Τέλος, η αύξηση του «κόστους» παραγωγής επιδεινώνει την ανταγωνιστικότητα, το εμπορικό ισοζύγιο και κατ' επέκταση το ισοζύγιο τρεχουσών συναλλαγών της χώρας.

Βέβαια το οικονομικό περιβάλλον και η άσκηση της οικονομικής πολιτικής μιας χώρας είναι τελείως διαφορετικά όταν μία χώρα ενταχθεί σε μία νομισματική ένωση. Με την ένταξη μιας χώρας σε νομισματική ένωση συνεπάγεται αυτόματα δύο πράγματα. Πρώτον την παραχώρηση της άσκησης της νομισματικής πολιτικής της χώρας στην κεντρική τράπεζα της νομισματικής ένωσης που αυτό κατ' επέκταση σημαίνει ότι η χώρα δεν μπορεί να χρησιμοποιήσει κανένα εργαλείο της νομισματικής πολιτικής και περιορίζεται μόνο στην άσκηση της δημοσιονομικής πολιτικής. Δεύτερον το οικονομικό περιβάλλον της χώρας χωρίζεται σε 2 τμήματα, στο εσωτερικό και το εξωτερικό οικονομικό περιβάλλον. Το εσωτερικό περιβάλλον το αποτελούνε οι χώρες που είναι μέλη της ίδιας νομισματικής ένωσης και το εξωτερικό περιβάλλον το αποτελούν οι χώρες που δεν είναι μέλη της ένωσης.

Σε μία τέτοια νομισματική ένωση ανήκει και η Ελλάδα, ενώ μέχρι το 2000 είχε το δικό της νόμισμα, την δραχμή, στη συνέχεια εντάχθηκε στην Οικονομική και Νομισματική Ένωση (ONE), υιοθέτησε το ευρώ και άλλαξε τελείως ο τρόπος άσκησης της οικονομικής πολιτικής της χώρας καθώς και το οικονομικό περιβάλλον.

Έτσι, ενώ πριν το 2000 η Ελλάδα χρησιμοποιούσε ιδιαίτερα την νομισματική πολιτική (υποτίμηση το 1983 κατά 15% έναντι του ECU το 1985 κατά 15%, το 1998 κατά 12,1%, το 2000 ανατίμηση 3,5%)<sup>4</sup> μετά το 2000 η πολιτική αυτή ασκείται από την Ευρωπαϊκή Κεντρική Τράπεζα (ΕΚΤ). Επίσης το οικονομικό περιβάλλον της Ελλάδας πριν και μετά το 2000 άλλαξε, έτσι πριν το 2000 το οικονομικό περιβάλλον διαμορφωνόταν μεταξύ της Ελλάδας και όλων των άλλων χωρών, ενώ μετά το 2000 χωρίζεται σε δύο τμήματα. Το εσωτερικό τμήμα που διαμορφώνεται ανάμεσα στην Ελλάδα και τις χώρες – μέλη της ΟΝΕ και το εξωτερικό τμήμα που διαμορφώνεται ανάμεσα στις χώρες μη μέλη της ΟΝΕ και την Ελλάδα.

Σύμφωνα με την έκθεση του Διοικητή της Τράπεζας της Ελλάδος<sup>5</sup> το 39,1% των εμπορικών σχέσεων της χώρας αφορά το εξωτερικό περιβάλλον και το 60,9% αφορά το εσωτερικό (για την περίοδο 2004 – 2006). Επίσης οι κυριότεροι εμπορικοί εταίροι της Ελλάδας την ίδια περίοδο είναι η Γερμανία, η Ιταλία και η Γαλλία με 16,7%, 15,1% και 7% μερίδιο αγοράς αντίστοιχα.

Τέλος να πούμε ότι στη παρούσα εργασία υποθέτουμε ότι η Ελλάδα δεν ανήκει σε καμία νομισματική ένωση έχει το δικό της νόμισμα και ασκεί τη δική της νομισματική πολιτική.

<sup>&</sup>lt;sup>4</sup> Burda Michael & Wyplosz Charles, (2008), Ευρωπαϊκή Μακροοικονομική, Αθήνα, Εκδόσεις «Gutenberg» Σελ 56

 $<sup>^5</sup>$  Έκθεση του Διοικητή της Τράπεζας της Ελλάδος για το έτος 2009 σε<br/>λ154

# 2.Εισαγωγή

Η παρούσα εργασία πραγματεύεται το θέμα της υποτίμησης του εθνικού νομίσματος της Ελλάδας και τις επιπτώσεις που θα έχει μία τέτοια ενέργεια στο «κόστος» των εγχωρίως παραγόμενων εμπορευμάτων. Ειδικότερα η εργασία απαντάει στο ερώτημα σε ποίο βαθμό η υποτίμηση επηρεάζει το επίπεδο τιμών των εγχώριων προϊόντων και κατ' επέκταση το «κόστος» παραγωγής.

Η μελέτη του συγκεκριμένου ζητήματος γίνεται με αφορμή τα σενάρια που κυκλοφορούν ευρύτατα σε εγχώριο και διεθνές περιβάλλον για το ενδεχόμενο απομάκρυνσης της Ελλάδας από τη ζώνη του ευρώ και επιστροφής σε εθνικό νόμισμα. Τα σενάρια αυτά της της αναζωπυρώθηκαν την τρέχουσα περίοδο λόγω της μεγάλης κρίσης που ταλανίζει την ελληνική οικονομία και που μεταφράζεται ως υπέρογκο δημόσιο χρέος που βαίνει αυξανόμενο (289.7 δις ευρώ το 2009, 328.6 δις ευρώ το 2010, 351.5 δις ευρώ το 2011 και 375.8 δις ευρώ το 2012 – σε ποσοστά του ΑΕΠ είναι αντίστοιχα 127.1%, 142.8% 157.7% 166.1% )<sup>6</sup>, υπερβολικά δημόσια ελλείμματα (15.4% του ΑΕΠ το 2009 και 10.5% του ΑΕΠ το 2010)<sup>7</sup> και μείωση του ακαθάριστου εγχώριου προϊόντος (235 δις ευρώ το 2009, 230.2 δις ευρώ το 2010, 222.8 δις ευρώ το 2011 ονομαστικές τιμές )8.

Ένας από τους σημαντικότερους λόγους της τρέχουσας οικονομικής κρίσεις της ελληνικής οικονομίας και της εμφάνισης των παραπάνω οικονομικών επιδόσεων (δημόσιο χρέος, έλλειμμα, και ανάπτυξη του ΑΕΠ) είναι ότι η χώρα υστερεί σε ανταγωνιστικότητα, με αποτέλεσμα το ισοζύγιο τρεχουσών συναλλαγών να είναι αρνητικό (-14% του ΑΕΠ το 2009, -11.8% του ΑΕΠ το 2010, -8.3% του ΑΕΠ το 2011 – σε πραγματικές τιμές)<sup>9</sup>. Έτσι πολλοί υποστηρίζουν ότι η χώρα πρέπει να επιστρέψει σε ένα εθνικό νόμισμα και να το υποτίμηση ώστε να βελτιώσει το ισοζύγιο τρεχουσών συναλλαγών.

 $<sup>^{6}\</sup> http://ec.europa.eu/economy\_finance/ameco/user/serie/ResultSerie.cfm$ 

<sup>&</sup>lt;sup>7</sup> http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=gov\_dd\_edpt1&lang=en

<sup>&</sup>lt;sup>8</sup> http://ec.europa.eu/economy\_finance/ameco/user/serie/ResultSerie.cfm

<sup>&</sup>lt;sup>9</sup> http://ec.europa.eu/economy\_finance/ameco/user/serie/ResultSerie.cfm

Ειδικότερα, υποθέτοντας ως διατηρήσιμη τιμή ισορροπίας για το εξωτερικό χρέος, ως ποσοστό του ΑΕΠ, το 80% (υπόθεση διατηρησιμότητας του IMF) και ρυθμό μεγέθυνσης του ονομαστικού ΑΕΠ ίσο με 5%, προκύπτει ότι το ισοζύγιο τρεχουσών συναλλαγών, ως ποσοστό του ΑΕΠ, πρέπει να συμπιεσθεί στο μείον 3.8%. Ακόμη, λαμβάνοντας υπόψη οικονομετρικές εκτιμήσεις της ελαστικότητας του ισοζυγίου τρεγουσών συναλλαγών ως προς την πραγματική συναλλαγματική ισοτιμία, υπολογίζεται ότι αυτή η συμπίεση προϋποθέτει πραγματική υποτίμηση της τάξης του 22.1% με 46.6% (βλέπε Αναστασάτος, 2009, σσ. 13-15, καθώς επίσης και European Commission, 2010, pp. 3-5)<sup>10</sup>.

Ας αφήσουμε όμως τώρα τις οικονομετρικές εκτιμήσεις και του λόγους που με ώθησαν να μελετήσω αυτό ζήτημα και ας ξεκινήσουμε την ανάλυσή μας. Όπως αναφέραμε και προηγούμενος η εργασία αφορά την ελληνική οικονομία και είναι βασισμένη σε μεγάλο βαθμό στην εργασία των Μαριόλη, Οικονομίδη, Σταμάτη και Φουστέρη 1997 «Ποσοτική εκτίμηση των επιπτώσεων της υποτίμησης στο κόστος παραγωγής». Γενικά δεν υπάρχουν αρκετές μελέτες και αναλύσεις εισροών – εκροών που να πραγματεύονται θέματα σχετικά με το «κόστος» παραγωγής και την επίδραση στο επίπεδο τιμών των προϊόντων στην ελληνική οικονομία. Μία τέτοια μελέτη και ανάλυση έχει πραγματοποιηθεί από τους Γκαργκάνα, Ν. Χ. και Μομφεράτο, Π. Χ. (1979) που έχει τίτλο Διακλαδική Ανάλυση της Συμβολής του Κόστους στη Διαμόρφωση των Τιμών στην Ελλάδα και αφορούσε την ανάλυση εισροών-εκροών για τη συμβολή του «κόστους» στη διαμόρφωση των τιμών στην Ελλάδα, την περίοδο 1971-1978<sup>11</sup>.

Οι κύριες διαφορές της παρούσας εργασίας με την εργασία Μαριόλης *et al.* (1997) έγκεινται στο ότι :

→ η παρούσα εργασία βασίζεται στους πίνακες εισροών – εκροών του 2005 (τελευταία διαθέσιμα στοιχεία) ενώ η αρχική βασίζεται στους πίνακες εισροών – εκροών του 1988.

<sup>10</sup> Αναστασάτος, Τ. (2009) Προς ένα νέο ελληνικό αναπτυξιακό πρότυπο: επενδύσεις και εξωστρέφεια, Eurobank Research: Οικονομία και Αγορές, 5 (7), Νοέμβριος και European Commission (2010) The Economic Adjustment Programme for Greece, European Economy, Occasional Papers 61, May 2010, Brussels, European Commission, Directorate-General for Economic and Financial Affairs.

<sup>11</sup> Γκαργκάνα, Ν. Χ. και Μομφεράτο, Π. Χ. (1979) Διακλαδική Ανάλυση της Συμβολής του Κόστους στη Διαμόρφωση των Τιμών στην Ελλάδα, Αρχείον Μελετών και Ομιλιών, Αθήνα, Τράπεζα της Ελλάδος

→ στη παρούσα εργασία ο πίνακας εισροών – εκροών έχει διαστάσεις (59x59) ενώ στην πρώτη μελέτη του θέματος ο πίνακας έχει διαστάσεις (36x36) δηλαδή οι κλάδοι της οικονομίας είναι συγχωνευμένοι.

→ οι τιμές στη παρούσα εργασία είναι σε ευρώ ενώ στην πρώτη είναι σε δραχμές.

→ στη παρούσα εργασία υπολογίζονται οι επιπτώσεις της υποτίμησης του νομίσματος κατά 15% και 50% (ρεαλιστικό σενάριο με βάση την οικονομική κατάσταση της χώρας αυτή τη περίοδο) ενώ στην αρχική εργασία υπολογίζονται οι επιπτώσεις της υποτίμησης κατά 15%.

Επίσης, η μελέτη των επιπτώσεων της υποτίμησης γίνεται με τη βοήθεια τριών συστημάτων τιμών (τρία μοντέλα):

1°) P = P\*Dom + P\*Imp + P\*K2°) P = (P\*Dom + P\*Imp + P\*B + P\*F)\*(1+r)3°) P = P\*Dom + P\*Imp + A.v

Τα τρία αυτά μοντέλα, περιγράφουν τρείς διαφορετικούς τρόπους μετάδοσης του πληθωριστικού κύματος της υποτίμησης στην ελληνική οικονομία.

Οι κύριες διαφορές των τριών μοντέλων είναι οι εξής :

Στο 1° μοντέλο υποθέτουμε ότι η ακαθάριστη προστιθέμενη αξία κάθε κλάδου παραγωγής εξαρτάται γραμμικά από την τιμή του εμπορεύματος του κλάδου (και μόνο από αυτή)<sup>12</sup>

Στο 2° μοντέλο υποθέτουμε ότι η ακαθάριστη προστιθέμενη αξία κάθε κλάδου παραγωγής εξαρτάται γραμμικά από την τιμή του εμπορεύματος του κλάδου και από τις τιμές των εισροών (εγχωρίων και εισαγομένων) του κλάδου (και μόνο από αυτές)<sup>13</sup>

Στο 3° μοντέλο υποθέτουμε ότι η ακαθάριστη προστιθέμενη αξία κάθε κλάδου παραγωγής δεν μεταβάλλεται συνέπεια μεταβολών των τιμών των εμπορευμάτων<sup>14</sup>

<sup>&</sup>lt;sup>12</sup> Θεόδωρος Μαριόλης – Χαράλαμπος Οικονομίδης – Γιώργος Σταμάτης – Νίκος Φουστέρης, 1997, Ποσοτική εκτίμηση των επιπτώσεων της υποτίμησης στο «κόστος» παραγωγής, Αθήνα, Εκδόσεις «Κριτική Σελ 12

<sup>&</sup>lt;sup>13</sup> Θεόδωρος Μαριόλης – Χαράλαμπος Οικονομίδης – Γιώργος Σταμάτης – Νίκος Φουστέρης, 1997, Ποσοτική εκτίμηση των επιπτώσεων της υποτίμησης στο «κόστος» παραγωγής, Αθήνα, Εκδόσεις «Κριτική Σελ 12

<sup>&</sup>lt;sup>14</sup> Θεόδωρος Μαριόλης – Χαράλαμπος Οικονομίδης – Γιώργος Σταμάτης – Νίκος Φουστέρης, 1997, Ποσοτική εκτίμηση των επιπτώσεων της υποτίμησης στο «κόστος» παραγωγής, Αθήνα, Εκδόσεις «Κριτική Σελ 13

Στο 1° και στο 3° μοντέλο δεν περιέχονται οι φόροι και οι επιδοτήσεις στις μήτρες εγχώριας παραγωγής και εισαγωγών σε αντίθεση με το 2° που λαμβάνονται υπόψη.

Ας πούμε όμως λίγα λόγια για το πώς θα αναλύσουμε την εργασία:

Το πρώτο μας βήμα είναι να «τρέξαμε» στο πρόγραμμα mathematica τα τρία μοντέλα που προαναφέραμε και θα βρούμε αναλυτικά την εξέλιξη των τιμών των εμπορευμάτων.

Το δεύτερο βήμα είναι να υπολογίσαμε τους δείκτες συνολικού πληθωρισμού για τις πρώτες πέντε περιόδους

και

Το τρίτο βήμα είναι να βρούμε τις ιδιοτιμές («ομαλοποιημένες» και μη) και τους δείκτες ταχύτητας σύγκλισης.

Ας ξεκινήσουμε όμως με το τι είναι οι πίνακες εισροών – εκροών (που αποτελούν και τα δεδομένα μας) και έπειτα ας «τρέξουμε» τα τρία μοντέλα που προαναφέρθηκαν.

# 3. Πίνακες Εισροών – Εκροών

#### 3.1 Εισαγωγικά Στοιχεία Πινάκων Εισροών – Εκροών

Οι πίνακες εισροών – εκροών δείχνουν πως κάθε κλάδος της οικονομίας αλληλεπιδρά και εξαρτάται απ' όλους τους άλλους. Οι πίνακες δεν χρησιμοποιούνται μόνο σε οικονομίες χωρών αλλά και σε περιφέρειες, σε μικρές περιοχές ακόμη και σε μεγάλες εταιρείες. Την πρώτη προσπάθεια κατασκευής πίνακα εισροών – εκροών την έκανε ο François Quesnay το 1758 αλλά τον πρώτο πίνακα τον συνέταξε ο Wassily Leontief το 1936 που ήταν αρκετά συνοπτικός και αφορούσε την αμερικανική οικονομία. Με την πάροδο των χρόνων οι πίνακες έγιναν πιο αναλυτικοί και πιο σαφείς.

Οι βασικές πληροφορίες από τις οποίες καταρτίζονται οι πίνακες εισροών – εκροών είναι οι ροές των προϊόντων από ένα κλάδο που θεωρείται ως παραγωγός, σε ένα άλλο κλάδο που θεωρείται ως χρήστης (καταναλωτής). Οι σειρές ενός τέτοιου πίνακα περιγράφουν την κατανομή της εκροής ενός κλάδου παραγωγού στην οικονομία και οι στήλες περιγράφουν τη σύνθεση των εισροών που απαιτούνται από ένα συγκεκριμένο κλάδο για την παραγωγή των εκροών του<sup>15</sup>.

Πίνακας Εισροών – Εκροών										
Εκροές Εισροές		Κλάδοι Παραγωγής				Τελική ζήτηση				Συνολική ζήτηση
Κλάδο	01	Κλάδος 1	Κλάδος 2	÷	Σύνολο	Ιδιωτική κατανάλωση	Δημόσια κατανάλωση	Επενδύσεις	Εξαγωγές	
Κλάδοι	1									
Κλάδοι	2									
Σύνολο										
્પ્ર	Μισθοί									
ενεί ές	Φόροι									
τογε σροι	Αποσβέσεις									
ωdΠ ει	Προστιθέμενη αξία									
Συνολ παραγ	ική αξία ωγή									

Ένας απλός πίνακας εισροών – εκροών έχει την ακόλουθη μορφή :

<sup>&</sup>lt;sup>15</sup> Οικονομίδης Χαράλαμπος, (2007), Εισαγωγή στο σύστημα και την ανάλυση εισροών – εκροών, Εκδόσεις «Κριτική» σελ 20

Εδώ να πούμε ότι οι πίνακες που θα χρησιμοποιηθούν για την εκπόνηση της εργασίας είναι πιο μεγάλοι σε μέγεθος, πιο λεπτομερείς και αφορούν τα στοιχεία της ελληνικής οικονομίας για το έτος 2005.

### 3.2 Προέλευση Πινάκων Εισροών – Εκροών Ελληνικής Οικονομίας

Πίνακες εισροών – εκροών συντάσσουν η ευρωπαϊκή στατιστική υπηρεσία (κάθε πέντε χρόνια ολοκληρωμένοι) καθώς και οι στατιστικές υπηρεσίες των περισσότερων κρατών. Εμείς στη παρούσα εργασία αναζητήσαμε τους πιο πρόσφατους πίνακες που αφορούν την ελληνική οικονομία και καταλήξαμε στα στοιχεία του 2005. Τα στοιχεία αυτά έχουν παρθεί από την ιστοσελίδα της Eurostat<sup>16</sup> και συγκεκριμένα οποιοσδήποτε επιθυμεί μπορεί να βρει στο διαδίκτυο τους πίνακες εισροών – εκροών της ελληνικής οικονομίας ως εξής:

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National Accounts
Use and Input-output tables   Greece

Το αρχείο που περιέχονται οι πίνακες είναι το : Greece\_SUIOT\_100113. Στο αρχείο αυτό περιέχονται οι πίνακες Use, Supply, Siot, Import και Domestic από διάφορα έτη. Οι πίνακες που θα χρησιμοποιηθούν στη παρούσα εργασία είναι οι πίνακες Siot, Import και Domestic του 2005.

<sup>&</sup>lt;sup>16</sup> http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/

## 3.3 Παράθεση & Επεξήγηση Πινάκων Εισροών – Εκροών Ελληνικής Οικονομίας

Στις επόμενες τρείς σελίδες παρατίθενται οι αρχικοί πίνακες εισροών – εκροών που θα χρησιμοποιήσουμε στη μελέτη των τριών μοντέλων.

→ 1°ς πίνακας Siot (σελίδα 11) όπου είναι ο ενοποιημένος πίνακας εγχώριας παραγωγής και εισαγωγών.

→ 2°ς πίνακας εγχώριας παραγωγής (σελίδα 12) όπου φαίνεται η εγχώρια παραγωγή της ελληνικής οικονομίας.

και

→ 3°ς πίνακας εισαγωγών (σελίδα 13) όπου φαίνονται οι εισαγωγές της ελληνικής οικονομίας.

Table siot

Table domestic

Table imports

Μοντέλο 1°

# $\mathbf{P} = \mathbf{P}^*\mathbf{Dom} + \mathbf{P}^*\mathbf{Imp} + \mathbf{P}^*\mathbf{K}$

#### 4. Μοντέλο 1°

#### 4.1Ορισμός & Επεξήγηση 1<sup>ου</sup> Μοντέλου

Το πρώτο μοντέλο που θα επεξεργαστούμε είναι της εξής μορφής :

$$\mathbf{P} = \mathbf{P}^*\mathbf{Dom} + \mathbf{P}^*\mathbf{Imp} + \mathbf{P}^*\mathbf{K}$$

Όπου:

P → Διάνυσμα γραμμή (1x59) των τιμών των εμπορευμάτων. Ως φυσική μονάδα μέτρησης κάθε εμπορεύματος θεωρούμε εκείνη την ποσότητά του, της οποίας η αγοραία αξία (η τιμή αγοράς) ισούται με 1 νομισματική μονάδα.

Dom → Μήτρα συντελεστών εγχώριας παραγωγής (59x59)

Imp  $\rightarrow$  Μήτρα συντελεστών εισαγωγών (59x59)

Κ  $\rightarrow \Delta$ ιαγώνια μήτρα (59x59) όπου όλα τα στοιχεία της είναι μηδέν εκτός από τα στοιχεία της κύριας διαγωνίου που εκφράζουν το ποσοστό της ακαθάριστης προστιθέμενης αξίας (Π) του κλάδου j στην τιμή (P) του εμπορεύματος j<sup>17</sup>:

$$K_{jj} = \Pi_j / P_j, \quad j = 1, 2, 3..., 59$$

Το παραπάνω σύστημα τιμών λέει ότι η τιμή P ενός εμπορεύματος οποιοδήποτε κλάδου της ελληνικής οικονομίας είναι ίση με την τιμή επί το συντελεστή της μήτρας εγχώριας παραγωγής συν την τιμή επί τον συντελεστή της μήτρας εισαγωγών συν την τιμή επί τον συντελεστή της προστιθέμενης αξίας.

Για παράδειγμα η τιμή του P του κλάδου Products of agriculture, hunting & related services με φυσική μονάδα μέτρησης τη μονάδα είναι ίση με  $P = 1*0,3141203 + 1*0,061227 + 1*0,624653 \Rightarrow P = 1$ 



Ας δούμε όμως πώς προήλθαν οι μήτρες που χρησιμοποιήσαμε στο σύστημα τιμών.

<sup>&</sup>lt;sup>17</sup> Μαριόλης Θεόδωρος – Οικονομίδης Χαράλαμπος – Σταμάτης Γιώργος – Φουστέρης Νίκος, 1997, Ποσοτική εκτίμηση των επιπτώσεων της υποτίμησης στο «κόστος» παραγωγής, Αθήνα, Εκδόσεις «Κριτική», σελ 12

#### 4.2 Επεξεργασία Αρχικών Πινάκων Εισροών – Εκροών Ελληνικής Οικονομίας

Για να μπορέσουμε να χρησιμοποιήσουμε το παραπάνω μοντέλο πρέπει πρώτα απ' όλα να εξάγουμε την μήτρα συντελεστών εγχώριας παραγωγής «Dom», την μήτρα συντελεστών εισαγωγών «Imp» και τη διαγώνια μήτρα του ποσοστού της ακαθάριστης προστιθέμενης αξίας του κλάδου στην τιμή του εμπορεύματος «K». Αυτό γίνεται μέσο της επεξεργασίας των αρχικών πινάκων εισροών – εκροών (σελίδα 11-13). Ο τρόπος εξαγωγής των απαραίτητων δεδομένων του μοντέλου μας (Dom, Imp και K) ακολουθεί στη συνέχεια.

#### 4.2.1 Γενική μετατροπή αρχικών πινάκων

Η γενική μετατροπή των αρχικών πινάκων εισροών – εκροών είναι η εξής. Από τους πίνακες εγχώρια παραγωγή (σελίδα 12) και εισαγωγές (σελίδα 13) αφαιρούμε τα 59 στοιχεία της γραμμής με όνομα «Output at basic prices» με τα 59 στοιχεία της γραμμής με όνομα «Taxes less subsidies on products». Η αφαίρεση γίνεται ένα προς ένα στοιχείο, για παράδειγμα :

$$\begin{array}{l} {\rm E73} = {\rm E72} - {\rm E62} \\ {\rm F73} = {\rm F72} - {\rm F62} \\ {\rm G73} = {\rm G72} - {\rm G62} \\ (\dots \acute{\epsilon} \omega \varsigma \ ) \\ {\rm BK73} = {\rm BK72} - {\rm BK62} \end{array}$$

Έτσι δημιουργούμε ένα καινούριο διάνυσμα γραμμή (1x59) με όνομα «New output at basic prices». Αυτή την καινούρια γραμμή την αντιγράφουμε στους πινάκες εγχώρια παραγωγή και εισαγωγές. Έτσι δημιουργούμε 2 καινούριους πίνακες που τους ονομάζουμε αντίστοιχα πίνακας εγχώριας παραγωγής M1 και πίνακας εισαγωγές M1 (που ακολουθούν (σελίδα 17 και 18 αντίστοιχα). Η διαφορά των αρχικών πινάκων με τους πίνακες εγχώρια παραγωγή M1 και εισαγωγές M1 είναι ότι στους τελευταίους έχουμε στη τελευταία γραμμή ένα επιπλέον διάνυσμα γραμμής (1x59). Table ; domestic M1

Table Import M1

### 4.2.2 Εξαγωγή μήτρας εγχώριας παραγωγής - Dom

 Η μήτρα εγχώριας παραγωγής – Dom (59x59) που χρειαζόμαστε για το μοντέλο μας εξάγεται από τον πίνακα εγχώρια παραγωγή M1 (σελίδα 17) ως εξής: Διαιρούμε τις εισροές κάθε κλάδου με τα στοιχεία της γραμμής «New output at basic prices». Η διαίρεση γίνεται ένα προς ένα στοιχείο, για παράδειγμα :

Για την 1<sup>η</sup> στήλη

To 1° στοιχείο της 1<sup>ης</sup> στήλης της μήτρα Dom είναι ίσο με E1/ E73 To 2° στοιχείο της 1<sup>ης</sup> στήλης της μήτρα Dom είναι ίσο με E2/ E73 To 3° στοιχείο της 1<sup>ης</sup> στήλης της μήτρα Dom είναι ίσο με E3/ E73 ... έως το 59° στοιχείο

Ομοίως και για την 2<sup>η</sup> στήλη

To 1° στοιχείο της  $2^{\eta\varsigma}$  στήλης της μήτρα Dom είναι ίσο με F1/F73 To 2° στοιχείο της  $2^{\eta\varsigma}$  στήλης της μήτρα Dom είναι ίσο με F2/F73 To 3° στοιχείο της  $2^{\eta\varsigma}$  στήλης της μήτρα Dom είναι ίσο με F3/F73 ... έως το 59° στοιχείο

Ομοίως μέχρι την 59<sup>η</sup> στήλη

Έτσι δημιουργούμε τη μήτρα συντελεστών εγχώριας παραγωγής M1 – Dom (59x59), που ακολουθεί (σελίδα 20)

Μητρα εγχωριας παραγωγή M1

#### 4.2.3 Εξαγωγή μήτρας εισαγωγών – Imp

Η μήτρα εισαγωγών – Imp (59x59) που χρειαζόμαστε στο πρώτο μοντέλο μας εξάγεται από τον πίνακα εισαγωγές M1 (σελίδα 18) ως εξής: διαιρούμε τις εισροές κάθε κλάδου του πίνακα με τα στοιχεία της γραμμής «New Output at basic prices». Η διαίρεση γίνεται ένα προς ένα στοιχείο, για παράδειγμα :

Για την 1<sup>η</sup> στήλη

To 1° στοιχείο της 1<sup>ης</sup> στήλης της μήτρα Imp είναι ίσο με E1/ E73 To 2° στοιχείο της 1<sup>ης</sup> στήλης της μήτρα Imp είναι ίσο με E2/ E73 To 3° στοιχείο της 1<sup>ης</sup> στήλης της μήτρα Imp είναι ίσο με E3/ E73 ... έως το 59° στοιχείο

Ομοίως και για την 2η στήλη

To 1° στοιχείο της  $2^{\eta\varsigma}$  στήλης της μήτρα Imp είναι ίσο με F1/F73 To 2° στοιχείο της  $2^{\eta\varsigma}$  στήλης της μήτρα Imp είναι ίσο με F2/F73 To 3° στοιχείο της  $2^{\eta\varsigma}$  στήλης της μήτρα Imp είναι ίσο με F3/F73 ... έως το 59° στοιχείο

Ομοίως μέχρι την 59<sup>η</sup> στήλη

Έτσι δημιουργούμε τη μήτρα συντελεστών εισαγωγών M1 – Imp (59x59) που ακολουθεί (σελίδα 22)

Μητρα εισαγωγων Μ1

#### 4.2.4 Εξαγωγή διανύσματος – Κ και διαγώνιας μήτρας – Κ

 Το διάνυσμα Κ (1x59) προκύπτει από τον πίνακα εγχώρια παραγωγή M1 (σελίδα 20) αν διαιρέσουμε την προστιθέμενη αξία κάθε κλάδου «Value added at basic prices» με τα στοιχεία της γραμμής «New Output at basic prices». Η διαίρεση γίνεται ένα προς ένα στοιχείο, για παράδειγμα:

Το 1° στοιχείο του διανύσματος Κ είναι ίσο με Ε71/Ε73 Το 2° στοιχείο του διανύσματος Κ είναι ίσο με F71/F73 Το 3° στοιχείο του διανύσματος Κ είναι ίσο με G71/G73

Ομοίως μέχρι το 59<sup>η</sup> στοιχείο του διανύσματος.

Έτσι δημιουργούμε το διάνυσμα γραμμή – Κ (1x59) που ακολουθεί (σελίδα 24)

Για να δημιουργήσουμε την διαγώνια μήτρα – K (59x59) που χρειαζόμαστε στο μοντέλο μας θα πάρουμε ένα πίνακα (59x59) που όλα τα στοιχεία του είναι μηδέν εκτός από αυτά της κύριας διαγωνίου όπου θα βρίσκονται τα στοιχεία του διανύσματος γραμμή – K. Ειδικότερα :

Το 1° στοιχείο της 1<br/>ης γραμμής της διαγώνιας μήτρας – Κ είναι το 1° στοιχείο του διανύσματος γραμμ<br/>ή – Κ

Το 2° στοιχείο της 2η<br/>ς γραμμής της διαγώνιας μήτρας – Κ είναι το 2° στοιχείο του διανύσματος γραμμ<br/>ή – Κ

Το 3° στοιχείο της 3η<br/>ς γραμμής της διαγώνιας μήτρας – Κ είναι το 3° στοιχείο του διανύσματος γραμμ<br/>ή – Κ

Ομοίως έως το 59° στοιχείο

Έτσι δημιουργούμε την διαγώνια μήτρα – K (59x59) που ακολουθεί (σελίδα 24)

Μητρα διαγωνια κ και διάνυσμα

#### 4.3 Εισαγωγή Δεδομένων 1<sup>ου</sup> Μοντέλου Στο Mathematica

Αφού εξηγήσαμε πως προήρθαν τα δεδομένα του 1<sup>ου</sup> μας μοντέλου (μήτρα Dom – Imp – K), τώρα θα εισάγουμε τα δεδομένα αυτά στο mathematica. Τα δεδομένα που εισάγουμε μπορεί κάποιος να τα βρει στο Α.1 Παράρτημα (σελίδα 138). Συγκεκριμένα εκεί περιέχονται τα εξής :

- Εισαγωγή μήτρας εγχώριας παραγωγής M1 Dom
- Εισαγωγή μήτρας εισαγωγών M1 Imp
- Εισαγωγή διαγώνιας μήτρας Κ
- Εισαγωγή διανύσματος γραμμή τιμής  $P_0$

## 4.4 Έλεγχος 1<sup>ου</sup> Μοντέλου Για Την Σωστή Εισαγωγή Των Δεδομένων

Στο σημείο αυτό (πριν «τρέξουμε» τα δεδομένα στο mathematika) είναι καλό να επαληθεύσουμε το μοντέλο μας, αν δηλαδή μετά την εισαγωγή των δεδομένων μας (πινάκων Dom – Imp – K – P<sub>0</sub>) ικανοποιείται η ισότητα (P<sub>1</sub>=P<sub>0</sub>)  $\Rightarrow$  1=1.

Όπου : P<sub>0</sub> είναι τα στοιχεία του διανύσματος γραμμή P<sub>0</sub> που είναι ίσα με τη μονάδα.

 $P_1$  είναι ίσο με  $P_0*Dom + P_0*Imp + P_0*K$ 

Με τη βοήθεια του mathematica διαπιστώνουμε στη συνέχεια ότι επαληθεύεται η ισότητα και άρα τα δεδομένα που χρησιμοποιήσαμε είναι σωστά<sup>18</sup>. Συγκριμένα το

Ρ1 είναι ίσο με το διάνυσμα γραμμή:

Ρ<sub>0</sub> είναι ίσο με το διάνυσμα γραμμή:

Στο σημείο αυτό να πούμε ότι το 6° στοιχείο των διανυσμάτων των τιμών  $P_0$  και  $P_1$  είναι μηδέν εξαιτίας του γεγονότος ότι στους πίνακες εισροών – εκροών της ελληνικής οικονομίας ο 6°ς κλάδος που αντιστοιχεί στο κλάδο «Uranium and thorium ores» είναι μηδέν όλες οι εισροές (αρχικές και ενδιάμεσες) και η εκροή.

 $<sup>^{18}</sup>$ Η ελάχιστη απόκλιση στη τιμή του κλάδου 29 είναι ασήμαντη και την παραβλέπου<br/>με

### 4.5 Επεξεργασία 1<sup>ου</sup> Μοντέλου Στο Mathematica Av Υποτιμήσουμε Το Νόμισμα 15%

### 4.5.1 Μορφή εντολής στο Mathematica για υποτίμηση 15%

Η εντολή που δίνουμε στο πρόγραμμά μας είναι η εξής:

P00=P0 For[i=0,i<200,i++, P1=P0.Dom+1.15\*P00.Imp+P0.Kk; Print[MatrixForm[P1]]; P0=P1]

Η εντολή αυτή μας λέει ότι :

α) Το πρόγραμμα θα εκτελέσει 200 επαναλήψεις.

β) Η τιμή Ρ μετά από κάθε επανάληψη θα είναι επηρεασμένη από μία σταθερή (——) επίδραση της υποτίμησης του νομίσματος κατά 15% (1.15 \* Imp).

 $\begin{array}{ll} P_0 = P_0^* Dom + \underbrace{P_0^* Imp + P_0^* K}_{P_1 = P_0^* Dom + 1,15^* P_0^* Imp} + P_0^* K & (\pi\rho\nu\nu\ \tau\eta\nu\ \upsilon\pi\sigma\tau'\mu\eta\sigma\eta) \\ P_2 = P_1^* Dom + 1,15^* P_0^* Imp + P_1^* K \\ P_3 = P_2^* Dom + 1,15^* P_0^* Imp + P_2^* K \\ \cdots \\ P_{200} = P_{199}^* Dom + 1,15^* P_0^* Imp + P_{199}^* K \end{array}$ 

γ) Τέλος, η τιμή εκκίνησης  $P_0$  του μοντέλου μας είναι η εξής:

Αυτό σημαίνει ότι η τιμή των εμπορευμάτων της ελληνικής οικονομίας πριν την υποτίμηση είναι 1 νομισματική μονάδα (π.χ 1 ευρώ).

Αν «τρέξουμε» τη παραπάνω εντολή στο mathematica θα πάρουμε με τη μορφή διανυσμάτων γραμμή<sup>19</sup> τις τιμές των εμπορευμάτων ανά κλάδο<sup>20</sup> που είναι και το ζητούμενό μας. Τέλος, για να είναι τα αποτελέσματα καλύτερα

<sup>&</sup>lt;sup>19</sup> Τα διανύσματα γραμμή είναι όσα και οι επαναλήψεις που εκτελέσαμε στο πρόγραμμα, δηλαδή 200

<sup>&</sup>lt;sup>20</sup> Βλέπε αναλυτικά τα 200 διανύσματα γραμμή των τιμών των εμπορευμάτων στο Β.1.α Παράρτημα σελίδα 219

αντιληπτά από τον αναγνώστη έχουν μεταφερθεί σε πίνακα που ακολουθούν στην επόμενη ενότητα (4.5.2 ενότητα).

Ο πίνακας αυτός μας δείχνει :

α) τις επιδράσεις των τιμών των εμπορευμάτων ανά κλάδο για τις πρώτες
 20 επαναλήψεις (που είναι και μεγαλύτερες)

β) σε πια επανάληψη σταματάνε οι επιδράσεις της υποτίμησης (τελευταία σειρά)

και

γ) τη τιμή που έχουν τα εμπορεύματα μετά το πέρας της επίδρασης της υποτίμησης του νομίσματος κατά 15 % (τελευταία σειρά)
## 4.5.2 Αποτελέσματα 1° μοντέλου σε πίνακα για υποτίμηση 15%

	Πίνακας αποτελεσμάτων 1 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος κατά 15% PRODUCTS Products Products Fish and Coal and Crude petroleum Uranium Metal Other Food Tobacco													
	PRODUCTS (CPA)	Products of agriculture , hunting & related services	Products of forestry, logging and related services	Fish and other fishing products; services incidental of fishing	Coal and lignite; peat	Crude petroleum and natural gas; services incidental to oil and gas	Uranium and thorium ores	Metal ores	Other mining and quarrying products	Food products and beverages	Tobacco products			
	Τιμή	E	F	G	Н	I	J	K	L	М	N			
	<b>P</b> <sub>1</sub>	1.00918	1.00045	1.00819	1.01103	1.01708	0.0	1.01095	1.01292	1.01239	1.012			
Ξ	P <sub>2</sub>	1.02061	1.0036	1.02093	1.02417	1.03216	0.0	1.02476	1.02932	1.02312	1.02282			
50	<b>P</b> <sub>3</sub>	1.03136	1.00813	1.03312	1.0363	1.04526	0.0	1.03759	1.04314	1.03307	1.03273			
tul	P4	1.04102	1.01346	1.04393	1.04692	1.05622	0.0	1.04863	1.05413	1.04216	1.04165			
ပိုင်	<b>P</b> 5	1.04963	1.01926	1.05336	1.05613	1.06526	0.0	1.05789	1.06292	1.05035	1.04961			
μ	P <sub>6</sub>	1.05731	1.02529	1.06158	1.06411	1.07272	0.0	1.06564	1.07011	1.05769	1.0567			
ך ארי	<b>P</b> <sub>7</sub>	1.06417	1.03137	1.06876	1.07107	1.07895	0.0	1.07219	1.07614	1.06425	1.06305			
νάλ	P <sub>8</sub>	1.07032	1.0374	1.07507	1.07716	1.08424	0.0	1.07779	1.08131	1.07015	1.06876			
μαλ	P <sub>9</sub>	1.07585	1.04328	1.08064	1.08254	1.08882	0.0	1.08266	1.08584	1.07546	1.07393			
ε	<b>P</b> <sub>10</sub>	1.08084	1.04897	1.08558	1.08732	1.09286	0.0	1.08697	1.08987	1.08027	1.07864			
ک	P <sub>11</sub>	1.08536	1.05443	1.09	1.0916	1.09646	0.0	1.09082	1.09352	1.08464	1.08294			
ό τι	P <sub>12</sub>	1.08947	1.05965	1.09397	1.09545	1.09972	0.0	1.09431	1.09684	1.08864	1.0869			
απ	<b>P</b> <sub>13</sub>	1.09322	1.0646	1.09755	1.09894	1.10269	0.0	1.0975	1.09989	1.09231	1.09055			
ής	P <sub>14</sub>	1.09666	1.0693	1.10081	1.10212	1.10543	0.0	1.10045	1.10272	1.09569	1.09394			
tu	<b>P</b> <sub>15</sub>	1.09983	1.07375	1.10379	1.10503	1.10796	0.0	1.10318	1.10534	1.09882	1.09708			
ու	P <sub>16</sub>	1.10275	1.07794	1.10652	1.1077	1.11031	0.0	1.10573	1.10779	1.10172	1.10001			
λή	P <sub>17</sub>	1.10546	1.0819	1.10904	1.11017	1.1125	0.0	1.10811	1.11009	1.10442	1.10275			
ťβo	P <sub>18</sub>	1.10797	1.08563	1.11137	1.11245	1.11455	0.0	1.11035	1.11223	1.10694	1.10532			
ET0	P <sub>19</sub>	1.11032	1.08915	1.11353	1.11457	1.11646	0.0	1.11246	1.11425	1.10929	1.10773			
Σ	<b>P</b> <sub>20</sub>	1.11251	1.09246	1.11555	1.11655	1.11827	0.0	1.11444	1.11615	1.1115	1.10999			
Σταθεροποίηση τιμής P <sub>190</sub> : 1,15 P <sub>199</sub> : 1,15 P <sub>198</sub> : 1,15 P <sub>189</sub> : 1,15 P <sub>191</sub> : 1,15 P <sub>191</sub> : 1,15 P <sub>191</sub> : 1,15 P <sub>190</sub> : 1,15 P									P <sub>191</sub> : 1,15	P <sub>192</sub> : 1,15				

	Πίνακας αποτελεσμάτων 1 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος κατά 15% (συνέχεια)												
	PRODUCTS (CPA)	Textiles	Wearing apparel; furs	Leather and leather products	Wood and products of wood and cork (except furniture);	Pulp, paper and paper products	Printed matter and recorded media	Coke, refined petroleum products and nuclear fuels	Chemicals, chemical products and man- made fibres	Rubber and plastic products	Other non- metallic mineral products		
	Τιμή	0	Р	Q	R	S	Т	U	V	W	Х		
۴	<b>P</b> <sub>1</sub>	1.02722	1.02172	1.02638	1.0245	1.03605	1.02212	1.10003	1.0423	1.03334	1.01471		
20	<b>P</b> <sub>2</sub>	1.04502	1.03733	1.0453	1.04009	1.05568	1.03851	1.12105	1.0631	1.05367	1.02806		
م لا	<b>P</b> <sub>3</sub>	1.05745	1.04908	1.05849	1.0507	1.06747	1.05049	1.1264	1.07483	1.0667	1.03972		
100	P4	1.06666	1.05829	1.06807	1.05868	1.07545	1.05954	1.12857	1.0825	1.07567	1.04971		
έα	<b>P</b> <sub>5</sub>	1.07387	1.06576	1.07541	1.06518	1.08147	1.06667	1.13002	1.08817	1.08235	1.05823		
۲	P <sub>6</sub>	1.07979	1.07201	1.08132	1.07077	1.08638	1.07257	1.13125	1.09275	1.08768	1.06554		
ίλη	P <sub>7</sub>	1.08482	1.07738	1.08627	1.07572	1.0906	1.07762	1.13236	1.09663	1.09213	1.07185		
αΛÇ	P <sub>8</sub>	1.08922	1.08208	1.09054	1.08019	1.09434	1.08208	1.13338	1.10004	1.096	1.07737		
υз	<b>P</b> 9	1.09314	1.08628	1.09431	1.08427	1.09771	1.08609	1.13432	1.1031	1.09944	1.08224		
11	<b>P</b> <sub>10</sub>	1.09668	1.09008	1.09769	1.08804	1.10079	1.08975	1.13519	1.10587	1.10253	1.0866		
որ	<b>P</b> <sub>11</sub>	1.0999	1.09355	1.10077	1.09154	1.10362	1.09313	1.13601	1.10841	1.10536	1.09053		
, Q	<b>P</b> <sub>12</sub>	1.10285	1.09675	1.10359	1.09479	1.10624	1.09626	1.13677	1.11076	1.10795	1.09411		
80	<b>P</b> <sub>13</sub>	1.10557	1.09971	1.1062	1.09783	1.10868	1.09919	1.13748	1.11294	1.11035	1.09738		
hų	P <sub>14</sub>	1.10809	1.10247	1.10862	1.10068	1.11095	1.10192	1.13815	1.11497	1.11257	1.1004		
្មដ	<b>P</b> <sub>15</sub>	1.11044	1.10505	1.11088	1.10335	1.11307	1.10449	1.13878	1.11686	1.11464	1.1032		
τı	P <sub>16</sub>	1.11262	1.10746	1.11299	1.10586	1.11506	1.10691	1.13937	1.11864	1.11658	1.10581		
λή	P <sub>17</sub>	1.11467	1.10973	1.11498	1.10822	1.11693	1.10918	1.13993	1.12031	1.11839	1.10823		
¢βo	P <sub>18</sub>	1.11658	1.11186	1.11684	1.11045	1.11869	1.11132	1.14045	1.12189	1.12009	1.1105		
ETC	P <sub>19</sub>	1.11838	1.11388	1.11859	1.11254	1.12035	1.11335	1.14095	1.12337	1.12168	1.11263		
X	P <sub>20</sub>	1.12006	1.11577	1.12025	1.11452	1.12191	1.11526	1.14142	1.12477	1.12319	1.11463		
	Σταθεροποίηση τιμής	P <sub>186</sub> : 1,15	P <sub>189</sub> : 1,15	P <sub>177</sub> : 1,15	P <sub>190</sub> : 1,15	P <sub>185</sub> : 1,15	P <sub>189</sub> : 1,15	P <sub>162</sub> :1,15	P <sub>183</sub> : 1,15	P <sub>184</sub> : 1,15	P <sub>190</sub> : 1,15		

	Πίνακας αποτελεσμάτων 1 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος κατά 15% (συνέχεια) PRODUCTS Basic Fabricated Machinery Office Electrical Radio, Medical, Motor Other Furniture;													
	PRODUCTS	Basic	Fabricated	Machinery	Office	Electrical	Radio,	Medical,	Motor	Other	Furniture;			
	(CPA)	metals	metal	and	machinery	machinery	television and	precision	vehicles,	transport	other			
			products,	equipment	and	and	communication	and optical	trailers	equipment	manufact.			
			except	n.e.c.	computers	apparatus	equipment and	Instruments,	and		goods			
			R R R R R R R R R R R R R R R R R R R			n.e.c.	apparatus		trailers		n.e.c.			
			equipment					CICCICS	traners					
	Τιμή	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH			
μ	<b>P</b> <sub>1</sub>	1.04584	1.03422	1.03662	1.02152	1.03585	1.022	1.03632	1.04478	1.0355	1.02068			
20	P <sub>2</sub>	1.07025	1.05793	1.05925	1.03768	1.05929	1.0382	1.05781	1.06768	1.05778	1.03704			
۸h	<b>P</b> <sub>3</sub>	1.08403	1.07322	1.0735	1.05001	1.07431	1.05044	1.07119	1.08044	1.07204	1.04964			
ι ζ	P4	1.0926	1.08321	1.08292	1.05962	1.0842	1.05997	1.08016	1.08839	1.0816	1.05942			
l Éű	<b>P</b> <sub>5</sub>	1.09854	1.09012	1.08955	1.06732	1.09109	1.06761	1.08667	1.09396	1.0884	1.0672			
۲¥	<b>P</b> <sub>6</sub>	1.10306	1.09525	1.09456	1.07366	1.09624	1.07392	1.09174	1.09826	1.09359	1.07358			
άλτ	<b>P</b> <sub>7</sub>	1.10675	1.09935	1.09858	1.07904	1.10034	1.07928	1.09592	1.10183	1.09777	1.07898			
SCV.	P <sub>8</sub>	1.10988	1.1028	1.10199	1.08371	1.10378	1.08394	1.09951	1.10492	1.10131	1.08366			
ĽЗ	<b>P</b> 9	1.11263	1.10582	1.10497	1.08785	1.10678	1.08806	1.10268	1.10767	1.10441	1.08781			
, 1 <sup>1</sup>	<b>P</b> <sub>10</sub>	1.11507	1.10852	1.10765	1.09157	1.10945	1.09178	1.10552	1.11016	1.10718	1.09155			
որ	P <sub>11</sub>	1.11728	1.11097	1.11009	1.09496	1.11186	1.09516	1.10811	1.11245	1.10969	1.09495			
πó	P <sub>12</sub>	1.11929	1.11323	1.11234	1.09807	1.11408	1.09827	1.11049	1.11455	1.112	1.09808			
ຮູ	<b>P</b> <sub>13</sub>	1.12113	1.11531	1.11442	1.10095	1.11612	1.10114	1.11269	1.11651	1.11414	1.10099			
μή	P <sub>14</sub>	1.12282	1.11725	1.11636	1.10363	1.11801	1.10382	1.11474	1.11833	1.11612	1.10368			
ζ 1	<b>P</b> <sub>15</sub>	1.12438	1.11905	1.11818	1.10614	1.11978	1.10631	1.11666	1.12004	1.11797	1.10621			
եղ	P <sub>16</sub>	1.12583	1.12074	1.11989	1.10848	1.12142	1.10865	1.11845	1.12164	1.1197	1.10857			
λή	P <sub>17</sub>	1.12718	1.12232	1.12149	1.11069	1.12297	1.11085	1.12013	1.12315	1.12133	1.11079			
αβα	P <sub>18</sub>	1.12844	1.12381	1.123	1.11276	1.12442	1.11292	1.12172	1.12457	1.12285	1.11287			
[ετι	P <sub>19</sub>	1.12962	1.1252	1.12442	1.11472	1.12578	1.11487	1.12321	1.1259	1.12429	1.11484			
N	P <sub>20</sub>	1.13072	1.12651	1.12576	1.11657	1.12706	1.11671	1.12462	1.12716	1.12564	1.11669			
	Σταθεροποίη	P179:1,15	$P_{182}:1,15$	$P_{182}: 1,15$	P <sub>189</sub> : 1,15	$P_{181}: 1,15$	P <sub>191</sub> : 1,15	P <sub>183</sub> :1,15	P <sub>183</sub> :1,15	$\mathbf{P}_{200} \approx 1, 15$	P <sub>189</sub> : 1,15			
	ση τιμής													

	Πίνακας αποτελεσμάτων 1 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος κατά 15% (συνέχεια) PRODUCTS Secondary Electrical Collected Construction Trade. Wholesale Retail trade Hotel and Land Water													
	PRODUCTS	Secondary	Electrical	Collected	Construction	Trade,	Wholesale	Retail trade	Hotel and	Land	Water			
	(CPA)	raw	energy,	and	work	maintenance	trade and	services,	restaurant	transport;	transport			
		materials	gas,	purified		and repair	commission	except of	services	transport	services			
			steam	water,		services of	trade	motor		via				
			and not	distribution		motor	services,	venicles and		pipeline				
			water	water		motorcycles.	motor	renair		Services				
				Water		retail sale of		services						
						automotive								
						fuel								
	Τιμή	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR			
E	<b>P</b> <sub>1</sub>	1.03966	1.00721	1.01079	1.01726	1.00681	1.01047	1.00635	1.01171	1.01952	1.04201			
20	<b>P</b> <sub>2</sub>	1.06446	1.01835	1.02274	1.03421	1.01325	1.02167	1.01339	1.02302	1.04214	1.06825			
չի	P <sub>3</sub>	1.07914	1.02937	1.03391	1.04806	1.01952	1.03232	1.02055	1.03323	1.05847	1.0838			
001	P4	1.08834	1.03949	1.04395	1.05897	1.02566	1.04188	1.02751	1.04236	1.06969	1.09343			
l ÉG	<b>P</b> 5	1.09466	1.04862	1.05289	1.0676	1.03164	1.05026	1.03414	1.05049	1.07767	1.09987			
Σ	P <sub>6</sub>	1.09942	1.0568	1.06082	1.07457	1.03744	1.05757	1.04039	1.05776	1.08369	1.10456			
άλη	<b>P</b> <sub>7</sub>	1.10328	1.06411	1.06786	1.08034	1.04306	1.06397	1.04626	1.06426	1.08851	1.10822			
ταν	P <sub>8</sub>	1.10655	1.07064	1.07411	1.08526	1.04846	1.06963	1.05179	1.07009	1.09257	1.11124			
1 8.1	<b>P</b> 9	1.10941	1.07648	1.07969	1.08954	1.05365	1.07468	1.05698	1.07535	1.09611	1.11384			
<ul> <li></li> </ul>	P <sub>10</sub>	1.11198	1.08172	1.08469	1.09333	1.05861	1.07923	1.06188	1.08012	1.09928	1.11613			
τIJ	P <sub>11</sub>	1.1143	1.08643	1.08918	1.09675	1.06334	1.08338	1.0665	1.08446	1.10216	1.11818			
ιπό	<b>P</b> <sub>12</sub>	1.11642	1.09069	1.09324	1.09987	1.06784	1.08718	1.07086	1.08843	1.10483	1.12005			
js c	<b>P</b> <sub>13</sub>	1.11837	1.09454	1.09691	1.10273	1.07212	1.09069	1.07498	1.09207	1.1073	1.12176			
int	P <sub>14</sub>	1.12018	1.09805	1.10027	1.10538	1.07618	1.09395	1.07888	1.09544	1.10961	1.12335			
151	P <sub>15</sub>	1.12185	1.10126	1.10333	1.10784	1.08003	1.097	1.08256	1.09855	1.11177	1.12482			
ήπ	P <sub>16</sub>	1.12341	1.1042	1.10614	1.11013	1.08368	1.09984	1.08605	1.10144	1.1138	1.1262			
oλı	<b>P</b> <sub>17</sub>	1.12487	1.10691	1.10873	1.11228	1.08714	1.10251	1.08936	1.10414	1.11571	1.12748			
ταβ	P <sub>18</sub>	1.12624	1.10941	1.11113	1.1143	1.09041	1.10502	1.09249	1.10665	1.11752	1.12869			
Mε	<b>P</b> <sub>19</sub>	1.12752	1.11173	1.11335	1.1162	1.09351	1.10739	1.09546	1.10901	1.11922	1.12982			
~	<b>P</b> <sub>20</sub>	1.12872	1.11389	1.11542	1.11799	1.09645	1.10962	1.09827	1.11122	1.12083	1.13089			
	Σταθεροποίηση τιμής	P <sub>180</sub> : 1,15	P <sub>190</sub> : 1,15	P <sub>189</sub> : 1,15	P <sub>188</sub> : 1,15	P <sub>199</sub> : 1,15	P <sub>193</sub> : 1,15	P <sub>197</sub> :1,15	P <sub>191</sub> : 1,15	P <sub>188</sub> : 1,15	P <sub>190</sub> :1,15			

		Πίνακας α	ποτελεσμά	πων 1 <sup>ου</sup> μον	τέλου με υπο	τίμηση του νο	μίσματος κα	ατά 15% (	συνέχεια)	
	PRODUCTS (CPA)	Air transport services	Supportin g and auxiliary transport services; travel	Post and telecommun ication services	Financial intermediat. services, except insurance & pension	Insurance and pension funding services, except compulsory	Activities auxiliary to financial intermediat.	Real estate services	Renting services of machinery & equipment without operator & of p & h goods	Computer and related services
	Τιμή	AS	AT	AU	AV	AW	AX	AY	AZ	BA
ι	<b>P</b> <sub>1</sub>	1.01731	1.01636	1.00431	1.00249	1.00663	1.00419	1.00136	1.0078	1.00927
20'	<b>P</b> <sub>2</sub>	1.03517	1.03148	1.00924	1.00625	1.01342	1.00939	1.00416	1.0161	1.01793
ռև	<b>P</b> <sub>3</sub>	1.04918	1.04402	1.01436	1.01086	1.0203	1.01512	1.00812	1.02397	1,02594
ζ μ	P <sub>4</sub>	1.05985	1.05423	1.01953	1.01599	1.02705	1.02109	1.01286	1.03127	1,03328
έa	<b>P</b> <sub>5</sub>	1.06815	1.06264	1.02471	1.02142	1.03355	1.02711	1.01807	1.03801	1,04002
μ	<b>P</b> <sub>6</sub>	1.07482	1.06966	1.02984	1.02698	1.03974	1.03306	1.02351	1.04426	1.04621
նչդ	<b>P</b> <sub>7</sub>	1.08036	1.07564	1.0349	1.03255	1.0456	1.03886	1.02903	1.05007	1.05192
ανά	P <sub>8</sub>	1.0851	1.08082	1.03986	1.03805	1.05113	1.04446	1.03452	1.0555	1.05723
ШЗ	<b>P</b> <sub>9</sub>	1.08924	1.08539	1.0447	1.04342	1.05635	1.04982	1.03991	1.06059	1.06218
, 1 <sup>n</sup>	<b>P</b> <sub>10</sub>	1.09294	1.08947	1.0494	1.04863	1.06128	1.05495	1.04516	1.06536	1.06681
որ	<b>P</b> <sub>11</sub>	1.09629	1.09316	1.05397	1.05365	1.06593	1.05983	1.05024	1.06985	1.07116
, Õõ	<b>P</b> <sub>12</sub>	1.09936	1.09652	1.05838	1.05847	1.07032	1.06447	1.05513	1.07408	1.07525
с С	<b>P</b> <sub>13</sub>	1.10219	1.09961	1.06263	1.06309	1.07447	1.06888	1.05983	1.07807	1.07911
μų	P <sub>14</sub>	1.10481	1.10246	1.06673	1.0675	1.07839	1.07306	1.06434	1.08184	1.08276
ζц	<b>P</b> <sub>15</sub>	1.10726	1.10511	1.07067	1.0717	1.0821	1.07702	1.06864	1.0854	1.08621
ոլ	<b>P</b> <sub>16</sub>	1.10956	1.10758	1.07445	1.07569	1.08562	1.08078	1.07275	1.08877	1.08947
λή	<b>P</b> <sub>17</sub>	1.11171	1.10988	1.07808	1.07949	1.08894	1.08434	1.07667	1.09195	1.09257
χβο	P <sub>18</sub>	1.11374	1.11205	1.08155	1.0831	1.09209	1.08771	1.0804	1.09496	1.0955
[ετι	<b>P</b> <sub>19</sub>	1.11565	1.11408	1.08487	1.08653	1.09507	1.09091	1.08395	1.09781	1.09828
Μ	<b>P</b> <sub>20</sub>	1.11745	1.11598	1.08805	1.08979	1.09789	1.09394	1.08732	1.10051	1.10091
	Σταθεροποίη ση τιμής	P <sub>197</sub> : 1,15	P <sub>190</sub> : 1,15	$P_{200} \approx 1,15$	P <sub>200</sub> : 1,15	P <sub>198</sub> : 1,15	P <sub>198</sub> : 1,15	P <sub>200</sub> ≈1,15	P <sub>197</sub> : 1,15	P <sub>196</sub> : 1,15

	Πίνακας αποτελεσμάτων 1 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος κατά 15% (συνέχεια) PRODUCTS Research Other Public Education Health Sewage Membership Recreational. Other Private												
	PRODUCTS (CPA)	Research and development services	Other business services	Public administrat. and defence services; compulsory	Education services	Health and social work services	Sewage and refuse disposal services, sanitation	Membership organisation services n.e.c.	Recreational, cultural and sporting services	Other services	Private households with employed persons		
	Τιμή	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK		
_	<b>P</b> <sub>1</sub>	1.00799	1.00781	1.01367	1.00046	1.01992	1.00871	1.00696	1.00814	1.00564	0		
20'	P <sub>2</sub>	1.01645	1.01604	1.02593	1.00197	1.03716	1.01913	1.01453	1.01637	1.01194	0		
ռև	P <sub>3</sub>	1.02491	1.02392	1.03675	1.00432	1.05102	1.02925	1.02188	1.02438	1.01864	0		
ο 2 τ	P4	1.03299	1.03128	1.04623	1.00728	1.06207	1.03862	1.02883	1.03199	1.02547	0		
ί	<b>P</b> <sub>5</sub>	1.04052	1.0381	1.05451	1.01068	1.07096	1.04717	1.03536	1.03913	1.03223	0		
۲¥۱	<b>P</b> <sub>6</sub>	1.04745	1.04443	1.06176	1.0144	1.07823	1.05494	1.04148	1.04576	1.03879	0		
άλτ	<b>P</b> <sub>7</sub>	1.0538	1.05031	1.06813	1.01834	1.08428	1.06198	1.04723	1.05192	1.0451	0		
000	P <sub>8</sub>	1.05962	1.05579	1.07378	1.02243	1.08939	1.06835	1.05264	1.05762	1.05111	0		
لع ا	P <sub>9</sub>	1.06495	1.0609	1.07882	1.02663	1.09378	1.07413	1.05774	1.0629	1.0568	0		
v 1'	P <sub>10</sub>	1.06987	1.06568	1.08336	1.03087	1.09761	1.07937	1.06255	1.06781	1.06217	0		
ւկ	P <sub>11</sub>	1.07441	1.07017	1.08746	1.03514	1.10101	1.08413	1.0671	1.07238	1.06723	0		
πó	P <sub>12</sub>	1.07863	1.07439	1.0912	1.0394	1.10405	1.08848	1.07141	1.07665	1.07198	0		
ζα	P <sub>13</sub>	1.08255	1.07837	1.09463	1.04362	1.1068	1.09245	1.07548	1.08064	1.07644	0		
μη	P <sub>14</sub>	1.08622	1.08212	1.0978	1.04779	1.10931	1.09609	1.07934	1.08438	1.08063	0		
с С	<b>P</b> <sub>15</sub>	1.08965	1.08565	1.10073	1.05189	1.11162	1.09943	1.08299	1.08789	1.08455	0		
ել	<b>P</b> <sub>16</sub>	1.09287	1.089	1.10345	1.0559	1.11376	1.1025	1.08645	1.09118	1.08823	0		
λή	<b>P</b> <sub>17</sub>	1.09589	1.09216	1.106	1.05982	1.11575	1.10534	1.08974	1.09429	1.09168	0		
αβί	P <sub>18</sub>	1.09874	1.09515	1.10837	1.06364	1.1176	1.10797	1.09284	1.09722	1.09491	0		
lετ	<b>P</b> <sub>19</sub>	1.10143	1.09798	1.11061	1.06734	1.11934	1.11041	1.09579	1.09998	1.09795	0		
N	<b>P</b> <sub>20</sub>	1.10396,	1.10066	1.1127	1.07094	1.12097	1.11267	1.09859	1.10259	1.1008	0		
	Σταθεροποίηση τιμής	P <sub>195</sub> : 1,15	P <sub>197</sub> : 1,15	P <sub>191</sub> : 1,15	P <sub>200</sub> ≈ 1,15	P <sub>186</sub> : 1,15	P <sub>190</sub> : 1,15	P <sub>197</sub> :1,15	P <sub>196</sub> : 1,15	P196:1,15			

#### 4.6 Επεξεργασία 1<sup>ου</sup> Μοντέλου Αν Υποτιμήσουμε Το Νόμισμα 50%

#### 4.6.1 Μορφή εντολής στο Mathematica για υποτίμηση 50%

Η εντολή που δίνουμε στο πρόγραμμά μας είναι η εξής:

P00=P0 For[i=0,i<300,i++, P1=P0.Dom+1.5\*P00.Imp+P0.Kk; Print[MatrixForm[P1]]; P0=P1]

Η εντολή αυτή μας λέει ότι :

α) Το πρόγραμμα θα εκτελέσει 300 επαναλήψεις.

β) Η τιμή Ρ μετά από κάθε επανάληψη θα είναι επηρεασμένη από μία σταθερή (——) επίδραση της υποτίμησης του νομίσματος κατά 50 % (1.5 \* Imp).

 $P_{0} = P_{0}*Dom + P_{0}*Imp + P_{0}*K \qquad (\pi_{f} P_{1} = P_{0}*Dom + \frac{1}{1,5}*P_{0}*Imp + P_{0}*K \qquad (\mu P_{2} = P_{1}*Dom + \frac{1}{1,5}*P_{0}*Imp + P_{1}*K$  $P_{3} = P_{2}*Dom + \frac{1}{1,5}*P_{0}*Imp + P_{2}*K \qquad ...$  $P_{200} = P_{200}*Dom + \frac{1}{1,5}*P_{0}*Imp + P_{200}*K$ 

(πριν την υποτίμηση) (μετά από υποτίμηση 50%)

 $P_{300} = P_{299}*Dom + 1,5*P_0*Imp + P_{299}*K$ 

γ) Τέλος, η τιμή εκκίνησης  $P_0$ του μοντέλου μας είναι η εξής:

Αυτό σημαίνει ότι η τιμή των εμπορευμάτων της ελληνικής οικονομίας πριν την υποτίμηση είναι 1 νομισματική μονάδα (π.χ 1 ευρώ).

Αν « τρέξουμε » τη παραπάνω εντολή στο mathematica θα πάρουμε με τη μορφή διανυσμάτων γραμμή<sup>21</sup> τις τιμές των εμπορευμάτων ανά κλάδο<sup>22</sup> που είναι και το ζητούμενό μας. Τέλος, για να είναι τα

 <sup>&</sup>lt;sup>21</sup> Τα διανύσματα γραμμή είναι όσα και οι επαναλήψεις που εκτελέσαμε στο πρόγραμμα, δηλαδή 300
 <sup>22</sup> Βλέπε αναλυτικά τα 300 διανύσματα γραμμή των τιμών των εμπορευμάτων στο Β.1.β Παράρτημα σελίδα 252

αποτελέσματα καλύτερα αντιληπτά από τον αναγνώστη έχουν μεταφερθεί σε πίνακα που ακολουθούν στην επόμενη ενότητα (4.6.2 ενότητα).

Ο πίνακας αυτός μας δείχνει :

α) τις επιδράσεις των τιμών των εμπορευμάτων ανά κλάδο για τις πρώτες 20 επαναλήψεις (που είναι και μεγαλύτερες)

β) σε πια επανάληψη σταματάνε οι επιδράσεις της υποτίμησης (τελευταία σειρά)

και

γ) τη τιμή που έχουν τα εμπορεύματα μετά το πέρας της επίδρασης της υποτίμησης του νομίσματος κατά 50 % (τελευταία σειρά)

## 4.6.2 Αποτελέσματα 1° μοντέλου σε πίνακα για υποτίμηση 50%

	Πίνακας αποτελεσμάτων 1 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος κατά 50% PRODUCTS Products Products Fish and Coal and Crude petroleum Uranium Metal Other Food Tobacco													
	PRODUCTS (CPA)	Products of agriculture , hunting & related services	Products of forestry, logging and related services	Fish and other fishing products; services incidental of fishing	Coal and lignite; peat	Crude petroleum and natural gas; services incidental to oil and gas	Uranium and thorium ores	Metal ores	Other mining and quarrying products	Food products and beverages	Tobacco products			
	Τιμή	E	F	G	Н	I	J	K	L	М	N			
	<b>P</b> <sub>1</sub>	1.03061	1.0015	1.02729	1.03676	1.05692	0.0	1.03651	1.04307	1.04129	1.03999			
۳.	<b>P</b> <sub>2</sub>	1.0687	1.012	1.06978	1.08058	1.10721	0.0	1.08252	1.09774	1.07705	1.07606			
50	P <sub>3</sub>	1.10453	1.02709	1.11041	1.12099	1.15087	0.0	1.12531	1.1438	1.11023	1.10909			
تا ۲	P <sub>4</sub>	1.13672	1.04488	1.14642	1.15641	1.18742	0.0	1.16209	1.18044	1.14054	1.13882			
υ Ο Ο	<b>P</b> <sub>5</sub>	1.16543	1.06421	1.17785	1.1871	1.21753	0.0	1.19295	1.20974	1.16784	1.16535			
ηέ	<b>P</b> <sub>6</sub>	1.19103	1.0843	1.20526	1.21371	1.24239	0.0	1.2188	1.2337	1.19229	1.189			
∖ր	<b>P</b> <sub>7</sub>	1.2139	1.10458	1.22921	1.23689	1.26315	0.0	1.24062	1.25379	1.21417	1.21016			
νάλ	P <sub>8</sub>	1.2344	1.12466	1.25024	1.2572	1.2808	0.0	1.2593	1.27103	1.23382	1.2292			
πα	<b>P</b> 9	1.25283	1.14428	1.2688	1.27513	1.29608	0.0	1.27555	1.28613	1.25152	1.24643			
lηε	<b>P</b> <sub>10</sub>	1.26946	1.16324	1.28528	1.29106	1.30953	0.0	1.28989	1.29958	1.26755	1.26212			
2	P <sub>11</sub>	1.28452	1.18145	1.3	1.30532	1.32154	0.0	1.30273	1.31172	1.28213	1.27647			
ότ	<b>P</b> <sub>12</sub>	1.29822	1.19883	1.31322	1.31816	1.3324	0.0	1.31436	1.32279	1.29546	1.28966			
απ	<b>P</b> <sub>13</sub>	1.31074	1.21535	1.32517	1.3298	1.34232	0.0	1.32501	1.33297	1.30769	1.30184			
ιής	P <sub>14</sub>	1.3222	1.23101	1.33603	1.34039	1.35143	0.0	1.33483	1.34239	1.31896	1.31312			
111	<b>P</b> 15	1.33276	1.24582	1.34596	1.35008	1.35986	0.0	1.34394	1.35115	1.32938	1.32361			
аl 2	<b>P</b> <sub>16</sub>	1.3425	1.25981	1.35506	1.359	1.36769	0.0	1.35243	1.35931	1.33906	1.33338			
λή	<b>P</b> <sub>17</sub>	1.35153	1.273	1.36346	1.36722	1.375	0.0	1.36038	1.36695	1.34806	1.34251			
κβo	P <sub>18</sub>	1.35991	1.28544	1.37123	1.37483	1.38182	0.0	1.36784	1.37412	1.35645	1.35107			
ετα	<b>P</b> <sub>19</sub>	1.36772	1.29716	1.37845	1.38191	1.38822	0.0	1.37485	1.38085	1.3643	1.35909			
Σ	<b>P</b> <sub>20</sub>	1.37502	1.3082	1.38518	1.38849	1.39422	0.0	1.38145	1.38718	1.37166	1.36662			
Σταθ	εροποίηση τιμής	P <sub>212</sub> :1,5	P220 : 1,5	P223:1,5	P210 : 1,5	P213 : 1,5		P <sub>212</sub> : 1,5	P <sub>211</sub> : 1,5	P <sub>212</sub> : 1,5	P213:1,5			

	Πίνακας αποτελεσμάτων 1 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος κατά 50% (συνέχεια) PRODUCTS Textiles Wearing Leather Wood and Pulp. Printed Coke. Chemicals, Rubber Other												
	PRODUCTS (CPA)	Textiles	Wearing apparel; furs	Leather and leather products	Wood and products of wood and cork (except furniture);	Pulp, paper and paper products	Printed matter and recorded media	Coke, refined petroleum products and nuclear fuels	Chemicals, chemical products and man- made fibres	Rubber and plastic products	Other non- metallic mineral products		
	Τιμή	0	Р	Q	R	S	Т	U	V	W	Х		
۲	P1	1.09074	1.07241	1.08793	1.08165	1.12015	1.07374	1.33344	1.14101	1.11112	1.04902		
20	P <sub>2</sub>	1.15007	1.12442	1.15101	1.13362	1.1856	1.12836	1.40351	1.21033	1.1789	1.09354		
sh	P <sub>3</sub>	1.1915	1.1636	1.19498	1.169	1.2249	1.16832	1.42134	1.24944	1.22232	1.13239		
۲ ک	P <sub>4</sub>	1.2222	1.1943	1.2269	1.1956	1.25149	1.19846	1.42857	1.27501	1.25224	1.16569		
έũ	<b>P</b> <sub>5</sub>	1.24623	1.2192	1.25138	1.21728	1.27156	1.22225	1.43342	1.29392	1.27451	1.19411		
μ	P <sub>6</sub>	1.26595	1.24004	1.27107	1.23589	1.28794	1.24189	1.43752	1.30915	1.29225	1.21846		
նչդ	<b>P</b> <sub>7</sub>	1.28274	1.25792	1.28756	1.25238	1.30201	1.25873	1.44121	1.3221	1.30711	1.2395		
ανά	P <sub>8</sub>	1.29741	1.27361	1.3018	1.26728	1.31447	1.27359	1.44461	1.33347	1.32001	1.25789		
ШЗ	P <sub>9</sub>	1.31047	1.28761	1.31436	1.28091	1.32571	1.28696	1.44774	1.34365	1.33145	1.27414		
۳ <u>1</u>	<b>P</b> <sub>10</sub>	1.32225	1.30027	1.32564	1.29347	1.33597	1.29917	1.45065	1.3529	1.34178	1.28866		
culo	P <sub>11</sub>	1.33298	1.31183	1.33589	1.30512	1.34541	1.31043	1.45336	1.36137	1.35119	1.30177		
, Q	<b>P</b> <sub>12</sub>	1.34282	1.32249	1.3453	1.31596	1.35415	1.32088	1.45589	1.36919	1.35983	1.31369		
b B B B B B B B B B B B B B B B B B B B	P <sub>13</sub>	1.3519	1.33236	1.35399	1.3261	1.36226	1.33063	1.45826	1.37645	1.36782	1.32461		
μή	P <sub>14</sub>	1.36031	1.34156	1.36206	1.33559	1.36983	1.33975	1.46049	1.38322	1.37523	1.33468		
31	<b>P</b> <sub>15</sub>	1.36812	1.35015	1.36959	1.34449	1.37691	1.34831	1.46259	1.38955	1.38214	1.34401		
च	P <sub>16</sub>	1.37541	1.3582	1.37664	1.35286	1.38355	1.35635	1.46456	1.39548	1.38859	1.35268		
λή	P <sub>17</sub>	1.38222	1.36577	1.38324	1.36074	1.38978	1.36393	1.46642	1.40105	1.39462	1.36078		
χβο	P <sub>18</sub>	1.3886	1.37288	1.38946	1.36815	1.39564	1.37108	1.46818	1.40629	1.40029	1.36835		
510	<b>P</b> <sub>19</sub>	1.39459	1.37959	1.3953	1.37515	1.40116	1.37782	1.46984	1.41123	1.40561	1.37545		
Z	<b>P</b> <sub>20</sub>	1.40021	1.38591	1.40082	1.38175	1.40637	1.38419	1.47141	1.41589	1.41062	1.38211		
	Σταθεροποίηση τιμής	P <sub>207</sub> : 1,5	P <sub>210</sub> : 1,5	P <sub>195</sub> : 1,5	P <sub>211</sub> : 1,5	P <sub>206</sub> : 1,5	P <sub>211</sub> : 1,5	P <sub>184</sub> : 1,5	P <sub>204</sub> : 1,5	P <sub>205</sub> : 1,5	P <sub>210</sub> : 1,5		

	Πίνακας αποτελεσμάτων 1 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος κατά 50% (συνέχεια) PRODUCTS Basic Fabricated Machinery Office Electrical Radio, Medical, Motor Other Furniture;													
	PRODUCTS	Basic	Fabricated	Machinery	Office	Electrical	Radio,	Medical,	Motor	Other	Furniture;			
	(CPA)	metals	metal	and	machinery	machinery	television and	precision	vehicles,	transport	other			
			products,	equipment	and	and	communication	and optical	trailers	equipment	manufact.			
			except	n.e.c.	computers	apparatus	equipment and	instruments,	and		goods			
			machinery			n.e.c.	apparatus	watches and	semi-		n.e.c.			
			equipment					CIUCKS	trailer 5					
	Τιμή	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH			
_	P <sub>1</sub>	1.15279	1.11407	1.12205	1.07173	1.1195	1.07333	1.12107	1.14928	1.11845	1.06892			
20'	P <sub>2</sub>	1.23415	1.1931	1.1975	1.12561	1.19763	1.12732	1.19271	1.22561	1.19277	1.12345			
λL	P <sub>3</sub>	1.28009	1.24408	1.24501	1.1667	1.24769	1.16814	1.23731	1.26813	1.24032	1.16547			
ე ე	P <sub>4</sub>	1.30868	1.27738	1.27639	1.19874	1.28066	1.19989	1.2672	1.29463	1.27218	1.19807			
έū	<b>P</b> <sub>5</sub>	1.32848	1.30039	1.2985	1.22439	1.30364	1.22536	1.2889	1.3132	1.29487	1.224			
μ	P <sub>6</sub>	1.34355	1.31751	1.31519	1.24554	1.3208	1.2464	1.30581	1.32755	1.31214	1.24527			
άλτ	<b>P</b> <sub>7</sub>	1.35582	1.33117	1.32862	1.26347	1.33448	1.26426	1.31974	1.33944	1.32609	1.26325			
or vi	P <sub>8</sub>	1.36627	1.34267	1.33997	1.27904	1.34595	1.27979	1.3317	1.34974	1.33789	1.27886			
<sub>ا</sub> 1	P <sub>9</sub>	1.37542	1.35272	1.34991	1.29283	1.35593	1.29355	1.34225	1.35891	1.34821	1.2927			
/ 1 <sup>r</sup>	P <sub>10</sub>	1.38358	1.36173	1.35883	1.30523	1.36482	1.30593	1.35173	1.36721	1.35745	1.30515			
ա	P <sub>11</sub>	1.39094	1.36991	1.36696	1.31652	1.37288	1.3172	1.36037	1.37482	1.36584	1.31651			
πó	<b>P</b> <sub>12</sub>	1.39763	1.37743	1.37445	1.3269	1.38025	1.32756	1.3683	1.38184	1.37354	1.32695			
α 2	P <sub>13</sub>	1.40376	1.38438	1.3814	1.3365	1.38706	1.33714	1.37565	1.38836	1.38065	1.33662			
ļnų	<b>P</b> <sub>14</sub>	1.4094	1.39083	1.38788	1.34544	1.39337	1.34605	1.38248	1.39445	1.38727	1.34562			
4 V	<b>P</b> <sub>15</sub>	1.41461	1.39684	1.39394	1.35379	1.39925	1.35438	1.38886	1.40014	1.39344	1.35402			
đ	<b>P</b> <sub>16</sub>	1.41945	1.40247	1.39962	1.36162	1.40475	1.36218	1.39484	1.40548	1.39921	1.36189			
λή	<b>P</b> <sub>17</sub>	1.42395	1.40774	1.40496	1.36897	1.40989	1.3695	1.40045	1.4105	1.40462	1.36928			
αβς	<b>P</b> <sub>18</sub>	1.42814	1.41269	1.40999	1.37588	1.41472	1.3764	1.40573	1.41522	1.4097	1.37624			
Ιετ	<b>P</b> <sub>19</sub>	1.43207	1.41734	1.41473	1.3824	1.41926	1.38289	1.4107	1.41968	1.41449	1.38279			
N	<b>P</b> <sub>20</sub>	1.43575	1.42172	1.4192	1.38855	1.42354	1.38902	1.41539	1.42388	1.41899	1.38896			
	Σταθεροποίηση	P <sub>199</sub> : 1,5	$P_{203}:1,5$	$P_{204}: 1,5$	$P_{210}:1,5$	$P_{202}:1,5$	$P_{213}:1,5$	$P_{204}: 1,5$	$P_{204}: 1,5$	$P_{300} \approx 1,5$	$P_{210}:1,5$			
	τιμής													

	Πίνακας αποτελεσμάτων 1 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος κατά 50% (συνέχεια) PRODUCTS Secondary Electrical Collected Construction Trade. Wholesale Retail trade Hotel and Land Water												
	PRODUCTS	Secondary	Electrical	Collected	Construction	Trade,	Wholesale	Retail trade	Hotel and	Land	Water		
	(CPA)	raw	energy,	and	work	maintenance	trade and	services,	restaurant	transport;	transport		
		materials	gas,	purified		and repair	commission	except of	services	transport	services		
			steam	water,		services of	trade	motor		via			
			and hot	distribution		motor	services,	vehicles and		pipeline			
			water	services of		Venicies &	except of	motorcycles;		services			
				Waler		rotail sale of		sorviços					
						automotive		Services					
						fuel							
	Τιμή	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR		
	P <sub>1</sub>	1.13222	1.02405	1.03596	1.05754	1.02271	1.0349	1.02117	1.03903	1.06507	1.14002		
F	P <sub>2</sub>	1.21487	1.06118	1.0758	1.11403	1.04415	1.07225	1.04464	1.07673	1.14048	1.22751		
20	<b>P</b> <sub>3</sub>	1.26379	1.09789	1.11303	1.16019	1.06507	1.10774	1.06851	1.11078	1.19492	1.27935		
ماہ	P <sub>4</sub>	1.29445	1.13163	1.14652	1.19655	1.08552	1.1396	1.09171	1.14118	1.23229	1.31143		
ς Ω	<b>P</b> <sub>5</sub>	1.31554	1.16207	1.17631	1.22532	1.10545	1.16753	1.1138	1.1683	1.25889	1.33291		
μ ε,	P <sub>6</sub>	1.33142	1.18933	1.20274	1.24855	1.12481	1.1919	1.13462	1.19252	1.27896	1.34853		
μ	<b>P</b> <sub>7</sub>	1.34425	1.2137	1.22618	1.26781	1.14352	1.21324	1.15421	1.21418	1.29504	1.36074		
νάλ	P <sub>8</sub>	1.35516	1.23547	1.24703	1.28419	1.16154	1.2321	1.17262	1.23364	1.30856	1.37082		
πα	P <sub>9</sub>	1.36471	1.25494	1.26563	1.29846	1.17883	1.24893	1.18995	1.25118	1.32036	1.37947		
lηε	<b>P</b> <sub>10</sub>	1.37325	1.2724	1.28229	1.31111	1.19536	1.26411	1.20627	1.26707	1.33092	1.38709		
2	P <sub>11</sub>	1.38099	1.28811	1.29726	1.32251	1.21113	1.27792	1.22166	1.28154	1.34055	1.39394		
ότ	<b>P</b> <sub>12</sub>	1.38806	1.30229	1.31079	1.33289	1.22613	1.2906	1.23619	1.29476	1.34942	1.40016		
απ	<b>P</b> <sub>13</sub>	1.39457	1.31515	1.32305	1.34243	1.24039	1.30231	1.24993	1.30691	1.35766	1.40588		
τής	P <sub>14</sub>	1.40059	1.32685	1.33422	1.35125	1.25393	1.31318	1.26292	1.31812	1.36535	1.41117		
मि	<b>P</b> <sub>15</sub>	1.40618	1.33754	1.34443	1.35946	1.26676	1.32332	1.27521	1.3285	1.37256	1.41608		
चे	P <sub>16</sub>	1.41138	1.34734	1.35381	1.36711	1.27893	1.33281	1.28685	1.33814	1.37934	1.42067		
λή	<b>P</b> <sub>17</sub>	1.41624	1.35637	1.36245	1.37428	1.29045	1.34171	1.29787	1.34712	1.38571	1.42495		
χβο	P <sub>18</sub>	1.42079	1.36472	1.37044	1.38101	1.30137	1.35008	1.30831	1.35551	1.39173	1.42898		
lετι	P <sub>19</sub>	1.42506	1.37245	1.37784	1.38733	1.31171	1.35796	1.3182	1.36336	1.3974	1.43275		
2	P <sub>20</sub>	1.42907	1.37964	1.38472	1.39328	1.3215	1.3654	1.32758	1.37072	1.40276	1.43631		
	Σταθεροποίηση	$P_{201}:1,5$	<b>P</b> <sub>211</sub> : 1,5	$P_{210}:1,5$	P <sub>209</sub> : 1,5	$P_{220}:1,5$	P <sub>214</sub> : 1,5	P <sub>219</sub> : 1,5	P <sub>213</sub> : 1,5	$P_{208}:1,5$	P <sub>217</sub> : 1,5		
	τιμής												

	Πίνακας αποτελεσμάτων 1 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος κατά 50% (συνέχεια) PRODUCTS Air Supportin Post and Financial Insurance and Activities Real Renting Computer													
	PRODUCTS (CPA)	Air transport services	Supportin g and auxiliary transport services; travel	Post and telecommun ication services	Financial intermediat. services, except insurance & pension	Insurance and pension funding services, except compulsory	Activities auxiliary to financial intermediat.	Real estate services	Renting services of machinery & equipment without operator & of p & h goods	Computer and related services				
	Τμή	AS	AT	AU	AV	AW	AX	AY	AZ	BA				
_	P1	1.05769	1.05455	1.01438	1.00829	1.02209	1.01397	1.00455	1.026	1.03089				
20'	P <sub>2</sub>	1.11724	1.10494	1.03081	1.02085	1.04475	1.03131	1.01385	1.05366	1.05977				
٨	<b>P</b> <sub>3</sub>	1.16395	1.14672	1.04786	1.0362	1.06766	1.0504	1.02706	1.07991	1.08646				
2 2 2	P <sub>4</sub>	1.19951	1.18078	1.06511	1.05331	1.09016	1.07029	1.04288	1.10423	1.11095				
έα	<b>P</b> <sub>5</sub>	1.22718	1.20879	1.08237	1.0714	1.11183	1.09037	1.06024	1.1267	1.13339				
۲	P <sub>6</sub>	1.24941	1.2322	1.09948	1.08992	1.13245	1.1102	1.07838	1.14753	1.15402				
ίλη	<b>P</b> <sub>7</sub>	1.26787	1.25213	1.11634	1.10849	1.15199	1.12953	1.09677	1.16691	1.17308				
αΛ	P <sub>8</sub>	1.28366	1.26941	1.13287	1.12682	1.17043	1.14819	1.11506	1.18501	1.19077				
π3	<b>P</b> 9	1.29748	1.28464	1.149	1.14473	1.18784	1.16608	1.13303	1.20195	1.20726				
1 J	<b>P</b> <sub>10</sub>	1.30981	1.29824	1.16468	1.1621	1.20426	1.18317	1.15053	1.21787	1.2227				
որ	<b>P</b> <sub>11</sub>	1.32097	1.31053	1.17989	1.17884	1.21977	1.19945	1.16747	1.23284	1.2372				
, Q	<b>P</b> <sub>12</sub>	1.33119	1.32173	1.19459	1.19492	1.23441	1.21492	1.18378	1.24694	1.25084				
8	<b>P</b> <sub>13</sub>	1.34062	1.33203	1.20877	1.2103	1.24824	1.2296	1.19945	1.26025	1.26371				
hų	P <sub>14</sub>	1.34938	1.34154	1.22243	1.22499	1.26131	1.24353	1.21446	1.2728	1.27587				
ដ	<b>P</b> <sub>15</sub>	1.35755	1.35037	1.23556	1.23899	1.27368	1.25674	1.2288	1.28467	1.28736				
ц	<b>P</b> <sub>16</sub>	1.3652	1.35859	1.24817	1.25231	1.28538	1.26925	1.2425	1.29589	1.29825				
λή	<b>P</b> <sub>17</sub>	1.37238	1.36628	1.26025	1.26498	1.29646	1.28112	1.25555	1.3065	1.30856				
xβo	P <sub>18</sub>	1.37913	1.37349	1.27183	1.27701	1.30695	1.29237	1.26799	1.31654	1.31833				
<u>ετ</u>	P <sub>19</sub>	1.3855	1.38025	1.2829	1.28844	1.31689	1.30303	1.27982	1.32604	1.3276				
Σ	P <sub>20</sub>	1.3915	1.38662	1.29349	1.29929	1.3263	1.31314	1.29107	1.33504	1.33638				
	Σταθεροποίηση τιμής	P <sub>222</sub> : 1,5	P <sub>212</sub> : 1,5	P <sub>223</sub> : 1,5	P <sub>222</sub> : 1,5	P <sub>219</sub> : 1,5	P <sub>220</sub> : 1,5	P <sub>222</sub> : 1,5	P <sub>219</sub> : 1,5	P <sub>218</sub> : 1,5				

	Πίνακας αποτελεσμάτων 1 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος κατά 50% (συνέχεια) PRODUCTS Research Other Public Education Health Sewage Membership Recreational. Other Private												
	PRODUCTS	Research	Other	Public	Education	Health	Sewage	Membership	Recreational,	Other	Private		
	(CPA)	and development	services	administrat.	services	social	refuse	services	sporting	services	with		
		services		defence		work	disposal	n.e.c.	services		employed		
				services;		services	services,				persons		
				compulsory			sanitation						
	Τιμή	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK		
Ē	P <sub>1</sub>	1.02663	1.02605	1.04557	1.00152	1.06639	1.02903	1.0232	1.02713	1.0188	0		
v 20	<b>P</b> <sub>2</sub>	1.05483	1.05348	1.08642	1.00657	1.12386	1.06378	1.04844	1.05456	1.03979	0		
եղ	P <sub>3</sub>	1.08303	1.07974	1.1225	1.0144	1.17005	1.0975	1.07295	1.08126	1.06215	0		
ωč	P4	1.10997	1.10427	1.15409	1.02427	1.20688	1.12873	1.09611	1.10664	1.08491	0		
η εί	<b>P</b> <sub>5</sub>	1.13507	1.12702	1.18169	1.03561	1.23654	1.15725	1.11786	1.13042	1.10743	0		
λ	P <sub>6</sub>	1.15817	1.14811	1.20585	1.04799	1.26077	1.18314	1.13826	1.15254	1.12931	0		
άλ	<b>P</b> <sub>7</sub>	1.17934	1.1677	1.22711	1.06113	1.28092	1.20659	1.15743	1.17305	1.15033	0		
ταν	P <sub>8</sub>	1.19872	1.18595	1.24595	1.07477	1.29795	1.22783	1.17546	1.19205	1.17036	0		
1 8.1	<b>P</b> <sub>9</sub>	1.21651	1.20299	1.26275	1.08875	1.3126	1.24708	1.19246	1.20967	1.18933	0		
v 1'	<b>P</b> <sub>10</sub>	1.23289	1.21894	1.27785	1.10291	1.32538	1.26456	1.20851	1.22604	1.20724	0		
որ	P <sub>11</sub>	1.24804	1.23391	1.29153	1.11714	1.33669	1.28045	1.22368	1.24128	1.2241	0		
πό	P <sub>12</sub>	1.26209	1.24798	1.304	1.13133	1.34682	1.29493	1.23803	1.2555	1.23995	0		
υ	P <sub>13</sub>	1.27517	1.26123	1.31544	1.14541	1.356	1.30816	1.2516	1.2688	1.25481	0		
μή	P <sub>14</sub>	1.28739	1.27372	1.32598	1.1593	1.36437	1.32029	1.26446	1.28125	1.26876	0		
с С	P <sub>15</sub>	1.29882	1.28551	1.33575	1.17296	1.37207	1.33142	1.27664	1.29295	1.28183	0		
च	P <sub>16</sub>	1.30955	1.29666	1.34484	1.18633	1.3792	1.34167	1.28818	1.30395	1.29409	0		
λή	P <sub>17</sub>	1.31964	1.30719	1.35332	1.1994	1.38583	1.35114	1.29912	1.3143	1.30559	0		
χβς	P <sub>18</sub>	1.32913	1.31716	1.36125	1.21212	1.39201	1.3599	1.30948	1.32406	1.31638	0		
ET(	<b>P</b> <sub>19</sub>	1.33809	1.3266	1.36869	1.22448	1.3978	1.36802	1.31931	1.33327	1.3265	0		
N	<b>P</b> <sub>20</sub>	1.34654	1.33553	1.37567	1.23647	1.40324	1.37557	1.32862	1.34197	1.33601	0		
	Σταθεροποίηση τιμής	P <sub>216</sub> : 1,5	$P_{218}: 1,5$	P <sub>212</sub> :1,5	P <sub>229</sub> : 1,5	P <sub>207</sub> : 1,5	P <sub>211</sub> : 1,5	P <sub>218</sub> : 1,5	$P_{217}: 1,5$	P <sub>217</sub> : 1,5			

#### 4.7 Δείκτης Συνολικού Πληθωρισμού Για Ποσοστό Υποτίμησης, 15% Και 50%

Στο σημείο αυτό για να έχουμε μία καλύτερη εικόνα του πληθωριστικού κύματος που δημιουργείται στο πρώτο μοντέλο λόγω της υποτίμησης του νομίσματος υπολογίζουμε τους δείκτες συνολικού πληθωρισμού (ΣΣΔΠ)<sup>23</sup> για τα ποσοστά υποτίμησης 15% και 50%. Για να υπολογίσουμε αυτούς τους δείκτες πρέπει να κάνουμε αρχικά τους εξής υπολογισμούς:

1° πολλαπλασιάζουμε την τιμή Ρ κάθε κλάδου της οικονομίας με την εγχώρια παραγωγή κάθε κλάδου (έχουμε 59 τιμές και 59 κλάδους άρα θα υπολογίσουμε 59 γινόμενα ένα για κάθε κλάδο).

Όπου : Ρ οι τιμές P<sub>1</sub>,P<sub>2</sub>,P<sub>3</sub>,P<sub>4</sub>,P<sub>5</sub> που βρήκαμε στην ενότητα 4.5.2 και 4.6.2 και P<sub>0</sub> =  $1^{24}$ .

 $2^{ov}$  προσθέτουμε τα 59 γινόμενα που υπολογίσαμε και βρίσκουμε τη αξία συνολικής παραγωγής για τις χρονικές περιόδους 0,1,2,3,4 και 5 αντίστοιχα με τα  $P_{0}$ , $P_{1}$ , $P_{2}$ , $P_{3}$ , $P_{4}$ , $P_{5}$ .

Τώρα είμαστε έτοιμοι να υπολογίσουμε τους δείκτες συνολικού πληθωρισμού για ποσοστό υποτίμησης 15% και 50%.

<sup>&</sup>lt;sup>23</sup> Θα υπολογίσουμε πέντε δείκτες πληθωρισμού που αντιστοιχούν σε πέντε έτη και αυτό γιατί πέρα από τα πέντε χρόνια πρακτικά οι δείκτες δεν έχουν νόημα. (Μετά από πέντε έτη θα έχουμε τεχνολογικές μεταβολές, μεταβολές στην κατανομή του εισοδήματος, υποκαταστάσεις εισαγωγών-εξαγωγών κ.λπ., οπότε το υπόδειγμα χάνει την όποια αξιοπιστία του).

 $<sup>^{24}</sup>P_0 = 1$  επειδή έχουμε θεωρήσει ως φυσική μονάδα μέτρησης κάθε εμπορεύματος εκείνη την ποσότητά του, της οποίας η αγοραία αξία (η τιμή αγοράς) ισούται με 1 νομισματική μονάδα.

## 4.7.1 Δείκτες συνολικού πληθωρισμού για ποσοστό υποτίμησης 15%

Μετά από τους υπολογισμούς (βλέπε αναλυτικά στη σελίδα 46) που έγιναν σύμφωνα με την ενότητα 4.7 είμαστε σε θέση να αναφέρουμε ότι οι αξίες συνολικής παραγωγής με υποτίμηση 15% για τις χρονικές περιόδους 0,1,2,3,4,5 είναι οι εξής :

Αξία συνολικής παραγωγής (ΑΣΠ)			
Συνολική αξία παραγωγής την P <sub>0</sub> περίοδο	87963,148700363500		
Συνολική αξία παραγωγής την Ρ1 περίοδο	89458,871810396000		
Συνολική αξία παραγωγής την $P_2$ περίοδο	90628,411497152800		
Συνολική αξία παραγωγής την Ρ3 περίοδο	91565,256041804900		
Συνολική αξία παραγωγής την Ρ4 περίοδο	92338,687974961200		
Συνολική αξία παραγωγής την Ρ5 περίοδο	92994,381366992000		

Έτσι οι δείκτες συνολικού πληθωρισμού βάση των υπολογισμών (βλέπε αναλυτικά σελίδα 46) είναι οι εξής:

Περίοδος δείκτη συνολικού πληθωρισμού (ΣΣΔΠ)	ΣΣΔΠ=[ΑΣΠ περιόδου t+1 - ΑΣΠ περιόδου t]/ΑΣΠ περιόδου t	ΣΣΔΠ σε ποσοστό (%)
Δείκτης συνολικού πληθωρισμού την πρώτη περίοδο	0,017003974188	1,70%
Δείκτης συνολικού πληθωρισμού την δεύτερη περίοδο	0,013073490232	1,30%
Δείκτης συνολικού πληθωρισμού την τρίτη περίοδο	0,010337205841	1,03%
Δείκτης συνολικού πληθωρισμού την τέταρτη περίοδο	0,008446783929	0,84%
Δείκτης συνολικού πληθωρισμού την πέμπτη περίοδο	0,007100960674	0,71%

# 4.7.2 Δείκτες συνολικού πληθωρισμού για ποσοστό υποτίμησης 50%

Μετά από τους υπολογισμούς (βλέπε αναλυτικά στη σελίδα 46) που έγιναν σύμφωνα με την ενότητα 4.7 είμαστε σε θέση να αναφέρουμε ότι οι αξίες συνολικής παραγωγής με υποτίμηση 50% για τις χρονικές περιόδους 0,1,2,3,4,5 είναι οι εξής :

Αξία συνολικής παραγωγής (ΑΣΠ)				
Συνολική αξία παραγωγής την P <sub>0</sub> περίοδο	87963,14870036350			
Συνολική αξία παραγωγής την Ρ1 περίοδο	92948,97980875270			
Συνολική αξία παραγωγής την P <sub>2</sub> περίοδο	96847,36553186710			
Συνολική αξία παραγωγής την Ρ3 περίοδο	99970,33248061210			
Συνολική αξία παραγωγής την Ρ4 περίοδο	102548,09870744800			
Συνολική αξία παραγωγής την Ρ5 περίοδο	104734,04374638600			

Έτσι οι δείκτες συνολικού πληθωρισμού βάση των υπολογισμών (βλέπε αναλυτικά σελίδα 46) είναι οι εξής:

Περίοδος δείκτη συνολικού πληθωρισμού (ΣΣΔΠ)	ΣΣΔΠ=[ΑΣΠ περιόδου t+1 - ΑΣΠ περιόδου t]/ΑΣΠ περιόδου t	ΣΣΔΠ σε ποσοστό (%)
Δείκτης συνολικού πληθωρισμού την πρώτη περίοδο	0,05668090765	5,66%
Δείκτης συνολικού πληθωρισμού την δεύτερη περίοδο	0,04194113514	4,19%
Δείκτης συνολικού πληθωρισμού την τρίτη περίοδο	0,03224627672	3,22%
Δείκτης συνολικού πληθωρισμού την τέταρτη περίοδο	0,02578531213	2,57%
Δείκτης συνολικού πληθωρισμού την πέμπτη περίοδο	0,02131629027	2,13%

ΣΣΔΠ 1

Μοντέλο 2°

P = (P\*Dom + P\*Imp + P\*B + P\*F) \* (1+r)

### 5. Μοντέλο 2°

#### 5.1Ορισμός & Επεξήγηση 2<sup>ου</sup> Μοντέλου

Όπως στο προηγούμενο κεφάλαιο έτσι και σε αυτό θα επεξεργαστούμε με τον ίδιο τρόπο ένα ακόμη μοντέλο. Το μοντέλο είναι της εξής μορφής :

## P = (P\*Dom + P\*Imp + P\*B + P\*F) \* (1+r)

Όπου:

P → Διάνυσμα γραμμή (1x59) των τιμών των εμπορευμάτων Ως φυσική μονάδα μέτρησης κάθε εμπορεύματος θεωρούμε εκείνη την ποσότητά του, της οποίας η αγοραία αξία (η τιμή αγοράς) ισούται με 1 νομισματική μονάδα.

Dom → Μήτρα συντελεστών εγχώριας παραγωγής (59x59)

Imp → Μήτρα συντελεστών εισαγωγών (59x59)

Β  $\rightarrow$  Διαγώνια μήτρα (59x59) όπου όλα τα στοιχεία της είναι μηδέν εκτός από τα στοιχεία της κύριας διαγωνίου που εκφράζουν το ποσοστό των ακαθάριστων αποσβέσεων παγίου κεφαλαίου του κλάδου j στην τιμή του εμπορεύματος j

 $F \rightarrow \Delta$ ιαγώνια μήτρα (59x59) όπου όλα τα στοιχεία της είναι μηδέν εκτός από τα στοιχεία της κύριας διαγωνίου που εκφράζουν το ποσοστό των καθαρών φόρων επί της παραγωγής του κλάδου j στην τιμή του εμπορεύματος j

r  $\rightarrow \Delta$ ιαγώνια μήτρα (59x59) όπου όλα τα στοιχεία της είναι μηδέν εκτός από τα στοιχεία της κύριας διαγωνίου που εκφράζουν το ποσοστό του αθροίσματος των αμοιβών των απασχολουμένων και του καθαρού λειτουργικού πλεονάσματος του κλάδου j στο άθροισμα των συνολικών ενδιάμεσων εισροών, των ακαθάριστων αποσβέσεων παγίου κεφαλαίου και των καθαρών φόρων επί της παραγωγής του κλάδου j<sup>25</sup>

Το παραπάνω σύστημα τιμών λέει ότι η τιμή P ενός εμπορεύματος οποιουδήποτε κλάδου της ελληνικής οικονομίας είναι ίση με την τιμή επί το συντελεστή της μήτρας εγχώριας παραγωγής συν την τιμή επί τον συντελεστή της μήτρας εισαγωγών συν την τιμή επί τον συντελεστή της

<sup>&</sup>lt;sup>25</sup> Μαριόλης Θεόδωρος – Οικονομίδης Χαράλαμπος – Σταμάτης Γιώργος – Φουστέρης Νίκος, 1997, Ποσοτική εκτίμηση των επιπτώσεων της υποτίμησης στο «κόστος» παραγωγής, Αθήνα, Εκδόσεις «Κριτική», σελ 13

μήτρας των καθαρών αποσβέσεων συν την τιμή επί τον συντελεστή της μήτρας των καθαρών φόρων και όλο αυτό επί το συντελεστή της μήτρας (r + 1).

Για παράδειγμα η τιμή του P του κλάδου Coke, refined petroleum products and nuclear fuels με φυσική μονάδα μέτρησης τη μονάδα είναι ίση με

 $P{=}(1{*}0{,}18474{+}1{*}0{,}640975{+}1{*}0{,}0089631{+}1{*}0{,}039028){*}(1{,}144547) \Longrightarrow$ 

Î	Î	Î	Û	①
Dom	Imp	В	F	(1 + r)

 $\Rightarrow P = 1$ 

Ας δούμε όμως πώς προήλθαν οι μήτρες που χρησιμοποιήσαμε στο σύστημα τιμών.

#### 5.2 Επεξεργασία Αρχικών Πινάκων Εισροών – Εκροών Ελληνικής Οικονομίας

Για να μπορέσουμε να χρησιμοποιήσουμε το παραπάνω μοντέλο πρέπει να εξάγουμε τις μήτρες «Dom, Imp» και τους διαγώνιους πίνακες «B, F και r+1». Η εξαγωγή των μητρών γίνεται από τους αρχικούς πίνακες εισροών – εκροών (σελίδα 11-13). Παρακάτω αναλύεται η διαδικασία εξαγωγής της κάθε μήτρας ξεχωριστά.

#### 5.2.1 Εξαγωγή μήτρας εγχώριας παραγωγής - Dom

 Η μήτρα εγχώριας παραγωγής – Dom (59x59) εξάγεται από τον πίνακα εγχώρια παραγωγή (σελίδα 12) ως εξής: Διαιρούμε τις εισροές κάθε κλάδου του πίνακα εγχώρια παραγωγή με τα στοιχεία της γραμμής «Output at basic prices». Η διαίρεση γίνεται ένα προς ένα στοιχείο, για παράδειγμα :

To 1° στοιχείο της 1<sup>ης</sup> στήλης της μήτρα Dom είναι ίσο με E1/ E72 To 2° στοιχείο της 1<sup>ης</sup> στήλης της μήτρα Dom είναι ίσο με E2/ E72 To 3° στοιχείο της 1<sup>ης</sup> στήλης της μήτρα Dom είναι ίσο με E3/ E72 ... έως το 59° στοιχείο

Ομοίως και για την  $2^\eta$  στήλη

To 1° στοιχείο της  $2^{\eta\varsigma}$  στήλης της μήτρα Dom είναι ίσο με F1/F72 To 2° στοιχείο της  $2^{\eta\varsigma}$  στήλης της μήτρα Dom είναι ίσο με F2/F72 To 3° στοιχείο της  $2^{\eta\varsigma}$  στήλης της μήτρα Dom είναι ίσο με F3/F72 ... έως το 59° στοιχείο

Ομοίως μέχρι την 59<sup>η</sup> στήλη

Έτσι δημιουργούμε τη μήτρα συντελεστών εγχώριας παραγωγής (59x59) που την ονομάζουμε μήτρα εγχώριας παραγωγής M2 και ακολουθεί (σελίδα 51)

Mήτρα : Domestic M2

#### 5.2.2 Εξαγωγή μήτρας εισαγωγών – Imp

 Η μήτρα εισαγωγών – Imp (59x59) εξάγεται από τον πίνακα εισαγωγών (σελίδα 13) ως εξής : διαιρούμε τις εισροές κάθε κλάδου του πίνακα εισαγωγών με τα στοιχεία της γραμμής «Output at basic prices».
 Η διαίρεση γίνεται ένα προς ένα στοιχείο, για παράδειγμα :

To 1° στοιχείο της 1<sup>ης</sup> στήλης της μήτρα Imp είναι ίσο με E1/ E72 To 2° στοιχείο της 1<sup>ης</sup> στήλης της μήτρα Imp είναι ίσο με E2/ E72 To 3° στοιχείο της 1<sup>ης</sup> στήλης της μήτρα Imp είναι ίσο με E3/ E72 ...έως το 59° στοιχείο

Ομοίως και για τη<br/>ν $2^\eta$  στήλη

To 1° στοιχείο της 2<sup>ης</sup> στήλης της μήτρα Imp είναι ίσο με F1/F72 To 2° στοιχείο της 2<sup>ης</sup> στήλης της μήτρα Imp είναι ίσο με F2/F72 To 3° στοιχείο της 2<sup>ης</sup> στήλης της μήτρα Imp είναι ίσο με F3/F72 ...έως το 59° στοιχείο

Ομοίως μέχρι την 59<sup>η</sup> στήλη

Έτσι δημιουργούμε τη μήτρα συντελεστών εισαγωγών Imp (59x59) που την ονομάζουμε μήτρα εισαγωγών M2 και ακολουθεί (σελίδα 53).

Μήτρα : Import M2

#### 5.2.3 Εξαγωγή διανύσματος – Β και διαγώνιας μήτρας – Β

Για να δημιουργήσουμε τη διαγώνιο μήτρα Β πρέπει πρώτα απ' όλα να φτιάξουμε το διάνυσμα γραμμή Β. Το διάνυσμα Β προκύπτει από τον πίνακα εγχώρια παραγωγή (σελίδα 12) αν διαιρέσουμε τα στοιχεία της γραμμής «Compensation of employees» με τα στοιχεία της γραμμής «Output at basic prices». Η διαίρεση γίνεται ένα προς ένα στοιχείο, για παράδειγμα:

Το 1° στοιχείο του διανύσματος γραμμή – B είναι ίσο με E64/E72 Το 2° στοιχείο του διανύσματος γραμμή – B είναι ίσο με F64/F72 Το 3° στοιχείο του διανύσματος γραμμή – B είναι ίσο με G64/G72

Ομοίως μέχρι το 59<sup>η</sup> στοιχείο

Έτσι δημιουργούμε το διάνυσμα γραμμή – B (1x59) (σελίδα 55).

Για να δημιουργήσουμε την διαγώνια μήτρα – B (59x59) που χρειαζόμαστε στο μοντέλο παίρνουμε ένα πίνακα (59x59) που όλα τα στοιχεία του είναι μηδέν εκτός από αυτά της κύριας διαγωνίου όπου βρίσκονται τα στοιχεία του διανύσματος γραμμής – B. Ειδικότερα :

Το 1° στοιχείο της 1η<br/>ς γραμμής της διαγώνιας μήτρας – Β είναι το 1° στοιχείο του διανύσματος γραμμ<br/>ή – Β

Το 2° στοιχείο της 2η<br/>ς γραμμής της διαγώνιας μήτρας – B είναι το 2° στοιχείο του διανύσματος γραμμ<br/>ή – B

To 3° στοιχείο της 3η<br/>ς γραμμής της διαγώνιας μήτρας – B είναι το 3° στοιχείο του διανύσματος γραμμ<br/>ή – B

Ομοίως έως το 59° στοιχείο

Έτσι δημιουργούμε την διαγώνια μήτρα – B (59x59) που ακολουθεί (σελίδα 55)

## διαγώνια μήτρα – Β και διάνυσμα

#### 5.2.4 Εξαγωγή διανύσματος – F και διαγώνιας μήτρας – F

Για να δημιουργήσουμε τη διαγώνιο μήτρα – F πρέπει πρώτα απ' όλα να φτιάξουμε το διάνυσμα γραμμή – F. Το διάνυσμα – F προκύπτει από τον πίνακα εγχώρια παραγωγή (σελίδα 12) αν διαιρέσουμε τα στοιχεία της γραμμής «Other net taxes on production» με τα στοιχεία της γραμμής «Output at basic prices». Η διαίρεση γίνεται ένα προς ένα στοιχείο, για παράδειγμα :

Το 1° στοιχείο του διανύσματος γραμμή – F είναι ίσο με E66/E72 Το 2° στοιχείο του διανύσματος γραμμή – F είναι ίσο με F66/F72 Το 3° στοιχείο του διανύσματος γραμμή – F είναι ίσο με G66/G72

Ομοίως μέχρι το 59<sup>η</sup> στοιχείο

Έτσι δημιουργούμε το διάνυσμα γραμμή – F (1x59) (σελίδα 57).

Για να δημιουργήσουμε την διαγώνια μήτρα – F (59x59) που χρειαζόμαστε στο μοντέλο μας θα πάρουμε ένα πίνακα (59x59) που όλα τα στοιχεία του είναι μηδέν εκτός από αυτά της κύριας διαγωνίου όπου θα βρίσκονται τα στοιχεία του διανύσματος γραμμής – F. Ειδικότερα :

Το 1° στοιχείο της 1<br/>ης γραμμής της διαγώνιας μήτρας – F είναι το 1° στοιχείο του διανύσματος γραμμ<br/>ή – F

Το 2° στοιχείο της 2η<br/>ς γραμμής της διαγώνιας μήτρας – F είναι το 2° στοιχείο του διανύσματος γραμμ<br/>ή – F

Το 3° στοιχείο της 3η<br/>ς γραμμής της διαγώνιας μήτρας – F είναι το 3° στοιχείο του διανύσματος γραμμ<br/>ή – F

Ομοίως έως το 59° στοιχείο

Έτσι δημιουργούμε την διαγώνια μήτρα – F (59x59) που ακολουθεί (σελίδα 57).

διαγώνια μήτρα – F

#### 5.2.5 Εξαγωγή διαγώνιας μήτρας – R

• Η διαγώνια μήτρα R = r + 1 προκύπτει με τη βοήθεια του πίνακα Table : Siot (σελίδα 11). Συγκεκριμένα για να δημιουργήσουμε την διαγώνια μήτρα r πρέπει να διαιρέσουμε το άθροισμα των αμοιβών των απασχολουμένων και του καθαρού λειτουργικού πλεονάσματος με το άθροισμα των συνολικών ενδιάμεσων εισροών, των ακαθάριστων αποσβέσεων παγίου κεφαλαίου και των καθαρών φόρων επί της παραγωγής. Βέβαια για να είναι ολοκληρωμένη η διαγώνιος μήτρα που χρειαζόμαστε για το μοντέλο μας R πρέπει ακόμα να προσθέσουμε σε όλα τα στοιχεία της κύριας διαγωνίου τη μονάδα. Για την επίτευξη αυτού ακολουθούμε τέσσερα βήματα τα οποία παρουσιάζονται στο πίνακα Table : Siot M2 (σελίδα 60):

**1**° **Βήμα** : Προσθέτουμε τα στοιχεία της γραμμής «Compensation of employees» με τα αντίστοιχα<sup>26</sup> στοιχεία της γραμμής «Operating surplus, net» και δημιουργούμε τη γραμμή «Numerator»<sup>27</sup>.

**2**° **Βήμα** : Προσθέτουμε τα αντίστοιχα στοιχεία της γραμμής «Total intermediate consumption» με τα αντίστοιχα στοιχεία της γραμμής «Consumption of fixed capital» και τα αντίστοιχα<sup>28</sup> στοιχεία της γραμμής «Other net taxes on production» και δημιουργούμε τη γραμμή «Denominator»<sup>29</sup>

**3º Βήμα** : Διαιρούμε τα στοιχεία της γραμμής «Numerator» με τα αντίστοιχα<sup>30</sup> στοιχεία της γραμμής «Denominator» και δημιουργούμε την γραμμή r<sup>31</sup>

**4° Βήμα** : Στα στοιχεία της γραμμής r προσθέτουμε τη μονάδα 1 (r + 1) και δημιουργούμε την **R** 

5° Βήμα : Φτιάχνουμε έναν πίνακα (59x59) που όλα τα στοιχεία είναι μηδέν εκτός από τα στοιχεία της κύριας διαγωνίου που αποτελούν τα στοιχεία της R.

 $<sup>^{26}</sup>$  Numerator E=E63+E67 , Numerator F=F63+F67, Numerator G=G63+G67 kai ou to ka $\theta'$  exhic

<sup>27</sup> Numerator = Compensation of employees + Operating surplus, net

<sup>&</sup>lt;sup>28</sup> Denominator E = E62 + E66 + E65, Denominator F = F62 + F66 + F65, Denominator F = G62 + G66 + G65 και ου το καθ' εξής

<sup>29</sup> Denominator = Total intermediate consumption + Consumption of fixed capital + Other net taxes on production

 $<sup>^{30}</sup>$   ${\rm I\!\!I}E$  = Numerator E/ Denominator E ,  ${\rm I\!\!I}F$  = Numerator F/ Denominator F ,  ${\rm I\!\!I}G$  = Numerator G/ Denominator G

 $<sup>^{31}</sup>$  r = Numerator / Denominator = (Compensation of employees + Operating surplus, net ) / (Total intermediate consumption + Consumption of fixed capital + Other net taxes on production)

$$R \ = \ \begin{pmatrix} (r_E+1) & 0 & 0 & \dots & 0 \\ 0 & (r_F+1) & 0 & \dots & 0 \\ 0 & 0 & (r_G+1) & \dots & 0 \\ \vdots & \vdots & \vdots & \ddots & \vdots \\ \vdots & \vdots & \vdots & \ddots & \vdots \\ 0 & 0 & 0 & \dots & (r_{BK}+1) \end{pmatrix}$$

Έτσι δημιουργούμε την διαγώνια μήτρα – R (59 x59) (σελίδα 61)

Table : Siot M2

διαγώνια μήτρα – R και διάνυσμα

#### 5.3 Εισαγωγή Δεδομένων 1<sup>ου</sup> Μοντέλου Στο Mathematica

Αφού εξηγήσαμε πως προήρθαν τα δεδομένα του  $2^{ov}$  μοντέλου (μήτρα Dom – Imp – B – F – R), τώρα θα εισάγουμε τα δεδομένα αυτά στο mathematica. Τα δεδομένα που εισάγουμε μπορεί κάποιος να τα βρει πίσω στο Α.2 Παράρτημα (σελίδα 171). Συγκεκριμένα εκεί περιέχονται τα εξής :

- Εισαγωγή μήτρας εγχώριας παραγωγής M2 Dom
- Εισαγωγή μήτρας εισαγωγών M2 Imp
- Εισαγωγή διαγώνιας μήτρας Β
- Εισαγωγή διαγώνιας μήτρας F
- Εισαγωγή διαγώνιας μήτρας R
- Εισαγωγή διανύσματος γραμμή τιμής  $P_0$

#### 5.4 Έλεγχος 2<sup>ου</sup> Μοντέλου Για Την Σωστή Εισαγωγή Των Δεδομένων

Στο σημείο αυτό είναι καλό να επαληθεύσουμε το μοντέλο μας, αν δηλαδή μετά την εισαγωγή των δεδομένων μας (Dom – Imp – B – F – R –  $P_0$ ) ικανοποιείται η ισότητα (PS= $P_0$ )  $\Rightarrow$  1=1

Όπου :  $P_0 \rightarrow$  είναι τα στοιχεία του διανύσματος γραμμή P0

 $PS \rightarrow (P_0*Dom + P_0*Imp + P_0*B + P_0*F) * R$ 

Με τη βοήθεια του mathematica διαπιστώνουμε στη συνέχεια ότι επαληθεύεται η ισότητα και άρα τα δεδομένα που χρησιμοποιήσαμε είναι σωστά. Συγκριμένα το

PS είναι ίσο με το διάνυσμα γραμμή:

Ρ<sub>0</sub> είναι ίσο με το διάνυσμα γραμμή:

Στο σημείο αυτό να πούμε ότι το 6° στοιχείο των διανυσμάτων των τιμών  $P_0$  και PS είναι μηδέν εξαιτίας του γεγονότος ότι στους πίνακες εισροών – εκροών της ελληνικής οικονομίας ο 6°ς κλάδος που αντιστοιχεί στο κλάδο «Uranium and thorium ores» είναι μηδέν όλες οι εισροές (αρχικές και ενδιάμεσες) και η εκροή.

#### 5.5 Επεξεργασία 2<sup>ου</sup> Μοντέλου Στο Mathematica Av Υποτιμήσουμε Το Νόμισμα 15%

#### 5.5.1 Μορφή εντολής στο Mathematica για υποτίμηση 15%

Η εντολή που δίνουμε στο mathematica είναι η εξής:

P00=P0; For[i=0,i<120,i++, P1=(P0.Dom+1.15\*P00.Imp+P0.B+P0.F).R; Print[MatrixForm[P1]]; P0=P1]

α) Η εντολή αυτή μας λέει ότι το πρόγραμμα θα εκτελέσει 120 επαναλήψεις

β) Η τιμή Ρ των εμπορευμάτων μετά από κάθε επανάληψη θα είναι επηρεασμένη από μία σταθερή ( —— ) επίδραση της υποτίμησης του νομίσματος κατά 15%.

$$\begin{split} P_0 &= (P_0*Dom + P_0*Imp + P_0*B + P_0*F) * R & (\pi\rho\nu \tau\eta\nu \upsilon\pi\sigma\tau\iota\mu\eta\sigma\eta) \\ P_1 &= (P_0*Dom + 1.15*P_0*Imp + P_0*B + P_0*F) * R & (15\% \upsilon\pi\sigma\tau\iota\mu\eta\sigma\eta) \\ P_2 &= (P_1*Dom + 1.15*P_0*Imp + P_1*B + P_1*F) * R \\ P_3 &= (P_2*Dom + 1.15*P_0*Imp + P_2*B + P_2*F) * R & ... \\ P_{120} &= (P_{119}*Dom + 1.15*P_0*Imp + P_{119}*B + P_{119}*F) * R \end{split}$$

γ) Τέλος, να πούμε ότι η τιμή εκκίνησης  $P_{\scriptscriptstyle 0}$ του μοντέλου μας είναι η εξής:

Αυτό σημαίνει ότι η τιμή των εμπορευμάτων της ελληνικής οικονομίας πριν την υποτίμηση είναι 1 νομισματική μονάδα (π.χ 1 ευρώ).

Αν « τρέξουμε » τη παραπάνω εντολή στο mathematica θα πάρουμε με τη μορφή διανυσμάτων γραμμή<sup>32</sup> τις τιμές των εμπορευμάτων ανά κλάδο<sup>33</sup> που είναι και το ζητούμενό μας. Τέλος, για να είναι τα

<sup>32</sup> Τα διανύσματα γραμμή είναι όσα και οι επαναλήψεις που εκτελέσαμε στο πρόγραμμα, δηλαδή 120

 <sup>&</sup>lt;sup>33</sup> Βλέπε αναλυτικά τα 120 διανύσματα γραμμή των τιμών των εμπορευμάτων στο Β.2.α Παράρτημα σελίδα 219
αποτελέσματα καλύτερα αντιληπτά από τον αναγνώστη έχουν μεταφερθεί σε πίνακα που ακολουθούν στην επόμενη ενότητα (5.5.2 ενότητα).

Ο πίνακας αυτός μας δείχνει :

α) τις επιδράσεις των τιμών των εμπορευμάτων ανά κλάδο για τις πρώτες 20 επαναλήψεις (που είναι και μεγαλύτερες)

 β) σε πια επανάληψη σταματάνε οι επιδράσεις της υποτίμησης (τελευταία σειρά)

και

γ) τη τιμή που έχουν τα εμπορεύματα μετά το πέρας της επίδρασης της υποτίμησης του νομίσματος κατά 15 % (τελευταία σειρά)

# 5.5.2 Αποτελέσματα 2° μοντέλου σε πίνακα για υποτίμηση 15%

		Πίνακας αποτελεσμάτων 2 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος κατά 15% PRODUCTS Products Products Fish and Coal and Crude petroleum Uranium Metal Other Food Tobacco												
	PRODUCTS (CPA)	Products of agriculture , hunting & related services	Products of forestry, logging & related services	Fish and other fishing products; services incidental of fishing	Coal and lignite; peat	Crude petroleum and natural gas; services incidental to oil and gas	Uranium and thorium ores	Metal ores	Other mining and quarrying products	Food products and beverages	Tobacco products			
	Τιμή	Е	F	G	Н		J	K	L	М	N			
5	<b>P</b> <sub>1</sub>	1.02163	1.00088	1.02104	1.02384	1.03327	0.0	1.02108	1.02291	1.01856	1.01928			
20	<b>P</b> <sub>2</sub>	1.04627	1.01097	1.0515	1.04818	1.05571	0.0	1.04582	1.05016	1.03834	1.03812			
ռև	<b>P</b> <sub>3</sub>	1.06468	1.0245	1.07201	1.06647	1.07314	0.0	1.0647	1.06826	1.057	1.05535			
1 2 2 2	P <sub>4</sub>	1.07856	1.03869	1.08584	1.08025	1.08557	0.0	1.07807	1.0808	1.07182	1.06928			
έũ	<b>P</b> <sub>5</sub>	1.08924	1.05213	1.09574	1.0909	1.09483	0.0	1.08799	1.09029	1.08335	1.08041			
μ	P <sub>6</sub>	1.09768	1.06425	1.10328	1.09932	1.10214	0.0	1.09582	1.09791	1.09249	1.08946			
նչդ	<b>P</b> <sub>7</sub>	1.10451	1.07491	1.1093	1.10613	1.10815	0.0	1.10231	1.10425	1.09993	1.09698			
αvi	P <sub>8</sub>	1.11018	1.08419	1.11429	1.11174	1.11321	0.0	1.10784	1.10965	1.10613	1.10334			
π3	P <sub>9</sub>	1.11497	1.09222	1.11852	1.11645	1.11754	0.0	1.11263	1.1143	1.11137	1.10879			
, 1 <sup>η</sup>	<b>P</b> <sub>10</sub>	1.11908	1.09918	1.12216	1.12045	1.12128	0.0	1.11682	1.11835	1.11588	1.11351			
որ	P <sub>11</sub>	1.12263	1.1052	1.12532	1.12389	1.12454	0.0	1.12049	1.12189	1.11978	1.11762			
цÓ	<b>P</b> <sub>12</sub>	1.12572	1.11044	1.12809	1.12687	1.12739	0.0	1.12374	1.12501	1.12319	1.12123			
ະ ອີງ	<b>P</b> <sub>13</sub>	1.12844	1.115	1.13052	1.12948	1.1299	0.0	1.12661	1.12775	1.12618	1.12441			
ļuļ	P <sub>14</sub>	1.13082	1.11899	1.13267	1.13177	1.13211	0.0	1.12916	1.13019	1.12881	1.12722			
ζ μ	<b>P</b> <sub>15</sub>	1.13293	1.12248	1.13457	1.13378	1.13407	0.0	1.13142	1.13234	1.13113	1.12971			
tı	<b>P</b> <sub>16</sub>	1.1348	1.12556	1.13625	1.13556	1.1358	0.0	1.13342	1.13426	1.13319	1.13191			
λή	P <sub>17</sub>	1.13645	1.12827	1.13774	1.13713	1.13734	0.0	1.13521	1.13596	1.13502	1.13387			
xβc	P <sub>18</sub>	1.13792	1.13066	1.13907	1.13853	1.13871	0.0	1.13681	1.13747	1.13664	1.13561			
<u>ετ</u> (	P <sub>19</sub>	1.13922	1.13278	1.14025	1.13977	1.13993	0.0	1.13822	1.13882	1.13809	1.13716			
N	<b>P</b> <sub>20</sub>	1.14039	1.13466	1.1413	1.14088	1.14101	0.0	1.13949	1.14002	1.13937	1.13855			
	Σταθεροποίη ση τιμής	P <sub>87</sub> : 1,15	P <sub>91</sub> : 1,15	P <sub>86</sub> : 1,15	P <sub>87</sub> : 1,15	P <sub>87</sub> : 1,15		P <sub>88</sub> :1,15	P <sub>88</sub> : 1,15	P <sub>88</sub> : 1,15	P <sub>89</sub> : 1,15			

	Πίνακας αποτελεσμάτων 2 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος κατά 15% (συνέχεια) PRODUCTS Textiles Wearing Leather Wood and Pulp. Printed Coke. Chemicals, Rubber Other													
	PRODUCTS (CPA)	Textiles	Wearing apparel; furs	Leather and leather products	Wood and products of wood and cork (except furniture);	Pulp, paper and paper products	Printed matter and recorded media	Coke, refined petroleum products & nuclear fuels	Chemicals, chemical products and man- made fibres	Rubber and plastic products	Other non- metallic mineral products			
	Τιμή	0	Р	Q	R	S	Т	U	V	W	Х			
L	<b>P</b> <sub>1</sub>	1.03776	1.03756	1.03872	1.02967	1.04711	1.03722	1.11004	1.05678	1.04977	1.02238			
20	P <sub>2</sub>	1.0596	1.05746	1.06247	1.04969	1.06889	1.05751	1.12584	1.07778	1.07172	1.04292			
۸L	<b>P</b> <sub>3</sub>	1.07508	1.07132	1.07766	1.06438	1.08221	1.07111	1.13023	1.09	1.08517	1.06072			
<u>ک</u>	P <sub>4</sub>	1.08674	1.08217	1.08862	1.07605	1.09197	1.08162	1.13294	1.0989	1.09499	1.07473			
ÉQ.	<b>P</b> <sub>5</sub>	1.0958	1.09093	1.09706	1.08562	1.09967	1.0902	1.13508	1.10582	1.10263	1.0856			
μγ	P <sub>6</sub>	1.10304	1.09819	1.10387	1.09364	1.10597	1.09741	1.13687	1.11144	1.10879	1.09424			
ίλη	<b>P</b> <sub>7</sub>	1.10899	1.10433	1.10951	1.10047	1.11127	1.10358	1.1384	1.11613	1.11389	1.10131			
ava	P <sub>8</sub>	1.11398	1.10961	1.11431	1.10633	1.11581	1.10891	1.13973	1.12013	1.11821	1.10724			
ĽЗ	<b>P</b> <sub>9</sub>	1.11823	1.1142	1.11843	1.11141	1.11973	1.11356	1.14089	1.12358	1.12191	1.11229			
, 1 <sup>n</sup>	<b>P</b> <sub>10</sub>	1.1219	1.11821	1.12201	1.11584	1.12314	1.11763	1.1419	1.12659	1.12512	1.11664			
tul	<b>P</b> <sub>11</sub>	1.12509	1.12174	1.12515	1.11971	1.12614	1.12122	1.1428	1.12921	1.12793	1.12043			
, QI	<b>P</b> <sub>12</sub>	1.12788	1.12485	1.1279	1.12311	1.12878	1.12438	1.14359	1.13152	1.13038	1.12374			
δ	<b>P</b> <sub>13</sub>	1.13033	1.1276	1.13034	1.1261	1.13111	1.12719	1.14429	1.13356	1.13255	1.12666			
μή	P <sub>14</sub>	1.1325	1.13004	1.13249	1.12874	1.13317	1.12967	1.14491	1.13536	1.13446	1.12922			
ζ τι	<b>P</b> <sub>15</sub>	1.13441	1.1322	1.13439	1.13107	1.135	1.13187	1.14546	1.13696	1.13616	1.1315			
aا	<b>P</b> <sub>16</sub>	1.13611	1.13413	1.13609	1.13314	1.13662	1.13383	1.14595	1.13837	1.13766	1.13351			
λή	<b>P</b> <sub>17</sub>	1.13761	1.13584	1.13759	1.13497	1.13807	1.13558	1.14639	1.13963	1.139	1.1353			
αβα	P <sub>18</sub>	1.13895	1.13736	1.13893	1.1366	1.13935	1.13713	1.14678	1.14075	1.14019	1.13689			
[ετ	<b>P</b> <sub>19</sub>	1.14014	1.13872	1.14012	1.13805	1.1405	1.13852	1.14713	1.14175	1.14124	1.1383			
N	P <sub>20</sub>	1.14121	1.13993	1.14118	1.13934	1.14152	1.13975	1.14743	1.14264	1.14219	1.13956			
	Σταθεροποίηση	$P_{87}:1,15$	$P_{88}:1,15$	$P_{87}: 1,15$	P <sub>88</sub> : 1,15	$P_{86}: 1,15$	P <sub>88</sub> : 1,15	P <sub>76</sub> :1,15	$P_{85}: 1,1\overline{5}$	P <sub>86</sub> : 1,15	$P_{88}: 1,15$			
	τιμής													

	Πίνακας αποτελεσμάτων 2 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος κατά 15% (συνέχεια) PRODUCTS Basic Fabricated Machinery Office Electrical Radio, Medical, Motor Other Furniture:													
	PRODUCTS	Basic	Fabricated	Machinery	Office	Electrical	Radio,	Medical,	Motor	Other	Furniture;			
	(CPA)	metals	metal	and	machinery	machinery	television and	precision	vehicles,	transport	other			
			products,	equipment	and	and	communication	and optical	trailers	equipment	manufact.			
			except	n.e.c.	computers	apparatus	equipment and	instruments,	and		goods			
			machinery			n.e.c.	apparatus	watches and	semi-		n.e.c.			
			and					CIOCKS	trailers					
	T	V		A A		A.C.					A I I			
	1 դո	ř	Ζ	AA 1.05500	AB	AC	AD	AE		AG				
۳(	P <sub>1</sub>	1.0514	1.04604	1.05733	1.03725	1.04951	1.04009	1.05853	1.06444	1.05478	1.03737			
, 2(	P <sub>2</sub>	1.07792	1.07213	1.07919	1.05848	1.07506	1.06059	1.07945	1.08494	1.07692	1.05819			
al ر	<b>P</b> <sub>3</sub>	1.09367	1.08765	1.09142	1.07305	1.09003	1.07452	1.09121	1.09598	1.0899	1.07249			
ς	P <sub>4</sub>	1.10414	1.0981	1.10005	1.08408	1.10015	1.08516	1.09982	1.1039	1.09912	1.08343			
l É0	<b>P</b> <sub>5</sub>	1.11166	1.10578	1.10675	1.09281	1.10757	1.09366	1.10658	1.11008	1.10622	1.09215			
γ	<b>P</b> <sub>6</sub>	1.11735	1.11179	1.11221	1.09998	1.11336	1.10065	1.11208	1.11512	1.11194	1.09934			
úλr	<b>P</b> <sub>7</sub>	1.12184	1.11667	1.11678	1.10601	1.11804	1.10657	1.11668	1.11934	1.11669	1.10541			
QVQ	P <sub>8</sub>	1.12549	1.12074	1.12068	1.11117	1.12195	1.11164	1.1206	1.12294	1.12071	1.11061			
Ш3	<b>P</b> <sub>9</sub>	1.12853	1.12421	1.12405	1.11563	1.12528	1.11603	1.12398	1.12606	1.12415	1.11512			
۰1 <sup>۱</sup>	<b>P</b> <sub>10</sub>	1.13111	1.12719	1.12699	1.11952	1.12814	1.11987	1.12693	1.12877	1.12712	1.11906			
լու	<b>P</b> <sub>11</sub>	1.13332	1.12978	1.12956	1.12294	1.13063	1.12323	1.12952	1.13115	1.12971	1.12252			
ц, ОД	P <sub>12</sub>	1.13523	1.13205	1.13182	1.12594	1.1328	1.1262	1.13179	1.13324	1.13198	1.12556			
კი კი	P <sub>13</sub>	1.1369	1.13404	1.13382	1.12858	1.13471	1.12881	1.13379	1.13508	1.13398	1.12825			
ļuļ	P <sub>14</sub>	1.13836	1.1358	1.13559	1.13093	1.13639	1.13113	1.13557	1.13672	1.13574	1.13063			
ζ 1	<b>P</b> <sub>15</sub>	1.13965	1.13735	1.13716	1.13301	1.13788	1.13318	1.13714	1.13816	1.1373	1.13274			
ող	<b>P</b> <sub>16</sub>	1.14078	1.13873	1.13855	1.13485	1.1392	1.13501	1.13853	1.13945	1.13869	1.13461			
λή	P <sub>17</sub>	1.14179	1.13995	1.13979	1.13649	1.14037	1.13663	1.13977	1.14059	1.13991	1.13628			
xβc	P <sub>18</sub>	1.14268	1.14104	1.14089	1.13795	1.14141	1.13807	1.14088	1.14161	1.141	1.13776			
Įετ	P <sub>19</sub>	1.14348	1.142	1.14187	1.13925	1.14234	1.13936	1.14186	1.14251	1.14197	1.13908			
N	P <sub>20</sub>	1.14418	1.14286	1.14274	1.1404	1.14317	1.1405	1.14274	1.14332	1.14284	1.14025			
	Σταθεροποίη	$P_{83}:1,15$	$P_{85}:1,15$	$P_{85}: 1,15$	$P_{87}: 1,15$	$P_{84}: 1,15$	P <sub>87</sub> : 1,15	P <sub>75</sub> :1,15	P <sub>84</sub> : 1,15	$P_{85}: 1,15$	$P_{87}: 1,1\overline{5}$			
	ση τιμής													

	Πίνακας αποτελεσμάτων 2 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος κατά 15% (συνέχεια)												
	PRODUCTS (CPA)	Secondary raw materials	Electrical energy, gas, steam and hot water	Collected and purified water, distribution services of water	Construction work	Trade, maintenance and repair services of motor vehicles & motorcycles; retail sale of automotive fuel	Wholesale trade and commission trade services, except of motor	Retail trade services, except of motor vehicles and motorcycles; repair services	Hotel and restaurant services	Land transport; transport via pipeline services	Water transport services		
	Τιμή	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR		
	<b>P</b> <sub>1</sub>	1.04798	1.01433	1.02494	1.02759	1.02006	1.02692	1.01822	1.02414	1.0306	1.06755		
	<b>P</b> <sub>2</sub>	1.0755	1.0378	1.04863	1.0528	1.03141	1.04857	1.03425	1.04351	1.06358	1.09267		
r0	<b>P</b> <sub>3</sub>	1.09134	1.05759	1.06661	1.06999	1.04317	1.06535	1.04829	1.0597	1.08096	1.10404		
2	P <sub>4</sub>	1.10179	1.07307	1.08019	1.08256	1.05446	1.07771	1.06016	1.07325	1.09154	1.1112		
ट म	<b>P</b> <sub>5</sub>	1.10933	1.08515	1.09068	1.09217	1.06474	1.08734	1.07034	1.08416	1.09926	1.11656		
έω	<b>P</b> <sub>6</sub>	1.11512	1.09467	1.09898	1.09979	1.07396	1.09521	1.07921	1.09296	1.10549	1.12086		
μ	<b>P</b> <sub>7</sub>	1.11975	1.10233	1.10572	1.10605	1.08217	1.10184	1.08702	1.1002	1.11076	1.12445		
մչդ	P <sub>8</sub>	1.12356	1.10859	1.11129	1.11133	1.08949	1.10752	1.09393	1.10627	1.11529	1.12749		
COVIC	<b>P</b> <sub>9</sub>	1.12677	1.1138	1.11599	1.11584	1.09601	1.11243	1.10005	1.11144	1.11923	1.13011		
<sup>1</sup> £Л	<b>P</b> <sub>10</sub>	1.12951	1.11819	1.12	1.11975	1.10182	1.11671	1.10548	1.1159	1.12268	1.13239		
v 1 <sup>-</sup>	P <sub>11</sub>	1.13187	1.12195	1.12346	1.12316	1.10699	1.12045	1.1103	1.11978	1.12571	1.13437		
ւղ	<b>P</b> <sub>12</sub>	1.13393	1.12519	1.12647	1.12615	1.1116	1.12374	1.1146	1.12317	1.12839	1.13611		
από	P <sub>13</sub>	1.13573	1.12801	1.12911	1.12878	1.11572	1.12664	1.11841	1.12615	1.13076	1.13765		
ήč	P <sub>14</sub>	1.13731	1.13048	1.13142	1.13111	1.11939	1.12921	1.12182	1.12877	1.13286	1.139		
ηıτ	<b>P</b> <sub>15</sub>	1.13871	1.13265	1.13347	1.13317	1.12267	1.13148	1.12485	1.1311	1.13472	1.1402		
չր	P <sub>16</sub>	1.13994	1.13456	1.13527	1.135	1.12559	1.13349	1.12755	1.13316	1.13637	1.14127		
۲ή	P <sub>17</sub>	1.14104	1.13625	1.13688	1.13662	1.12821	1.13528	1.12996	1.13498	1.13784	1.14221		
tβoĵ	P <sub>18</sub>	1.14201	1.13775	1.1383	1.13807	1.13054	1.13687	1.13211	1.13661	1.13915	1.14305		
ET0	P <sub>19</sub>	1.14287	1.13908	1.13956	1.13935	1.13262	1.13829	1.13403	1.13805	1.14032	1.1438		
Σ	P <sub>20</sub>	1.14364	1.14026	1.14069	1.1405	1.13448	1.13955	1.13574	1.13934	1.14136	1.14447		
	Σταθεροποίηση τιμής	$P_{84}:1,15$	P <sub>87</sub> : 1,15	$P_{87}: 1,15$	P <sub>87</sub> : 1,15	$P_{92}: 1,15$	P <sub>88</sub> : 1,15	P <sub>91</sub> :1,15	P <sub>88</sub> : 1,15	P <sub>86</sub> : 1,15	$P_{82}: 1,15$		

	Πίνακας αποτελεσμάτων 2 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος κατά 15% (συνέχεια) PRODUCTS Air Supporting Post and Financial Insurance and Activities Real Renting Computer												
	PRODUCTS	Air	Supporting	Post and telecommuni	Financial	Insurance and	Activities	Real	Renting services of	Computer and related			
		services	auxiliary	cation	services, except	funding	financial	services	machinery &	services			
			transport	services	insurance &	services, except	intermediat.		equipment				
			services;		pension	compulsory			without				
			travel						operator & of p				
	Τιμή	AS	AT	AU	AV	AW	AX	AY	ATIGOOUS	BA			
	<b>P</b> <sub>1</sub>	1.03574	1.03331	1.01411	1.00867	1.01032	1.01051	1.00224	1.01579	1.01598			
20 <sup>n</sup>	P <sub>2</sub>	1.06329	1.05644	1.02897	1.0233	1.02354	1.0239	1.00837	1.03164	1.03125			
٦٢	<b>P</b> <sub>3</sub>	1.07796	1.07219	1.04277	1.03846	1.03732	1.0376	1.01729	1.04513	1.04509			
β	P <sub>4</sub>	1.08793	1.0836	1.05526	1.05206	1.05017	1.0504	1.0274	1.05694	1.05733			
έα	<b>P</b> <sub>5</sub>	1.09584	1.09253	1.06636	1.06388	1.06172	1.06191	1.03779	1.06735	1.06806			
۲Ψ	P <sub>6</sub>	1.10244	1.09982	1.07614	1.07411	1.07192	1.07207	1.04795	1.07653	1.07746			
άλη	<b>P</b> <sub>7</sub>	1.10806	1.10593	1.08472	1.08298	1.08086	1.08098	1.0576	1.08465	1.08569			
000	P <sub>8</sub>	1.11291	1.11115	1.09223	1.0907	1.0887	1.08879	1.0666	1.09182	1.09293			
L <sup>3</sup>	<b>P</b> <sub>9</sub>	1.11712	1.11564	1.09882	1.09745	1.09558	1.09565	1.0749	1.09818	1.09929			
v 1'	<b>P</b> <sub>10</sub>	1.12081	1.11955	1.10461	1.10336	1.10164	1.10169	1.0825	1.10382	1.10491			
ւկ	<b>P</b> <sub>11</sub>	1.12405	1.12296	1.10969	1.10856	1.10698	1.10702	1.08941	1.10883	1.10987			
πό	<b>P</b> <sub>12</sub>	1.12691	1.12596	1.11417	1.11314	1.1117	1.11174	1.09568	1.11328	1.11426			
ы С	<b>P</b> <sub>13</sub>	1.12944	1.12861	1.11813	1.11719	1.11588	1.11591	1.10133	1.11724	1.11816			
ιμŕ	P <sub>14</sub>	1.13168	1.13095	1.12163	1.12078	1.1196	1.11962	1.10643	1.12077	1.12162			
lC T	<b>P</b> <sub>15</sub>	1.13367	1.13303	1.12473	1.12396	1.12289	1.12291	1.11101	1.12392	1.12469			
ן נו	P <sub>16</sub>	1.13544	1.13487	1.12748	1.12679	1.12582	1.12584	1.11512	1.12672	1.12743			
oλŕ	P <sub>17</sub>	1.13701	1.13651	1.12993	1.1293	1.12843	1.12845	1.11881	1.12922	1.12986			
αβ	P <sub>18</sub>	1.13841	1.13796	1.1321	1.13153	1.13076	1.13077	1.12212	1.13144	1.13203			
lετ	<b>P</b> <sub>19</sub>	1.13966	1.13926	1.13403	1.13352	1.13283	1.13284	1.12508	1.13343	1.13396			
7	P <sub>20</sub>	1.14077	1.14042	1.13575	1.13529	1.13467	1.13468	1.12773	1.13521	1.13568			
	Σταθεροποί	P <sub>87</sub> : 1,15	P <sub>87</sub> : 1,15	P <sub>91</sub> : 1,15	P91: 1,15	P <sub>91</sub> : 1,15	P91: 1,15	P <sub>95</sub> :1,15	P <sub>91</sub> : 1,15	P <sub>91</sub> : 1,15			
	ηση τιμής												

	Πίνακας αποτελεσμάτων 2 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος κατά 15% (συνέχεια) PRODUCTS Research Other Public Education Health Sewage Membership Recreational. Other Private													
	PRODUCTS	Research	Other	Public	Education	Health	Sewage	Membership	Recreational,	Other	Private			
	(CPA)	and	business	administrat.	services	and	and	organisation	cultural and	services	households			
		development	services	and		social	retuse	services	sporting		with			
		Services		services.		services	services	n.e.c.	Services		nersons			
				compulsory			sanitation				percente			
				,			•••							
	Τιμή	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK			
	<b>P</b> <sub>1</sub>	1.0118	1.01409	1.02925	1.00316	1.04993	1.03477	1.00945	1.01565	1.02231	0.0			
	<b>P</b> <sub>2</sub>	1.0262	1.02954	1.05063	1.01889	1.07403	1.0617	1.02251	1.03094	1.04052	0.0			
'n	<b>P</b> <sub>3</sub>	1.04076	1.04367	1.06659	1.03644	1.08722	1.07748	1.03547	1.04514	1.05601	0.0			
lv 2	P <sub>4</sub>	1.05409	1.05616	1.07881	1.05197	1.09643	1.08828	1.04744	1.05775	1.06884	0.0			
3 41	<b>P</b> <sub>5</sub>	1.06584	1.0671	1.08848	1.06505	1.10359	1.09653	1.05829	1.06875	1.07951	0.0			
ξŨ	P <sub>6</sub>	1.07605	1.07666	1.09636	1.07604	1.10942	1.10322	1.06805	1.07829	1.08842	0.0			
۲Y	<b>P</b> <sub>7</sub>	1.08488	1.08502	1.10295	1.08535	1.11431	1.10883	1.0768	1.08657	1.09591	0.0			
նչդ	P <sub>8</sub>	1.09253	1.09235	1.10854	1.09329	1.11849	1.11362	1.08462	1.0938	1.10229	0.0			
ανό	<b>P</b> <sub>9</sub>	1.09917	1.09879	1.11336	1.1001	1.12211	1.11776	1.09161	1.10012	1.10779	0.0			
ιεπ	P <sub>10</sub>	1.10497	1.10447	1.11753	1.10599	1.12526	1.12138	1.09785	1.10568	1.11257	0.0			
v 1'	P <sub>11</sub>	1.11005	1.10948	1.12119	1.1111	1.12802	1.12455	1.10343	1.11058	1.11675	0.0			
եղ	P <sub>12</sub>	1.11451	1.11392	1.12439	1.11556	1.13045	1.12735	1.10841	1.1149	1.12043	0.0			
χπό	<b>P</b> <sub>13</sub>	1.11844	1.11785	1.12722	1.11946	1.1326	1.12983	1.11286	1.11874	1.12367	0.0			
ής (	P <sub>14</sub>	1.12191	1.12135	1.12972	1.12288	1.1345	1.13202	1.11683	1.12214	1.12655	0.0			
ที่บา	<b>P</b> <sub>15</sub>	1.12498	1.12445	1.13193	1.1259	1.13619	1.13397	1.12038	1.12516	1.1291	0.0			
նե	<b>P</b> <sub>16</sub>	1.12771	1.12721	1.13389	1.12856	1.13769	1.1357	1.12354	1.12784	1.13136	0.0			
۲ή٦	<b>P</b> <sub>17</sub>	1.13012	1.12967	1.13564	1.13091	1.13902	1.13724	1.12637	1.13023	1.13337	0.0			
βοĵ	P <sub>18</sub>	1.13227	1.13185	1.13719	1.133	1.1402	1.13862	1.1289	1.13236	1.13517	0.0			
ю13	P <sub>19</sub>	1.13419	1.1338	1.13857	1.13484	1.14126	1.13984	1.13116	1.13426	1.13676	0.0			
Μ	P <sub>20</sub>	1.13589	1.13554	1.1398	1.13649	1.1422	1.14093	1.13317	1.13595	1.13819	0.0			
	Σταθεροποίηση	P <sub>91</sub> : 1,15	P <sub>91</sub> : 1,15	P <sub>88</sub> : 1,15	P <sub>90</sub> : 1,15	P85: 1,15	P <sub>87</sub> : 1,15	P <sub>92</sub> :1,15	P <sub>91</sub> : 1,15	P89: 1,15				
	τιμής													

#### 5.6 Επεξεργασία 2<sup>ου</sup> Μοντέλου Αν Υποτιμήσουμε Το Νόμισμα 50%

#### 5.6.1 Μορφή εντολής στο Mathematica για υποτίμηση 50%

Η εντολή που δίνουμε στο mathematica είναι η εξής:

P00=P0; For[i=0,i<120,i++, P1=(P0.Dom+1.5\*P00.Imp+P0.B+P0.F).R; Print[MatrixForm[P1]]; P0=P1]

α) Η εντολή αυτή μας λέει ότι το πρόγραμμα θα εκτελέσει 120 επαναλήψεις

β) Η τιμή Ρ των εμπορευμάτων μετά από κάθε επανάληψη θα είναι επηρεασμένη από μία σταθερή ( —— ) επίδραση της υποτίμησης του νομίσματος κατά 50% ( 1.5\*Imp).

$$\begin{split} P_0 &= (P_0*Dom + P_0*Imp + P_0*B + P_0*F) * R & (\pi\rho\nu \tau\eta\nu \upsilon\pi\sigma\tau\iota\mu\eta\sigma\eta) \\ P_1 &= (P_0*Dom + \overline{1.5*P_0*Imp} + P_0*B + P_0*F) * R & (50\% \upsilon\pi\sigma\tau\iota\mu\eta\sigma\eta) \\ P_2 &= (P_1*Dom + \overline{1.5*P_0*Imp} + P_1*B + P_1*F) * R \\ P_3 &= (P_2*Dom + \overline{1.5*P_0*Imp} + P_2*B + P_2*F) * R & ... \\ P_{120} &= (P_{119}*Dom + \overline{1.5*P_0*Imp} + P_{119}*B + P_{119}*F) * R \end{split}$$

γ) Τέλος, να πούμε ότι η τιμή εκκίνησης  $P_{\scriptscriptstyle 0}$ του μοντέλου μας είναι η εξής:

Αυτό σημαίνει ότι η τιμή των εμπορευμάτων της ελληνικής οικονομίας πριν την υποτίμηση είναι 1 νομισματική μονάδα (π.χ 1 ευρώ).

Αν « τρέξουμε » τη παραπάνω εντολή στο mathematica θα πάρουμε με τη μορφή διανυσμάτων γραμμή<sup>34</sup> τις τιμές των εμπορευμάτων ανά

<sup>&</sup>lt;sup>34</sup> Τα διανύσματα γραμμή είναι όσα και οι επαναλήψεις που εκτελέσαμε στο πρόγραμμα, δηλαδή 120

κλάδο<sup>35</sup> που είναι και το ζητούμενό μας. Τέλος, για να είναι τα αποτελέσματα καλύτερα αντιληπτά από τον αναγνώστη έχουν μεταφερθεί σε πίνακα που ακολουθούν στην επόμενη ενότητα (5.6.2 ενότητα).

Ο πίνακας αυτός μας δείχνει :

α) τις επιδράσεις των τιμών των εμπορευμάτων ανά κλάδο για τις πρώτες 20 επαναλήψεις (που είναι και μεγαλύτερες)

 β) σε πια επανάληψη σταματάνε οι επιδράσεις της υποτίμησης (τελευταία σειρά)

και

γ) τη τιμή που έχουν τα εμπορεύματα μετά το πέρας της επίδρασης της υποτίμησης του νομίσματος κατά 50 %(τελευταία σειρά)

<sup>&</sup>lt;sup>35</sup> Βλέπε αναλυτικά τα 120 διανύσματα γραμμή των τιμών των εμπορευμάτων στο Β.2.β Παράρτημα σελίδα 252

# 5.6.2 Αποτελέσματα 2° μοντέλου σε πίνακα για υποτίμηση 50%

	Πίνακας αποτελεσμάτων 2 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος κατά 50% PRODUCTS Products Products Fish and Coal and Crude petroleum Uranium Metal Other Food Tobacco (CPA) of other fishing lignite: and natural gas: and ores mining products products										
	PRODUCTS (CPA)	Products of agriculture , hunting & related services	Products of forestry, logging & related services	Fish and other fishing products; services incidental of fishing	Coal and lignite; peat	Crude petroleum and natural gas; services incidental to oil and gas	Uranium and thorium ores	Metal ores	Other mining and quarrying products	Food products and beverages	Tobacco products
	Τιμή	E	F	G	H		J	K	L	M	N
	<b>P</b> <sub>1</sub>	1.07211	1.00294	1.07014	1.07948	1.1109	0.0	1.07027	1.07635	1.06186	1.06425
Ū	<b>P</b> <sub>2</sub>	1.15422	1.03656	1.17167	1.16059	1.18569	0.0	1.15275	1.1672	1.1278	1.12706
2	<b>P</b> <sub>3</sub>	1.2156	1.08167	1.24004	1.22157	1.24378	0.0	1.21568	1.22753	1.19001	1.18451
ц ц	P <sub>4</sub>	1.26186	1.12898	1.28614	1.26751	1.28524	0.0	1.26023	1.26935	1.23939	1.23093
ξŨ	<b>P</b> <sub>5</sub>	1.29747	1.17378	1.31914	1.30301	1.3161	0.0	1.29328	1.30096	1.27782	1.26803
۲	<b>P</b> <sub>6</sub>	1.32558	1.21417	1.34427	1.33108	1.34047	0.0	1.31941	1.32636	1.30831	1.29821
ζųγ	P <sub>7</sub>	1.34837	1.24971	1.36435	1.35376	1.3605	0.0	1.34104	1.34751	1.33311	1.32327
ανό	P <sub>8</sub>	1.36728	1.28063	1.38098	1.37246	1.37738	0.0	1.35948	1.3655	1.35376	1.34446
ן נית	<b>P</b> <sub>9</sub>	1.38325	1.30741	1.39507	1.38815	1.39181	0.0	1.37544	1.38101	1.37125	1.36262
v 1 '	<b>P</b> <sub>10</sub>	1.39693	1.33059	1.4072	1.40149	1.40428	0.0	1.38939	1.3945	1.38626	1.37835
τı	<b>P</b> <sub>11</sub>	1.40876	1.35067	1.41774	1.41297	1.41513	0.0	1.40165	1.40631	1.39927	1.39207
χπό	<b>P</b> <sub>12</sub>	1.41908	1.36812	1.42696	1.42291	1.42463	0.0	1.41247	1.41669	1.41062	1.4041
ής <b>(</b>	<b>P</b> <sub>13</sub>	1.42812	1.38333	1.43507	1.4316	1.43299	0.0	1.42204	1.42585	1.42058	1.4147
ท่น	P <sub>14</sub>	1.43608	1.39662	1.44223	1.43922	1.44036	0.0	1.43052	1.43396	1.42936	1.42406
ու	<b>P</b> <sub>15</sub>	1.4431	1.40827	1.44855	1.44593	1.44688	0.0	1.43805	1.44114	1.43711	1.43235
۲ų	P <sub>16</sub>	1.44932	1.41852	1.45416	1.45186	1.45267	0.0	1.44475	1.44752	1.44397	1.4397
βοί	P <sub>17</sub>	1.45483	1.42755	1.45913	1.45711	1.4578	0.0	1.45071	1.45319	1.45006	1.44624
510	<b>P</b> <sub>18</sub>	1.45973	1.43553	1.46356	1.46177	1.46236	0.0	1.45602	1.45824	1.45547	1.45205
Σ	<b>P</b> <sub>19</sub>	1.46408	1.4426	1.46749	1.46591	1.46642	0.0	1.46075	1.46274	1.46028	1.45722
	P <sub>20</sub>	1.46796	1.44886	1.471	1.46959	1.47004	0.0	1.46496	1.46674	1.46457	1.46182
	Σταθεροποίη ση τιμής	P <sub>98</sub> : 1,5	P <sub>101</sub> : 1,5	P <sub>97</sub> : 1,5	P <sub>98</sub> : 1,5	P <sub>97</sub> : 1,5		P99 : 1,5	P <sub>98</sub> : 1,5	P99 : 1,5	P <sub>100</sub> : 1,5

	Πίνακας αποτελεσμάτων 2 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος κατά 50% (συνέχεια) PRODUCTS Textiles Wearing Leather Wood and Pulp. Printed Coke. Chemicals, Rubber Other												
	PRODUCTS (CPA)	Textiles	Wearing apparel; furs	Leather and leather products	Wood and products of wood and cork (except furniture);	Pulp, paper and paper products	Printed matter and recorded media	Coke, refined petroleum products & nuclear fuels	Chemicals, chemical products and man- made fibres	Rubber and plastic products	Other non- metallic mineral products		
	Τιμή	0	P	Q	R	S	T	U	V	W	Х		
ج	<b>P</b> <sub>1</sub>	1.12587	1.1252	1.12908	1.09888	1.15705	1.12406	1.36681	1.18928	1.1659	1.07461		
, 2(	<b>P</b> <sub>2</sub>	1.19866	1.19153	1.20824	1.16564	1.22964	1.19169	1.41946	1.25927	1.23907	1.14307		
լու	<b>P</b> <sub>3</sub>	1.25026	1.23772	1.25886	1.2146	1.27402	1.23703	1.43411	1.30001	1.28388	1.20241		
Sc	P <sub>4</sub>	1.28915	1.27388	1.29539	1.2535	1.30657	1.27206	1.44312	1.32965	1.31664	1.24908		
] έ(	<b>P</b> <sub>5</sub>	1.31934	1.3031	1.32355	1.28541	1.33223	1.30067	1.45025	1.35274	1.3421	1.28532		
۱	P <sub>6</sub>	1.34348	1.3273	1.34622	1.31215	1.35325	1.32471	1.45622	1.37146	1.36262	1.31413		
άλι	<b>P</b> <sub>7</sub>	1.3633	1.34778	1.36505	1.33489	1.37091	1.34526	1.46133	1.38711	1.37963	1.33771		
ταν	P <sub>8</sub>	1.37993	1.36538	1.38102	1.35444	1.38602	1.36304	1.46575	1.40044	1.39402	1.35747		
1 81	P <sub>9</sub>	1.3941	1.38067	1.39476	1.37138	1.39908	1.37853	1.46962	1.41194	1.40637	1.3743		
v 1'	P <sub>10</sub>	1.40633	1.39404	1.40671	1.38613	1.41048	1.39211	1.47301	1.42195	1.41708	1.38882		
tıl	P <sub>11</sub>	1.41696	1.40579	1.41716	1.39903	1.42046	1.40406	1.476	1.43071	1.42642	1.40144		
πó	<b>P</b> <sub>12</sub>	1.42626	1.41615	1.42635	1.41035	1.42925	1.41462	1.47863	1.43841	1.43461	1.41248		
βα	<b>P</b> <sub>13</sub>	1.43444	1.42532	1.43445	1.42032	1.43702	1.42395	1.48097	1.4452	1.44183	1.42219		
ιμή	P <sub>14</sub>	1.44165	1.43345	1.44162	1.42912	1.4439	1.43223	1.48304	1.4512	1.44821	1.43075		
51	<b>P</b> <sub>15</sub>	1.44803	1.44067	1.44798	1.4369	1.44999	1.43958	1.48488	1.45652	1.45386	1.43832		
t	<b>P</b> <sub>16</sub>	1.45369	1.44709	1.45362	1.44379	1.45541	1.44611	1.48651	1.46125	1.45888	1.44504		
λή	P <sub>17</sub>	1.45871	1.45279	1.45864	1.44991	1.46023	1.45193	1.48797	1.46544	1.46333	1.451		
αβα	P <sub>18</sub>	1.46318	1.45788	1.4631	1.45534	1.46452	1.45711	1.48926	1.46917	1.46729	1.4563		
lετ	<b>P</b> <sub>19</sub>	1.46715	1.46241	1.46708	1.46017	1.46833	1.46172	1.49042	1.47249	1.47081	1.46101		
N	P <sub>20</sub>	1.47069	1.46645	1.47062	1.46446	1.47174	1.46583	1.49145	1.47545	1.47395	1.46521		
	Σταθεροποίηση	P <sub>97</sub> : 1,5	P <sub>98</sub> : 1,5	P <sub>97</sub> : 1,5	P99 : 1,5	P <sub>97</sub> : 1,5	P99 : 1,5	P <sub>86</sub> : 1,5	P <sub>96</sub> : 1,5	P <sub>96</sub> : 1,5	P <sub>99</sub> : 1,5		
	τιμής												

	Πίνακας αποτελεσμάτων 2 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος κατά 50% (συνέχεια) PRODUCTS Basic Fabricated Machinery Office Electrical Radio. Medical. Motor Other Furniture:													
	PRODUCTS (CPA)	Basic metals	Fabricated metal	Machinery and	Office machinery	Electrical machinery	Radio, television and	Medical, precision	Motor vehicles,	Other transport	Furniture; other			
			products,	equipment	and	and	communication	and optical	trailers	equipment	manufact.			
			except	n.e.c.	computers	apparatus	equipment and	instruments,	and		goods			
			machinery			n.e.c.	apparatus	watches and	semi-		n.e.c.			
			and					clocks	trailers					
	<b>T</b> (		equipment					• <b>–</b>	• =					
	Τιμή	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH			
ы	<b>P</b> <sub>1</sub>	1.17134	1.15347	1.19111	1.12415	1.16503	1.13363	1.19511	1.21482	1.1826	1.12457			
V	<b>P</b> <sub>2</sub>	1.25972	1.24045	1.26397	1.19495	1.25018	1.20195	1.26484	1.28314	1.25639	1.19396			
որ	<b>P</b> <sub>3</sub>	1.31222	1.29217	1.30474	1.2435	1.30011	1.2484	1.30402	1.31993	1.29967	1.24164			
ევ	P <sub>4</sub>	1.34714	1.32698	1.33351	1.28026	1.33382	1.28388	1.33273	1.34633	1.33039	1.27809			
Jε	<b>P</b> <sub>5</sub>	1.37219	1.3526	1.35584	1.30938	1.35858	1.31219	1.35526	1.36694	1.35406	1.30718			
۲	<b>P</b> <sub>6</sub>	1.39116	1.37262	1.37402	1.33327	1.37785	1.33552	1.37359	1.38372	1.37315	1.33114			
úکہ	<b>P</b> <sub>7</sub>	1.40613	1.38889	1.38926	1.35336	1.39348	1.35522	1.38892	1.39779	1.38898	1.35136			
ταν	P <sub>8</sub>	1.41831	1.40247	1.40227	1.37056	1.40652	1.37212	1.40199	1.4098	1.40236	1.36871			
187	<b>P</b> <sub>9</sub>	1.42845	1.41402	1.41351	1.38544	1.4176	1.38677	1.41328	1.42019	1.41383	1.38375			
ر 1 <sup>ر</sup>	<b>P</b> <sub>10</sub>	1.43704	1.42396	1.42329	1.39841	1.42713	1.39956	1.42311	1.42924	1.42374	1.39688			
եղ	P <sub>11</sub>	1.4444	1.4326	1.43186	1.40978	1.43542	1.41078	1.43172	1.43716	1.43238	1.4084			
πό	<b>P</b> <sub>12</sub>	1.45077	1.44016	1.43941	1.41979	1.44266	1.42066	1.43929	1.44413	1.43995	1.41854			
α v	<b>P</b> <sub>13</sub>	1.45633	1.44679	1.44607	1.42862	1.44903	1.42938	1.44597	1.45028	1.44661	1.4275			
μų	P <sub>14</sub>	1.4612	1.45265	1.45196	1.43643	1.45464	1.4371	1.45189	1.45572	1.45248	1.43543			
ζτ	<b>P</b> <sub>15</sub>	1.46549	1.45783	1.45719	1.44335	1.45961	1.44395	1.45713	1.46055	1.45768	1.44247			
च	<b>P</b> <sub>16</sub>	1.46928	1.46242	1.46183	1.4495	1.46401	1.45003	1.46178	1.46483	1.46229	1.44871			
ĥλί	P <sub>17</sub>	1.47263	1.4665	1.46595	1.45496	1.46791	1.45543	1.46591	1.46863	1.46638	1.45426			
αβα	P <sub>18</sub>	1.47561	1.47012	1.46963	1.45982	1.47138	1.46024	1.46959	1.47202	1.47001	1.4592			
[ετ	<b>P</b> <sub>19</sub>	1.47825	1.47334	1.4729	1.46415	1.47447	1.46452	1.47287	1.47503	1.47325	1.46359			
N	<b>P</b> <sub>20</sub>	1.4806	1.47621	1.47581	1.46801	1.47722	1.46834	1.47579	1.47772	1.47613	1.46751			
	Σταθεροποίη	P <sub>94</sub> : 1,5	P <sub>95</sub> : 1,5	P <sub>96</sub> : 1,5	P <sub>98</sub> : 1,5	P <sub>95</sub> :1,5	P <sub>98</sub> : 1,5	P <sub>95</sub> : 1,5	P <sub>95</sub> : 1,5	P <sub>95</sub> :1,5	P <sub>98</sub> : 1,5			
	ση τιμής													

	Πίνακας αποτελεσμάτων 2 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος κατά 50% (συνέχεια)													
PRODUCTSSecondaryElectricalCollectedConstructionTrade,WholesaleRetail tradeHotel andLandWater(CPA)rawenergy,andworkmaintenancetrade andservices,restauranttransport;transport;transport;														
	(CPA)	raw	energy,	and	work	maintenance	trade and	services,	restaurant	transport;	transport			
		materials	gas,	purified		and repair	commission	except of	services	transport	services			
			steam	water,		services of	trade	motor		via				
			and hot	distribution		motor	services,	vehicles and		pipeline				
			water	services of		vehicles &	except of	motorcycles;		services				
				water		motorcycles;	motor	repair						
						automotive		361 1165						
						fuel								
	Τιμή	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR			
_	<b>P</b> <sub>1</sub>	1.15992	1.04778	1.08313	1.09198	1.06685	1.08972	1.06075	1.08046	1.102	1.22517			
20'	P <sub>2</sub>	1.25166	1.126	1.16212	1.17599	1.1047	1.16188	1.11417	1.14502	1.21194	1.30892			
۸L	<b>P</b> <sub>3</sub>	1.30448	1.19195	1.22203	1.23331	1.1439	1.21784	1.16096	1.199	1.26986	1.3468			
1 20	P <sub>4</sub>	1.33929	1.24358	1.2673	1.27521	1.18153	1.25904	1.20053	1.24418	1.30512	1.37067			
έũ	<b>P</b> <sub>5</sub>	1.36444	1.28382	1.30226	1.30722	1.21581	1.29112	1.23446	1.28053	1.33086	1.38852			
μ	<b>P</b> <sub>6</sub>	1.38373	1.31558	1.32994	1.33264	1.24652	1.31737	1.26405	1.30986	1.35165	1.40288			
άλτ	<b>P</b> <sub>7</sub>	1.39916	1.34109	1.35239	1.35352	1.27392	1.33948	1.29008	1.33399	1.36919	1.41483			
COVC	P <sub>8</sub>	1.41187	1.36196	1.37098	1.37109	1.29831	1.35841	1.3131	1.35423	1.38429	1.42498			
μ3 l	<b>P</b> <sub>9</sub>	1.42257	1.37932	1.38664	1.38613	1.32004	1.37478	1.33349	1.37147	1.39743	1.43371			
, 1,	<b>P</b> <sub>10</sub>	1.4317	1.39398	1.40001	1.39915	1.33939	1.38903	1.3516	1.38633	1.40893	1.44128			
եղ	<b>P</b> <sub>11</sub>	1.43958	1.40651	1.41155	1.41052	1.35663	1.40151	1.36768	1.39925	1.41905	1.4479			
πó	<b>P</b> <sub>12</sub>	1.44644	1.41732	1.42158	1.42049	1.37201	1.41247	1.38198	1.41055	1.42797	1.4537			
σ	<b>P</b> <sub>13</sub>	1.45244	1.42671	1.43036	1.42927	1.38573	1.42214	1.39471	1.42049	1.43586	1.45882			
ļμ	<b>P</b> <sub>14</sub>	1.45771	1.43493	1.43808	1.43702	1.39797	1.43069	1.40605	1.42924	1.44285	1.46334			
βı	<b>P</b> <sub>15</sub>	1.46236	1.44216	1.44489	1.44389	1.40889	1.43825	1.41616	1.43699	1.44906	1.46734			
լող	<b>P</b> <sub>16</sub>	1.46648	1.44853	1.45091	1.44999	1.41865	1.44497	1.42516	1.44386	1.45457	1.47089			
λŕ	<b>P</b> <sub>17</sub>	1.47013	1.45416	1.45625	1.45541	1.42735	1.45093	1.43319	1.44995	1.45948	1.47404			
αβί	<b>P</b> <sub>18</sub>	1.47337	1.45915	1.46099	1.46022	1.43512	1.45623	1.44036	1.45537	1.46384	1.47685			
Ιετ	<b>P</b> <sub>19</sub>	1.47625	1.46359	1.46521	1.46451	1.44206	1.46095	1.44675	1.46018	1.46773	1.47935			
N	<b>P</b> <sub>20</sub>	1.47881	1.46752	1.46896	1.46833	1.44826	1.46516	1.45246	1.46447	1.4712	1.48157			
	Σταθεροποίηση	P <sub>94</sub> : 1.5	P <sub>98</sub> : 1.5	P <sub>98</sub> : 1.5	P <sub>98</sub> : 1.5	$P_{102}: 1.5$	P <sub>99</sub> : 1.5	$P_{101}: 1.5$	P99 : 1.5	P <sub>97</sub> : 1.5	P <sub>93</sub> : 1.5			
	τιμής													

	Πίνακας αποτελεσμάτων 2 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος κατά 50% (συνέχεια)           PRODUCTS         Air         Supporting         Post and         Financial         Insurance and         Activities         Real         Renting         Computer           (CDA)         and         tabacemenupic         intermediat         nameion         autilitation of tabacemenupic         autilitation of tabacemenupic														
	PRODUCTS (CPA)	Air transport services	Supporting and auxiliary transport services; travel	Post and telecommuni cation services	Financial intermediat. services, except insurance & pension	Insurance and pension funding services, except compulsory	Activities auxiliary to financial intermediat.	Real estate services	Renting services of machinery & equipment without operator & of p & h goods	Computer and related services					
	Τιμή	AS	AT	AU	AV	AW	AX	AY	AZ	BA					
և	P <sub>1</sub>	1.11914	1.11105	1.04703	1.02891	1.03439	1.03504	1.00746	1.05264	1.05327					
20	P <sub>2</sub>	1.21098	1.18814	1.09656	1.07766	1.07848	1.07968	1.0279	1.10547	1.10418					
۸L	<b>P</b> <sub>3</sub>	1.25986	1.24063	1.14258	1.1282	1.1244	1.12534	1.05763	1.15042	1.15028					
1 2 2 1	P <sub>4</sub>	1.2931	1.27868	1.18419	1.17352	1.16723	1.168	1.09132	1.18979	1.19109					
έũ	<b>P</b> <sub>5</sub>	1.31946	1.30842	1.2212	1.21293	1.20573	1.20637	1.12595	1.22449	1.22687					
۲	<b>P</b> <sub>6</sub>	1.34146	1.33273	1.2538	1.24704	1.23972	1.24024	1.15982	1.25511	1.25819					
πανάληψη	<b>P</b> <sub>7</sub>	1.36019	1.35312	1.28239	1.27661	1.26954	1.26993	1.19198	1.28216	1.28564					
ανç	P <sub>8</sub>	1.37635	1.37049	1.30744	1.30235	1.29567	1.29597	1.222	1.30608	1.30975					
из	P <sub>9</sub>	1.3904	1.38546	1.32941	1.32483	1.3186	1.31883	1.24968	1.32727	1.33098					
1 1	<b>P</b> <sub>10</sub>	1.40269	1.39848	1.34868	1.34453	1.33879	1.33896	1.27501	1.34607	1.34969					
որ	<b>P</b> <sub>11</sub>	1.4135	1.40987	1.36564	1.36186	1.35659	1.35673	1.29805	1.36276	1.36624					
ŢŲ,	<b>P</b> <sub>12</sub>	1.42303	1.41988	1.38058	1.37714	1.37234	1.37245	1.31892	1.3776	1.38088					
8	<b>P</b> <sub>13</sub>	1.43146	1.42871	1.39377	1.39064	1.38628	1.38638	1.33777	1.39081	1.39387					
ιμήα	P <sub>14</sub>	1.43893	1.43651	1.40544	1.4026	1.39865	1.39873	1.35476	1.40257	1.4054					
<b>ξ</b>	<b>P</b> <sub>15</sub>	1.44556	1.44343	1.41578	1.4132	1.40964	1.40971	1.37003	1.41305	1.41564					
ել	<b>P</b> <sub>16</sub>	1.45145	1.44957	1.42495	1.42262	1.41941	1.41947	1.38374	1.42239	1.42476					
λή	<b>P</b> <sub>17</sub>	1.45669	1.45503	1.43309	1.43099	1.42811	1.42816	1.39604	1.43072	1.43287					
αβα	<b>P</b> <sub>18</sub>	1.46136	1.45988	1.44033	1.43844	1.43585	1.43589	1.40706	1.43815	1.4401					
lετ	<b>P</b> <sub>19</sub>	1.46552	1.4642	1.44677	1.44507	1.44275	1.44279	1.41693	1.44478	1.44654					
N	P <sub>20</sub>	1.46922	1.46805	1.45251	1.45098	1.4489	1.44893	1.42577	1.45069	1.45228					
	Σταθεροποί ηση τιμής	P <sub>98</sub> : 1.5	P <sub>98</sub> : 1.5	P99 : 1.5	$P_{102}: 1.5$	P <sub>102</sub> : 1.5	$P_{102}:1.5$	$P_{105}:1.5$	P <sub>102</sub> : 1.5	P <sub>102</sub> : 1.5					

	Πίνακας αποτελεσμάτων 2 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος κατά 50% (συνέχεια) PRODUCTS Research Other Public Education Health Sewage Membership Recreational, Other Private												
	PRODUCTS	Research	Other	Public	Education	Health	Sewage	Membership	Recreational,	Other	Private		
	(CPA)	and	business	administrat.	services	and	and	organisation	cultural and	services	households		
		development	services	and		social	refuse	services	sporting		with		
		Services		derence		Services	aisposai	n.e.c.	Services		nersons		
				compulsory		301 11003	sanitation				persons		
				,			•••						
	Τιμή	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK		
	<b>P</b> <sub>1</sub>	1.03932	1.04697	1.0975	1.01055	1.16643	1.1159	1.03149	1.05216	1.07437	0.0		
	P <sub>2</sub>	1.08733	1.09847	1.16875	1.06297	1.24678	1.20567	1.07502	1.10313	1.13507	0.0		
'n	P <sub>3</sub>	1.13586	1.14556	1.22198	1.12147	1.29072	1.25828	1.11824	1.15047	1.1867	0.0		
2	P <sub>4</sub>	1.1803	1.18718	1.2627	1.17322	1.32145	1.29426	1.15814	1.1925	1.22945	0.0		
a 2	<b>P</b> <sub>5</sub>	1.21946	1.22365	1.29493	1.21683	1.34531	1.32177	1.19431	1.22915	1.26504	0.0		
ξŨ	$\mathbf{P}_{6}$	1.25348	1.25553	1.32122	1.25348	1.36475	1.34407	1.22685	1.26095	1.29473	0.0		
۲	P <sub>7</sub>	1.28292	1.28341	1.34316	1.2845	1.38104	1.36276	1.25599	1.28858	1.3197	0.0		
նչդ	P <sub>8</sub>	1.30842	1.30784	1.36181	1.31096	1.39497	1.37872	1.28206	1.31266	1.34097	0.0		
OVC	P <sub>9</sub>	1.33058	1.32931	1.37785	1.33368	1.40702	1.39254	1.30536	1.33374	1.35929	0.0		
μ <sub>3</sub> ι	<b>P</b> <sub>10</sub>	1.34991	1.34824	1.39178	1.35331	1.41752	1.4046	1.32617	1.35226	1.37522	0.0		
v 1'	<b>P</b> <sub>11</sub>	1.36683	1.36495	1.40395	1.37035	1.42673	1.41518	1.34476	1.36859	1.38916	0.0		
եղ	<b>P</b> <sub>12</sub>	1.3817	1.37974	1.41464	1.3852	1.43484	1.42451	1.36136	1.38301	1.40142	0.0		
χπό	<b>P</b> <sub>13</sub>	1.39479	1.39285	1.42406	1.3982	1.442	1.43276	1.37619	1.39579	1.41225	0.0		
ής e	P <sub>14</sub>	1.40636	1.40448	1.43239	1.40961	1.44834	1.44008	1.38943	1.40712	1.42183	0.0		
μu	<b>P</b> <sub>15</sub>	1.4166	1.41483	1.43976	1.41966	1.45396	1.44657	1.40125	1.41719	1.43032	0.0		
ն	<b>P</b> <sub>16</sub>	1.42569	1.42403	1.44631	1.42853	1.45895	1.45234	1.41181	1.42614	1.43787	0.0		
τŲ 1	P <sub>17</sub>	1.43375	1.43222	1.45212	1.43637	1.46339	1.45748	1.42124	1.4341	1.44458	0.0		
βολ	P <sub>18</sub>	1.44092	1.43951	1.45729	1.44332	1.46734	1.46206	1.42967	1.4412	1.45056	0.0		
ετα	<b>P</b> <sub>19</sub>	1.44729	1.44601	1.4619	1.44948	1.47086	1.46614	1.43719	1.44752	1.45588	0.0		
Σ	P <sub>20</sub>	1.45297	1.45181	1.466	1.45496	1.47399	1.46977	1.4439	1.45316	1.46062	0.0		
	Σταθεροποίηση	$P_{101}: 1,5$	$P_{102}:1,5$	P99 : 1,5	P <sub>101</sub> : 1,5	P <sub>96</sub> : 1,5	P <sub>97</sub> : 1,5	$P_{103}: 1,5$	P <sub>101</sub> : 1,5	P <sub>100</sub> : 1,5			
	τιμής			, ,					, 	,			

#### 5.7 Δείκτες Συνολικού Πληθωρισμού Για Ποσοστό Υποτίμησης, 15% Και 50%

Στο σημείο αυτό για να έχουμε μία καλύτερη εικόνα του πληθωριστικού κύματος που δημιουργείται στο δεύτερο μοντέλο λόγω της υποτίμησης του νομίσματος υπολογίζουμε τους δείκτες συνολικού πληθωρισμού (ΣΣΔΠ)<sup>36</sup> για τα ποσοστά υποτίμησης 15% και 50%. Για να υπολογίσουμε τους δείκτες συνολικού πληθωρισμού πρέπει να κάνουμε αρχικά τους εξής υπολογισμούς:

1° πολλαπλασιάζουμε την τιμή P κάθε κλάδου της οικονομίας με την εγχώρια παραγωγή κάθε κλάδου (έχουμε 59 τιμές και 59 κλάδους άρα θα υπολογίσουμε 59 γινόμενα ένα για κάθε κλάδο).

Όπου : Ρ οι τιμές P<sub>1</sub>,P<sub>2</sub>,P<sub>3</sub>,P<sub>4</sub>,P<sub>5</sub> που βρήκαμε στην ενότητα 5.5.2 και 5.6.2 και P<sub>0</sub> =  $1^{37}$ .

 $2^{ov}$  προσθέτουμε τα 59 γινόμενα που υπολογίσαμε και βρίσκουμε τη αξία συνολικής παραγωγής για τις χρονικές περιόδους 0,1,2,3,4 και 5 αντίστοιχα με τα  $P_{0,}P_{1,}P_{2,}P_{3,}P_{4,}P_{5}$ .

Τώρα είμαστε έτοιμοι να υπολογίσουμε τους δείκτες συνολικού πληθωρισμού για ποσοστό υποτίμησης 15% και 50%.

<sup>&</sup>lt;sup>36</sup> Θα υπολογίσουμε πέντε δείκτες πληθωρισμού που αντιστοιχούν σε πέντε έτη και αυτό γιατί πέρα από τα πέντε χρόνια πρακτικά οι δείκτες δεν έχουν νόημα. (Μετά από πέντε έτη θα έχουμε τεχνολογικές μεταβολές, μεταβολές στην κατανομή του εισοδήματος, υποκαταστάσεις εισαγωγών-εξαγωγών κ.λπ., οπότε το υπόδειγμα χάνει την όποια αξιοπιστία του).

 $<sup>{}^{37}</sup>P_0 = 1$  επειδή έχουμε θεωρήσει ως φυσική μονάδα μέτρησης κάθε εμπορεύματος εκείνη την ποσότητά του, της οποίας η αγοραία αξία (η τιμή αγοράς) ισούται με 1 νομισματική μονάδα.

# 4.7.1 Δείκτες συνολικού πληθωρισμού για ποσοστό υποτίμησης 15%

Μετά από τους υπολογισμούς (βλέπε αναλυτικά στη σελίδα 83) που έγιναν σύμφωνα με την ενότητα 5.7 είμαστε σε θέση να αναφέρουμε ότι οι αξίες συνολικής παραγωγής με υποτίμηση 15% για τις χρονικές περιόδους 0,1,2,3,4,5 είναι οι εξής :

Αξία συνολικής παραγωγής (ΑΣΠ)										
Συνολική αξία παραγωγής την P <sub>0</sub> περίοδο	87963,148700363500									
Συνολική αξία παραγωγής την Ρ1 περίοδο	90484,526838338000									
Συνολική αξία παραγωγής την $P_2$ περίοδο	92296,033463609200									
Συνολική αξία παραγωγής την Ρ3 περίοδο	93654,681712245300									
Συνολική αξία παραγωγής την Ρ4 περίοδο	94715,306728073700									
Συνολική αξία παραγωγής την Ρ5 περίοδο	95566,923390072300									

Έτσι οι δείκτες συνολικού πληθωρισμού βάση των υπολογισμών (βλέπε αναλυτικά σελίδα 83) είναι οι εξής:

Περίοδος δείκτη συνολικού πληθωρισμού (ΣΣΔΠ)	ΣΣΔΠ=[ΑΣΠ περιόδου t+1 - ΑΣΠ περιόδου t]/ΑΣΠ περιόδου t	ΣΣΔΠ σε ποσοστό (%)
Δείκτης συνολικού πληθωρισμού την πρώτη περίοδο	0,02866402778	2,86%
Δείκτης συνολικού πληθωρισμού την δεύτερη περίοδο	0,02002007071	2,00%
Δείκτης συνολικού πληθωρισμού την τρίτη περίοδο	0,01472054863	1,47%
Δείκτης συνολικού πληθωρισμού την τέταρτη περίοδο	0,01132484780	1,13%
Δείκτης συνολικού πληθωρισμού την πέμπτη περίοδο	0,00899133088	0,89%

# 5.7.2 Δείκτες συνολικού πληθωρισμού για ποσοστό υποτίμησης 50%

Μετά από τους υπολογισμούς (βλέπε αναλυτικά στη σελίδα 83) που έγιναν σύμφωνα με την ενότητα 5.7 είμαστε σε θέση να αναφέρουμε ότι οι αξίες συνολικής παραγωγής με υποτίμηση 50% για τις χρονικές περιόδους 0,1,2,3,4,5 είναι οι εξής :

Αξία συνολικής παραγω	γής (ΑΣΠ)
Συνολική αξία παραγωγής την P <sub>0</sub> περίοδο	87963,14870036350
Συνολική αξία παραγωγής την Ρ1 περίοδο	96367,90840256520
Συνολική αξία παραγωγής την P <sub>2</sub> περίοδο	102405,78121033600
Συνολική αξία παραγωγής την Ρ3 περίοδο	106935,08889695900
Συνολική αξία παραγωγής την Ρ4 περίοδο	110470,25328469400
Συνολική αξία παραγωγής την Ρ5 περίοδο	113308,44467912300

Έτσι οι δείκτες συνολικού πληθωρισμού βάση των υπολογισμών (βλέπε αναλυτικά σελίδα 83) είναι οι εξής:

Περίοδος δείκτη συνολικού πληθωρισμού (ΣΣΔΠ)	ΣΣΔΠ=[ΑΣΠ περιόδου t+1 - ΑΣΠ περιόδου t]/ΑΣΠ περιόδου t	ΣΣΔΠ σε ποσοστό (%)
Δείκτης συνολικού πληθωρισμού την πρώτη περίοδο	0,09554864539	9,55%
Δείκτης συνολικού πληθωρισμού την δεύτερη περίοδο	0,06265439302	6,26%
Δείκτης συνολικού πληθωρισμού την τρίτη περίοδο	0,04422902333	4,42%
Δείκτης συνολικού πληθωρισμού την τέταρτη περίοδο	0,03305897460	3,30%
Δείκτης συνολικού πληθωρισμού την πέμπτη περίοδο	0,02569190628	2,56%

#### $\Sigma\Sigma\Pi\Delta~2$

Μοντέλο 3°

# $\mathbf{P} = \mathbf{P}^*\mathbf{Dom} + \mathbf{P}^*\mathbf{Imp} + \mathbf{A.v}$

### 6. Μοντέλο 3°

#### 6.1Ορισμός & Επεξήγηση Μοντέλου

Όπως στα προηγούμενα συστήματα τιμών έτσι και σε αυτό θα επεξεργαστούμε με τον ίδιο τρόπο ένα ακόμη μοντέλο. Το μοντέλο είναι της εξής μορφής :

```
\mathbf{P} = \mathbf{P}^*\mathbf{Dom} + \mathbf{P}^*\mathbf{Imp} + \mathbf{A.v}
```

Όπου:

P → Διάνυσμα (1x59) της τιμής κάθε κλάδου Ως φυσική μονάδα μέτρησης κάθε εμπορεύματος θεωρούμε εκείνη την ποσότητά του, της οποίας η αγοραία αξία (η τιμή αγοράς) ισούται με 1 νομισματική μονάδα.

Dom → Μήτρα συντελεστών εγχώριας παραγωγής (59 x59)

Imp  $\rightarrow$  Μήτρα συντελεστών εισαγωγών (59 x59)

A.v → Διάνυσμα (1x59) της προστιθέμενη αξία των κλάδων <sup>38</sup>

Το παραπάνω σύστημα τιμών λέει ότι η τιμή P ενός εμπορεύματος κάποιου κλάδου της ελληνικής οικονομίας είναι ίση με την τιμή επί το συντελεστή της μήτρας εγχώριας παραγωγής συν την τιμή επί τον συντελεστή της μήτρας εισαγωγών συν τον συντελεστή της προστιθέμενης αξίας.

Για παράδειγμα η τιμή του P του κλάδου Basic metals με φυσική μονάδα μέτρησης τη μονάδα είναι ίση με :

 $P = 1 * 0,5204117 + 1 * 0,305588 + 1 * 0,1739998 \Longrightarrow P = 1$ 



Ας δούμε όμως πώς προήλθαν οι μήτρες που χρησιμοποιήσαμε στο σύστημα τιμών.

<sup>&</sup>lt;sup>38</sup> Μαριόλης Θεόδωρος – Οικονομίδης Χαράλαμπος – Σταμάτης Γιώργος – Φουστέρης Νίκος, 1997, Ποσοτική εκτίμηση των επιπτώσεων της υποτίμησης στο «κόστος» παραγωγής, Αθήνα, Εκδόσεις «Κριτική», σελ 13

#### 6.2 Επεξεργασία Πινάκων Εισροών – Εκροών Ελληνικής Οικονομίας

Για να μπορέσουμε να χρησιμοποιήσουμε το παραπάνω μοντέλο πρέπει πρώτα απ' όλα να εξάγουμε την μήτρα συντελεστών εγχώριας παραγωγής «Dom», την μήτρα συντελεστών εισαγωγών «Imp» και το διάνυσμα της προστιθέμενης αξίας «A.v». Τις μήτρες «Dom και Imp» τις έχουμε από το πρώτο μας μοντέλο (σελίδα 20 και 22 αντίστοιχα) ενώ το διάνυσμα A.v. το εξάγουμε παρακάτω.

#### 6.2.1 Εξαγωγή διανύσματος Α.ν

 Το διάνυσμα Α.ν προκύπτει από τον πίνακα εγχώρια παραγωγή M1(σελίδα 12) αν διαιρέσουμε την προστιθέμενη αξία κάθε κλάδου «Value added at basic prices» με τα στοιχεία της γραμμής «New Output at basic prices». Η διαίρεση γίνεται ένα προς ένα στοιχείο, για παράδειγμα:

Το 1° στοιχείο του διανύσματος Α.ν είναι ίσο με Ε71/Ε73 Το 2° στοιχείο του διανύσματος Α.ν είναι ίσο με F71/F73 Το 3° στοιχείο του διανύσματος Α.ν είναι ίσο με G71/G73 ...ομοίως μέχρι το 59<sup>η</sup> στοιχείο του διανύσματος

Έτσι δημιουργούμε το διάνυσμα προστιθέμενης αξίας Α.ν (1x59) που ακολουθεί (σελίδα 87)

Διανυσμα Αν

### 6.3 Εισαγωγή Δεδομένων 3<sup>ου</sup> Μοντέλου Στο Mathematica

Αφού εξηγήσαμε πως προήρθαν τα δεδομένα του 3<sup>ου</sup> μας μοντέλου (μήτρα Dom – Imp – A.v), τώρα θα εισάγουμε τα δεδομένα αυτά στο mathematica. Τα δεδομένα που εισάγουμε μπορεί κάποιος να τα βρει στο A.1 και A.3 Παράρτημα (σελίδα 138 και 218 αντίστοιχα). Συγκεκριμένα εκεί περιέχονται τα εξής :

- Εισαγωγή μήτρας εγχώριας παραγωγής M1 Dom
- Εισαγωγή μήτρας εισαγωγών M1 Imp
- Εισαγωγή διαγώνιας μήτρας Α.ν
- Εισαγωγή διανύσματος γραμμή τιμής  $P_0$

#### 6.4 Έλεγχος 3<sup>ου</sup> Μοντέλου Για Την Σωστή Εισαγωγή Των Δεδομένων

Στο σημείο αυτό είναι καλό να επαληθεύσουμε το μοντέλο μας, αν δηλαδή μετά την εισαγωγή των δεδομένων μας  $(Dom - Imp - A.v - P_0)$  ικανοποιείται η ισότητα  $(PS=P_0) \Rightarrow 1=1$ 

Όπου :  $P_0 \rightarrow$  είναι τα στοιχεία του διανύσματος γραμμή  $P_0$ 

 $PS \rightarrow P_0^*Dom + Av + P_0^*Imp$ 

Με τη βοήθεια του mathematica διαπιστώνουμε στη συνέχεια ότι επαληθεύεται η ισότητα και άρα τα δεδομένα που χρησιμοποιήσαμε είναι σωστά<sup>39</sup>. Συγκριμένα το

PS είναι ίσο με το διάνυσμα γραμμή:

Ρ<sub>0</sub> είναι ίσο με το διάνυσμα γραμμή:

Στο σημείο αυτό να πούμε ότι το 6° στοιχείο των διανυσμάτων των τιμών  $P_0$  και PS είναι μηδέν εξαιτίας του γεγονότος ότι στους πίνακες εισροών – εκροών της ελληνικής οικονομίας ο 6°ς κλάδος που αντιστοιχεί στο κλάδο «Uranium and thorium ores» είναι μηδέν όλες οι εισροές (αρχικές και ενδιάμεσες) και η εκροή (ομοίως και ο κλάδος Private households with employed persons)

<sup>&</sup>lt;sup>39</sup> Η ελάχιστη απόκλιση στη τιμή του κλάδου 29 είναι ασήμαντη και την παραβλέπουμε

#### 6.5 Επεξεργασία 3<sup>ου</sup> Μοντέλου Στο Mathematica Av Υποτιμήσουμε Το Νόμισμα 15%

#### 6.5.1 Μορφή εντολής στο Mathematica για υποτίμηση 15%

Η εντολή που δίνουμε στο πρόγραμμά μας είναι η εξής:

```
P00=P0;
For[i=0,i<120,i++,
P1=P0.Dom+Av+1.15*P00.Imp;
Print[MatrixForm[P1]];
P0=P1]
```

Η εντολή αυτή μας λέει ότι :

α) Το πρόγραμμα θα εκτελέσει 120 επαναλήψεις

β) Η τιμή Ρ μετά από κάθε επανάληψη θα είναι επηρεασμένη από μία σταθερή ( —) επίδραση της υποτίμησης κατά 15%.

 $P_{0} = P_{0}*Dom + Av + P_{0}*Imp$   $P_{1} = P_{0}*Dom + Av + 1,15*P_{0}*Imp$   $P_{2} = P_{1}*Dom + Av + 1,15*P_{0}*Imp$   $P_{3} = P_{2}*Dom + Av + 1,15*P_{0}*Imp$ ...

(πριν την υποτίμηση) (μετά από υποτίμηση 15%)

 $P_{120} = P_{119}*Dom + Av + 1,15*P_0*Imp$ 

γ) Τέλος, η τιμή εκκίνησης  $P_0$  του μοντέλου μας είναι η εξής:

Αυτό σημαίνει ότι η τιμή των εμπορευμάτων της ελληνικής οικονομίας πριν την υποτίμηση είναι 1 νομισματική μονάδα (π.χ 1 ευρώ).

Αν « τρέξουμε » τη παραπάνω εντολή στο mathematica θα πάρουμε με τη μορφή διανυσμάτων γραμμή<sup>40</sup> τις τιμές των εμπορευμάτων ανά

<sup>&</sup>lt;sup>40</sup> Τα διανύσματα γραμμή είναι όσα και οι επαναλήψεις που εκτελέσαμε στο πρόγραμμα, δηλαδή 120. Επειδή όμως μετά την 9<sup>η</sup> περίπου επανάληψη τα στοιχεία του διανύσματος γραμμή των τιμών των εμπορευμάτων παραμένουν σταθερά αναγράφονται μόνο 20.

κλάδο<sup>41</sup> που είναι και το ζητούμενό μας. Τέλος, για να είναι τα αποτελέσματα καλύτερα αντιληπτά από τον αναγνώστη έχουν μεταφερθεί σε πίνακα που ακολουθούν στην επόμενη ενότητα (6.5.2 ενότητα).

Ο πίνακας αυτός μας δείχνει :

α) τις επιδράσεις των τιμών των εμπορευμάτων ανά κλάδο για τις πρώτες 20 επαναλήψεις

 β) σε πια επανάληψη σταματάνε οι επιδράσεις της υποτίμησης (υπογραμμισμένες τιμές και έντονα γράμματα)

και

γ) τη τιμή που έχουν τα εμπορεύματα μετά το πέρας της επίδρασης της υποτίμησης του νομίσματος κατά 15 % (υπογραμμισμένες τιμές και έντονα γράμματα)

<sup>&</sup>lt;sup>41</sup> Βλέπε αναλυτικά τα 20 διανύσματα γραμμή των τιμών των εμπορευμάτων στο Β.3.α Παράρτημα σελίδα 324

# 6.5.2 Αποτελέσματα 3° μοντέλου σε πίνακα για υποτίμηση 15%

	Πίνακας αποτελεσμάτων 3⁰ μοντέλου με υποτίμηση του νομίσματος 15%												
	PRODUCTS (CPA)	Products of agriculture, hunting and related services	Products of forestry, logging and related services	Fish and other fishing products; services incidental of fishing	Coal and lignite; peat	Crude petroleum and natural gas; services incidental to oil and gas extraction excluding surveying	Urani um and thori um ores	Metal ores	Other mining and quarrying products	Food products and beverages	Tobacco products		
	Τιμή	E	F	G	Н	I	J	К	L	М	N		
<b>հ</b>	P <sub>1</sub>	1.00918	1.00045	1.00819	1.01103	1.01708	0.0	1.01095	1.01292	1.01239	1.012		
, 2(	P <sub>2</sub>	1.01487	1.00328	1.01504	1.01731	1.02232	0.0	1.01785	1.02213	1.01884	1.01736		
ւու	P <sub>3</sub>	1.01646	1.00442	1.01626	1.01918	1.02444	0.0	1.01979	1.02424	1.02183	1.0197		
თვ	P <sub>4</sub>	1.01692	1.0048	1.01655	1.01971	1.02491	0.0	1.02022	1.02477	1.02281	1.02046		
η έ(	P <sub>5</sub>	1.01705	1.00492	1.01663	1.01986	1.02505	0.0	1.02035	1.02493	1.02311	1.02069		
ւ√ր	P <sub>6</sub>	1.01709	1.00496	1.01666	1.01991	1.02509	0.0	1.02039	1.02497	1.0232	1.02077		
άλι	P <sub>7</sub>	1.01711	1.00497	1.01666	1.01993	1.02511	0.0	1.0204	1.02499	1.02323	1.02079		
ταν	P <sub>8</sub>	1.01711	1.00497	1.01667	1.01993	1.02511	0.0	1.02041	1.02499	1.02324	1.0208		
л <i>с</i> л	P <sub>9</sub>	1.01711	1.00497	1.01667	1.01994	1.02511	0.0	1.02041	1.025	1.02324	1.0208		
v 1	P <sub>10</sub>	1.01711	1.00498	1.01667	1.01994	1.02511	0.0	1.02041	1.025	1.02324	1.0208		
ւոյ	P <sub>11</sub>	1.01711	1.00498	1.01667	1.01994	1.02511	0.0	1.02041	1.025	1.02324	1.0208		
πό	P <sub>12</sub>	1.01711	1.00498	1.01667	1.01994	1.02511	0.0	1.02041	1.025	1.02324	1.0208		
15 0	P <sub>13</sub>	1.01711	1.00498	1.01667	1.01994	1.02511	0.0	1.02041	1.025	1.02324	1.0208		
ιμŕ	P <sub>14</sub>	1.01711	1.00498	1.01667	1.01994	1.02511	0.0	1.02041	1.025	1.02324	1.0208		
IG τ	P <sub>15</sub>	1.01711	1.00498	1.01667	1.01994	1.02511	0.0	1.02041	1.025	1.02324	1.0208		
l tr	P <sub>16</sub>	1.01711	1.00498	1.01667	1.01994	1.02511	0.0	1.02041	1.025	1.02324	1.0208		
λŕ	P <sub>17</sub>	1.01711	1.00498	1.01667	1.01994	1.02511	0.0	1.02041	1.025	1.02324	1.0208		
αβί	P <sub>18</sub>	1.01711	1.00498	1.01667	1.01994	1.02511	0.0	1.02041	1.025	1.02324	1.0208		
Ιετ	P <sub>19</sub>	1.01711	1.00498	1.01667	1.01994	1.02511	0.0	1.02041	1.025	1.02324	1.0208		
V	P <sub>20</sub>	1.01711	1.00498	1.01667	1.01994	1.02511	0.0	1.02041	1.025	1.02324	1.0208		

	Πίνακας αποτελεσμάτων 3 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος 15% (συνέχεια)													
	PRODUCTS (CPA)	Textiles	Wearing apparel; furs	Leather and leather products	Wood and products of wood and cork (except furniture); articles of straw and plaiting materials	Pulp, paper and paper products	Printed matter and recorded media	Coke, refined petroleum products and nuclear fuels	Chemicals, chemical products and man- made fibres	Rubber and plastic products	Other non- metallic mineral products			
	Τιμή	0	Р	Q	R	S	Т	U	V	W	Х			
ш	P <sub>1</sub>	1.02722	1.02172	1.02638	1.0245	1.03605	1.02212	1.10003	1.0423	1.03334	1.01471			
v 2(	P <sub>2</sub>	1.03382	1.0262	1.03404	1.03402	1.04388	1.02779	1.10696	1.04937	1.04023	1.02203			
ւկ	P <sub>3</sub>	1.03629	1.02772	1.03624	1.03751	1.04616	1.02954	1.10786	1.05145	1.04236	1.02515			
ათ	P <sub>4</sub>	1.03712	1.02825	1.03694	1.03874	1.04689	1.03011	1.10809	1.05213	1.04306	1.02614			
ηέ	P <sub>5</sub>	1.03738	1.02842	1.03716	1.03914	1.04711	1.03029	1.10816	1.05234	1.04327	1.02642			
√ր	P <sub>6</sub>	1.03746	1.02847	1.03723	1.03927	1.04718	1.03035	1.10818	1.0524	1.04334	1.02651			
άλ	P <sub>7</sub>	1.03749	1.02849	1.03725	1.03931	1.0472	1.03036	<u>1.10819</u>	1.05243	1.04336	1.02654			
TOL	P <sub>8</sub>	<u>1.0375</u>	1.02849	1.03725	1.03933	1.04721	1.03037	1.10819	1.05243	1.04337	1.02655			
<sup>ц</sup> £1	P <sub>9</sub>	1.0375	1.02849	1.03726	1.03933	1.04721	1.03037	1.10819	1.05243	1.04337	1.02655			
v 1	P <sub>10</sub>	1.0375	1.02849	1.03726	1.03933	1.04721	1.03037	1.10819	1.05243	1.04337	1.02655			
եղ	P <sub>11</sub>	1.0375	1.02849	1.03726	1.03933	1.04721	1.03037	1.10819	1.05244	1.04337	1.02655			
πó	P <sub>12</sub>	1.0375	1.02849	1.03726	1.03933	1.04721	1.03037	1.10819	1.05244	1.04337	1.02655			
s S	P <sub>13</sub>	1.0375	1.02849	1.03726	1.03933	1.04721	1.03037	1.10819	1.05244	1.04337	1.02655			
ļμή	P <sub>14</sub>	1.0375	1.02849	1.03726	1.03933	1.04721	1.03037	1.10819	1.05244	1.04337	1.02655			
ζ <b>1</b>	P <sub>15</sub>	1.0375	1.02849	1.03726	1.03933	1.04721	1.03037	1.10819	1.05244	1.04337	1.02655			
च	P <sub>16</sub>	1.0375	1.02849	1.03726	1.03933	1.04721	1.03037	1.10819	1.05244	1.04337	1.02655			
λή	P <sub>17</sub>	1.0375	1.02849	1.03726	1.03933	1.04721	1.03037	1.10819	1.05244	1.04337	1.02655			
αβς	P <sub>18</sub>	1.0375	1.02849	1.03726	1.03933	1.04721	1.03037	1.10819	1.05244	1.04337	1.02655			
13]	P <sub>19</sub>	1.0375	1.02849	1.03726	1.03933	1.04721	1.03037	1.10819	1.05244	1.04337	1.02655			
Z	P <sub>20</sub>	1.0375	1.02849	1.03726	1.03933	1.04721	1.03037	1.10819	1.05244	1.04337	1.02655			

	Πίνακας αποτελεσμάτων 3 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος 15% (συνέχεια)												
	PRODUCTS	Basic	Fabricated	Machinery	Office	Electrical	Radio,	Medical,	Motor	Other	Furniture;		
	(CPA)	metals	metal	and	machinery	machinery	television and	precision	vehicles,	transport	other		
			products,	equipment	and	and	communication	and optical	trailers	equipment	manufact.		
			except	n.e.c.	computers	apparatus	equipment and	instruments,	and semi-		goods		
			machinery			n.e.c.	apparatus	watches	trailers		n.e.c.		
			and					and clocks					
	Turi	V		A_A		A.C.							
	Τιμη	1 04504	Z	AA				AE		AG			
	P <sub>1</sub>	1.04584	1.03422	1.03662	1.02152	1.03585	1.022	1.03632	1.044/8	1.0355	1.02068		
'nOĩ	P <sub>2</sub>	1.06227	1.04648	1.04321	1.02632	1.04639	1.02641	1.0417	1.0508	1.04267	1.02662		
2	P <sub>3</sub>	1.06815	1.05075	1.0454	1.02803	1.05001	1.02799	1.04327	1.05265	1.04515	1.02875		
러	P <sub>4</sub>	1.07017	1.05225	1.04616	1.02861	1.05128	1.02853	1.04381	1.05329	1.04601	1.02951		
ĘŴ	P <sub>5</sub>	1.07084	1.05275	1.04642	1.0288	1.05171	1.0287	1.04397	1.0535	1.04629	1.02976		
۲	P <sub>6</sub>	1.07106	1.05291	1.0465	1.02886	1.05185	1.02876	1.04402	1.05357	1.04639	1.02984		
մոր	P <sub>7</sub>	1.07113	1.05297	1.04653	1.02888	1.05189	1.02878	1.04404	1.05359	1.04642	1.02987		
ανό	P <sub>8</sub>	1.07115	1.05299	1.04654	1.02888	1.05191	1.02878	1.04405	1.05359	1.04643	1.02988		
ן צע	P <sub>9</sub>	1.07116	1.05299	1.04654	1.02889	1.05191	1.02878	1.04405	1.0536	1.04643	1.02988		
11	P <sub>10</sub>	1.07116	1.05299	1.04654	1.02889	1.05191	1.02878	1.04405	1.0536	1.04643	1.02988		
որ	P <sub>11</sub>	1.07116	1.05299	1.04654	1.02889	1.05191	1.02878	1.04405	1.0536	1.04643	1.02988		
μ μ	P <sub>12</sub>	1.07116	1.05299	1.04654	1.02889	1.05191	1.02878	1.04405	1.0536	1.04643	1.02988		
jς c	P <sub>13</sub>	1.07116	1.05299	1.04654	1.02889	1.05191	1.02878	1.04405	1.0536	1.04643	1.02988		
เท่าว	P <sub>14</sub>	1.07116	1.05299	1.04654	1.02889	1.05191	1.02878	1.04405	1.0536	1.04643	1.02988		
JLC	P <sub>15</sub>	1.07116	1.05299	1.04654	1.02889	1.05191	1.02878	1.04405	1.0536	1.04643	1.02988		
τų τ	P <sub>16</sub>	1.07116	1.05299	1.04654	1.02889	1.05191	1.02878	1.04405	1.0536	1.04643	1.02988		
βoĵ	P <sub>17</sub>	1.07116	1.05299	1.04654	1.02889	1.05191	1.02878	1.04405	1.0536	1.04643	1.02988		
ετα	P <sub>18</sub>	1.07116	1.05299	1.04654	1.02889	1.05191	1.02878	1.04405	1.0536	1.04643	1.02988		
Σ	P <sub>19</sub>	1.07116	1.05299	1.04654	1.02889	1.05191	1.02878	1.04405	1.0536	1.04643	1.02988		
	P <sub>20</sub>	1.07116	1.05299	1.04654	1.02889	1.05191	1.02878	1.04405	1.0536	1.04643	1.02988		

	Πίνακας αποτελεσμάτων 3 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος 15% (συνέχεια)													
	PRODUCTS	Secondary	Electrical	Collected	Construction	Trade,	Wholesale	Retail trade	Hotel and	Land	Water			
	(CPA)	raw	energy,	and	work	maintenance	trade and	services,	restaurant	transport;	transport			
		materials	gas,	purified		and repair	commission	except of	services	transport	services			
			steam	water,		services of	trade	motor vehicles		via				
			and hot	distribution		motor venicies	services,	and		pipeline				
			water	water		motorcycles:	motor	renair services,		Services				
				Water		retail sale of	vehicles	of personal						
						automotive fuel	and	and household						
							motorcycles	goods						
	Tuń	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR			
	P <sub>1</sub>	1.03966	1.00721	1.01079	1.01726	1.00681	1.01047	1.00635	1.01171	1.01952	1.04201			
۲	P <sub>2</sub>	1.05523	1.0138	1.01459	1.02646	1.00847	1.01482	1.00886	1.01625	1.03196	1.05011			
v 2(	P <sub>3</sub>	1.06041	1.01565	1.01552	1.02948	1.00937	1.01633	1.00983	1.01803	1.03365	1.05169			
ւր	P <sub>4</sub>	1.06218	1.01616	1.0158	1.03054	1.00969	1.01669	1.01011	1.01869,	1.03409	1.05213			
έωċ	P <sub>5</sub>	1.06277	1.0163	1.01588	1.03087	1.00979	1.0168	1.01019	1.0189	1.03422	1.05226			
۲	P <sub>6</sub>	1.06296	1.01634	1.01591	1.03098	1.00982	1.01684	1.01022	1.01896	1.03427	1.0523			
մչդ	P <sub>7</sub>	1.06302	<u>1.01636</u>	<u>1.01592</u>	1.03102	1.00983	<u>1.01685</u>	<u>1.01023</u>	1.01898	1.03428	1.05231			
ανό	P <sub>8</sub>	1.06304	1.01636	1.01592	<u>1.03103</u>	1.00983	1.01685	1.01023	<u>1.01899</u>	1.03428	<u>1.05232</u>			
lεπ	P9	<u>1.06305</u>	1.01636	1.01592	1.03103	1.00984	1.01685	1.01023	1.01899	<u>1.03429</u>	1.05232			
د 1 <sup>-1</sup>	P <sub>10</sub>	1.06305	1.01636	1.01592	1.03103	1.00984	1.01685	1.01023	1.01899	1.03429	1.05232			
τı	P <sub>11</sub>	1.06305	1.01636	1.01592	1.03103	1.00984	1.01685	1.01023	1.01899	1.03429	1.05232			
από	P <sub>12</sub>	1.06305	1.01636	1.01592	1.03103	1.00984	1.01685	1.01023	1.01899	1.03429	1.05232			
ής ο	P <sub>13</sub>	1.06305	1.01636	1.01592	1.03103	1.00984	1.01685	1.01023	1.01899	1.03429	1.05232			
ท่น	P <sub>14</sub>	1.06305	1.01636	1.01592	1.03103	1.00984	1.01685	1.01023	1.01899	1.03429	1.05232			
ող	P <sub>15</sub>	1.06305	1.01636	1.01592	1.03103	1.00984	1.01685	1.01023	1.01899	1.03429	1.05232			
λή	P <sub>16</sub>	1.06305	1.01636	1.01592	1.03103	1.00984	1.01685	1.01023	1.01899	1.03429	1.05232			
χβο	P <sub>17</sub>	1.06305	1.01636	1.01592	1.03103	1.00984	1.01685	1.01023	1.01899	1.03429	1.05232			
Ιετι	P <sub>18</sub>	1.06305	1.01636	1.01592	1.03103	1.00984	1.01685	1.01023	1.01899	1.03429	1.05232			
2	P <sub>19</sub>	1.06305	1.01636	1.01592	1.03103	1.00984	1.01685	1.01023	1.01899	1.03429	1.05232			
	P <sub>20</sub>	1.06305	1.01636	1.01592	1.03103	1.00984	1.01685	1.01023	1.01899	1.03429	1.05232			

	Πίνακας αποτελεσμάτων 3 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος 15% (συνέχεια)													
	PRODUCTS (CPA)	Air transport services	Supporting and auxiliary transport services; travel agency services	Post and telecommunicat ion services	Financial intermediat . services, except insurance and pension funding services	Insurance and pension funding services, except compulsory social security services	Activities auxiliary to financial intermediat.	Real estate services	Renting services of machinery and equipment without operator and of personal and household goods	Computer and related services				
	Τιμή	AS	AT	AU	AV	AW	AX	AY	AZ	BA				
	P <sub>1</sub>	1.01731	1.01636	1.00431	1.00249	1.00663	1.00419	1.00136	1.0078	1.00927				
ьŪ	P <sub>2</sub>	1.02493	1.02191	1.00569	1.00432	1.01045	1.00663	1.00295	1.01155	1.01302				
2 2	P <sub>3</sub>	1.02626	1.02347	1.0061	1.00506	1.01222	1.00767	1.00375	1.0129	1.01447				
1 L L	P <sub>4</sub>	1.02665	1.02388	1.00623	1.00531	1.01288	1.00805	1.004	1.01336	1.01499				
ξŨ	P <sub>5</sub>	1.02678	1.02402	1.00627	1.00539	1.01311	1.00819	1.00409	1.01352	1.01516				
Ę	P <sub>6</sub>	1.02682	1.02406	1.00628	1.00542	1.01319	1.00823	1.00412	1.01356	1.01521				
մու	P <sub>7</sub>	1.02683	1.02407	1.00628	1.00543	1.01322	1.00824	1.00413	1.01358	1.01523				
ανά	P <sub>8</sub>	1.02684	1.02407	1.00628	1.00543	1.01323	1.00825	1.00413	1.01358	1.01524				
£π	P <sub>9</sub>	1.02684	1.02407	1.00628	1.00543	1.01323	1.00825	1.00413	1.01359	1.01524				
, 1 <sup>n</sup>	P <sub>10</sub>	1.02684	1.02408	1.00628	1.00543	1.01323	1.00825	1.00413	1.01359	1.01524				
ու	P <sub>11</sub>	1.02684	1.02408	1.00628	1.00543	1.01323	1.00825	1.00413	1.01359	1.01524				
πó	P <sub>12</sub>	1.02684	1.02408	1.00628	1.00543	1.01323	1.00825	1.00413	1.01359	1.01524				
js o	P <sub>13</sub>	1.02684	1.02408	1.00628	1.00543	1.01323	1.00825	1.00413	1.01359	1.01524				
เท่าว	P <sub>14</sub>	1.02684	1.02408	1.00628	1.00543	1.01323	1.00825	1.00413	1.01359	1.01524				
, Г	P <sub>15</sub>	1.02684	1.02408	1.00628	1.00543	1.01323	1.00825	1.00413	1.01359	1.01524				
ήτ	P <sub>16</sub>	1.02684	1.02408	1.00628	1.00543	1.01323	1.00825	1.00413	1.01359	1.01524				
βολ	P <sub>17</sub>	1.02684	1.02408	1.00628	1.00543	1.01323	1.00825	1.00413	1.01359	1.01524				
ετα	P <sub>18</sub>	1.02684	1.02408	1.00628	1.00543	1.01323	1.00825	1.00413	1.01359	1.01524				
Ĩ	P <sub>19</sub>	1.02684	1.02408	1.00628	1.00543	1.01323	1.00825	1.00413	1.01359	1.01524				
	P <sub>20</sub>	1.02684	1.02408	1.00628	1.00543	1.01323	1.00825	1.00413	1.01359	1.01524				

Πίνακας αποτελεσμάτων 3 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος 15% (συνέχεια)											
	PRODUCTS (CPA)	Research and development services	Other business services	Public administrat. and defence services; compulsory social security services	Education	Health and social work services	Sewage and refuse disposal services, sanitation and similar services	Membership organisation services n.e.c.	Recreational, cultural and sporting services	Other services	Private households with employed persons
	Τιμή	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK
	P1	1.00799	1.00781	1.01367	1.00046	1.01992	1.00871	1.00696	1.00814	1.00564	0.0
۳C	P <sub>2</sub>	1.01175	1.01192	1.01643	1.00156	1.02396	1.01216	1.01179	1.0114	1.00737	0.0
v 2(	P3	1.01331	1.01348	1.01736	1.00202	1.02489	1.01287	1.01385	1.01273	1.0081	0.0
tı	P <sub>4</sub>	1.01384	1.01403	1.01764	1.00217	1.02519	1.01309	1.01459	1.0132	1.00833	0.0
έως	P <sub>5</sub>	1.01402	1.01422	1.01774	1.00222	1.02528	1.01315	1.01483	1.01336	1.00841	0.0
۲	P <sub>6</sub>	1.01408	1.01428	1.01777	1.00224	1.02531	1.01317	1.01491	1.01342	1.00844	0.0
չու	P <sub>7</sub>	1.0141	1.0143	1.01777	1.00225	1.02532	1.01318	1.01494	1.01344	1.00845	0.0
ανό	P <sub>8</sub>	1.01411	1.01431	1.01778	1.00225	1.02532	1.01318	1.01495	1.01344	1.00845	0.0
Ľ3	P <sub>9</sub>	1.01411	1.01431	1.01778	1.00225	1.02532	1.01318	1.01495	1.01344	1.00845	0.0
, 1	P <sub>10</sub>	1.01411	1.01431	1.01778	1.00225	1.02532	1.01318	1.01495	1.01344	1.00845	0.0
٤IJ	P <sub>11</sub>	1.01411	1.01431	1.01778	1.00225	1.02532	1.01318	1.01495	1.01344	1.00845	0.0
хπó	P <sub>12</sub>	1.01411	1.01431	1.01778	1.00225	1.02532	1.01318	1.01495	1.01344	1.00845	0.0
ής c	P <sub>13</sub>	1.01411	1.01431	1.01778	1.00225	1.02532	1.01318	1.01495	1.01344	1.00845	0.0
μn	P <sub>14</sub>	1.01411	1.01431	1.01778	1.00225	1.02532	1.01318	1.01495	1.01344	1.00845	0.0
ц С	P <sub>15</sub>	1.01411	1.01431	1.01778	1.00225	1.02532	1.01318	1.01495	1.01344	1.00845	0.0
νή τ	P <sub>16</sub>	1.01411	1.01431	1.01778	1.00225	1.02532	1.01318	1.01495	1.01344	1.00845	0.0
βoĵ	P <sub>17</sub>	1.01411	1.01431	1.01778	1.00225	1.02532	1.01318	1.01495	1.01344	1.00845	0.0
6T0	P <sub>18</sub>	1.01411	1.01431	1.01778	1.00225	1.02532	1.01318	1.01495	1.01344	1.00845	0.0
Σ	P <sub>19</sub>	1.01411	1.01431	1.01778	1.00225	1.02532	1.01318	1.01495	1.01344	1.00845	0.0
	P <sub>20</sub>	1.01411	1.01431	1.01778	1.00225	1.02532	1.01318	1.01495	1.01344	1.00845	0.0

#### 6.6 Επεξεργασία 3<sup>ου</sup> Μοντέλου Αν Υποτιμήσουμε Το Νόμισμα 50%

#### 6.6.1 Μορφή εντολής στο Mathematica για υποτίμηση 50%

Η εντολή που δίνουμε στο πρόγραμμά μας είναι η εξής:

P00=P0; For[i=0,i<120,i++, P1=P0.Dom+Av+1.5\*P00.Imp; Print[MatrixForm[P1]]; P0=P1]

Η εντολή αυτή μας λέει ότι :

α) Το πρόγραμμα θα εκτελέσει 120 επαναλήψεις

β) Η τιμή Ρ μετά από κάθε επανάληψη θα είναι επηρεασμένη από μία σταθερή ( —) επίδραση της υποτίμησης κατά 50%.

 $P_0 = P_0 * Dom + Av + P_0 * Imp$  $P_1 = P_0^* Dom + Av + \overline{1,5^* P_0^* Imp}$  $P_2 = P_1 * Dom + Av + 1.5 * P_0 * Imp$  $P_3 = P_2 * Dom + Av + 1,5*P_0 * Imp$ 

(πριν την υποτίμηση) (μετά από υποτίμηση 50%)

 $P_{120} = P_{119}*Dom + Av + 1,5*P_0*Imp$ 

γ) Τέλος, η τιμή εκκίνησης P<sub>0</sub> του μοντέλου μας είναι η εξής:

 $\mathbf{P}_0:$ 

Αυτό σημαίνει ότι η τιμή των εμπορευμάτων της ελληνικής οικονομίας πριν την υποτίμηση είναι 1 νομισματική μονάδα (π.χ 1 ευρώ).

Αν « τρέξουμε » τη παραπάνω εντολή στο mathematica θα πάρουμε με τη μορφή διανυσμάτων γραμμή<sup>42</sup> τις τιμές των εμπορευμάτων ανά κλάδο<sup>43</sup> που είναι και το ζητούμενό μας. Τέλος, για να είναι τα αποτελέσματα καλύτερα

<sup>&</sup>lt;sup>42</sup> Τα διανύσματα γραμμή είναι όσα και οι επαναλήψεις που εκτελέσαμε στο πρόγραμμα, δηλαδή 120. Επειδή όμως μετά την 11<sup>η</sup> περίπου επανάληψη τα στοιχεία του διανύσματος γραμμή των τιμών των εμπορευμάτων παραμένουν σταθερά αναγράφονται μόνο 20.

<sup>&</sup>lt;sup>43</sup> Βλέπε αναλυτικά τα 20 διανύσματα γραμμή των τιμών των εμπορευμάτων στο Β.3.α Παράρτημα σελίδα 328

αντιληπτά από τον αναγνώστη έχουν μεταφερθεί σε πίνακα που ακολουθούν στην επόμενη ενότητα (6.6.2 ενότητα).

Ο πίνακας αυτός μας δείχνει :

α) τις επιδράσεις των τιμών των εμπορευμάτων ανά κλάδο για τις πρώτες 20 επαναλήψεις

 β) σε πια επανάληψη σταματάνε οι επιδράσεις της υποτίμησης (υπογραμμισμένες τιμές και έντονα γράμματα)

και

γ) τη τιμή που έχουν τα εμπορεύματα μετά το πέρας της επίδρασης της υποτίμησης του νομίσματος κατά 50 % (υπογραμμισμένες τιμές και έντονα γράμματα)

# 6.6.2 Αποτελέσματα 3° μοντέλου σε πίνακα για υποτίμηση 50%

Πίνακας αποτελεσμάτων 3 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος 50%												
	PRODUCTS (CPA)	Products of agriculture, hunting and related services	Products of forestry, logging and related services	Fish and other fishing products; services incidental of fishing	Coal and lignite; peat	Crude petroleum and natural gas; services incidental to oil and gas extraction excluding surveying	Uraniu m & thoriu m ores	Metal ores	Other mining and quarrying products	Food products and beverages	Tobacco products	
	Τιμή	E	F	G	Н	I	J	K	L	М	N	
Ε	P1	1.03061	1.0015	1.02729	1.03676	1.05692	0.0	1.03651	1.04307	1.04129	1.03999	
, 20	P <sub>2</sub>	1.04958	1.01093	1.05015	1.05771	1.07439	0.0	1.05951	1.07378	1.0628	1.05786	
որ	P <sub>3</sub>	1.05486	1.01473	1.0542	1.06392	1.08145	0.0	1.06597	1.08081	1.07277	1.06566	
ς	P <sub>4</sub>	1.05639	1.01601	1.05517	1.06568	1.08303	0.0	1.06741	1.08256	1.07604	1.06819	
l έ(	P <sub>5</sub>	1.05684	1.01641	1.05544	1.06622	1.0835	0.0	1.06783	1.08308	1.07703	1.06897	
γľ	P <sub>6</sub>	1.05698	1.01653	1.05552	1.06638	1.08364	0.0	1.06797	1.08325	1.07733	1.06922	
άλη	P <sub>7</sub>	1.05702	1.01657	1.05555	1.06643	1.08369	0.0	1.06801	1.0833	1.07743	1.0693	
ταν	P <sub>8</sub>	1.05703	<u>1.01658</u>	<u>1.05556</u>	1.06644	1.0837	0.0	<u>1.06803</u>	1.08331	1.07746	1.06932	
л сл	P <sub>9</sub>	<u>1.05704</u>	1.01658	1.05556	<u>1.06645</u>	<u>1.08371</u>	0.0	1.06803	<u>1.08332</u>	<u>1.07747</u>	1.06933	
v 1	P <sub>10</sub>	1.05704	1.01658	1.05556	1.06645	1.08371	0.0	1.06803	1.08332	1.07747	<u>1.06934</u>	
եղ	P <sub>11</sub>	1.05704	1.01658	1.05556	1.06645	1.08371	0.0	1.06803	1.08332	1.07747	1.06934	
πό	P <sub>12</sub>	1.05704	1.01658	1.05556	1.06645	1.08371	0.0	1.06803	1.08332	1.07747	1.06934	
lS a	P <sub>13</sub>	1.05704	1.01658	1.05556	1.06645	1.08371	0.0	1.06803	1.08332	1.07747	1.06934	
τμŕ	P <sub>14</sub>	1.05704	1.01658	1.05556	1.06645	1.08371	0.0	1.06803	1.08332	1.07747	1.06934	
ול ד	P <sub>15</sub>	1.05704	1.01658	1.05556	1.06645	1.08371	0.0	1.06803	1.08332	1.07747	1.06934	
l tr	P <sub>16</sub>	1.05704	1.01658	1.05556	1.06645	1.08371	0.0	1.06803	1.08332	1.07747	1.06934	
oλŕ	P <sub>17</sub>	1.05704	1.01658	1.05556	1.06645	1.08371	0.0	1.06803	1.08332	1.07747	1.06934	
αβ	P <sub>18</sub>	1.05704	1.01658	1.05556	1.06645	1.08371	0.0	1.06803	1.08332	1.07747	1.06934	
Ιετ	P <sub>19</sub>	1.05704	1.01658	1.05556	1.06645	1.08371	0.0	1.06803	1.08332	1.07747	1.06934	
V	P <sub>20</sub>	1.05704	1.01658	1.05556	1.06645	1.08371	0.0	1.06803	1.08332	1.07747	1.06934	
	Πίνακας αποτελεσμάτων 3 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος 50% (συνέχεια)											
------	---	--------------	----------------	----------------	---------------	----------------	----------------	----------------	----------------	----------------	---------------	
	PRODUCTS	Textiles	Wearing	Leather	Wood and	Pulp,	Printed	Coke,	Chemicals,	Rubber	Other non-	
	(CPA)		apparel;	and	products of	paper and	matter and	refined	chemical	and plastic	metallic	
			furs	leather	wood and	paper	recorded	petroleum	products	products	mineral	
				products	cork	products	media	products	and man-		products	
					(except			and	made			
					furniture);			nuclear	TIDres			
					straw and			Tuels				
					nlaiting							
					materials							
	Τιμή	0	Р	Q	R	S	Т	U	V	W	Х	
u(	P <sub>1</sub>	1.09074	1.07241	1.08793	1.08165	1.12015	1.07374	1.33344	1.14101	1.11112	1.04902	
20	P <sub>2</sub>	1.11275	1.08735	1.11347	1.11338	1.14626	1.09265	1.35653	1.16457	1.13411	1.07343	
ملا	P <sub>3</sub>	1.12095	1.09239	1.12078	1.12504	1.15387	1.09847	1.35953	1.1715	1.1412	1.08385	
်ဂ	P4	1.12372	1.09416	1.12311	1.12912	1.15629	1.10036	1.36031	1.17376	1.14352	1.08712	
l έc	P <sub>5</sub>	1.12459	1.09472	1.12385	1.13047	1.15704	1.10096	1.36054	1.17446	1.14424	1.08808	
μ	P <sub>6</sub>	1.12487	1.0949	1.12408	1.1309	1.15727	1.10115	1.36061	1.17468	1.14446	1.08837	
άλη	P <sub>7</sub>	1.12496	1.09495	1.12415	1.13104	1.15735	1.10122	1.36063	1.17475	1.14453	1.08846	
αv	P <sub>8</sub>	1.12499	1.09497	1.12418	1.13108	1.15737	1.10123	<u>1.36064</u>	1.17477	1.14456	1.08849	
гз Г	P <sub>9</sub>	<u>1.125</u>	<u>1.09498</u>	<u>1.12419</u>	<u>1.1311</u>	<u>1.15738</u>	<u>1.10124</u>	1.36064	<u>1.17478</u>	<u>1.14457</u>	<u>1.0885</u>	
11	P <sub>10</sub>	1.125	1.09498	1.12419	1.1311	1.15738	1.10124	1.36064	1.17478	1.14457	1.0885	
ւու	P <sub>11</sub>	1.125	1.09498	1.12419	1.1311	1.15738	1.10124	1.36064	1.17478	1.14457	1.0885	
πó	P <sub>12</sub>	1.125	1.09498	1.12419	1.1311	1.15738	1.10124	1.36064	1.17478	1.14457	1.0885	
υ	P <sub>13</sub>	1.125	1.09498	1.12419	1.1311	1.15738	1.10124	1.36064	1.17478	1.14457	1.0885	
ļμ	P <sub>14</sub>	1.125	1.09498	1.12419	1.1311	1.15738	1.10124	1.36064	1.17478	1.14457	1.0885	
ςτ	P <sub>15</sub>	1.125	1.09498	1.12419	1.1311	1.15738	1.10124	1.36064	1.17478	1.14457	1.0885	
ոլ	P <sub>16</sub>	1.125	1.09498	1.12419	1.1311	1.15738	1.10124	1.36064	1.17478	1.14457	1.0885	
λή	P <sub>17</sub>	1.125	1.09498	1.12419	1.1311	1.15738	1.10124	1.36064	1.17478	1.14457	1.0885	
αβί	P <sub>18</sub>	1.125	1.09498	1.12419	1.1311	1.15738	1.10124	1.36064	1.17478	1.14457	1.0885	
Ιετ	P <sub>19</sub>	1.125	1.09498	1.12419	1.1311	1.15738	1.10124	1.36064	1.17478	1.14457	1.0885	
2	P <sub>20</sub>	1.125	1.09498	1.12419	1.1311	1.15738	1.10124	1.36064	1.17478	1.14457	1.0885	

		Πίνακας α	ποτελεσμ	ιάτων 3ου	μοντέλου	με υποτίμ	μηση του νομ	ίσματος 50	)% (συνέ)	(εια)	
	PRODUCTS	Basic	Fabricated	Machinery	Office	Electrical	Radio,	Medical,	Motor	Other	Furniture;
	(CPA)	metals	metal	and	machinery	machinery	television and	precision	vehicles,	transport	other
			products,	equipment	and	and	communication	and optical	trailers	equipment	manufact.
			except	n.e.c.	computers	apparatus	equipment and	instruments,	and semi-		goods
			machinery			n.e.c.	apparatus	watches	trailers		n.e.c.
			and					and clocks			
	T	V		Λ Λ		A.C.				A.C.	
	Τιμη	I 1 15070	L 1 1 1 4 0 7	AA 1 10005	AD	AC	AD	AE		AG	
	P <sub>1</sub>	1.15279	1.11407	1.12205	1.0/1/3	1.1195	1.0/333	1.12107	1.14928	1.11845	1.06892
ьŪ	P <sub>2</sub>	1.20757	1.15494	1.14402	1.08773	1.15463	1.08803	1.13901	1.16932	1.14236	1.08872
2	P <sub>3</sub>	1.22717	1.16918	1.15133	1.09343	1.1667	1.09331	1.14424	1.17551	1.15061	1.09585
1	P <sub>4</sub>	1.23389	1.17415	1.15388	1.09537	1.17094	1.09511	1.14602	1.17765	1.15346	1.09838
ξ.	P <sub>5</sub>	1.23613	1.17583	1.15473	1.09599	1.17236	1.09568	1.14658	1.17833	1.15441	1.09921
۴Ľ	P <sub>6</sub>	1.2368	1.17638	1.155	1.09619	1.17282	1.09586	1.14675	1.17855	1.15473	1.09948
չդղ	P <sub>7</sub>	1.2371	1.17656	1.1551	1.09626	1.17297	1.09592	1.1468	1.17862	1.15483	1.09957
ανά	P <sub>8</sub>	1.23718	1.17662	1.15512	1.09628	1.17302	1.09594	1.14682	1.17865	1.15486	1.09959
йз_	P <sub>9</sub>	1.2372	<u>1.17664</u>	1.15513	<u>1.09629</u>	1.17303	<u>1.09595</u>	1.14682	1.17865	1.15487	1.0996
v 1 <sup>n</sup>	P <sub>10</sub>	<u>1.23721</u>	1.17664	<u>1.15514</u>	1.09629	<u>1.17304</u>	1.09595	<u>1.14683</u>	<u>1.17866</u>	<u>1.15488</u>	<u>1.09961</u>
tıl	P <sub>11</sub>	1.23721	1.17664	1.15514	1.09629	1.17304	1.09595	1.14683	1.17866	1.15488	1.09961
ĸπό	P <sub>12</sub>	1.23721	1.17664	1.15514	1.09629	1.17304	1.09595	1.14683	1.17866	1.15488	1.09961
ής c	P <sub>13</sub>	1.23721	1.17664	1.15514	1.09629	1.17304	1.09595	1.14683	1.17866	1.15488	1.09961
nhu	P <sub>14</sub>	1.23721	1.17664	1.15514	1.09629	1.17304	1.09595	1.14683	1.17866	1.15488	1.09961
ն	P <sub>15</sub>	1.23721	1.17664	1.15514	1.09629	1.17304	1.09595	1.14683	1.17866	1.15488	1.09961
۲ų	P <sub>16</sub>	1.23721	1.17664	1.15514	1.09629	1.17304	1.09595	1.14683	1.17866	1.15488	1.09961
ιβοĵ	P <sub>17</sub>	1.23721	1.17664	1.15514	1.09629	1.17304	1.09595	1.14683	1.17866	1.15488	1.09961
[ET0	P <sub>18</sub>	1.23721	1.17664	1.15514	1.09629	1.17304	1.09595	1.14683	1.17866	1.15488	1.09961
Σ	P <sub>19</sub>	1.23721	1.17664	1.15514	1.09629	1.17304	1.09595	1.14683	1.17866	1.15488	1.09961
	P <sub>20</sub>	1.23721	1.17664	1.15514	1.09629	1.17304	1.09595	1.14683	1.17866	1.15488	1.09961

	Πίνακας αποτελεσμάτων 3 <sup>ου</sup> μοντέλου με υποτίμηση του νομίσματος 50% (συνέχεια)										
	PRODUCTS	Secondary	Electrical	Collected	Construction	Trade,	Wholesale	Retail trade	Hotel and	Land	Water
	(CPA)	raw	energy,	and	work	maintenance	trade and	services,	restaurant	transport;	transport
		materials	gas,	purified		and repair	commission	except of	services	transport	services
			steam	water,		services of	trade	motor vehicles		via	
			and hot	distribution		motor venicies	services,	and		pipeline	
			water	Services Or		anu motorcycles:	motor	repair services		Services	
				water		retail sale of	vehicles	of personal			
						automotive fuel	and	and household			
							motorcycles	goods			
	<b></b>		A 1	A 1 C		<b>A B A</b>		10	4.5		4.0
	Τιμή	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR
	P <sub>1</sub>	1.13222	1.02405	1.03596	1.05754	1.02271	1.0349	1.02117	1.03903	1.06507	1.14002
μŪ	P <sub>2</sub>	1.1841	1.046	1.04863	1.08821	1.02823	1.0494	1.02955	1.05416	1.10653	1.16704
2	P <sub>3</sub>	1.20137	1.05216	1.05173	1.09827	1.03124	1.05442	1.03275	1.06009	1.11218	1.1723
व	P <sub>4</sub>	1.20725	1.05385	1.05266	1.10178	1.03229	1.05564	1.03369	1.0623	1.11363	1.17375
ξŨ	P <sub>5</sub>	1.20922	1.05434	1.05295	1.10291	1.03263	1.056	1.03398	1.06299	1.11408	1.17419
۲	P <sub>6</sub>	1.20986	1.05448	1.05304	1.10327	1.03274	1.05612	1.03407	1.0632	1.11422	1.17434
նչդ	P <sub>7</sub>	1.21007	1.05453	1.05306	1.10339	1.03277	1.05616	1.0341	1.06327	1.11427	1.17438
ανό	P <sub>8</sub>	1.21014	1.05454	1.05307	1.10342	1.03278	<u>1.05617</u>	1.03411	1.06329	1.11428	1.17439
L <sup>3</sup>	P <sub>9</sub>	1.21016	1.05454	<u>1.05308</u>	1.10343	<u>1.03279</u>	1.05617	1.03411	1.06329	<u>1.11429</u>	<u>1.1744</u>
v 1 '	P <sub>10</sub>	<u>1.21017</u>	<u>1.05455</u>	1.05308	<u>1.10344</u>	1.03279	1.05617	<u>1.03412</u>	<u>1.0633</u>	1.11429	1.1744
ц,	P <sub>11</sub>	1.21017	1.05455	1.05308	1.10344	1.03279	1.05617	1.03412	1.0633	1.11429	1.1744
χπό	P <sub>12</sub>	1.21017	1.05455	1.05308	1.10344	1.03279	1.05617	1.03412	1.0633	1.11429	1.1744
ής (	P <sub>13</sub>	1.21017	1.05455	1.05308	1.10344	1.03279	1.05617	1.03412	1.0633	1.11429	1.1744
ท่าว	P <sub>14</sub>	1.21017	1.05455	1.05308	1.10344	1.03279	1.05617	1.03412	1.0633	1.11429	1.1744
չր	P <sub>15</sub>	1.21017	1.05455	1.05308	1.10344	1.03279	1.05617	1.03412	1.0633	1.11429	1.1744
λή	P <sub>16</sub>	1.21017	1.05455	1.05308	1.10344	1.03279	1.05617	1.03412	1.0633	1.11429	1.1744
xβo	P <sub>17</sub>	1.21017	1.05455	1.05308	1.10344	1.03279	1.05617	1.03412	1.0633	1.11429	1.1744
ετς	P <sub>18</sub>	1.21017	1.05455	1.05308	1.10344	1.03279	1.05617	1.03412	1.0633	1.11429	1.1744
Σ	P <sub>19</sub>	1.21017	1.05455	1.05308	1.10344	1.03279	1.05617	1.03412	1.0633	1.11429	1.1744
	P <sub>20</sub>	1.21017	1.05455	1.05308	1.10344	1.03279	1.05617	1.03412	1.0633	1.11429	1.1744

		Πίνακας	ς αποτελεσ	μάτων 3 <sup>ου</sup> μο	ντέλου με	υποτίμηση	του νομίσ	ματος 50%	ο (συνέχεια)	
	PRODUCTS	Air	Supporting	Post and	Financial	Insurance	Activities	Real estate	Renting services	Computer
	(CPA)	transport	and	telecommunicat	intermediat	and pension	auxiliary to	services	of machinery	and related
		services	auxiliary	ion services	. services,	funding	financial		and equipment	services
			transport		except	services,	intermediat.		without operator	
			services;		insurance	except			and of personal	
			travel		and	compulsory			and household	
			agency		pension	SOCIAI			goods	
			Services		services	services				
	Tuní	AS	AT	AU	AV	AW	AX	AY	AZ	BA
	P <sub>1</sub>	1.05769	1.05455	1.01438	1.00829	1.02209	1.01397	1.00455	1.026	1.03089
٣	P <sub>2</sub>	1.08309	1.07302	1.01897	1.01442	1.03483	1.02211	1.00985	1.0385	1.0434
v 2(	P <sub>3</sub>	1.08753	1.07823	1.02032	1.01688	1.04072	1.02557	1.01248	1.043	1.04824
th	P <sub>4</sub>	1.08884	1.07962	1.02075	1.0177	1.04293	1.02684	1.01335	1.04455	1.04996
έως	P <sub>5</sub>	1.08927	1.08005	1.02089	1.01798	1.04371	1.02729	1.01364	1.04505	1.05053
÷ لہ	P <sub>6</sub>	1.0894	1.08019	1.02093	1.01807	1.04397	1.02744	1.01373	1.04521	1.05072
մոր	P <sub>7</sub>	1.08944	1.08023	1.02094	1.0181	1.04406	1.02748	1.01376	1.04527	1.05078
ανό	P <sub>8</sub>	<u>1.08946</u>	1.08024	<u>1.02095</u>	<u>1.01811</u>	1.04408	<u>1.0275</u>	1.01377	1.04528	<u>1.0508</u>
Ш3	P <sub>9</sub>	1.08946	<u>1.08025</u>	1.02095	1.01811	1.04409	1.0275	<u>1.01378</u>	<u>1.04529</u>	1.0508
, 1 <sup>n</sup>	P <sub>10</sub>	1.08946	1.08025	1.02095	1.01811	<u>1.0441</u>	1.0275	1.01378	1.04529	1.0508
al)	P <sub>11</sub>	1.08946	1.08025	1.02095	1.01811	1.0441	1.0275	1.01378	1.04529	1.0508
хπó	P <sub>12</sub>	1.08946	1.08025	1.02095	1.01811	1.0441	1.0275	1.01378	1.04529	1.0508
ής σ	P <sub>13</sub>	1.08946	1.08025	1.02095	1.01811	1.0441	1.0275	1.01378	1.04529	1.0508
nhı	P <sub>14</sub>	1.08946	1.08025	1.02095	1.01811	1.0441	1.0275	1.01378	1.04529	1.0508
с ЦС	P <sub>15</sub>	1.08946	1.08025	1.02095	1.01811	1.0441	1.0275	1.01378	1.04529	1.0508
١ų	P <sub>16</sub>	1.08946	1.08025	1.02095	1.01811	1.0441	1.0275	1.01378	1.04529	1.0508
ťβο	P <sub>17</sub>	1.08946	1.08025	1.02095	1.01811	1.0441	1.0275	1.01378	1.04529	1.0508
013]	P <sub>18</sub>	1.08946	1.08025	1.02095	1.01811	1.0441	1.0275	1.01378	1.04529	1.0508
Σ	P <sub>19</sub>	1.08946	1.08025	1.02095	1.01811	1.0441	1.0275	1.01378	1.04529	1.0508
	P <sub>20</sub>	1.08946	1.08025	1.02095	1.01811	1.0441	1.0275	1.01378	1.04529	1.0508

		Πίνακας απ	ιοτελεσμα	άτων 3 <sup>ου</sup> μ	οντέλου μ	ιε υποτίμι	ηση του v	ομίσματος	50% (συνέ	χεια)	
	PRODUCTS	Research	Other	Public	Education	Health	Sewage	Membership	Recreational,	Other	Private
	(CPA)	and	business	administrat.	services	and social	and	organisation	cultural and	services	households
		development	services	and		work	refuse	services	sporting		with
		services		defence		services	disposal	n.e.c.	services		employed
				services;			services,				persons
				compulsory			sanitation				
				SOCIAI			and				
				security			similar				
	Τιμή	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK
	P <sub>1</sub>	1.02663	1.02605	1.04557	1.00152	1.06639	1.02903	1.0232	1.02713	1.0188	0.0
Ē	P <sub>2</sub>	1.03917	1.03973	1.05478	1.00519	1.07987	1.04055	1.0393	1.038	1.02457	0.0
20	P <sub>3</sub>	1.04436	1.04494	1.05786	1.00672	1.08297	1.04292	1.04617	1.04242	1.02698	0.0
եղչ	P4	1.04614	1.04678	1.05881	1.00724	1.08397	1.04362	1.04862	1.04401	1.02777	0.0
ათვ	P <sub>5</sub>	1.04674	1.0474	1.05912	1.00741	1.08427	1.04384	1.04944	1.04455	1.02804	0.0
با ئ	P <sub>6</sub>	1.04694	1.0476	1.05922	1.00747	1.08436	1.04391	1.04971	1.04473	1.02813	0.0
չուկ	P <sub>7</sub>	1.047	1.04767	1.05925	1.00749	1.08439	1.04393	1.0498	1.04478	1.02815	0.0
χνά	P <sub>8</sub>	1.04702	1.04769	1.05926	1.00749	1.0844	<u>1.04394</u>	1.04983	1.0448	1.02816	0.0
EД	P <sub>9</sub>	<u>1.04703</u>	<b>1.0477</b>	1.05926	1.00749	<u>1.08441</u>	1.04394	<u>1.04984</u>	<u>1.04481</u>	1.02816	0.0
, 1 <sup>n</sup>	P <sub>10</sub>	1.04703	1.0477	1.05926	<u>1.0075</u>	1.08441	1.04394	1.04984	1.04481	<u>1.02817</u>	0.0
ոլ	P <sub>11</sub>	1.04703	1.0477	1.05926	1.0075	1.08441	1.04394	1.04984	1.04481	1.02817	0.0
ιπό	P <sub>12</sub>	1.04703	1.0477	1.05926	1.0075	1.08441	1.04394	1.04984	1.04481	1.02817	0.0
ής α	P <sub>13</sub>	1.04703	1.0477	1.05926	1.0075	1.08441	1.04394	1.04984	1.04481	1.02817	0.0
μu	P <sub>14</sub>	1.04703	1.0477	1.05926	1.0075	1.08441	1.04394	1.04984	1.04481	1.02817	0.0
ն	P <sub>15</sub>	1.04703	1.0477	1.05926	1.0075	1.08441	1.04394	1.04984	1.04481	1.02817	0.0
١ų	P <sub>16</sub>	1.04703	1.0477	1.05926	1.0075	1.08441	1.04394	1.04984	1.04481	1.02817	0.0
ιβοĵ	P <sub>17</sub>	1.04703	1.0477	1.05926	1.0075	1.08441	1.04394	1.04984	1.04481	1.02817	0.0
013]	P <sub>18</sub>	1.04703	1.0477	1.05926	1.0075	1.08441	1.04394	1.04984	1.04481	1.02817	0.0
Σ	P <sub>19</sub>	1.04703	1.0477	1.05926	1.0075	1.08441	1.04394	1.04984	1.04481	1.02817	0.0
	P <sub>20</sub>	1.04703	1.0477	1.05926	1.0075	1.08441	1.04394	1.04984	1.04481	1.02817	0.0

### 6.7 Δείκτες συνολικού πληθωρισμού Για Ποσοστό Υποτίμησης, 15% Και 50%

Στο σημείο αυτό για να έχουμε μία καλύτερη εικόνα του πληθωριστικού κύματος που δημιουργείται στο δεύτερο μοντέλο λόγω της υποτίμησης του νομίσματος υπολογίζουμε τους δείκτες συνολικού πληθωρισμού (ΣΣΔΠ)<sup>44</sup> για τα ποσοστά υποτίμησης 15% και 50%. Για να υπολογίσουμε τους δείκτες συνολικού πληθωρισμού πρέπει να κάνουμε αρχικά τους εξής υπολογισμούς:

1° πολλαπλασιάζουμε την τιμή Ρ κάθε κλάδου της οικονομίας με την εγχώρια παραγωγή κάθε κλάδου (έχουμε 59 τιμές και 59 κλάδους άρα θα υπολογίσουμε 59 γινόμενα ένα για κάθε κλάδο).

Όπου : Ρ οι τιμές P<sub>1</sub>,P<sub>2</sub>,P<sub>3</sub>,P<sub>4</sub>,P<sub>5</sub> που βρήκαμε στην ενότητα 6.5.2 και 6.6.2 και P<sub>0</sub> =  $1^{45}$ .

 $2^{ov}$  προσθέτουμε τα 59 γινόμενα που υπολογίσαμε και βρίσκουμε τη αξία συνολικής παραγωγής για τις χρονικές περιόδους 0,1,2,3,4 και 5 αντίστοιχα με τα  $P_{0,P_1}$ , $P_2$ , $P_3$ , $P_4$ , $P_5$ .

Τώρα είμαστε έτοιμοι να υπολογίσουμε τους δείκτες συνολικού πληθωρισμού για ποσοστό υποτίμησης 15% και 50%.

<sup>&</sup>lt;sup>44</sup> Θα υπολογίσουμε πέντε δείκτες πληθωρισμού που αντιστοιχούν σε πέντε έτη και αυτό γιατί πέρα από τα πέντε χρόνια πρακτικά οι δείκτες δεν έχουν νόημα. (Μετά από πέντε έτη θα έχουμε τεχνολογικές μεταβολές, μεταβολές στην κατανομή του εισοδήματος, υποκαταστάσεις εισαγωγώνεξαγωγών κ.λπ., οπότε το υπόδειγμα χάνει την όποια αξιοπιστία του).

 $<sup>^{45}</sup>P_0 = 1$  επειδή έχουμε θεωρήσει ως φυσική μονάδα μέτρησης κάθε εμπορεύματος εκείνη την ποσότητά του, της οποίας η αγοραία αξία (η τιμή αγοράς) ισούται με 1 νομισματική μονάδα.

### 6.7.1 Δείκτες συνολικού πληθωρισμού για ποσοστό υποτίμησης 15%

Μετά από τους υπολογισμούς (βλέπε αναλυτικά στη σελίδα 109) που έγιναν σύμφωνα με την ενότητα 6.7 είμαστε σε θέση να αναφέρουμε ότι οι αξίες συνολικής παραγωγής με υποτίμηση 15% για τις χρονικές περιόδους 0,1,2,3,4,5 είναι οι εξής :

Αξία συνολικής παραγωγής (ΑΣΠ)				
Συνολική αξία παραγωγής την P <sub>0</sub> περίοδο	87963,148700363500			
Συνολική αξία παραγωγής την Ρ1 περίοδο	89458,871810396000			
Συνολική αξία παραγωγής την Ρ2 περίοδο	89978,081888761900			
Συνολική αξία παραγωγής την Ρ3 περίοδο	90152,354879572500			
Συνολική αξία παραγωγής την Ρ4 περίοδο	90209,393438600000			
Συνολική αξία παραγωγής την Ρ5 περίοδο	90227,351689166500			

Έτσι οι δείκτες συνολικού πληθωρισμού βάση των υπολογισμών (βλέπε αναλυτικά σελίδα 109) είναι οι εξής:

Περίοδος δείκτη συνολικού πληθωρισμού (ΣΣΔΠ)	ΣΣΔΠ=[ΑΣΠ περιόδου t+1 - ΑΣΠ περιόδου t]/ΑΣΠ περιόδου t	ΣΣΔΠ σε ποσοστό (%)
Δείκτης συνολικού πληθωρισμού την πρώτη περίοδο	0,01700397419	1,70%
Δείκτης συνολικού πληθωρισμού την δεύτερη περίοδο	0,00580389701	0,58%
Δείκτης συνολικού πληθωρισμού την τρίτη περίοδο	0,00193683825	0,19%
Δείκτης συνολικού πληθωρισμού την τέταρτη περίοδο	0,00063269073	0,06%
Δείκτης συνολικού πληθωρισμού την πέμπτη περίοδο	0,00019907296	0,001%

### 6.7.2 Δείκτες συνολικού πληθωρισμού για ποσοστό υποτίμησης 50%

Μετά από τους υπολογισμούς (βλέπε αναλυτικά στη σελίδα 109) που έγιναν σύμφωνα με την ενότητα 6.7 είμαστε σε θέση να αναφέρουμε ότι οι αξίες συνολικής παραγωγής με υποτίμηση 50% για τις χρονικές περιόδους 0,1,2,3,4,5 είναι οι εξής :

Αξία συνολικής παραγωγής (ΑΣΠ)					
Συνολική αξία παραγωγής την P <sub>0</sub> περίοδο	87963,148700363500				
Συνολική αξία παραγωγής την Ρ1 περίοδο	92948,979808752700				
Συνολική αξία παραγωγής την P2 περίοδο	94679,984103232100				
Συνολική αξία παραγωγής την Ρ3 περίοδο	95260,362003329800				
Συνολική αξία παραγωγής την Ρ4 περίοδο	95450,434828118700				
Συνολική αξία παραγωγής την Ρ5 περίοδο	95510,636067131700				

Έτσι οι δείκτες συνολικού πληθωρισμού βάση των υπολογισμών (βλέπε αναλυτικά σελίδα 109) είναι οι εξής:

Περίοδος δείκτη συνολικού πληθωρισμού (ΣΣΔΠ)	ΣΣΔΠ=[ΑΣΠ περιόδου t+1 - ΑΣΠ περιόδου t]/ΑΣΠ περιόδου t	ΣΣΔΠ σε ποσοστό (%)
Δείκτης συνολικού πληθωρισμού την πρώτη περίοδο	0,05668090765	5,66%
Δείκτης συνολικού πληθωρισμού την δεύτερη περίοδο	0,01862316615	1,86%
Δείκτης συνολικού πληθωρισμού την τρίτη περίοδο	0,00612989013	0,61%
Δείκτης συνολικού πληθωρισμού την τέταρτη περίοδο	0,00199529816	0,199%
Δείκτης συνολικού πληθωρισμού την πέμπτη περίοδο	0,00063070681	0,06%

# ΣΣΔΠ3

## 7. Ιδιοτιμές & Δείκτες Ταχύτητας Σύγκλισης

Πέρα την ανάλυση των τριών μοντέλων και τον προσδιορισμό του τρόπους μετάδοσης της αύξησης του επιπέδου τιμών των εμπορευμάτων λόγω της υποτίμησης του νομίσματος κατά 15% και 50% που είδαμε στα κεφάλαια 4, 5 και 6 σημαντικές πληροφορίες μπορούμε να εκμαιεύσουμε από μια σειρά εργαλείων όπως είναι: οι ιδιοτιμές, οι δείκτες ταχύτητας σύγκλισης και οι «ομαλοποιημένε»ς ιδιοτιμές. Για αυτό το λόγω σ' αυτό το κεφάλαιο θα ασχοληθούμε με τον υπολογισμό των εν λόγω εργαλείων.

### 7.1 Υπολογισμός Ιδιοτιμών

Οι μήτρες που μας ενδιαφέρουν για τον υπολογισμό των ιδιοτιμών είναι τρείς<sup>46</sup>:

→ Η μήτρα εγχώριας παραγωγής M1

 $\rightarrow$ Η μήτρα αθροίσματος εγχώριας παραγωγή<br/>ς M1 + K

 $\rightarrow$ Η μήτρας που σχηματίζουν από την (εγχώριας παραγωγή<br/>ς M2 + B + F)\*(R)

Το mathematica υπολογίζει με την εντολή Eigenvalues[όνομα μήτρας] τις ιδιοτιμές και τις εμφανίζει από τη μεγαλύτερη προς τη μικρότερη. Η τιμή της ιδιοτιμής πρέπει να είναι πάντα μικρότερη της μονάδας (τιμή ιδιοτιμής < 1). Επίσης, όσο μεγαλύτερη είναι η μέγιστη ιδιοτιμή της μήτρας τόσο μεγαλύτερος είναι ο χρόνος που απαιτείται για να προσεγγίσει το σύστημα τιμών την τελική τιμή του και συνεπώς τόσο μικρότερο είναι το «σοκ» που δέχεται το σύστημα από την υποτίμηση (από την άποψη της αύξησης του «κόστους» παραγωγής)<sup>47</sup>.

Ο υπολογισμός αυτών των ιδιοτιμών θα μας βοηθήσει να υπολογίσουμε τους δείκτες ταχύτητας σύγκλισης των τιμών στο τελικό διάνυσμα τιμών και τις «ομαλοποιημένες» ιδιοτιμες.

<sup>&</sup>lt;sup>46</sup> Μαριόλης Θεόδωρος – Οικονομίδης Χαράλαμπος – Σταμάτης Γιώργος – Φουστέρης Νίκος, 1997, Ποσοτική εκτίμηση των επιπτώσεων της υποτίμησης στο «κόστος» παραγωγής, Αθήνα, Εκδόσεις «Κριτική», σελ.35 - 41
<sup>47</sup> Μαριόλης Θεόδωρος – Οικονομίδης Χαράλαμπος – Σταμάτης Γιώργος – Φουστέρης Νίκος, 1997, Ποσοτική εκτίμηση των επιπτώσεων της υποτίμησης στο «κόστος» παραγωγής, Αθήνα, Εκδόσεις «Κριτική», σελ.41

## 7.1.1 Ιδιοτιμές μήτρας : εγχώριας παραγωγής Μ1

Για να υπολογίσουμε τις ιδιοτιμές της μήτρας «εγχώρια παραγωγή M1» κάνουμε τα εξής :

α) εισάγουμε τη μήτρα εγχώρια παραγωγή M1(σελίδα 20) στο mathematica και

β) χρησιμοποιούμε την εντολή Eigenvalues[όνομα μήτρας]

Έτσι αν «τρέξουμε» το πρόγραμμα έχουμε τις παρακάτω ιδιοτιμές (όπου  $i \equiv \sqrt{-1}$ ) .

Πίναι	Πίνακας ιδιοτιμών μήτρας εγχώριας παραγωγής Μ1				
	Ιδι	οτιμή			
1 <sup>η</sup>	0.321697				
<b>2</b> <sup>η</sup>	0.249328				
<b>3</b> <sup>η</sup>	0.167487 +0.00291732 i	0.167487 -0.00291732 i			
<b>4</b> <sup>η</sup>	0.157003				
5 <sup>η</sup>	0.105572				
<b>6</b> <sup>η</sup>	0.100061				
<b>7</b> <sup>η</sup>	0.0868586 +0.027817 i	0.0868586 -0.027817 i			
<b>8</b> <sup>η</sup>	0.0776878				
<b>9</b> <sup>η</sup>	-0.0776021				
<b>10</b> <sup>η</sup>	0.0750952 +0.0131405 i	0.0750952 -0.0131405 i			
11 <sup>η</sup>	0.0669626				
<b>12</b> <sup>η</sup>	0.0644622				
<b>13</b> <sup>η</sup>	0.0533983 +0.010458 i	0.0533983 -0.010458 i			
<b>14</b> <sup>η</sup>	0.0249071 +0.0459938 i	0.0249071 -0.0459938 i			
15 <sup>η</sup>	-0.0198617+0.0459104 i	-0.0198617-0.0459104 i			
<b>16</b> <sup>η</sup>	0.0472569				
1 <b>7</b> <sup>η</sup>	0.0439259 +0.0131953 i	0.0439259 -0.0131953 i			
<b>18</b> <sup>η</sup>	0.0210046 +0.037344 i	0.0210046 -0.037344 i			
<b>19</b> <sup>η</sup>	0.0351885 +0.00578462 i	0.0351885 -0.00578462 i			
<b>20</b> <sup>η</sup>	-0.0322261				
<b>21</b> <sup>η</sup>	0.0319649				
22 <sup>η</sup>	0.0301203				
23 <sup>η</sup>	-0.00970158+0.0265003 i	-0.00970158-0.0265003 i			
24 <sup>η</sup>	0.0251926 +0.00177218 i	0.0251926 -0.00177218 i			
25 <sup>η</sup>	0.0224658				
26 <sup>η</sup>	0.0203444				

27 <sup>η</sup>	0.0147124 +0.00578071 i	0.0147124 -0.00578071 i
<b>28</b> <sup>η</sup>	0.0154909	
29 <sup>η</sup>	-0.00826021+0.00769815 i	-0.00826021-0.00769815 i
<b>30</b> <sup>η</sup>	-0.0106592+0.000716457 i	-0.0106592-0.000716457 i
<b>31</b> <sup>η</sup>	0.00578565 +0.0050474 i	0.00578565 -0.0050474 i
<u>32</u> <sup>η</sup>	-0.00562812	
<b>33</b> <sup>η</sup>	0.00313441 +0.00116785 i	0.00313441 -0.00116785 i
<b>34</b> <sup>η</sup>	0.00330219	
<b>35</b> <sup>η</sup>	-0.00270523	
<b>36</b> <sup>η</sup>	0.00194147 +0.000234256 i	0.00194147 -0.000234256 i
<b>37</b> <sup>η</sup>	0.00138974	
<b>38</b> <sup>η</sup>	-0.000169761	
<b>39</b> <sup>η</sup>	-0.0000515009	
<b>40</b> <sup>η</sup>	0.	
<b>41</b> <sup>η</sup>	0.	
<b>4</b> 2 <sup>η</sup>	0.	

### 7.1.2 Ιδιοτιμές μήτρας : εγχώριας παραγωγής Μ1 + Κ

Για να υπολογίσουμε τις ιδιοτιμές του αθροίσματος των μητρών «εγχώρια παραγωγή  $M1+K\!\!>\!\!\!>$  κάνουμε τα εξής :

α) εισάγουμε τη μήτρα εγχώρια παραγωγή M1(σελίδα 20) και την διαγώνια μήτρα K<sup>48</sup> (σελίδα 24) στο mathematica

β) προσθέτουμε τις μήτρες και δημιουργούμε μία νέα. Η νέα αυτή μήτρα υπάρχει πίσω στο Γ.1 Παράρτημα (σελίδα 332)

και

γ) χρησιμοποιούμε την εντολή Eigenvalues[όνομα μήτρας]

Έτσι αν «τρέξουμε» το πρόγραμμα έχουμε τις παρακάτω ιδιοτιμές (όπου  $i \equiv \sqrt{-1}$ ).

П	ίνακας ιδιοτιμών εγχώριας	παραγωγής Μ1 + Κ
	I	διοτιμή
1 <sup>η</sup>	0.948878	
2 <sup>η</sup>	0.90767	
<b>3</b> η	0.880282	
<b>4</b> <sup>η</sup>	0.831951	
5 <sup>η</sup>	0.819611	
<b>6</b> <sup>η</sup>	0.811452	
<b>7</b> <sup>η</sup>	0.793519 +0.0120074 i	0.793519 -0.0120074 i
<b>8</b> <sup>η</sup>	0.766784 +0.000183346 i	0.766784 -0.000183346 i
<b>9</b> <sup>η</sup>	0.747974	
<b>10</b> <sup>η</sup>	0.73476	
11 <sup>η</sup>	0.705639 +0.00310921 i	0.705639 -0.00310921 i
<b>12</b> <sup>η</sup>	0.694402	
<b>13</b> <sup>η</sup>	0.689488 +0.0165342 i	0.689488 -0.0165342 i
<b>14</b> <sup>η</sup>	0.667729	
15 <sup>η</sup>	0.662834	
<b>16</b> <sup>η</sup>	0.635713	

<sup>&</sup>lt;sup>48</sup> Στη διαγώνια μήτρα K το στοιχείο στην τελευταία στήλη και τελευταία σειρά από μονάδα το μηδενίζουμε γιατί αν παρατηρήσουμε στη στήλη Private households with employed persons όλες οι εισροές είναι μηδέν εκτός από την προστιθέμενη αξία που είναι ίση με την εκροή. Αν δεν μηδενίσουμε το τελευταίο στοιχείο της διαγώνιας μήτρας K της στήλης Private households with employed persons θα μας εμφανιστεί η μέγιστη ιδιοτιμή ίση με τη μονάδα

1 <b>7</b> <sup>η</sup>	0.617666 +0.0118896 i	0.617666 -0.0118896 i
<b>18</b> <sup>η</sup>	0.593902 +0.0173153 i	0.593902 -0.0173153 i
<b>19</b> <sup>η</sup>	0.580089	
<b>20</b> <sup>η</sup>	0.574896 +0.00182207 i	0.574896 -0.00182207 i
<b>21</b> <sup>η</sup>	0.567949 +0.0122009 i	0.567949 -0.0122009 i
22 <sup>η</sup>	0.566924	
23 <sup>η</sup>	0.53453	
<b>24</b> <sup>η</sup>	0.52897	
25 <sup>η</sup>	0.520623	
<b>26</b> <sup>η</sup>	0.504961 +0.0254492 i	0.504961 -0.0254492 i
<b>27</b> <sup>η</sup>	0.500166	
<b>28</b> <sup>η</sup>	0.491181	
<b>29</b> <sup>η</sup>	0.479844	
<b>30</b> <sup>η</sup>	0.468975	
<b>31</b> <sup>η</sup>	0.462529 +0.00466365 i	0.462529 -0.00466365 i
<b>32</b> <sup>η</sup>	0.45826	
33 <sup>η</sup>	0.456449	
<b>34</b> <sup>η</sup>	0.449674	
<b>35</b> <sup>η</sup>	0.444263	
<b>36</b> <sup>η</sup>	0.431152 +0.00155238 i	0.431152 -0.00155238 i
<b>37</b> <sup>η</sup>	0.407219	
<b>38</b> <sup>η</sup>	0.394874 +0.0190911 i	0.394874 -0.0190911 i
<b>39</b> <sup>η</sup>	0.393263 +0.00834392 i	0.393263 -0.00834392 i
<b>40</b> <sup>η</sup>	0.39315	
<b>41</b> <sup>η</sup>	0.384989	
<b>4</b> 2 <sup>η</sup>	0.379178	
<b>43</b> <sup>η</sup>	0.236231	
<b>44</b> <sup>η</sup>	0.197693	
<b>45</b> <sup>η</sup>	0.	
<b>46</b> <sup>η</sup>	0.	

## 7.1.3 Ιδιοτιμές μήτρας (εγχώριας παραγωγής M2 + B + F)\*(R)

Για να υπολογίσουμε τις ιδιοτιμές της μήτρας που δημιουργείται μετά από τις πράξεις των παρενθέσεων (εγχώριας παραγωγής M2 + B + F)\*(R) κάνουμε τα εξής :

α) εισάγουμε τη μήτρα εγχώρια παραγωγή M2 (σελίδα 51) και τις διαγώνιες μήτρες B, F και R (σελίδα 55, 57, και 61 αντίστοιχα) στο mathematica

β) προσθέτουμε τις μήτρες εγχώρια παραγωγή M2, B, F, το άθροισμα τους το πολλαπλασιάζουμε με τη μήτρα R και δημιουργούμε μία νέα μήτρα (59x59). Η νέα αυτή μήτρα υπάρχει πίσω στο Γ.2 Παράρτημα (σελίδα 344)

γ) χρησιμοποιούμε την εντολή Eigenvalues[όνομα μήτρας]

Έτσι αν «τρέξουμε» το πρόγραμμα έχουμε τις παρακάτω ιδιοτιμές (όπου  $i \equiv \sqrt{-1}$ ).

Πίνακας ιδιοτιμών : (εγχώριας παραγωγής M2 + B + F)*(R)			
	Ιδιοτιμή		
1 <sup>η</sup>	0.893078		
<b>2</b> <sup>η</sup>	0.715366		
<b>3</b> <sup>η</sup>	0.648343		
<b>4</b> <sup>η</sup>	0.592049		
5 <sup>η</sup>	0.537502		
<b>6</b> <sup>η</sup>	0.487722		
<b>7</b> <sup>η</sup>	0.455068		
<b>8</b> <sup>η</sup>	0.419081		
<b>9</b> <sup>η</sup>	0.401212		
<b>10</b> <sup>η</sup>	0.372033		
11 <sup>η</sup>	0.357757 +0.00912143 i	0.357757 -0.00912143 i	
12 <sup>η</sup>	0.346099		
<b>13</b> <sup>η</sup>	0.304508 +0.0695242 i	0.304508 -0.0695242 i	
<b>14</b> <sup>η</sup>	0.309615		
15 <sup>η</sup>	0.302478		
<b>16</b> <sup>η</sup>	0.264546		
1 <b>7</b> <sup>η</sup>	0.261107 +0.0319948 i	0.261107 -0.0319948 i	
<b>18</b> <sup>η</sup>	0.260298 +0.0142558 i	0.260298 -0.0142558 i	

<b>19</b> <sup>η</sup>	0.254786	
<b>20</b> <sup>η</sup>	0.251052	
21 <sup>η</sup>	0.233339 +0.0451426 i	0.233339 -0.0451426 i
22 <sup>η</sup>	0.21077	
<b>23</b> <sup>η</sup>	0.194997 +0.00965896 i	0.194997 -0.00965896 i
<b>24</b> <sup>η</sup>	0.184688	
25 <sup>η</sup>	0.170293 +0.0565765 i	0.170293 -0.0565765 i
<b>26</b> <sup>η</sup>	0.179283	
<b>27</b> <sup>η</sup>	0.171492 +0.00030102 i	0.171492 -0.00030102 i
<b>28</b> <sup>η</sup>	0.163643	
<b>29</b> <sup>η</sup>	0.162086 +0.0190081 i	0.162086 -0.0190081 i
<b>30</b> <sup>η</sup>	0.151303 +0.00182029 i	0.151303 -0.00182029 i
<b>31</b> <sup>η</sup>	0.142588 +0.0466494 i	0.142588 -0.0466494 i
<b>32</b> <sup>η</sup>	0.147376	
<b>33</b> <sup>η</sup>	0.142157	
<b>34</b> <sup>η</sup>	0.1374 +0.00473805 i	0.1374 -0.00473805 i
<b>35</b> <sup>η</sup>	0.132546 +0.00187224 i	0.132546 -0.00187224 i
<b>36</b> <sup>η</sup>	0.129577	
<b>37</b> <sup>η</sup>	0.11051	
<b>38</b> <sup>η</sup>	0.109705	
<b>39</b> <sup>η</sup>	0.0941228 +0.0427754 i	0.0941228 -0.0427754 i
<b>40</b> <sup>η</sup>	0.0769322	
<b>41</b> <sup>η</sup>	0.0684376 +0.021371 i	0.0684376 -0.021371 i
<b>4</b> 2 <sup>η</sup>	0.0473462	
<b>43</b> <sup>η</sup>	0.	
<b>4</b> 4 <sup>η</sup>	0.	

### 7.2 Δείκτες Ταχύτητας Σύγκλισης Στο Τελικό Διάνυσμα Τιμών

Αφού υπολογίσαμε τις ιδιοτιμές της μήτρας : α) εγχώριας παραγωγής M1, β) εγχώριας παραγωγής M1 + K και γ) (εγχώριας παραγωγής M2 + B + F)\*(R) σε αυτή την ενότητα θα υπολογιστούν για τις ίδιες μήτρες οι δείκτες ταχύτητας σύγκλισης των. Για να γίνει αυτό πρώτα πρέπει να υπολογίσουμε το μέτρο της κάθε ιδιοτιμής. Αφού υπολογιστούν τα μέτρα όλων των ιδιοτιμών διαιρούμε αυτά με το μέγιστο μέτρο<sup>49</sup>. Αυτός είναι ο ζητούμενος δείκτης ταχύτητας σύγκλισης που μας δείχνει πόσο γρήγορα συγκλίνουν οι τιμές των εμπορευμάτων στο τελικό διάνυσμα τιμών.

7.2.1 Δείκτη ταχύτητας σύγκλισης μήτρας εγχώριας π	ιαραγωγής
<b>M1</b>	

	Πίνακας δείκτη ταχύτητας σύγκλισης μήτρας εγχώριας παραγωγής Μ1			
	Ιδιοτιμές	Μέτρο (modulus)	Δείκτης ταχύτητας σύγκλισης στο τελικό διάνυσμα τιμών	
1 <sup>η</sup>	0.321697	$\sqrt{0.321697^2} = 0.321697$	0.321697/0.321697 = 1	
2η	0.249328	$\sqrt{0.249328^2} = 0.249328$	0.249328/0.321697 = 0.77504	
3η	0.167487 +0.00291732 i	$\sqrt{(0.167487^2 + 0.00291732^2)} =$	0.1675/0.321697 = 0.5206	
	0.167487 - 0.00291732 i	0.1675		
<b>4</b> η	0.157003	$\sqrt{0.157003^2} = 0.157003$	0.157003/0.321697 = 0.48804	
<b>5</b> η	0.105572	$\sqrt{0.105572^2} = 0.105572$	0.105572/0.321697 = 0.32817	
<b>6</b> <sup>η</sup>	0.100061	$\sqrt{0.100061^2} = 0.100061$	0.100061/0.321697 = 0.31104	
<b>7</b> η	0.0868586 +0.027817 i	$\sqrt{(0.0868586^2 + 0.027817^2)} =$	0.09116/0.321697 = 0.28337	
	0.0868586 - 0.027817 i	0.09116		
<b>8</b> η	0.0776878	$\sqrt{0.0776878^2} = 0.0776878$	0.0776878/0.321697 = 0.24149	
9ղ	-0.0776021	$\sqrt{-0.0776021^2} = 0.0776021$	0.0776021/0.321697 = 0.241227	
<b>10</b> <sup>η</sup>	0.0750952 +0.0131405 i	$\sqrt{(0.0750952^2 + 0.0131405^2)} =$	0.07615/0.321697 = 0.2367	
	0.0750952 - 0.0131405 i	0.07615		
11 <sup>η</sup>	0.0669626	$\sqrt{0.0669626^2} = 0.0669626$	0.0669626/0.321697 = 0.20815	
<b>12</b> <sup>η</sup>	0.0644622	$\sqrt{0.0644622^2} = 0.0644622$	0.0644622/0.321697 = 0.20038	
<b>13</b> η	0.0533983 +0.010458 i	$\sqrt{(0.0533983^2 + 0.010458^2)} =$	0.0544/0.321697 = 0.1691	
	0.0533983 -0.010458 i	0.0544		
<b>14</b> η	0.0249071 +0.0459938 i	$\sqrt{(0.0249071^2 + 0.0459938^2)} =$	0.05225/0.321697 = 0.1624	
	0.0249071 -0.0459938 i	0.05225		
<b>15</b> η	-0.0198617+0.0459104 i	$\sqrt{(-0.0198617^2+0.0459104^2)} =$	0.0499/0.321697 = 0.1551	
	-0.0198617-0.0459104 i	0.0499		
<b>16</b> <sup>η</sup>	0.0472569	$\sqrt{0.0472569^2} = 0.0472569$	0.0472569/0.321697 = 0.14689	
<b>17</b> <sup>η</sup>	0.0439259 +0.0131953 i	$\sqrt{(0.0439259^2 + 0.0131953^2)}$	0.0458/0.321697 = 0.14245	

<sup>&</sup>lt;sup>49</sup> G. James and V. Rumchev, (2005), Stability of Positive Linear Discrete-time Systems, Bulletin of the Polish Academy of Sciences, Technical Sciences, Vol. 53, No. 1, page 6

	0.0439259 -0.0131953 i	=0.0458	
<b>18</b> <sup>η</sup>	0.0210046 +0.037344 i	$\sqrt{(0.0210046^2 + 0.037344^2)} =$	0.04277/0.321697 = 0.1329
	0.0210046 -0.037344 i	0.04277	
<b>19</b> <sup>η</sup>	0.0351885 +0.00578462 i	$\sqrt{(0.0351885^2 + 0.00578462^2)} =$	0.03565/0.321697 = 0.1108
	0.0351885 -0.00578462 i	0.03565	
<b>20</b> <sup>η</sup>	-0.0322261	$\sqrt{-0.0322261^2} = 0.0322261$	0.0322261/0.321697 = 0.10017
<b>21</b> <sup>η</sup>	0.0319649	$\sqrt{0.0319649^2} = 0.0319649$	0.0319649/0.321697 = 0.09936
22 <sup>η</sup>	0.0301203	$\sqrt{0.0301203^2} = 0.0301203$	0.0301203/0.321697 = 0.09363
<b>23</b> η	-0.00970158+0.0265003 i	$\sqrt{(-0.00970158^2+0.0265003^2)} =$	0.02811/0.321697 = 0.0873
	-0.00970158-0.0265003 i	0.02811	
<b>24</b> <sup>η</sup>	0.0251926 +0.00177218 i	$\sqrt{0.0251926^2 + 0.00177218^2} =$	0.02516/0.321697 = 0.0782
	0.0251926 -0.00177218 i	0.02516	
<b>25</b> η	0.0224658	$\sqrt{0.0224658^2} = 0.0224658$	0.0224658/0.321697 = 0.0698
<b>26</b> <sup>η</sup>	0.0203444	$\sqrt{0.0203444^2} = 0.0203444$	0.0203444/0.321697 = 0.0632
<b>27</b> <sup>η</sup>	0.0147124 +0.00578071 i	$\sqrt{(0.0147124^2 + 0.00578071^2)} =$	0.01579/0.321697 = 0.04909
	0.0147124 -0.00578071 i	0.01579	
<b>28</b> <sup>η</sup>	0.0154909	$\sqrt{0.0154909^2} = 0.0154909$	0.0154909/0.321697 = 0.04815
<b>29</b> <sup>η</sup>	-0.00826021+0.00769815 i	$\sqrt{(-0.00826021^2+0.00769815^2)} =$	0.01128/0.321697 = 0.03506
	-0.00826021-0.00769815 i	0.01128	
<b>30</b> η	-0.0106592+0.000716457 i	$\sqrt{(-0.0106592^2 + 0.000716457^2)} =$	0.01063/0.321697 = 0.03304
	-0.0106592-0.000716457 i	0.01063	
<b>31</b> η	0.00578565 +0.0050474 i	$\sqrt{(0.00578565^2 + 0.0050474^2)} =$	0.007647/0.321697 = 0.02377
	0.00578565 -0.0050474 i	0.007647	
<b>32</b> η	-0.00562812	$\sqrt{-0.00562812^2} = 0.00562812$	0.00562812/0.321697 =
			0.017495
<b>33</b> η	0.00313441 +0.00116785 i	$\sqrt{(0.00313441^2 + 0.00116785^2)} =$	0.003341/0.321697 = 0.01038
	0.00313441 -0.00116785 i	0.003341	
<b>34</b> η	0.00330219	$\sqrt{0.00330219^2} = 0.00330219$	0.00330219/0.321697 = 0.01026
<b>35</b> η	-0.00270523	$\sqrt{-0.00270523^2} = 0.00270523$	0.00270523/0.321697 =
			0.008409
<b>36</b> η	0.00194147 +0.000234256i	$\sqrt{(0.00194147^2 + 0.000234256^2)}$	0.001955/0.321697 = 0.00607
	0.00194147 -0.000234256 i	= 0.001955	
<b>37</b> η	0.00138974	√0.00138974 <sup>2</sup> = 0.00138974	0.00138974/0.321697 = 0.00432
<b>38</b> η	-0.000169761	$\sqrt{-0.000169761^2} = 0.000169761$	0.000169761/0.321697 =
			0.000527
<b>39</b> η	-0.0000515009	$\sqrt{-0.0000515009^2} =$	0.0000515009/0.321697 =
		0.0000515009	0.00016
<b>40</b> <sup>η</sup>	0.	0.	0.
<b>41</b> <sup>η</sup>	0.	0.	0.
<b>4</b> 2 <sup>η</sup>	0.	0.	0.

# 7.2.2 Δείκτη ταχύτητας σύγκλισης μήτρας εγχώριας παραγωγής M1 + K

Πίνα	Ιίνακας δείκτη ταχύτητας σύγκλισης μήτρας εγχώριας παραγωγής Μ1+ Κ			
	Ιδιοτιμές	Μέτρο modulus	Δείκτης ταχύτητας	
			σύγκλισης στο τελικό	
<b>1</b> n	0.040070		διάνυσμα τιμών	
1"	0.948878	V0.948878 <sup>2</sup> =0.948878	0.948878/0.948878=1	
2 <sup>¶</sup>	0.90767	$\sqrt{0.90767^2} = 0.90767$	0.90767/0.948878 = 0.95657	
<b>3</b> η	0.880282	$\sqrt{0.880282^2} = 0.880282$	0.880282/0.948878= 0.9277	
<b>4</b> <sup>η</sup>	0.831951	$\sqrt{0.831951^2} = 0.831951$	0.831951/0.948878=0.87677	
5 <sup>η</sup>	0.819611	$\sqrt{0.819611^2} = 0.819611$	0.819611/0.948878= 0.86377	
<b>6</b> <sup>η</sup>	0.811452	$\sqrt{0.811452^2} = 0.811452$	0.811452/0.948878= 0.85517	
<b>7</b> <sup>η</sup>	0.793519 +0.0120074 i	$\sqrt{(0.793519^2 + 0.0120074^2)} = 0.7936$	0.7936/0.948878= 0.83636	
	0.793519 -0.0120074 i			
<b>8</b> η	0.766784 +0.000183346 i	$\sqrt{(0.766784^2 + 0.000183346^2)} =$	0.76678/0.948878= 0.80809	
07	0.766784 -0.000183346 i	0.76678	0.7.4707.4/0.0.499.70 0.799.77	
9''	0.747974	$\sqrt{0.747974^2} = 0.747974$	0.747974/0.948878= 0.78827	
<b>10</b> <sup>4</sup>	0.73476	$\sqrt{0.734/6^2} = 0.734/6$	0.73476/0.948878= 0.77434	
11 <sup>η</sup>	0.705639 +0.00310921 i	$\sqrt{(0.705639^2 + 0.00310921^2)}$	0.70564/0.948878= 0.74366	
<b>10</b> n	0.705639 -0.00310921 1	=0.70564	0 604402/0 049979 0 7219	
12"	0.694402	$\sqrt{0.094402} = 0.094402$	0.694402/0.948878= 0.7318	
13"	$0.689488 \pm 0.0165342$	√(0.689488 <sup>2</sup> +0.0165342 <sup>2</sup> )= 0.68968	0.68968/0.948878=0.7268	
1 <b>/</b> 1	0.667729	$\sqrt{0.667729^2} = 0.667729$	0 667729/0 948878= 0 7037	
14 · 151	0.662834	$\sqrt{0.662834^2} = 0.662834$	0.662834/0.948878 = 0.96854	
15 <sup>1</sup>	0.635713	$\sqrt{0.635713^2} = 0.635713$	0.635713/0.948878 = 0.66996	
10' 17n	0.617666 ±0.0118896 ±	$\sqrt{(0.617666^2 \pm 0.0118896^2)} = 0.6177$	0.6177/0.948878-0.65106	
1/'	0.617666 -0.0118896 i	(0.017000 +0.0110090 )=0.0177	0.017770.940076- 0.05100	
<b>18</b> <sup>η</sup>	0.593902 +0.0173153 i	$\sqrt{(0.593902^2 + 0.0173153^2)} =$	0.59415/0.948878= 0.62616	
10	0.593902 -0.0173153 i	0.59415		
<b>19</b> <sup>η</sup>	0.580089	$\sqrt{0.580089^2} = 0.580089$	0.580089/0.948878= 0.61134	
<b>20</b> <sup>η</sup>	0.574896 +0.00182207 i	$\sqrt{(0.574896^2 + 0.00182207^2)} =$	0.57489/0.948878= 0.60586	
	0.574896 -0.00182207 i	0.57489		
<b>21</b> <sup>η</sup>	0.567949 +0.0122009 i	$\sqrt{(0.567949^2 + 0.0122009^2)} =$	0.56807/0.948878= 0.59868	
	0.567949 -0.0122009 i	0.56807	0.5((004/0.0400700.5074)	
22 <sup>¶</sup>	0.566924	V0.566924 <sup>2</sup> =0.566924	0.566924/0.948878= 0.59746	
23 <sup>η</sup>	0.53453	$v_{0.53453^2} = 0.53453$	0.53453/0.948878=0.56332	
<b>24</b> <sup>η</sup>	0.52897	V0.52897/ <sup>2</sup> =0.52897	0.52897/0.948878= 0.55746	
25 <sup>η</sup>	0.520623	v0.520623 <sup>2</sup> = 0.520623	0.520623/0.948878= 0.54867	
<b>26</b> <sup>η</sup>	0.504961 +0.0254492 i	$\sqrt{(0.504961^2 + 0.0254492^2)} = 0.50559$	0.50559/0.948878= 0.5328	
	0.504961 -0.0254492 i		0.5001/6/0.040070 0.5071	
27 <sup>¶</sup>	0.500166	$V0.500166^2 = 0.500166$	0.500166/0.948878= 0.5271	

<b>28</b> <sup>η</sup>	0.491181	$\sqrt{0.491181^2} = 0.491181$	0.491181/0.948878= 0.51764
<b>29</b> <sup>η</sup>	0.479844	$\sqrt{0.479844^2} = 0.479844$	0.479844/0.948878= 0.50569
<b>30</b> <sup>η</sup>	0.468975	$\sqrt{0.468975^2} = 0.468975$	0.468975/0.948878= 0.4942
<b>31</b> <sup>η</sup>	0.462529 +0.00466365 i	$\sqrt{(0.462529^2 + 0.00466365^2)} =$	0.462549/0.948878=
	0.462529 -0.00466365 i	0.462549	0.487469
<b>32</b> <sup>η</sup>	0.45826	$\sqrt{0.45826^2}=0.45826$	0.45826/0.948878= 0.482949
<b>33</b> η	0.456449	$\sqrt{0.456449^2} = 0.456449$	0.456449/0.948878= 0.48104
<b>34</b> <sup>η</sup>	0.449674	$\sqrt{0.449674^2} = 0.449674$	0.449674/0.948878= 0.4739
<b>35</b> η	0.444263	$\sqrt{0.444263^2} = 0.444263$	0.444263/0.948878=
			0.468198
<b>36</b> <sup>η</sup>	0.431152 +0.00155238 i	$\sqrt{(0.431152^2 + 0.00155238^2)} =$	0.431152/0.948878= 0.45438
	0.431152 -0.00155238 i	0.431152	
<b>37</b> <sup>η</sup>	0.407219	$\sqrt{0.407219^2} = 0.407219$	0.407219/0.948878=
			0.429158
<b>38</b> η	0.394874 +0.0190911 i	$\sqrt{(0.394874^2 + 0.0190911^2)} =$	0.39533/0.948878= 0.416627
	0.394874 -0.0190911 i	0.39533	
<b>39</b> η	0.393263 +0.00834392 i	$\sqrt{(0.393263^2 + 0.00834392^2)} =$	0.39334/0.948878= 0.41453
	0.393263 -0.00834392 i	0.39334	
<b>40</b> <sup>η</sup>	0.39315	$\sqrt{0.39315^2} = 0.39315$	0.39315/0.948878= 0.41433
<b>41</b> <sup>η</sup>	0.384989	$\sqrt{0.384989^2} = 0.384989$	0.384989/0.948878= 0.40573
<b>42</b> <sup>η</sup>	0.379178	$\sqrt{0.379178^2} = 0.379178$	0.379178/0.948878= 0.3996
<b>43</b> <sup>η</sup>	0.236231	$\sqrt{0.236231^2} = 0.236231$	0.236231/0.948878=
			0.248958
<b>44</b> <sup>η</sup>	0.197693	$\sqrt{0.197693^2} = 0.197693$	0.197693/0.948878= 0.20834
<b>45</b> <sup>η</sup>	0.	0	0
<b>46</b> <sup>η</sup>	0.	0	0

# 7.2.3 Δείκτη ταχύτητας σύγκλισης μήτρας (εγχώριας παραγωγής M2 + B + F)\*(R)

]	Πίνακας δείκτη ταχύτητας σύγκλισης (εγχώριας παραγωγής M2 + B + F)*(R)			
	Ιδιοτιμές	Μέτρο modulus	Δείκτης ταχύτητας σύγκλισης	
			στο τελικό διάνυσμα τιμών	
<b>1</b> <sup>η</sup>	0.893078	$\sqrt{0.893078^2} = 0.893078$	0.893078/0.893078 = 1	
2 <sup>η</sup>	0.715366	$\sqrt{0.715366^2} = 0.715366$	0.715366/0.893078 = 0.80101	
<b>3</b> <sup>η</sup>	0.648343	$\sqrt{0.648343^2} = 0.648343$	0.648343/0.893078 = 0.72596	
<b>4</b> <sup>η</sup>	0.592049	$\sqrt{0.592049^2} = 0.592049$	0.592049/0.893078 = 0.66293	
5 <sup>η</sup>	0.537502	$\sqrt{0.537502^2} = 0.537502$	0.537502/0.893078 = 0.60185	
<b>6</b> <sup>η</sup>	0.487722	$\sqrt{0.487722^2} = 0.487722$	0.487722/0.893078 = 0.54611	
<b>7</b> η	0.455068	$\sqrt{0.455068^2} = 0.455068$	0.455068/0.893078 = 0.50955	
<b>8</b> <sup>η</sup>	0.419081	$\sqrt{0.419081^2} = 0.419081$	0.419081/0.893078 = 0.46925	
<b>9</b> ղ	0.401212	$\sqrt{0.401212^2} = 0.401212$	0.401212/0.893078 = 0.44924	
<b>10</b> <sup>η</sup>	0.372033	$\sqrt{0.372033^2} = 0.372033$	0.372033/0.893078 = 0.41657	
11 <sup>η</sup>	0.357757 +0.00912143 i	$\sqrt{(0.357757^2 + 0.00912143^2)} =$	0.35787/0.893078 = 0.4007	
	0.357757 -0.00912143 i	0.35787		
<b>12</b> <sup>η</sup>	0.346099	$\sqrt{0.346099^2} = 0.346099$	0.346099/0.893078 = 0.3875	
<b>13</b> η	0.304508 +0.0695242 i	$\sqrt{(0.304508^2 + 0.0695242^2)} =$	0.31234/0.893078 = 0.349738	
	0.304508 -0.0695242 i	0.31234		
<b>14</b> <sup>η</sup>	0.309615	$\sqrt{0.309615^2} = 0.309615$	0.309615/0.893078 = 0.34668	
<b>15</b> <sup>η</sup>	0.302478	√0.302478 <sup>2</sup> =0.302478	0.302478/0.893078 = 0.33869	
<b>16</b> <sup>η</sup>	0.264546	√0.264546 <sup>2</sup> =0.264546	0.264546/0.893078 = 0.296218	
17 <sup>η</sup>	0.261107 +0.0319948 i	$\sqrt{(0.261107^2 + 0.0319948^2)} =$	0.263045/0.893078 = 0.2945	
107	0.261107 -0.0319948 i	0.263045		
18"	$0.260298 \pm 0.0142558 \pm 0.260208 + 0.0142558 \pm 0.014258 \pm 0.0142588 \pm 0.00288 \pm 0.00288 \pm 0.002888 \pm 0.002888 \pm 0.002888 \pm 0.002888 \pm 0.002888 \pm 0.002888 \pm 0.0028888 \pm 0.0028888 \pm 0.0028888 \pm 0.00288888 \pm 0.0028888888888888888888888888888888888$	$N(0.260298^2 + 0.0142558^2) =$	0.2606879/0.893078 = 0.291898	
101	0.200298 -0.0142338 1	0.2606879	0 25/1786/0 802078 - 0 285280	
19 <sup>4</sup>	0.254780	$10.254/86^2 = 0.254/86$	0.254780/0.895078 = 0.285289	
20 <sup>4</sup>	0.231032	$\sqrt{0.231032} = 0.231032$	0.231032/0.8930/8 = 0.261108	
21"	$0.233339 \pm 0.0451426$ 1 0.233339 0.0451426 $\ddagger$	$(0.233339^{-}+0.0451426^{-})$ -0.23766	0.23766/0.893078 = 0.266119	
<b>22</b> ¶	0.21077	$\sqrt{0.21077^2} = 0.21077$	0.21077/0.893078 = 0.236	
22 <sup>1</sup>	0.194997 +0.00965896 i	$\sqrt{(0.194997^2 + 0.00965896^2)} =$	0.195226/0.893078 = 0.218599	
23	0.194997 -0.00965896 i	0.195226	0.175220,0.075070 = 0.210577	
24 <sup>ղ</sup>	0.184688	$\sqrt{0.184688^2} = 0.184688$	0.184688/0.893078 = 0.206799	
<b>25</b> <sup>η</sup>	0.170293 +0.0565765 i	$\sqrt{(0.170293^2 + 0.0565765^2)} =$	0.1794/0.893078 = 0.200928	
	0.170293 -0.0565765 i	0.1794		
<b>26</b> <sup>η</sup>	0.179283	$\sqrt{0.179283^2} = 0.179283$	0.179283/0.893078 = 0.200747	
$27^{\eta}$	0.171492 +0.00030102 i	$\sqrt{(0.171492^2 + 0.00030102^2)} =$	0.17149/0.893078 = 0.192022	
	0.171492 -0.00030102 i	0.17149		
<b>28</b> <sup>η</sup>	0.163643	√0.163643 <sup>2</sup> = 0.163643	0.163643/0.893078 = 0.18323	
<b>29</b> <sup>η</sup>	0.162086 +0.0190081 i	$\sqrt{(0.162086^2 + 0.0190081^2)} =$	0.163196/0.893078 = 0.18273	
	0.162086 -0.0190081 i	0.163196		

<b>30</b> <sup>η</sup>	0.151303 +0.00182029 i	$\sqrt{(0.151303^2 + 0.00182029^2)}$	0.151313/0.893078 = 0.169429
	0.151303 -0.00182029 i	=0.151313	
<b>31</b> <sup>η</sup>	0.142588 +0.0466494 i	$\sqrt{(0.142588^2 + 0.0466494^2)} =$	0.15002/0.893078 = 0.16798
	0.142588 -0.0466494 i	0.15002	
<b>32</b> <sup>η</sup>	0.147376	$\sqrt{0.147376^2} = 0.147376$	0.147376/0.893078 = 0.16502
<b>33</b> η	0.142157	$\sqrt{0.142157^2} = 0.142157$	0.142157/0.893078 = 0.159176
<b>34</b> <sup>η</sup>	0.1374 +0.00473805 i	$\sqrt{(0.1374^2 + 0.00473805^2)} =$	0.1374789/0.893078 = 0.153938
	0.1374 -0.00473805 i	0.1374789	
<b>35</b> <sup>η</sup>	0.132546 +0.00187224 i	$\sqrt{(0.132546^2 + 0.00187224^2)}$	0.1325575/0.893078 = 0.148427
	0.132546 -0.00187224 i	=0.1325575	
<b>36</b> <sup>η</sup>	0.129577	$\sqrt{0.129577^2} = 0.129577$	0.129577/0.893078 = 0.14509
<b>37</b> <sup>η</sup>	0.11051	$\sqrt{0.11051^2} = 0.11051$	0.11051/0.893078 = 0.12374
<b>38</b> η	0.109705	$\sqrt{0.109705^2} = 0.109705$	0.109705/0.893078 = 0.122839
<b>39</b> η	0.0941228 +0.0427754 i	$\sqrt{(0.0941228^2 + 0.0427754^2)} =$	0.1033868/0.893078 =
	0.0941228 -0.0427754 i	0.1033868	0.1157645
<b>40</b> <sup>η</sup>	0.0769322	$\sqrt{0.0769322^2} = 0.0769322$	0.0769322/0.893078 = 0.08614
<b>41</b> <sup>η</sup>	0.0684376 +0.021371 i	$\sqrt{(0.0684376^2 + 0.021371^2)} =$	0.0716967/0.893078 = 0.08028
	0.0684376 -0.021371 i	0.0716967	
<b>42</b> <sup>η</sup>	0.0473462	$\sqrt{0.0473462^2} = 0.0473462$	0.0473462/0.893078 = 0.05301
<b>43</b> <sup>η</sup>	0.	0.	0.
<b>44</b> <sup>η</sup>	0.	0.	0.

### 7.3 Υπολογισμός Ομαλοποιημένων Ιδιοτιμών

Τέλος, αφού υπολογίσαμε και του δείκτες ταχύτητας σύγκλισης τώρα θα υπολογίσουμε και τις νέες «ομαλοποιημένες» ιδιοτιμές των τριών μητρών που χρησιμοποιήσαμε στις προηγούμενες ενότητες (7.1 και 7.2). Ο υπολογισμός των νέων «ομαλοποιημένων» ιδιοτιμών γίνεται αν διαιρέσουμε την κάθε ιδιοτιμή της μήτρας με τη μέγιστη ιδιοτιμή αυτής.

## 7.3.1 «Ομαλοποιημένες» ιδιοτιμές μήτρας εγχώριας παραγωγής M1

Πίνακας «ομαλοποιημένων» ιδιοτιμών εγχώριας παραγωγής Μ1			
	Ιδιοτιμή	Ιδιοτιμή / μέγιστη ιδιοτιμή	«Ομαλοποιημένη» ιδιοτιμή
<b>1</b> <sup>η</sup>	0.321697	0.321697/0.321697	1
<b>2</b> <sup>η</sup>	0.249328	0.249328/0.321697	0.77503
<b>3</b> <sup>η</sup>	0.167487 +0.00291732 i	(0.167487+0.002917321)/0.321697	0.5206 + 0.009 i
<b>4</b> <sup>η</sup>	0.167487 -0.00291732 i	(0.167487 -0.00291732 i/0.321697	0.5206 -0.009 i
<b>5</b> <sup>η</sup>	0.157003	0.157003/0.321697	0.488
<b>6</b> <sup>η</sup>	0.105572	0.105572/0.321697	0.3281
<b>7</b> <sup>η</sup>	0.100061	0.100061/0.321697	0.311
8η	0.0868586 +0.027817 i	(0.0868586 +0.027817 i)/0.321697	0.27 + 0.0864i
<b>9</b> <sup>η</sup>	0.0868586 -0.027817 i	(0.0868586 -0.027817 i) /0.321697	0.27 - 0.0864i
<b>10</b> <sup>η</sup>	0.0776878	0.0776878/0.321697	0.2414
11 <sup>η</sup>	-0.0776021	-0.0776021/0.321697	0.2412
<b>12</b> <sup>η</sup>	0.0750952 +0.0131405 i	(0.0750952 +0.0131405 i)/0.321697	0.2334 +0.04i
<b>13</b> <sup>η</sup>	0.0750952 -0.0131405 i	(0.0750952 -0.0131405 i)/0.321697	0.2334 -0.04i
<b>14</b> <sup>η</sup>	0.0669626	0.0669626/0.321697	0.208
<b>15</b> <sup>η</sup>	0.0644622	0.0644622/0.321697	0.200
<b>16</b> <sup>η</sup>	0.0533983 +0.010458 i	(0.0533983 +0.010458 i)/0.321697	0.165 + 0.032i
<b>17</b> <sup>η</sup>	0.0533983 -0.010458 i	(0.0533983 -0.010458 i)/0.321697	0.165 - 0.032i
<b>18</b> <sup>η</sup>	0.0249071 +0.0459938 i	(0.0249071 +0.0459938 i)/0.321697	0.077 + 0.1429i
<b>19</b> <sup>η</sup>	0.0249071 -0.0459938 i	(0.0249071 -0.0459938 i )/0.321697	0.077 - 0.1429i
<b>20</b> <sup>η</sup>	-0.0198617+0.0459104 i	(-0.0198617+0.0459104 i)/0.321697	-0.0617 + 0.1427i
<b>21</b> <sup>η</sup>	-0.0198617-0.0459104 i	(-0.0198617-0.0459104 i)/0.321697	-0.0617 - 0.1427i
22 <sup>η</sup>	0.0472569	0.0472569/0.321697	0.1468
<b>23</b> η	0.0439259 +0.0131953 i	(0.0439259 +0.0131953 i )/0.321697	0.1365 + 0.041i
<b>24</b> <sup>η</sup>	0.0439259 -0.0131953 i	(0.0439259 -0.0131953 i)/0.321697	0.1365 - 0.041i
<b>25</b> <sup>η</sup>	0.0210046 +0.037344 i	(0.0210046 +0.037344 i )/0.321697	0.065 + 0.116i

<b>26</b> <sup>η</sup>	0.0210046 -0.037344 i	(0.0210046 -0.037344 i)/0.321697	0.065 - 0.116i
<b>27</b> <sup>η</sup>	0.0351885 +0.00578462 i	(0.0351885 +0.00578462 ii) /0.321697	0.109 + 0.0179i
<b>28</b> <sup>η</sup>	0.0351885 -0.00578462 i	(0.0351885 -0.00578462 i)/0.321697	0.109 - 0.0179i
<b>29</b> <sup>η</sup>	-0.0322261	-0.0322261/0.321697	-0.100
<b>30</b> <sup>η</sup>	0.0319649	0.0319649/0.321697	0.099
<b>31</b> <sup>η</sup>	0.0301203	0.0301203/0.321697	0.0936
<b>32</b> <sup>η</sup>	-0.00970158+0.0265003 i	(-0.00970158+0.0265003 i )/0.321697	-0.030 + 0.082i
<b>33</b> η	-0.00970158-0.0265003 i	(-0.00970158-0.0265003 i)/0.321697	-0.030 - 0.082i
<b>34</b> <sup>η</sup>	0.0251926 +0.00177218 i	(0.0251926 +0.00177218 ii) /0.321697	0.078 + 0.0055i
<b>35</b> <sup>η</sup>	0.0251926 -0.00177218 i	(0.0251926 -0.00177218 i )/0.321697	0.078 - 0.0055i
<b>36</b> <sup>η</sup>	0.0224658	0.0224658/0.321697	0.0698
<b>37</b> <sup>η</sup>	0.0203444	0.0203444/0.321697	0.063
<b>38</b> η	0.0147124 +0.00578071 i	(0.0147124 +0.00578071 i) /0.321697	0.0457 + 0.0179i
<b>39</b> η	0.0147124 -0.00578071 i	(0.0147124 -0.00578071 i)/0.321697	0.0457 - 0.0179i
<b>40</b> <sup>η</sup>	0.0154909	0.0154909/0.321697	0.048
<b>41</b> <sup>η</sup>	-0.00826021+0.00769815i	(-0.00826021+0.00769815 i)/0.321697	- 0.025 + 0.0239i
<b>4</b> 2 <sup>η</sup>	-0.00826021-0.00769815 i	(-0.00826021-0.00769815 i)/0.321697	- 0.025 - 0.0239i
<b>43</b> <sup>η</sup>	-0.0106592+0.000716457i	(-0.0106592+0.000716457 i)/0.321697	- 0.033 + 0.002i
<b>4</b> 4 <sup>η</sup>	-0.0106592-0.000716457 i	(-0.0106592-0.000716457 i)/0.321697	- 0.033 - 0.002i
<b>45</b> <sup>η</sup>	0.00578565 +0.0050474 i	(0.00578565 +0.0050474 i )/0.321697	0.0179 + 0.015i
<b>46</b> <sup>η</sup>	0.00578565 -0.0050474 i	(0.00578565 -0.0050474 i)0.321697	0.0179 - 0.015i
<b>47</b> <sup>η</sup>	-0.00562812	-0.00562812/0.321697	- 0.017
<b>48</b> <sup>η</sup>	0.00313441 +0.00116785 i	(0.00313441 +0.00116785 ii)/0.321697	0.009 + 0.0036i
<b>49</b> <sup>η</sup>	0.00313441 -0.00116785 i	(0.00313441 -0.00116785 i)/0.321697	0.009 - 0.0036i
<b>50</b> <sup>η</sup>	0.00330219	0.00330219/0.321697	0.01
<b>5</b> 1 <sup>η</sup>	-0.00270523	-0.00270523/0.321697	-0.008
<b>5</b> 2 <sup>η</sup>	0.00194147	(0.00194147 +0.000234256	0.006 + 0.0007i
	+0.000234256i	i)/0.321697	0.007.00007:
53¶	0.00194147 -0.0002342561	(0.00194147 -0.000234256 i)/0.321697	0.006 - 0.00071
<u>54</u> η	0.00138974	0.00138974/0.321697	0.004
<u>55</u> η	-0.000169761	-0.000169761/0.321697	-0.0005
<b>56</b> <sup>η</sup>	-0.0000515009	-0.0000515009/0.321697	-0.0001
<b>57</b> <sup>η</sup>	0.	0.	0.
<b>58</b> η	0.	0.	0.
<b>59</b> <sup>η</sup>	0.	0.	0.

# 7.3.2 «Ομαλοποιημένες» ιδιοτιμές μήτρας εγχώριας παραγωγής M1+ K

Π	ίνακας «ομαλοποιημένω	νν» ιδιοτιμών μήτρας εγχώριας παι	οαγωγής Μ1+ Κ
	Ιδιοτιμή	Ιδιοτιμή / μέγιστη ιδιοτιμή	«Ομαλοποιημένη» ιδιοτιμή
<b>1</b> <sup>η</sup>	0.948878	0.948878/0.948878	1
<b>2</b> <sup>η</sup>	0.90767	0.90767/0.948878	0.956
<b>3</b> η	0.880282	0.880282/0.948878	0.927
<b>4</b> <sup>η</sup>	0.831951	0.831951/0.948878	0.8767
<b>5</b> <sup>η</sup>	0.819611	0.819611/0.948878	0.8637
<b>6</b> <sup>η</sup>	0.811452	0.811452/0.948878	0.855
<b>7</b> η	0.793519 +0.0120074 i	(0.793519 +0.0120074 i)/0.948878	0.836 + 0.0126i
8η	0.793519 -0.0120074 i	(0.793519 -0.0120074 i)/0.948878	0.836 - 0.0126i
<b>9</b> <sup>η</sup>	0.766784 +0.000183346 i	(0.766784 +0.000183346 i )/0.948878	0.808 + 0.00019i
<b>10</b> <sup>η</sup>	0.766784 -0.000183346 i	(0.766784 -0.000183346 i)/0.948878	0.808 - 0.00019i
<b>11</b> <sup>η</sup>	0.747974	0.747974/0.948878	0.788
<b>12</b> <sup>η</sup>	0.73476	0.73476/0.948878	0.774
<b>13</b> <sup>η</sup>	0.705639 +0.00310921 i	(0.705639 +0.00310921 i)/0.948878	0.743 + 0.003i
<b>14</b> <sup>η</sup>	0.705639 -0.00310921 i	(0.705639 -0.00310921 i)/0.948878	0.743 - 0.003i
<b>15</b> <sup>η</sup>	0.694402	0.694402/0.948878	0.7318
<b>16</b> <sup>η</sup>	0.689488 +0.0165342 i	(0.689488 +0.0165342 i)/0.948878	0.7266 + 0.017i
<b>17</b> <sup>η</sup>	0.689488 -0.0165342 i	(0.689488 -0.0165342 i)/0.948878	0.7266 - 0.017i
<b>18</b> <sup>η</sup>	0.667729	0.667729/0.948878	0.7037
<b>19</b> <sup>η</sup>	0.662834	0.662834/0.948878	0.6985
<b>20</b> <sup>η</sup>	0.635713	0.635713/0.948878	0.6699
<b>21</b> <sup>η</sup>	0.617666 +0.0118896 i	(0.617666 +0.0118896 i )/0.948878	0.6509 + 0.0125i
22 <sup>η</sup>	0.617666 -0.0118896 i	(0.617666 -0.0118896 i )/0.948878	0.6509 - 0.0125i
<b>23</b> <sup>η</sup>	0.593902 +0.0173153 i	(0.593902 +0.0173153 i )/0.948878	0.6258 + 0.018i
<b>24</b> <sup>η</sup>	0.593902 -0.0173153 i	(0.593902 -0.0173153 i)/0.948878	0.6258 - 0.018i
<b>25</b> <sup>η</sup>	0.580089	0.580089/0.948878	0.611
<b>26</b> <sup>η</sup>	0.574896 +0.00182207 i	(0.574896 +0.00182207 i)/0.948878	0.6058 + 0.0019i
<b>27</b> <sup>η</sup>	0.574896 -0.00182207 i	(0.574896 -0.00182207 i)/0.948878	0.6058 - 0.0019i
<b>28</b> <sup>η</sup>	0.567949 +0.0122009 i	(0.567949 +0.0122009 ii) /0.948878	0.598 + 0.012i
<b>29</b> <sup>η</sup>	0.567949 -0.0122009 i	(0.567949 -0.0122009 i )/0.948878	0.598 - 0.012i
<b>30</b> <sup>η</sup>	0.566924	0.566924/0.948878	0.597
<b>31</b> <sup>η</sup>	0.53453	0.53453/0.948878	0.563
<b>32</b> <sup>η</sup>	0.52897	0.52897/0.948878	0.557
<b>33</b> η	0.520623	0.520623/0.948878	0.548
<b>34</b> <sup>η</sup>	0.504961 +0.0254492 i	(0.504961 +0.0254492 i )/0.948878	0.532 + 0.026i

<b>35</b> <sup>η</sup>	0.504961 -0.0254492 i	(0.504961 -0.0254492 ii)/0.948878	0.532 - 0.026i
<b>36</b> <sup>η</sup>	0.500166	0.500166/0.948878	0.527
<b>37</b> <sup>η</sup>	0.491181	0.491181/0.948878	0.5176
<b>38</b> <sup>η</sup>	0.479844	0.479844/0.948878	0.505
<b>39</b> η	0.468975	0.468975/0.948878	0.494
<b>40</b> <sup>η</sup>	0.462529 +0.00466365 i	(0.462529 +0.00466365 i)/0.948878	0.487 + 0.0049i
<b>41</b> <sup>η</sup>	0.462529 -0.00466365 i	(0.462529 -0.00466365 i)/0.948878	0.487 - 0.0049i
<b>4</b> 2 <sup>η</sup>	0.45826	0.45826/0.948878	0.4829
<b>43</b> <sup>η</sup>	0.456449	0.456449/0.948878	0.481
<b>4</b> 4 <sup>η</sup>	0.449674	0.449674/0.948878	0.4739
<b>45</b> <sup>η</sup>	0.444263	0.444263/0.948878	0.468
<b>46</b> <sup>η</sup>	0.431152 +0.00155238 i	(0.431152 +0.00155238 ii)/0.948878	0.454 + 0.0016i
<b>47</b> <sup>η</sup>	0.431152 -0.00155238 i	(0.431152 -0.00155238 i)/0.948878	0.454 - 0.0016i
<b>48</b> <sup>η</sup>	0.407219	0.407219/0.948878	0.429
<b>49</b> <sup>η</sup>	0.394874 +0.0190911 i	(0.394874 +0.0190911 i)/0.948878	0.416 + 0.02i
<b>50</b> η	0.394874 -0.0190911 i	(0.394874 -0.0190911 i )/0.948878	0.416 - 0.02i
<b>5</b> 1 <sup>η</sup>	0.393263 +0.00834392 i	(0.393263 +0.00834392 ii)/0.948878	0.4144 + 0.008i
<b>52</b> <sup>η</sup>	0.393263 -0.00834392 i	(0.393263 -0.00834392 i)/0.948878	0.4144 - 0.008i
<b>53</b> η	0.39315	0.39315/0.948878	0.4143
<b>54</b> <sup>η</sup>	0.384989	0.384989/0.948878	0.4057
<b>55</b> <sup>η</sup>	0.379178	0.379178/0.948878	0.3996
<b>56</b> <sup>η</sup>	0.236231	0.236231/0.948878	0.2489
<b>57</b> η	0.197693	0.197693/0.948878	0.208
<b>58</b> η	0.	0.	0.
<b>59</b> <sup>η</sup>	0.	0.	0.

# 7.3.3 «Ομαλοποιημένες» ιδιοτιμές μήτρας

# (εγχώριας παραγωγής M2 + B + F)\*(R)

	Πίνακας «ομαλοποιημένων» ιδιοτιμών		
	(εγχώριας παραγωγής M2 + B + F)*(R)		
	Ιδιοτιμή	Ομαλοποιημένη ιδιοτιμή = Ιδιοτιμή	«Ομαλοποιημένη»
<b>1</b> n	0 902079	/ μέγιστη ιδιοτιμή	ιδιοτιμή
1'' 01	0.093070	0.895078/0.895078	1
2" 2"	0.713300	0.648242/0.892078	0.7250
3'' 4n	0.048343	0.048343/0.893078	0.7259
4 <sup>4</sup>	0.592049	0.592049/0.893078	0.6629
5"	0.53/502	0.537502/0.893078	0.6018
<b>6</b> <sup>¶</sup>	0.487722	0.487722/0.893078	0.546
7 <sup>η</sup>	0.455068	0.455068/0.893078	0.5095
<b>8</b> <sup>η</sup>	0.419081	0.419081/0.893078	0.469
<b>9</b> <sup>η</sup>	0.401212	0.401212/0.893078	0.449
<b>10</b> <sup>η</sup>	0.372033	0.372033/0.893078	0.4165
<b>11</b> <sup>η</sup>	0.357757 +0.00912143 i	(0.357757 +0.00912143 i)/0.893078	0.4005 + 0.01i
12 <sup>η</sup>	0.357757 -0.00912143 i	(0.357757 -0.00912143 i)/0.893078	0.4005 - 0.01i
<b>13</b> <sup>η</sup>	0.346099	0.346099/0.893078	0.3875
<b>14</b> <sup>η</sup>	0.304508 +0.0695242 i	(0.304508 +0.0695242i)/0.893078	0.3409 + 0.0778i
<b>15</b> <sup>η</sup>	0.304508 -0.0695242 i	(0.304508 +0.0695242i)/0.893078	0.3409 - 0.0778i
<b>16</b> <sup>η</sup>	0.309615	0.309615/0.893078	0.3466
1 <b>7</b> <sup>η</sup>	0.302478	0.302478/0.893078	0.338
<b>18</b> <sup>η</sup>	0.264546	0.264546/0.893078	0.296
<b>19</b> <sup>η</sup>	0.261107 +0.0319948 i	(0.261107 +0.0319948 i )/0.893078	0.292 + 0.0358i
<b>20</b> <sup>η</sup>	0.261107 -0.0319948 i	(0.261107 -0.0319948 i )/0.893078	0.292 - 0.0358i
<b>21</b> <sup>η</sup>	0.260298 +0.0142558 i	(0.260298 +0.0142558 i)/0.893078	0.291 + 0.0159i
22 <sup>η</sup>	0.260298 -0.0142558 i	(0.260298 -0.0142558 i)/0.893078	0.291 - 0.0159i
<b>23</b> <sup>η</sup>	0.254786	0.254786/0.893078	0.285
<b>24</b> <sup>η</sup>	0.251052	0.251052/0.893078	0.281
<b>25</b> <sup>η</sup>	0.233339 +0.0451426 i	(0.233339 +0.0451426 ±)/0.893078	0.261 + 0.05i
<b>26</b> <sup>η</sup>	0.233339 -0.0451426 i	(0.233339 -0.0451426 i)/0.893078	0.261 - 0.05i
<b>27</b> <sup>η</sup>	0.21077	0.21077/0.893078	0.236
<b>28</b> <sup>η</sup>	0.194997 +0.00965896 i	(0.194997 +0.00965896 i)/0.893078	0.218 + 0.0108i
<b>29</b> <sup>η</sup>	0.194997 -0.00965896 i	(0.194997 -0.00965896 i)/0.893078	0.218 - 0.0108i
<b>30</b> <sup>η</sup>	0.184688	0.184688/0.893078	0.206
<b>31</b> <sup>η</sup>	0.170293 +0.0565765 i	(0.170293 +0.0565765 i) /0.893078	0.1906 + 0.063i
<b>32</b> <sup>η</sup>	0.170293 -0.0565765 i	(0.170293 -0.0565765 i)/0.893078	0.1906 - 0.063i
<b>33</b> η	0.179283	0.179283/0.893078	0.2007

<b>34</b> <sup>η</sup>	0.171492 +0.00030102 i	(0.171492 +0.00030102 i )/0.893078	0.192 + 0.0003i
<b>35</b> η	0.171492 -0.00030102 i	(0.171492 -0.00030102 i )/0.893078	0.192 - 0.0003i
<b>36</b> <sup>η</sup>	0.163643	0.163643/0.893078	0.1832
<b>37</b> <sup>η</sup>	0.162086 +0.0190081 i	(0.162086 +0.0190081 i)/0.893078	0.181 + 0.021i
<b>38</b> η	0.162086 -0.0190081 i	(0.162086 -0.0190081 ii)/0.893078	0.181 - 0.021i
<b>39</b> η	0.151303 +0.00182029 i	(0.151303 +0.00182029 ii)/0.893078	0.169 + 0.002i
<b>40</b> <sup>η</sup>	0.151303 -0.00182029 i	(0.151303 -0.00182029 ii)/0.893078	0.169 - 0.002i
<b>41</b> <sup>η</sup>	0.142588 +0.0466494 i	(0.142588 +0.0466494 i)/0.893078	0.1596 + 0.05i
<b>4</b> 2 <sup>η</sup>	0.142588 -0.0466494 i	(0.142588 -0.0466494 ii) / 0.893078	0.1596 - 0.05i
<b>43</b> <sup>η</sup>	0.147376	0.147376/0.893078	0.165
<b>44</b> <sup>η</sup>	0.142157	0.142157/0.893078	0.159
<b>45</b> <sup>η</sup>	0.1374 +0.00473805 i	(0.1374 +0.00473805 i)/0.893078	0.1538 + 0.0053i
<b>46</b> <sup>η</sup>	0.1374 -0.00473805 i	(0.1374 -0.00473805 i)/0.893078	0.1538 - 0.0053i
<b>47</b> <sup>η</sup>	0.132546 +0.00187224 i	(0.132546 +0.00187224 i)/0.893078	0.148 + 0.002i
<b>48</b> <sup>η</sup>	0.132546 -0.00187224 i	(0.132546 -0.00187224 i)/0.893078	0.148 - 0.002i
<b>49</b> <sup>η</sup>	0.129577	0.129577/0.893078	0.145
<b>50</b> <sup>η</sup>	0.11051	0.11051/0.893078	0.1237
<b>5</b> 1 <sup>η</sup>	0.109705	0.109705/0.893078	0.1228
<b>52</b> <sup>η</sup>	0.0941228 +0.0427754 i	(0.0941228 +0.0427754 i)/0.893078	0.105 + 0.0478i
<b>53</b> η	0.0941228 -0.0427754 i	(0.0941228 -0.0427754 i)/0.893078	0.105 - 0.0478i
<b>54</b> <sup>η</sup>	0.0769322	0.0769322/0.893078	0.086
<b>55</b> <sup>η</sup>	0.0684376 +0.021371 i	(0.0684376 +0.021371 i )/0.893078	0.076 + 0.0239i
<b>56</b> <sup>η</sup>	0.0684376 -0.021371 i	(0.0684376 -0.021371 i )/0.893078	0.076 - 0.0239i
<b>57</b> <sup>η</sup>	0.0473462	0.0473462/0.893078	0.053
<b>58</b> <sup>η</sup>	0.	0.	0.
<b>59</b> <sup>η</sup>	0.	0.	0.

## 7.4 Αναπαράσταση «Ομαλοποιημένων» Ιδιοτιμών Σε Μοναδιαίο Κύκλο

Με τον υπολογισμό των νέων «ομαλοποιημένων» ιδιοτιμών δίνεται η δυνατότητα από το mathematica να αναπαραστήσουμε αυτές σε μοναδιαίο κύκλο. Η αναπαράσταση αυτή θα μας βοηθήσει οπτικά να καταλάβουμε την ταχύτητα σύγκλισης των τριών συστημάτων. Γενικά όσο πιο κοντά συσσωρεύεται ο «πληθυσμός» των ιδιοτιμών στην αρχή των αξόνων τόσο πιο γρήγορα συγκλίνει το σύστημα.

	Συντεταγμένες «Ομαλοποιημένων» Ιδιοτιμών		
	Εγχώριας Παραγωγής Μ1	Εγχώριας Παραγωγής M1 + K	(Εγχώριας Παραγωγής M2 + B + F)*(R)
1 <sup>η</sup>	(1,0)	(1,0)	(1,0)
<b>2</b> <sup>η</sup>	(0.77503,0)	(0.956,0)	(0.801,0)
<b>3</b> η	(0.5206,+0.009)	(0.927,0)	(0.7259,0)
<b>4</b> <sup>η</sup>	(0.5206,-0.009)	(0.8767,0)	(0.6629,0)
<b>5</b> <sup>η</sup>	(0.488,0)	(0.8637,0)	(0.6018,0)
<b>6</b> <sup>η</sup>	(0.3281,0)	(0.855,0)	(0.546,0)
<b>7</b> <sup>η</sup>	(0.311,0)	(0.836,+ 0.0126)	(0.5095,0)
<b>8</b> <sup>η</sup>	(0.27,+ 0.0864)	(0.836,-0.0126)	(0.469,0)
<b>9</b> ղ	(0.27,- 0.0864)	(0.808,+0.00019)	(0.449,0)
<b>10</b> <sup>η</sup>	(0.2414,0)	(0.808,- 0.00019)	(0.4165,0)
<b>11</b> <sup>η</sup>	(0.2412,0)	(0.788,0)	(0.4005,+0.01)
<b>12</b> <sup>η</sup>	(0.2334,+0.04)	(0.774,0)	(0.4005,-0.01)
<b>13</b> <sup>η</sup>	(0.2334,-0.04)	(0.743,+ 0.003)	(0.3875,0)
<b>14</b> <sup>η</sup>	(0.208,0)	(0.743,-0.003)	(0.3409, +0.0778)
<b>15</b> <sup>η</sup>	(0.200,0)	(0.7318,0)	(0.3409,- 0.0778)
<b>16</b> <sup>η</sup>	(0.165,+ 0.032)	(0.7266,+ 0.017)	(0.3466,0)
<b>17</b> <sup>η</sup>	(0.165,-0.032)	(0.7266,-0.017)	(0.338,0)
<b>18</b> <sup>η</sup>	(0.077,+0.1429)	(0.7037,0)	(0.296,0)
<b>19</b> <sup>η</sup>	(0.077,-0.1429)	(0.6985,0)	(0.292,+ 0.0358)
<b>20</b> <sup>η</sup>	(-0.0617,+ 0.1427)	(0.6699,0)	(0.292,- 0.0358)
<b>21</b> <sup>η</sup>	(-0.0617,- 0.1427)	(0.6509, +0.0125)	(0.291,+ 0.0159)
22 <sup>η</sup>	(0.1468,0)	(0.6509,-0.0125)	(0.291,- 0.0159)
<b>23</b> <sup>η</sup>	(0.1365,+ 0.041)	(0.6258,+ 0.018)	(0.285,0)
<b>24</b> <sup>η</sup>	(0.1365,- 0.041)	(0.6258,- 0.018)	(0.281,0)
<b>25</b> <sup>η</sup>	(0.065, +0.116)	(0.611,0)	(0.261,+ 0.05)
<b>26</b> <sup>η</sup>	(0.065,-0.116)	(0.6058,+ 0.0019)	(0.261,-0.05)

<b>27</b> <sup>η</sup>	(0.109,+ 0.0179)	(0.6058,- 0.0019)	(0.236,0)
<b>28</b> <sup>η</sup>	(0.109,- 0.0179)	(0.598,+ 0.012)	(0.218,+ 0.0108)
<b>29</b> <sup>η</sup>	(-0.100,0)	(0.598,- 0.012)	(0.218,- 0.0108)
<b>30</b> <sup>η</sup>	(0.099,0)	(0.597,0)	(0.206,0)
<b>31</b> <sup>η</sup>	(0.0936,0)	(0.563,0)	(0.1906,+ 0.063)
<b>32</b> <sup>η</sup>	(-0.030,+ 0.082)	(0.557,0)	(0.1906,- 0.063)
33 <sup>η</sup>	(-0.030,- 0.082)	(0.548,0)	(0.2007,0)
<b>34</b> <sup>η</sup>	(0.078, +0.0055)	(0.532,+ 0.026)	(0.192,+ 0.0003)
<b>35</b> η	(0.078,- 0.0055)	(0.532,- 0.026)	(0.192,- 0.0003)
<b>36</b> <sup>η</sup>	(0.0698,0)	(0.527,0)	(0.1832,0)
<b>37</b> <sup>η</sup>	(0.063,0)	(0.5176,0)	(0.181,+ 0.021)
<b>38</b> η	(0.0457, +0.0179)	(0.505,0)	(0.181,- 0.021)
<b>39</b> <sup>η</sup>	(0.0457,- 0.0179)	(0.494,0)	(0.169,+ 0.002)
<b>40</b> <sup>η</sup>	(0.048,0)	(0.487, +0.0049)	(0.169,- 0.002)
<b>41</b> <sup>η</sup>	(-0.025,+0.0239)	(0.487,- 0.0049)	(0.1596, +0.05)
<b>4</b> 2 <sup>η</sup>	(- 0.025,- 0.0239)	(0.4829,0)	(0.1596,- 0.05)
<b>43</b> <sup>η</sup>	(-0.033,+0.002)	(0.481,0)	(0.165,0)
<b>4</b> 4 <sup>η</sup>	(- 0.033,- 0.002)	(0.4739,0)	(0.159,0)
<b>45</b> <sup>η</sup>	(0.0179,+ 0.015)	(0.468,0)	(0.1538,+ 0.0053)
<b>46</b> <sup>η</sup>	(0.0179,- 0.015)	(0.454, +0.0016)	(0.1538,- 0.0053)
<b>47</b> <sup>η</sup>	(- 0.017,0)	(0.454,- 0.0016)	(0.148,+ 0.002)
<b>48</b> <sup>η</sup>	(0.009, +0.0036)	(0.429,0)	(0.148,- 0.002)
<b>49</b> <sup>η</sup>	(0.009,- 0.0036)	(0.416, +0.02)	(0.145,0)
<b>50</b> <sup>η</sup>	(0.01,0)	(0.416,- 0.02)	(0.1237,0)
<b>5</b> 1 <sup>η</sup>	(-0.008,0)	(0.4144, +0.008)	(0.1228,0)
52 <sup>η</sup>	(0.006,+ 0.0007)	(0.4144,- 0.008)	(0.105, +0.0478)
<b>53</b> <sup>η</sup>	(0.006,- 0.0007)	(0.4143,0)	(0.105,- 0.0478)
54 <sup>η</sup>	(0.004,0)	(0.4057,0)	(0.086,0)
<b>55</b> <sup>η</sup>	(-0.0005,0)	(0.3996,0)	(0.076,+ 0.0239)
<b>56</b> <sup>η</sup>	(-0.0001,0)	(0.2489,0)	(0.076,- 0.0239)
<b>57</b> <sup>η</sup>	(0,0)	(0.208,0)	(0.053,0)
<b>58</b> <sup>η</sup>	(0,0)	(0,0)	(0,0)
<b>59</b> <sup>η</sup>	(0,0)	(0,0)	(0,0)



7.4.1 Αναπαράσταση «ομαλοποιημένων» ιδιοτιμών μήτρας εγχώριας παραγωγής M1

Σελίδα | 131



7.4.2 Αναπαράσταση «ομαλοποιημένων» ιδιοτιμών μήτρας εγχώριας παραγωγής M1+K

Σελίδα | 132



7.4.3 Αναπαράσταση «ομαλοποιημένων» ιδιοτιμών μήτρας

(εγχώριας παραγωγής M2+B+F )\*(R)

# 8. Συμπεράσματα

Όπως είπαμε στην αρχή αυτής της μελέτης μας σκοπός της ήταν η εκτίμηση των επιπτώσεων της υποτίμησης του νομίσματος της ελληνικής οικονομίας στο «κόστος» των εγχωρίως παραγόμενων εμπορευμάτων, στη βάση των πινάκων εισροών – εκροών της ελληνικής οικονομίας για το έτος 2005.

Για την επίτευξη αυτού του σκοπού χρησιμοποιήσαμε τρία διαφορετικά συστήματα τιμών (τρία μοντέλα) που περιέγραφαν τρείς διαφορετικούς τρόπους μετάδοσης του πληθωριστικού κύματος της υποτίμησης στην ελληνική οικονομία.

Τα τρία αυτά μοντέλα τα «τρέξαμε» στο πρόγραμμα mathematica και βρήκαμε αναλυτικά την εξέλιξη των τιμών των εμπορευμάτων. Έπειτα υπολογίσαμε τους δείκτες συνολικού πληθωρισμού για τις πρώτες πέντε περιόδους και εν συνεχεία βρήκαμε τις ιδιοτιμές («ομαλοποιημένες» και μη) και τους δείκτες ταχύτητας σύγκλισης. Έτσι τώρα είμαστε έτοιμοι να αναλύσουμε τα συμπεράσματα αυτής της μελέτης.

1° το «τρέξιμο» των τριών μοντέλων έδειξε ότι οι τιμές των εμπορευμάτων μεταβλήθηκαν ως εξής:

 $\rightarrow$  Στο <u>πρώτο</u> σύστημα τιμών (1° μοντέλο) για υποτίμηση του νομίσματος:

15% είχαμε αύξηση 0,15 μονάδες, δηλαδή η τιμή από τη 1 μονάδα προσαρμόστηκε στο 1,15 μονάδες (δηλαδή η υποτίμηση περνάει όλη στο κόστος παραγωγής)

**50%** είχαμε αύξηση 0,50 μονάδες, δηλαδή η τιμή από τη 1 μονάδα προσαρμόστηκε στο 1,50 μονάδες (δηλαδή η υποτίμηση περνάει όλη στο κόστος παραγωγής)

 $\rightarrow$  Στο δεύτερο σύστημα τιμών (2° μοντέλο) για υποτίμηση του νομίσματος:

15% είχαμε αύξηση 0,15 μονάδες, δηλαδή η τιμή από τη 1 μονάδα προσαρμόστηκε στο 1,15 μονάδες (δηλαδή η υποτίμηση περνάει όλη στο κόστος παραγωγής)

**50%** είχαμε αύξηση 0,50 μονάδες, δηλαδή η τιμή από τη 1 μονάδα προσαρμόστηκε στο 1,50 μονάδες (δηλαδή η υποτίμηση περνάει όλη στο κόστος παραγωγής)

→ Στο τρίτο σύστημα τιμών (3° μοντέλο) για υποτίμηση του νομίσματος:

**15%** είχαμε αύξηση περίπου 0,004 – 0,108 μονάδες, δηλαδή η τιμή από τη 1 μονάδα προσαρμόστηκε στο 1,004 – 1,108 μονάδες ανάλογα το εμπόρευμα (δηλαδή από το 15% της υποτίμησης μόνο το 0,4% – 11% περνάει στο κόστος παραγωγής)

**50%** είχαμε αύξηση περίπου 0,015 – 0,36 μονάδες, δηλαδή η τιμή από τη 1 μονάδα προσαρμόστηκε στο 1,015 – 1,36 μονάδες ανάλογα το εμπόρευμα (δηλαδή από το 50% της υποτίμησης μόνο το 1% – 36% περνάει στο κόστος παραγωγής)

Επίσης μπορούμε να έχουμε διαγραμματικά (Διάγραμμα 1) τη μεταβολή της τιμής των εμπορευμάτων λόγω της επίδραση της υποτίμησης.



Γενικά παρατηρούμε ότι το 1° και 2° μοντέλο απορροφούν όλη την υποτίμηση σε αντίθεση με το 3° μοντέλο και μάλιστα η απορρόφηση στο δεύτερο μοντέλο γίνεται με πιο αργό ρυθμό απ' ότι στο 1°.

2° ο υπολογισμό των δεικτών συνολικού πληθωρισμού δείχνει ότι το πληθωριστικό κύμα έχει την εξής μορφή:

→ Στο <u>πρώτο σύστημα τιμών</u> (1° μοντέλο) για υποτίμηση του νομίσματος:

**15%** είχαμε την πρώτη περίοδο 1,7%, την δεύτερη περίοδο 1,3% την τρίτη περίοδο 1,03%, την τέταρτη περίοδο 0,84% την πέμπτη περίοδο 0,71%

**50%** είχαμε την πρώτη περίοδο 5,66%, την δεύτερη περίοδο 4,19% την τρίτη περίοδο 3,22%, την τέταρτη περίοδο 2,57% την πέμπτη περίοδο 2,13%

→ Στο δεύτερο σύστημα τιμών (2° μοντέλο) για υποτίμηση του νομίσματος:

**15%** είχαμε την πρώτη περίοδο 2,86%, την δεύτερη περίοδο 2,0% την τρίτη περίοδο 1,47%, την τέταρτη περίοδο 1,13% την πέμπτη περίοδο 0,89%

**50%** είχαμε την πρώτη περίοδο 9,55%, την δεύτερη περίοδο 6,26% την τρίτη περίοδο 4,42%, την τέταρτη περίοδο 3,30% την πέμπτη περίοδο 2,56%

 $\rightarrow$  Στο <u>τρίτο σύστημα τιμών</u> (3° μοντέλο) για υποτίμηση του νομίσματος:

**15%** είχαμε την πρώτη περίοδο 1,7%, την δεύτερη περίοδο 0,58% την τρίτη περίοδο 0,19%, την τέταρτη περίοδο 0,06% την πέμπτη περίοδο 0,01%

**50%** είχαμε την πρώτη περίοδο 5,66%, την δεύτερη περίοδο 1,86% την τρίτη περίοδο 0,61%, την τέταρτη περίοδο 0,199% την πέμπτη περίοδο 0,06%

δεικτών πληθωρισμού	
Άθροισμα δεικτών πληθωρισμού	
50%	
17,77	
26,09	
8,389	
-	
Γενικά παρατηρούμε ότι το πληθωριστικό κύμα λόγω της υποτίμησης του νομίσματος έχει φθίνουσα μορφή και ότι το μεγαλύτερο πληθωρισμό τον έχουμε στο δεύτερο μοντέλο που περιλαμβάνονται και οι φόροι.

• 3° ο υπολογισμό των ιδιοτιμών των τριών μητρών : α) εγχώριας παραγωγής M1, β) εγχώριας παραγωγής M1 + K και γ) (εγχώριας παραγωγής M2 + B + F)\*(R) έδειξε ότι οι μήτρες είναι συγκλίνουσες (αφού η μέγιστη ιδιοτιμή τους είναι μικρότερη της μονάδας) και ότι το μεγαλύτερο χρόνο για να προσεγγίσει το σύστημα (μοντέλο 1,2,3) τη νέα μόνιμη κατάστασή του (ο λεγόμενος «χρόνος αποκατάστασης»)<sup>50</sup> απαιτείται στη μήτρα εγχώριας παραγωγής M1 + K και έπονται η μήτρα (εγχώριας παραγωγής M2 + B + F)\*(R) και τέλος η μήτρα εγχώριας παραγωγής M1 με μέγιστες ιδιοτιμές (0.948878, 0.893078 και 0.321697 αντίστοιχα). Αυτό βέβαια φαίνεται και στην απεικόνιση που υπάρχει στις ενότητες 7.4.1, 7.4.2 και 7.4.3. αφού ισχύει ότι όσο πιο κοντά στην αρχή των αξόνων συσσωρεύεται ο «πληθυσμός» των ιδιοτιμών τόσο πιο γρήγορα συγκλίνει το σύστημα.

<sup>&</sup>lt;sup>50</sup> Μαριόλης Θεόδωρος – Οικονομίδης Χαράλαμπος – Σταμάτης Γιώργος – Φουστέρης Νίκος, 1997, Ποσοτική εκτίμηση των επιπτώσεων της υποτίμησης στο «κόστος» παραγωγής, Αθήνα, Εκδόσεις «Κριτική», σελ.41

# 9. Παράρτημα

## Παράρτημα Α

## A.1 Εισαγωγή Δεδομένων 1<sup>ου</sup> Μοντέλου Στο Mathematica

## A.1.α Εισαγωγή μήτρας εγχώριας παραγωγής M1 – Dom

{

<u>1<sup>n</sup> γραμμή</u> {0.127197,0.0479968,0.00178314,0,0,0,0,0,0.242143,0.15 4528,0.0454443,0.00231927,1.44139×10<sup>-6</sup>,0.000110278,0.00487196, 3.81138×10<sup>-6</sup>,4.70491×10<sup>-6</sup>,0.00136019,0.0143041,0.0000153493,1.7 0581×10<sup>-6</sup>,0.0000584937,0.000709849,0,5.55614×10<sup>-7</sup>,0,0.00002490 68,9.31595×10<sup>-7</sup>,0.0000860373,0.00712094,0,1.78166×10<sup>-7</sup>,0,2.5285 1×10<sup>-10</sup>,0,0.00362042,0.0000405241,0.0170201,0.000994978,0.00125 698,0,0.00225488,0.000032537,0,0.0000475993,0,0.0012346,0.0067 7324,0,0,3.21796×10<sup>-7</sup>,0,0.0000430505,0.000102371,0,0.00110853, 0.000145587,0.000654146,0},

<u>2<sup>n</sup> γραμμή</u>{0,0.103975,0,0.00225409,0.000656274,0,0.000763113,0.00 0593696,0.000864871,0.0000640987,0.000111645,0.000493719,0.000 158074,0.0582043,0.000322324,0.000519594,7.87492×10<sup>-7</sup>,0.001094 03,0.000171659,0.000143867,0.000215232,0.000241797,0.000080284 6,0.000053278,0.0000283087,0.0000297935,0.0000808958,0.0000279 743,0.000117457,0.000860579,0.000676657,1.03104×10<sup>-6</sup>,0,1.12583 ×10<sup>-6</sup>,5.53174×10<sup>-8</sup>,0.0000698 941,1.21173×10<sup>-6</sup>,0.000493253,0.00001 98301,0,0,0.000048366,8.15998×10<sup>-7</sup>,0,0,0,0.0000282258,0.0001374 14,0,0,0.000082 9951,0,0.0199044,1.05582×10<sup>-8</sup>,0,0.00013624,4.42 678×10<sup>-6</sup>, 5.98175×10<sup>-6</sup>,0},

<u>3<sup>n</sup> γραμμή</u>{0,0,0.0474183,0,0,0,0,0,0.000720648,0,0.0000100064,0,4 .52091×10<sup>-9</sup>,0.00002471,0.0000119979,5.44569×10<sup>-9</sup>,0,2.56219×10<sup>-6</sup>, 0.0000673299,1.78768×10<sup>-7</sup>,1.31063×10<sup>-7</sup>,7.81953×10<sup>-6</sup>,4.64736×10<sup>-6</sup>, 0,1.48637×10<sup>-7</sup>,0,6.21022×10<sup>-6</sup>,2.49219×10<sup>-7</sup>,0.0000169048,0.001875 33,0,0,0,6.69084×10<sup>-12</sup>,0,0.0000134382,8.20118×10<sup>-6</sup>,0.0032877,3. 66879×10<sup>-6</sup>,0.000246974,0,0.0000 378947,6.29955×10<sup>-6</sup>,0,9.35018×10 <sup>-6</sup>,0,0.0000203341,0.0000560838,0,0,8.34342×10<sup>-9</sup>,0,0,3.73481×10<sup>-6</sup> 6,0,0.0000531242,0.0000280399,0.0000398698,0}, <u>4<sup>n</sup> γραμμή</u>{0,0,0,0.00342772,0,0,0,0,0.000115405,0,5.95099×10<sup>-7</sup>,0,0 ,4.95312×10<sup>-7</sup>,1.85205×10<sup>-6</sup>,0,4.05305×10<sup>-6</sup>,5.07463×10<sup>-6</sup>,0.0000591 297,0.000963926,0.0041171,0.000223227,0.0000312448,0,0,0,0,0,5 .68028×10<sup>-7</sup>,0,0.000285223,0.114764,0,1.537 31×10<sup>-6</sup>,0,6.88541×10<sup>-6</sup> ,0,0,4.4903×10<sup>-6</sup>,0,0,0.0000101299,0,0,0,0.000467287,0.004575 97,0,0,1.09201×10<sup>-9</sup>,0,0,0,0,0,3.01696×10<sup>-7</sup>,0,0},

<u>5<sup>η</sup> γραμμή</u> {0,0,0,0,0,0,0,8.43215×10<sup>-6</sup>,7.30959×10<sup>-</sup>

<sup>6</sup>,0.0000730468,0

<u>8<sup>n</sup> γραμμή</u> {0.000284808,0.00010747,0,0,0,0,0,0.0257273,0.000225745 ,0,0.0000205279,3.36304×10<sup>-7</sup>,0.0000327264,0.000171823,0.0008751 29,3.03681×10<sup>-6</sup>,1.04654×10<sup>-6</sup>,0.00526183,0.00114282,0.104709,0.00 0280661,0.000199818,0.000934281,0,0.0000232189,1.93643×10<sup>-8</sup>,0.0 000153287,0.0000137811,1.17169×10<sup>-8</sup>,4.02549×10<sup>-6</sup>,0.00106027,3.9 894×10<sup>-6</sup>,0,0.0210084,2.43483×10<sup>-8</sup>,0.000240792,1.13194×10<sup>-6</sup>,0.000 56406,0.000128013,0,0,0.000369976,9.33134×10<sup>-7</sup>,0,0,0,0.0001611 78,0.000902798,0,0,5.49812×10<sup>-10</sup>,0,1.31862×10<sup>-7</sup>,0,0,0,4.52659×1 0<sup>-6</sup>,6.84043×10<sup>-6</sup>,0},

<u>9<sup>n</sup> γραμμή</u>{0.019511,0.00736234,0.00522625,0,0,0,0,0,0.0632918,0.0 000135314,0.00128149,0.0000203159,0.0147497,0.0000739012,0.002 75702,0.000123325,2.65276×10<sup>-6</sup>,0.00286613,0.00332586,0.00007222 19,5.02238×10<sup>-6</sup>,6.8661×10<sup>-6</sup>,0.000184844,2.22218×10<sup>-6</sup>,2.91818×10<sup>-</sup> 8,4.16619×10<sup>-6</sup>,0.0000113876,4.8929×10<sup>-8</sup>,0.000528866,0.000372304, 2.46231×10<sup>-6</sup>,1.35602×10<sup>-6</sup>,0,2.00205×10<sup>-6</sup>,9.07528×10<sup>-8</sup>,0.00102423, 0.000202365,0.0927662,0.000268381,0.00772658,0,0.00142788,0. 00018039,0,0.000661866,0.0000173404,0.000780801,0.00383673,0,1 .31481×10<sup>-6</sup>,0.000626922,0.00189564,0.000236571,0.0085766,0.0009 32123,0.00325416,0.00109267,0.00132992,0},

<u>10<sup>n</sup> γραμμή</u> {0,0,0,0,0,0,0,0,0,0.00330596,0,0,1.44139×10<sup>-6</sup>,0,0,2.39 ×10<sup>-8</sup>,0,0,0,0,0,0,0,0,0,0,0,3.45552×10<sup>-7</sup>,0,0,0,0,1.21723×10<sup>-11</sup>, 0,1.31323×10<sup>-6</sup>,5.9731×10<sup>-9</sup>,1.06736×10<sup>-9</sup>,3.484 6×10<sup>-7</sup>,5.04842×10<sup>-6</sup>, 0, 8.94343×10<sup>-7</sup>,1.75944×10<sup>-8</sup>,0,1.91752×10<sup>-7</sup>,0,4.19485×10<sup>-7</sup>,2.3384 3×10<sup>-6</sup>,0,0,1.06992×10<sup>-7</sup>,0,0.0000209932,0.0000163913,0,0,7.67814 ×10<sup>-8</sup>,0,0},

<u>11<sup>n</sup> γραμμή</u> {0.000217795,0.0000820896,0.00902033,0,0,0,4.336 49×10<sup>-8</sup>,0.0000674432,0.000499072,0.00518471,0.0399833,0.06 44311,0.01 24737,0.000277537,0.00179356,0.000158378,6.49469×10<sup>-6</sup>,0.0014643 6,0.00238993,0.000440064,0.00029395,0.0045 9326,0.00015146,0.00 00397457,0.0000726767,0.0000866215,0.00011215,0.0000645453,0.0 00108491,0.0114438,0.000040678,1.09441×10<sup>-6</sup>,7.74189×10<sup>-7</sup>,0.00001 68856,0.000285066,0.00217665,0.00799857,0.0040293,0.0000614411 ,0.000205583,0,0.000163923,7.38216×10<sup>-6</sup>,0,7.78287×10<sup>-6</sup>,0,0.00029 282,0.000458982,5.6382×10<sup>-6</sup>,3.24442×10<sup>-7</sup>,0.000142638,0,0.000013 2301,0.0000 433325,1.50435×10<sup>-7</sup>,0.0000512824,0.000253759,0.0001 06469,0},

<u>12<sup>n</sup> γραμμή</u>{2.87704×10<sup>-8</sup>,0,7.84762×10<sup>-6</sup>,0,0,0,0,6.38761×10<sup>-7</sup>,8.12 125×10<sup>-7</sup>,0.000168037,0.0235852,0,5.15204×10<sup>-6</sup>,0,0.0000443113,1. 98755×10<sup>-8</sup>,1.56701×10<sup>-7</sup>,0,0,3.70574×10<sup>-6</sup>,0,6.3585×10<sup>-7</sup>,4.78142×1 0<sup>-6</sup>,0,8.97945×10<sup>-6</sup>,3.77789×10<sup>-6</sup>,0,0.0000170833,6.10281×10<sup>-9</sup>,5.28 25×10<sup>-6</sup>,0.0000511212,0.00246023,9.94092×10<sup>-7</sup>,0.000041558,0.0002 84578,0.000135483,0.000481097,0.0000112658,0.00023819,0.000456 581,0.0000671228,1.7936×10<sup>-6</sup>,0.000059246,9.07021×10<sup>-6</sup>,3.75389×1 0<sup>-6</sup>,0.0000314744,0.0000916048,0.0000154144,0.0000546205,0.00032 8205,0.000798915,0.0000873772,0.000357086,0.00920161,0.0000713 177,0.000498173,0.000109237,0},

<u>13<sup>n</sup> γραμμή</u>{0.0000342006,0.0000129054,0,0,0,0,0,0,0,9.23982×10<sup>-7</sup>,0,9 .08857×10<sup>-6</sup>,0.00125951,0.064648,8.93126×10<sup>-6</sup>,4.37838×10<sup>-6</sup>,0.0002 46768,5.39064×10<sup>-9</sup>,0.0000320378,7.0738×10<sup>-7</sup>,8.49718×10<sup>-9</sup>,3.86402 ×10<sup>-8</sup>,2.39834×10<sup>-7</sup>,5.17571×10<sup>-6</sup>,0,2.29148×10<sup>-9</sup>,2.81922×10<sup>-10</sup>,0.00 00287628,0.00010943,1.81708×10<sup>-6</sup>,0.0000289845,2.16076×10<sup>-10</sup>,3.7 4865×10<sup>-6</sup>,0,8.96396×10<sup>-10</sup>,6.19348×10<sup>-6</sup>,0.0000226363,2.25803×10<sup>-6</sup>, 5.68894×10<sup>-9</sup>,5.86456×10<sup>-6</sup>,0.0000265471,0,0.0000126937,9.25197×10 <sup>-8</sup>,0,1.00924×10<sup>-6</sup>,0,6.62406×10<sup>-6</sup>,0.0000372595,7.44464×10<sup>-7</sup>,5.2311 5×10<sup>-6</sup>,0.0000870414,0,5.84328×10<sup>-7</sup>,0.0000556314,2.26207×10<sup>-8</sup>,0.0 000105775,0.0000743,0.0000322867,0},

14<sup>n</sup> γραμμή {0,0,0.00248155,0,0,0,0.000109042,0.000596532,0.003927 26,0.00496107,0.00146067,0.000399023,0.000634785,0.173984,0.00 112919,0.00018221,0.0000497631,0.0071397,0.00160061,0.00103865 ,0.000133858,0.00122214,0.00152745,0.0000446012,0.0013352,0.00 00937716,0.00178802,0.000436711,0.000393449,0.0932504,0.000031 1344,0.000192276,0,0.00207063,7.16181×10<sup>-7</sup>,0.000392637,0.00008 61559,0.0104482,0.000114418,0.000117595,0.0000259308,0.000580 08 2,0.0000285095,1.19668×10<sup>-7</sup>,0.0000263604,9.09752×10<sup>-7</sup>,0.00018 1524,0.000846289,0.0000141118,7.18502×10<sup>-6</sup>,0.000766942,0,0,8.1 958×10<sup>-6</sup>,8.19256×10<sup>-8</sup>,1.21815×10<sup>-6</sup>,0.000538888,0.00615371,0},

15<sup>n</sup> γραμμή {0.000410855,0.0000152371,0.00124633,0.00143871,0.000 418878,0,0.000487195,0.000574473,0.0023136,0.0119735,0.0006295 76,0.000500345,0.00256074,0.00393917,0.105584,0.0568789,0.0021 1002,0.00408442,0.00242856,0.00104095,0.000566929,0.000347771, 0.000274675,0.000207915,0.000605595,0.000286402,0.000327047,0. 0000546818,0.000159089,0.000309767,0.00075867,0.0000270251,3.9 786×10<sup>-6</sup>,0.0000516296,0.00131802,0.00534799,0.00249746,0.006585 27,0.000519839,0.000397108,0.000803366,0.00197692,0.000786632, 8.56795×10<sup>-6</sup>,0.00227136,0.00132063,0.000355419,0.00109,0.01105 38,0.000264072,0.00256773,0.000227878,4.2509×10<sup>-9</sup>,0.0000244649 ,1.49079×10<sup>-7</sup>,0.00073469,0.00032891,0.000197135,0},

16<sup>n</sup> γραμμή {6.72117×10<sup>-6</sup>, 2.49353×10<sup>-6</sup>, 0, 0.00215161, 0.000626436, 0, 0 .000728417, 0.000566703, 0.00109271, 0.00354036, 0.000658693, 0.000 667213, 0.000926315, 0.000888521, 0.000918441, 0.00779979, 0.000070 6363, 0.00360384, 0.000693545, 0.00127515, 0.000444864, 0.000421317 ,0.000204223, 0.000139055, 0.000142116, 0.000116845, 0.000253167, 0 .0000524046, 0.000345029, 0.000222479, 0.000974351, 0.000172724, 0. 0000329817, 0.00148036, 0.0000591119, 0.000873863, 0.000358683, 0.0 0236454, 0.000866332, 0.00195743, 0.00311848, 0.000361084, 0.000136 845, 0.00391106, 0.00324335, 0.00313536, 0.000116199, 0.00884982, 0. 0293384, 0.0273154, 0.0152344, 0.00332614, 0.00317977, 0.000755023, 1.79745×10<sup>-6</sup>, 0.0265892, 0.00884746, 0.00025294, 0},

<u>17<sup>n</sup> γραμμή</u>{0.0288899,0.0109879,0.0490683,0.0315049,0.0134243,0,0.0365384,0.0595658,0.00619858,0.00422026,0.00319093,0.00123645,0.022144,0.0154719,0.00781165,0.00778559,0.0571809,0.00459604,0.0061631,0.0182219,0.0166041,0.009492,0.00653756,0.00297634,0.00493255,0.0033769,0.00387186,0.0020865,0.00711841,0.0037369,5,0.0228749,0.0400483,0.0200958,0.0201881,0.000630885,0.011655,0.00513783,0.00708867,0.0971068,0.0410395,0.0508519,0.023844

3,0.00508311,0.00333739,0.00244668,0.00353057,0.000832525,0.00 946631,0.00183996,0.00262091,0.00727824,0.00418974,0.000461776 ,0.0135122,0.019139,0.00844415,0.00295777,0.000597655,0},

18<sup>n</sup> γραμμή {0.00685911,0.00259251,0.000133852,0.00751826,0.002188
93,0,0.00720348,0.00513921,0.0025672,0.000304365,0.0141879,0.0
00576038,0.00457722,0.00707307,0.0112392,0.00563598,0.00414541
,0.0712672,0.0476702,0.00271626,0.00314078,0.0075651,0.0036414
4,0.00578601,0.0101339,0.00112503,0.029431,0.0458012,0.0020835
,0.00419638,0.0016271,0.0000133644,0.000395287,0.000406432,0.0
0131398,0.00758909,0.00127721,0.00380071,0.000357881,0.0006402
23,0.0000857394,0.000572468,0.0000220377,0.000246939,0.0005300
78,0.000394688,0.000495989,0.00147619,0,0.00145003,0.00156109
,0.00158641,0.000185639,0.0213597,0.00316701,0.00214141,0.0025
5592,0.00131023,0},

<u>19<sup>n</sup> γραμμή</u> {0.00113413, 0.000427609, 0.0000145139, 0.00502974, 0.001 4644, 0, 0.00170472, 0.00431378, 0.00523842, 0.00444553, 0.00368695, 0.00141295, 0.0111612, 0.00628148, 0.00726657, 0.00396037, 0.000044 6557, 0.00483955, 0.0240562, 0.00123383, 0.000714705, 0.00428601, 0. 00612446, 0.0104343, 0.00906726, 0.00524282, 0.00559897, 0.00153177 ,0.000656107, 0.00851983, 0.00170636, 0.000120568, 0.000164862, 0.0 124715, 0.000807635, 0.00697246, 0.00503933, 0.00160131, 0.00258203 ,0.000632572, 0.00149084, 0.00089262, 0.0000281828, 2.5814×10<sup>-7</sup>, 0.0 000284482, 0.00007723, 0.0003495, 0.00296348, 0.000378104, 0.000144 762, 0.00041325, 0, 0.0000450757, 0.000123589, 0.0000132447, 0.00001 90692, 0.000248815, 0.00565518, 0},

<u>20<sup>n</sup> γραμμή</u> {4.69899×10<sup>-12</sup>, 0, 0, 0, 0, 0, 0, 0, 0.0034217, 0.00427103, 0.000 68421, 0.000340268, 0.000544086, 0.000979956, 0.00081829, 0.0001324 16, 0.0000548232, 0.00594219, 0.00363288, 0.100792, 0.000897269, 0.0 00963626, 0.00522027, 0.00216607, 0.0107669, 0.00034537, 0.0229201, 0.00228793, 0.00238307, 0.00202598, 1.0109×10<sup>-6</sup>, 0.0000752427, 0.000 0227736, 0.0930066, 3.65939×10<sup>-6</sup>, 0.000441873, 6.96843×10<sup>-6</sup>, 0.00224 006, 0.0004815, 0.00023952, 0.000301187, 0.000417793, 4.54034×10<sup>-6</sup>, 0, 9.50664×10<sup>-6</sup>, 3.61777×10<sup>-10</sup>, 0.000184428, 0.00108063, 0, 0.0000501 662, 0.0000864132, 0, 0.000020284, 0.00206332, 7.73626×10<sup>-6</sup>, 0.00002 24488, 0.00112 322, 0.000162635, 0},

<u>21<sup>n</sup> γραμμή</u>{0,0,0,0,0,0,0,0,0.00241998,0.00305653,0.0360606,0.000 241834,0.0004149,0.00196018,0.00112404,0.000872704,0.000030461 8,0.00354499,0.0167822,0.00365495,0.274564,0.170224,0.0579855, 0.0214213,0.13015,0.0196921,0.0114136,0.03274,0.0660339,0.0085 0832,0.217991,0.000157497,0.0000487553,0.0162976,0.00487219,0. 00126271,6.10019×10<sup>-6</sup>,2.80245×10<sup>-8</sup>,0.000400679,0.000135483,0,0. 000835786,4.72174×10<sup>-7</sup>,0,5.12903×10<sup>-6</sup>,0,0.000506686,0.00263146, 0,4.83479×10<sup>-8</sup>,2.7615×10<sup>-6</sup>,0,0.0000174033,8.2358×10<sup>-6</sup>,0.0000717 337,7.24763×10<sup>-7</sup>,0.000740334,0,0},

<u>22<sup>n</sup> γραμμή</u>{0.000275527,0.00840853,0,0.00208464,0.000606938,0,0.0 00705745,0.000549064,0.00858915,0.0104144,0.0108251,0.00227982 ,0.00638297,0.00377272,0.00446904,0.00533869,0.000103582,0.010 8324,0.0103621,0.00304528,0.0039552,0.0392207,0.0086748,0.0090 7322,0.0141987,0.00284644,0.00191381,0.00236369,0.0136269,0.00 632955,0.0033701,0.000850304,0.00181241,0.0610846,0.000224609, 0.000517738,0.000142383,0.00328634,0.000735916,0.00300853,0.00 00921327,0.000452338,0.00098621,0.00113179,0.0000477343,0.0036 2875,0.000968073,0.0157162,0.000105644,0.0114195,0.000945797, 0.000601249,0.000480073,0},

23<sup>n</sup> γραμμή {0.000920221,0.00034724,0,0.00428098,0.0151258,0,0.004 59097,0.0054008,0.000377621,0.000506621,0.000756872,0.00038769 5,0.000401879,0.00187813,0.000710518,0.00154499,0.0000520177,0 .000621944,0.00102273,0.00269935,0.000971087,0.00123307,0.0214 564,0.0000319025,0.000662608,0.000337315,0.000192727,0.0010897 1,0.00255809,0.000406793,0.00143976,0.00160221,0.00700188,0.00 096938,0.0000578886,0.000103139,8.66252×10<sup>-6</sup>,0.000307972,0.0003 18268,0.000183662,0.00102688,0.000409112,0.0000823492,8.98447 ×10<sup>-7</sup>, 8.97134×10<sup>-6</sup>, 2.9617×10<sup>-11</sup>,0.000120543,0.000697318,0.00002 46104,8.04161×10<sup>-6</sup>,0.00027828,0.00829484,7.51487×10<sup>-6</sup>,5.1975×10 <sup>-6</sup>,0.00207953,0.000353763,0.0000512822,0.0000668162,0},

<u>24<sup>n</sup> γραμμή</u>{0,0,0,0,0,0,0,0,0,0,0000188635,0.0000288454,0.000038210 2,0.0000220665,0.0000228746,0.0000314026,0.0000389734,0.000064 8778,2.96129×10<sup>-6</sup>,0.0000293077,0.0000431963,0.000146136,0.0000 514542,0.0000313214,5.66632×10<sup>-6</sup>,0.000878274,3.45209×10<sup>-6</sup>,2.91 111×10<sup>-6</sup>,2.26386×10<sup>-6</sup>,8.30989×10<sup>-6</sup>,0.0000169426,0.0000209129,0. 0000355113,4.19672×10<sup>-7</sup>,5.19016×10<sup>-8</sup>,3.04875×10<sup>-6</sup>,1.6105×10<sup>-8</sup>,1. 419×10<sup>-6</sup>,2.92637×10<sup>-7</sup>,0.0000246776,0.0000310972,0.0000130521,0 .0000384746,0.0000267527,7.07268×10<sup>-6</sup>,7.73019×10<sup>-8</sup>,6.88916×10<sup>-7</sup> ,0.000118898,1.19136×10<sup>-6</sup>,0.000161838,0.000650607,0.0000406196 ,6.06672×10<sup>-6</sup>,0.0000511108,0.000032619,1.22041×10<sup>-6</sup>,8.3772×10<sup>-9</sup> ,0.0000337612,9.2542×10<sup>-6</sup>,0.0000109658,0},

<u>25<sup>n</sup> γραμμή</u>{5.50062×10<sup>-10</sup>,0,0,0.00225272,0.000655874,0,0.000762648 ,0.000593334,0.000470183,0.000718888,0.00103606,0.000549943,0. 000570118,0.000801171,0.00097464,0.00154847,0.0000738016,0.000 782898,0.00153119,0.00369494,0.00129943,0.00132317,0.00696046, 0.000836166,0.0336006,0.00122621,0.000653619,0.00201598,0.0018 6751,0.000699879,0.0210129,0.00253235,0.0111734,0.0184678,1.38 727×10<sup>-6</sup>,0.000122807,0.000100195,0.000874957,0.00166282,0.0006 07475,0.00619523,0.00163398,0.000254466,2.77615×10<sup>-6</sup>,0.0000330 105,7.59263×10<sup>-8</sup>,

0.0000553088,0.000491166,0.00177299,0.0000903983,0.000254684,0 ,0.0000708677,0.000106038,3.32491×10<sup>-7</sup>,0.000042381,0.00279945, 0.0000560979,0},

<u>26<sup>n</sup> γραμμή</u> {8.7391×10<sup>-9</sup>, 0, 0, 0, 0, 0, 0, 0, 4.69488×10<sup>-8</sup>, 0, 2.48317×10<sup>-6</sup>, 0, 0, 1.96319×10<sup>-6</sup>, 0, 0.0000421325, 0, 2.43588×10<sup>-6</sup>, 6.24523×10<sup>-6</sup>, 2. 63082×10<sup>-6</sup>, 6.07595×10<sup>-7</sup>, 0.0000423772, 0.000564307, 0.0246186, 0.001 04088, 0.0310287, 0.000149955, 0.000034044, 1.33699×10<sup>-6</sup>, 0.00014880 9, 0.0000313507, 0.0000183935, 0.0000105934, 0.000797435, 0, 0.00012 1657, 0.00153243, 0.000030551, 0.0000626361, 0.0000187598, 0.000029 2441, 0.0000883035, 0.00378426, 0.0000418701, 1.14602×10<sup>-6</sup>, 2.49891 ×10<sup>-8</sup>, 0.0000483098, 0.000131291, 0.00069881, 0.0000509617, 0.00087 3552, 0, 3.49006×10<sup>-9</sup>, 4.31833×10<sup>-6</sup>, 1.47991×10<sup>-7</sup>, 9.73073×10<sup>-7</sup>, 0.00 0792441, 8.70804×10<sup>-6</sup>, 0},

<u>27<sup>n</sup> γραμμή</u> {0,0,0,0,0,0,0,0,2.01127×10<sup>-9</sup>,0,2.44727×10<sup>-6</sup>,0,1.12237 ×10<sup>-9</sup>,1.3792×10<sup>-7</sup>,1.07496×10<sup>-7</sup>,0.0000739839,0,1.08226×10<sup>-6</sup>,0.000 0105941,1.31186×10<sup>-6</sup>,5.80443×10<sup>-7</sup>,0.0000170117,0.00035391,3.289 87×10<sup>-7</sup>,0.0000478816,0.000136231,0.0256931,0.0000265375,0.00108 126,7.98745×10<sup>-6</sup>,0.0000530039,0.0000171502,0.0000108413,0.0000 861478,1.09759×10<sup>-7</sup>,0.0000122172,9.37097×10<sup>-7</sup>,0.0000393795,0.00 00135937,0.0000311466,0.00155927,0.000145384,0.0000236984,2.60 293×10<sup>-7</sup>,1.55974×10<sup>-6</sup>,2.65193×10<sup>-10</sup>,0.0000199033,0.000023933,0.0 000327364,0.00117325,0.00018024,0.00108151,2.44759×10<sup>-6</sup>,0.0100 837,4.12932×10<sup>-7</sup>,0.0000155731,0.000222299,3.13495×10<sup>-6</sup>,0},

<u>28<sup>n</sup> γραμμή</u>{0,1.69421×10<sup>-6</sup>,0,0.0000301944,0.000135001,0,0.00003238 07,0.0000533836,0.0000804898,0.0000468235,0.0000404066,0.00007 00337,0.0000506772,0.000106116,0.0000604957,0.000195982,4.8358 ×10<sup>-8</sup>,0.0000720172,0.000139607,0.000439286,0.0000106721,0.0000 910283,0.0000573867,0.0000566015,0.000458147,9.06809×10<sup>-6</sup>,0.00 005692270.00362875,0.0000230567,0.0000948528,0.000163566,2.16 325×10<sup>-8</sup>,0.000280821,2.16353×10<sup>-6</sup>,0.00164203,4.11624×10<sup>-6</sup>,2.878 86×10<sup>-7</sup>,5.13253×10<sup>-8</sup>,0.000241276,1.79384×10<sup>-6</sup>,0.000202964,0.000 0889289,6.83762×10<sup>-6</sup>,7.55865×10<sup>-8</sup>,5.6996×10<sup>-7</sup>,8.57761×10<sup>-13</sup>,0.00 00303911,0.000317419,2.00886×10<sup>-7</sup>,2.21422×10<sup>-7</sup>,0.0000404241,0.0 0122929,6.09596×10<sup>-6</sup>,7.86984×10<sup>-6</sup>,0.00115362,0.00039346,0.00003 4 9303,5.73171×10<sup>-7</sup>,0},

<u>29<sup>n</sup> γραμμή</u> {0,0,0.00435244,0.000673847,0.00301281,0,0.00072264,0. 00119136,0,0,0,0,0,0,0,1.2834×10<sup>-8</sup>,0.000171721,8.0867 7×10<sup>-8</sup>,0,0 ,4.10363×10<sup>-7</sup>,0.0000199327,0.0000179371,0,0,0.00278357,0,0.0020
7261,0.0229827,3.80972×10<sup>-8</sup>,0.000142796,0,0,0.0000808132,0.000
716859,2.26374×10<sup>-6</sup>,0.0000166553,2.92628×10<sup>-6</sup>,0.000397285,0.013
133,0.00763283,0.000899503,0.0000655415,2.18762×10<sup>-7</sup>,0.0004985
4,0,0.0000121748,0.000683196,4.48316×10<sup>-7</sup>,0,1.83178×10<sup>-6</sup>,0,0,8.
80191×10<sup>-6</sup>,3.02716×10<sup>-9</sup>,6.22694×10<sup>-6</sup>,0.000055609,4.86075×10<sup>-6</sup>,0},

<u>30<sup>n</sup> γραμμή</u> {8.84858×10<sup>-8</sup>, 8.06557×10<sup>-6</sup>, 0, 0.000325236, 0.0000946918, 0 ,0.000110107, 0.0000856626, 0.000162757, 0.0000939169, 0.000445434 ,0.00261275, 0.000521989, 0.00032852, 0.000208874, 0.0007477, 9.524 93×10<sup>-7</sup>, 0.000177705, 0.000219767, 0.000118914, 0.000328531, 0.0006 15614, 0.000138099, 0.0000906498, 0.0000402862, 0.0000823946, 0.000 169046, 0.000104785, 0.000281892, 0.0154864, 0.0100285, 0.000052560 9, 5.12259×10<sup>-6</sup>, 0.000310757, 0.0000171445, 0.000685581, 0.00049102 7, 0.00187177, 0.000306561, 0.000259521, 0.000303255, 0.00119227, 0. 000559392, 0.00148535, 0.0000201491, 0.000422552, 0.0000510053, 0.0 00187204, 0.000123862, 0.00143835, 0.000648416, 0.000116722, 0.0001 79542, 0.000487143, 2.50416×10<sup>-6</sup>, 0.00146696, 0.00144461, 0.0004525 72, 0},

32<sup>n</sup> γραμμή {0.00900555,0.00342222,0.00016809,0.117418,0.0640866,0 ,0.0171792,0.0501428,0.0177884,0.00891183,0.0482441,0.0163222, 0.0187609,0.0266658,0.0429158,0.0258893,0.00783992,0.0192861,0 .0466542,0.0669355,0.0838322,0.0248314,0.0125834,0.0117151,0.0 172607,0.0119509,0.0140734,0.00737051,0.0243271,0.00955725,0.0 484249,0.0834568,0.0422141,0.00217961,0.0386156,0.0180636,0.01 04019,0.0282908,0.00882317,0.00280693,0.00634974,0.0185908,0.0 0911972,0.00449583,0.00170161,0.00300959,0.0020701,0.0145308,0 .0102567,0.0117027,0.00889898,0.00588422,0.000944524,0.0075119 9,0.0154547,0.00733447,0.0116574,0.00620327,0},

<u>33<sup>n</sup> γραμμή</u> {0.0087476,0.00332544,0,0.0090216,0.00262662,0,0.00305 422,0.00237616,0.000500888,0.000179581,0.000289041,0.000486132 ,0.000433056,0.000146156,0.000404888,0.00264728,1.77205×10<sup>-6</sup>,0. 000344558,0.000335753,0.000231281,0.000601341,0.000541729,0.00 0213943,0.000156678,0.0000744604,0.0000989982,0.000212607,0.00 00774783,0.000552259,0.000187689,0.00219787,2.17274×10<sup>-6</sup>,4.1922 9×10<sup>-6</sup>,0.000521316,0.000537606,0.000393359,0.000272474,0.000145 547,0.000647663,0.00328181,0.000791129,0.0293688,0.000309161,0 .00434377,0.000461229,0.000278649,0.00025135,0.000444213,2.390 05×10<sup>-6</sup>,0.000397507,0.000790535,0.0219148,0.000816822,0.0022493 ,0.0112817,0.00318576,0.00127001,0.000873843,0},

<u>34<sup>n</sup> γραμμή</u>{0.000921042,0.000904956,0,0.0399269,0.00358452,0,0.01 81817,0.0181155,0.00455345,0.00609405,0.00612329,0.00360404,0. 0379019,0.0370886,0.00793399,0.00830616,0.00220376,0.00773882, 0.00668327,0.0100163,0.00919937,0.00444704,0.000914388,0.00064 8641,0.00141976,0.000804701,0.000593459,0.00237099,0.00291261, 0.00386221,0.0125432,0.00330135,0.0045689,0.000107886,0.000308 553,0.0047477,0.00296614,0.00517475,0.000198624,0.00300657,0.0 0448926,0.00733396,0.00135969,0.00485679,0.0359134,0.0133762,0 .0687046,0.00140676,0.000510931,0.0147546,0.0108989,0.0167598, 0.0024788,0.00678151,0.0000632726,0.0464912,0.0174381,0.000283 117,0},

<u>35<sup>η</sup> γραμμή</u> {0.00771073,0.00618668,0.00667225,0.0120356,

0.0415916,

0,0.0122575,0.0194254,0.0154257,0.0100863,0.0112609,0.0122896, 0.0121209,0.0173394,0.012915,0.00975646,0.00563621,0.0159184,0 .013232,0.0150725,0.00496921,0.00726848,0.00668504,0.0112855,0 .0100597,0.0109694,0.0138678,0.012408,0.00470478,0.0121709,0.0 128386,0.00271146,0.00364717,0.0112307,0.00189726,0.0163986,0. 0105593,0.00983879,0.0393023,0.00356951,0.00352929,0.00595914, 0.00163032,0.000467601,0.000631973,0.00188153,0.00101857,0.037 776,0.00683226,0.00249249,0.0067696,0.0151183,0.00150393,0.007 28083,0.00354726,0.00385586,0.00245885,0.00135911,0},

<u>36<sup>n</sup> γραμμή</u> {0.0423082,0.033954,0.036619,0.0185273,0.0157375,0,0.0 163988,0.0258853,0.0780975,0.0513823,0.0587595,0.0615373,0.062 5329,0.0849865,0.066118,0.0397874,0.0309221,0.0816724,0.061806 6,0.0481657,0.0251446,0.0337047,0.0324937,0.0557897,0.0530622, 0.0564733,0.0705082,0.0670968,0.0248042,0.0593432,0.0461798,0. 0142858,0.0183487,0.0533343,0.0103418,0.0158375,0.0119838,0.05 0308,0.0218825,0.01536,0.0193696,0.00966771,0.00785113,0.00255 441,0.00320043,0.00282294,0.00214091,0.0137251,0.0197839,0.012 1875,0.0119796,0.0166769,0.00824602,0.0393349,0.0193312,0.0153 424,0.011351,0.00530882,0},

<u>37<sup>n</sup> γραμμή</u>{0.0310276,0.0249009,0.0268553,0.0135757,0.0115117,0,0 .0119441,0.0165415,0.0572744,0.0376822,0.0430925,0.0451296,0.0 458598,0.0623266,0.048489,0.0293565,0.0226773,0.0598961,0.0453 271,0.0353233,0.0184403,0.024718,0.0238299,0.0409145,0.0389143 ,0.0414158,0.0517086,0.0492068,0.018191,0.0435205,0.033761,0.0 104768,0.0134564,0.0391169,0.00758439,0.0116143,0.00878856,0.0 368944,0.016048,0.011269,0.0142051,0.00709234,0.0057578,0.0018 7333,0.00234727,0.00207026,0.00159843,0.0102884,0.0146479,0.00 911132,0.0090508,0.0154703,0.00604769,0.0288524,0.0141769,0.01 12581,0.00832634,0.00402555,0},

<u>38<sup>n</sup> γραμμή</u> {3.63092×10<sup>-8</sup>, 0.000017905, 0, 0.0000341829, 0.000784529, 0, 0.000105959, 0.0000979182, 0.000460622, 0.000855669, 0.000762568, 0 .00144801, 0.000929893, 0.000546548, 0.000631738, 0.000694995, 0.00 00919469, 0.00110208, 0.000792247, 0.000642855, 0.000516011, 0.0011 319, 0.000983814, 0.00254571, 0.000750841, 0.00242486, 0.000531773, 0.00046396, 0.00194603, 0.000594079, 0.000570151, 0.000107258, 0.00 00760857, 0.000030357, 1.11978×10<sup>-6</sup>, 0.000298447, 0.000185189, 0.00 00166653, 0.000592626, 0.0117357, 0.0357455, 0.0268472, 0.000042673 1, 0.000356008, 0.0232783, 0.0268522, 0.000132578, 0.00281076, 0.003 63401, 0.00851474, 0.00946663, 0.00173852, 0.0000124426, 0.00059494 8, 3.9422×10<sup>-6</sup>, 0.0150412, 0.00552648, 0.0596722, 0},

<u>39<sup>n</sup> γραμμή</u>{0.00253777,0.00100604,0.00361218,0.00471576,0.0885141 ,0,0.0718499,0.0302074,0.00177492,0.00279081,0.00301366,0.0047 6115,0.00287412,0.0029391,0.00204432,0.00304458,0.000284993,0. 00689915,0.00253118,0.00212628,0.00245708,0.00368521,0.0031823 2,0.00884657,0.00228594,0.00944738,0.00252326,0.00146963,0.003 57019,0.00183697,0.0082735,0.00169074,1.01716×10<sup>-6</sup>,0.00344055,0 .00421491,0.048472,0.0220032,0.0000130611,0.00256596,0.0035011 5,0.000280017,0.0221083,0.0000746812,0.00310278,0.000375311,0. 00123801,0.00170778,0.00813617,0.00111964,0.00832422,0.0021342 6,0.00344095,0.000555195,0.000890408,0.0000331778,0.00649479,0 .00243193,0.0115237,0},

<u>40<sup>n</sup> γραμμή</u> {3.77477×10<sup>-7</sup>, 0,0.00441523,0,0,0,0,0,8.41026×10<sup>-6</sup>,0.000 0107048,0,0.0000148018,0,0.0000679104,0,0.0000388807,2.61984×1 0<sup>-7</sup>,2.05954×10<sup>-6</sup>,0,0,0.0000488418,0,8.37168×10<sup>-6</sup>,0.0000630251,0, 0.000118324,0.0000497974,0,0.00151496,8.04426×10<sup>-8</sup>,0.0000778054 ,7.35289×10<sup>-6</sup>, 1.17581×10<sup>-7</sup>,0.00003227 44,0.000120332,0.00273912, 0.00151072,7.42794×10<sup>-6</sup>,0.0112469,0.0221333,0,0.00481056,0.0000 773461, 2.31927×10<sup>-9</sup>,0.000907485,0.0000133815,0.000104069,0.000 44966,0.000124136,0.00445174,0.00091174,0.00070702,5.65344×10<sup>-6</sup> ,0.000087158,1.67641×10<sup>-6</sup>,2.2348×10<sup>-6</sup>,0.000535377,2.36126×10<sup>-6</sup>,0 },

<u>41<sup>n</sup> γραμμή</u> {2.55628×10<sup>-7</sup>, 0, 0, 0, 0, 0, 0, 0, 0.00042833, 0.000792785, 0.0 0070091, 0.00133965, 0.000854705, 0.000542337, 0.000580658, 0.00114 671, 0.0000846666, 0.00101418, 0.000728189, 0.000590876, 0.00050304 3, 0.00104038, 0.000909196, 0.00237698, 0.00069013, 0.00229846, 0.00 0518093, 0.000426446, 0.00106805, 0.000546091, 0.000553532, 0.00038 5488, 3.48329×10<sup>-6</sup>, 0.000152358, 0.0000317518, 0.00188722, 0.001070 64, 0.000183843, 0.000183221, 0.00104437, 0.00133535, 0.0110547, 0.0 0121654, 0.000832723, 0.000179466, 0.000794366, 0.000182152, 0.0014 7101, 0.00197779, 0.00109524, 0.00493691, 0.0108786, 4.35887×10<sup>-6</sup>, 8. 24106×10<sup>-6</sup>, 5. 92929×10<sup>-7</sup>, 0.00403281, 0.00122482, 0.000187742, 0},

<u>42<sup>n</sup> γραμμή</u> {2.52984×10<sup>-6</sup>, 8.63885×10<sup>-7</sup>, 0.00123003, 0, 0, 0, 0, 0.0003565 7, 0.000433605, 6.7253×10<sup>-6</sup>, 0.0000816181, 0.000112095, 0.0000147365 , 0.000274827, 0.000325269, 0.000191898, 0.00031402, 0.000197788, 0. 0000888097, 0.0000928812, 0.0000423693, 0.0001526, 0.000134632, 0.0 000548525, 0.0000302794, 0.0000942393, 0.000105404, 0.0000482699, 0 .00502402, 0.0000752784, 0.0000759254, 5.27103×10<sup>-6</sup>, 1.39974×10<sup>-7</sup>, 0. 00509276, 1.70315×10<sup>-6</sup>, 0.00176817, 0.00164326, 0.00132923, 0.024169 8, 0.0730753, 0.011699, 0.0193656, 0.00227595, 0.000158439, 0.002914 32, 9.21942×10<sup>-6</sup>, 0.0000957091, 0.00129082, 0.00226409, 0.00073546, 0 .000345544, 0, 1.493×10<sup>-9</sup>, 0.0019676, 5.10165×10<sup>-7</sup>, 6.28489×10<sup>-7</sup>, 0.00

<u>43<sup>n</sup> γραμμή</u>{0.000252598,7.83799×10<sup>-6</sup>,0.00196291,0.000126379,0.002 72468,0,0.00146093,0.00385207,0.00252339,0.00149417,0.00446469 ,0.0069452,0.00567704,0.00543356,0.00454232,0.0184426,0.000296 077,0.0042495,0.00480743,0.00443075,0.00185888,0.00552992,0.00 474523,0.0104603,0.00372185,0.00742367,0.00673539,0.00175817,0 .00292933,0.00505473,0.0038084,0.00776156,0.00173266,0.0044803 7,0.00829482,0.0327905,0.0240782,0.0102221,0.00638907,0.008183 52,0.0141495,0.0207683,0.0645886,0.0276694,0.0403877,0.037282, 0.00174538,0.0268526,0.0576091,0.0145112,0.0397816,0.0119564,0 .000440748,0.00266249,0.0000261998,0.0155333,0.0129575,0.00146 262,0},

<u>44<sup>n</sup> γραμμή</u> {0.0229269,0.0224798,0.0180203,0.0167046,0.0164257,0,0.0262058,0.0184203,0.0159038,0.0144962,0.0165871,0.0154531,0.0161636,0.0171594,0.0166253,0.0222876,0.0166855,0.0163904,0.0161907,0.0161922,0.0170883,0.0185509,0.0141445,0.0169279,0.0161388,0.0174393,0.0160867,0.00943409,0.0151204,0.0124811,0.0175925,0.0214283,0.00731498,0.0102649,0.0286018,0.0409924,0.0367343,0.0118233,0.01763,0.00227542,0.0197258,0.0163419,0.0156006,0.0344163,0.0246545,0.0327704,0.0156727,0.0165571,0.0126526,0.0212621,0.0342407,0.0247062,0.0036092,0.00687767,0.00221526,0.0367892,0.0203564,0.0156952,0},

<u>45<sup>n</sup> γραμμή</u> {0.000475101,0.000179168,0.00147721,0.0000517043,0.014 4715,0,0.00170258,0.00197104,0.00144198,0.00299654,0.00432351, 0.00225555,0.00188502,0.00264538,0.0028437,0.00290282,0.001074 22,0.00225541,0.0030393,0.00236376,0.00158396,0.00202474,0.001 97081,0.000951447,0.00197328,0.00147436,0.0012314,0.000716733, 0.00351161,0.00225475,0.00110626,0.0000179819,0.0000358554,0.0 0168667,0.000294012,0.0021877,0.00165624,0.000283147,0.0099037 5,0.0150793,0.0034458,0.00219287,0.000108591,0.0019902,0.02205 93,0.00192931,0.00018048,0.00242087,0.000129971,0.000498395,0. 000682642,0.000496586,0.000158766,0.0000360563,1.70036×10<sup>-6</sup>,0. 000809005,0.000722559,0.0000347976,0},

<u>46<sup>n</sup> γραμμή</u>{0.0000800743,0.0000300871,0,0,0,0,0,0,9.57464×10<sup>-6</sup>,9.4 6769×10<sup>-6</sup>,0,0.0000130912,0,0.0000600622,0,5.44438×10<sup>-9</sup>,2.31707×1 0<sup>-7</sup>,1.84429×10<sup>-6</sup>,0,0,0.0000432145,0,7.44088×10<sup>-6</sup>,0.0000557415,0, 0.000104788,0.0000440424,0,0.0000507921,7.11461×10<sup>-8</sup>,0.00006160 57,0.0000206976,3.30979×10<sup>-7</sup>,0.00088591,0.0042126,0.00247956,0. 00241906,0.000303912,0.0000406806,0.000709463,0.00130635,0.000 10045,0.000635402,0.000162952,0.147681,0.0523598,0.000495444,0 .00017005,5.41025×10<sup>-6</sup>,4.2175×10<sup>-6</sup>,0.00388409,0,0,3.73391×10<sup>-6</sup>,2 .73987×10<sup>-8</sup>,0.0145826,0.000260801,0.0001138,0},

<u>47<sup>n</sup> γραμμή</u> {4.3616×10<sup>-7</sup>,0,0.000479261,0.00538428,0.00271689,0,0.0 297727,0.0252978,0.00496731,0.0189648,0.0192045,0.0333522,0.01 94577,0.0259818,0.0305279,0.0345665,0.0109561,0.00602762,0.018 9702,0.0152296,0.00415081,0.0221539,0.0205363,0.0094354,0.0121 938,0.0102276,0.00975131,0.0045971,0.00428797,0.0247207,0.0044 7207,0.00401474,0.00455654,0.0138992,0.0958611,0.00426394,0.06 09491,0.0117227,0.00900795,0.00284236,0.0168066,0.0193739,0.01 45762,0.00967716,0.0474435,0.0362283,0.00419715,0.0759663,0.05 00332,0.0149019,0.0483169,0.0112615,0.000919019,0.010711,0.016 2453,0.193084,0.0352996,0.021886,0},

<u>48<sup>n</sup> γραμμή</u>{0.000560759,0.000211599,0,0.0011675,9.31427×10<sup>-6</sup>,0,0.0 01963,0.00567362,0.0000147719,0,0,0,0,0,0,2.10963×10<sup>-7</sup>,0,0,0,0, 0,0,0,0,0,0,0,0,0.000865157,0,0.000443684,0.00416824,0.030981, 0.00111605,0,2.74379×10<sup>-6</sup>,0.0000178341,0.000510791,0.015057,0. 0114245,0.0487396,0.0209522,0.0000706239,0.0105949,0.00337474, 0.000800883,0.0000646197,0.020538,0.00167715,0.0025477,0.00532 674,0,0.000202514,0.000144685,0.0116341,0.00353133,0.0168102,0 .0000355183,0},

<u>49<sup>n</sup> γραμμή</u> {0,0,0,0,0,0,0,0.000285843,0.000785254,0.000169922,0.000 0576848,0.000482576,0.000919517,0.000452382,0.000315095,0.0006 56756,0.00291616,0.0000908404,0.000188645,0.00023462,0.0009971 28,0.000328111,0.000521688,0.000746493,0.000336348,0.000582574 ,0.0000769837,0.000327197,0.000150599,0.00048003,0.000480371,0 .000202077,0.0013228,0.00072855,0.000170264,2.40628×10<sup>-7</sup>,0.0000 199016,0.000119553,0.0000128999,0.00382981,0.00517219,0.000931 901,0.00149222,0.00378543,0.00752949,0.0100827,0.0246021,0.000 07989,0.00627434,0.053773,0.00795403,0.0135165,0.00278157,0.00 0965712,0.00410155,0.0000129507,0.00144325,0.0229312,0.0002155 9,0},

<u>51<sup>n</sup> γραμμή</u>{0.00201469,0.000759232,0.00282358,0.00241289,0.005897
35,0,0.0235205,0.0315455,0.0242964,0.0951617,0.0271871,0.03194
54,0.0269519,0.0261484,0.0401024,0.0682711,0.0255876,0.0382016
,0.0133965,0.0248423,0.0214013,0.041649,0.0698538,0.0753881,0.
0231083,0.0739683,0.0190923,0.0690405,0.0974385,0.0142634,0.01
9505,0.00325285,0.000896852,0.0395872,0.0403262,0.020931,0.018
3661,0.0120686,0.0492118,0.0136762,0.0151806,0.0224654,0.00725
066,0.0701071,0.117478,0.0643954,0.00274858,0.0728493,0.111011
,0.114599,0.128131,0.0215711,0.00192329,0.0120459,0.000127267,
0.129344,0.0503049,0.00366591,0}

54<sup>n</sup> γραμμή {0.000403354,0.000152203,0,0,0,0,0,0,0.0000106254,0,0, 0,0,0,0.000373328,0,0,0,0,0,0,0,0,0,0,0,0,0,0.00001801,0,3.574 83×10<sup>-7</sup>, 8.68874×10<sup>-6</sup>, 0.0000209557, 8.46×10<sup>-6</sup>,0,0, 5.00001×10<sup>-7</sup>,1. 9281×10<sup>-7</sup>,0.00048942,0.000262976,5.80764×10<sup>-6</sup>,0.0000561177,0.00 00190179,0.00418803,0.0095834,0.000990516,0.0000898208,0.00001 78975,0.00176992,0.000459908,0.000447575,0.00667925,1.85494×10<sup>-7</sup>,0.00495263,3.48572×10<sup>-6</sup>,0.00191039,0.000505975,0.00012625,0},

<u>55<sup>n</sup> γραμμή</u> {8.30399×10<sup>-7</sup>, 0, 0, 0, 0, 0, 0, 0, 0.0000184379, 0.0000234426, 0, 0.0000324147, 0, 0.000148718, 0, 0.0000238203, 5.73722×10<sup>-7</sup>, 4.52301×10<sup>-6</sup>, 0, 0, 0.000106969, 0, 0.0000183539, 0.00013802, 0, 0.000259197, 0

.000109052,0,0.0002886,1.76162×10<sup>-7</sup>,0.000152752,0.000163678,0. 0000530629,5.32737×10<sup>-6</sup>,5.63664×10<sup>-6</sup>,0.00602968,0.00387273,0.00 128671,0.000394818,0.00421638,0,0.000472678,0.000184648,0.0081 9018,0.000162978,0.000929303,0.000301461,0.000232611,0.0017591 8,0.00161787,0.00418422,0.000360006,0.0151044,0.00280329,0.000 202797,0.000763924,0.000433297,0.000473636,0},

<u>56<sup>n</sup> γραμμή</u>{0,0,0,0.000275591,0.000387589,0,0.00125152,0.00181382 ,0.00125113,0.00138155,0.0017971,0.001765,0.00139111,0.0016510 4,0.00162551,0.00351316,0.00040528,0.00170386,0.00174501,0.001 52839,0.00067616,0.00184127,0.00171858,0.00155785,0.00148217,0 .00148353,0.00154479,0.00098458,0.000806687,0.00158102,0.00186 368,0.000905753,0.000370696,6.15823×10<sup>-7</sup>,1.77897×10<sup>-6</sup>,0.00006872 4,1.15227×10<sup>-6</sup>,3.53118×10<sup>-8</sup>,0.0000991297,0.0000441494,0,0.000094 3625,1.53859×10<sup>-7</sup>,0,2.01653×10<sup>-6</sup>,0,0.0000357961,0.00130905,0.00 0773771,0.000863947,0.00286038,0,0,0.0000399031,3.13483×10<sup>-6</sup>, 0,0.000327575,0.0000435677,0},

}

### Α.1.β Εισαγωγή μήτρας εισαγωγών M1 – Imp

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<u>1<sup>n</sup> γραμμή</u> { 0.016224,0.00612204,0.000227441,0,0,0,0,0,0.0308 855,0 .0197102,0.00579647,0.000295825,1.83851×10<sup>-7</sup>,0.00001 40661,0.00 0621423,4.86145×10<sup>-7</sup>,6.00115×10<sup>-7</sup>,0.000173493,0.0018245,1.9578 1×10<sup>-6</sup>,2.17578×10<sup>-7</sup>,7.46092×10<sup>-6</sup>,0.000090541 8,0,7.0869×10<sup>-8</sup>,0,3. 17688×10<sup>-6</sup>,1.18826×10<sup>-7</sup>,0.0000109741,0.000908282,0,2.27253×10<sup>-8</sup> ,0,3.22514×10<sup>-11</sup>,0,0.000461788,5.16888×10<sup>-6</sup>,0.00217093,0.00012 691,0.000160329,0,0.000287611,4.15012×10<sup>-6</sup>,0,6.07133×10<sup>-6</sup>,0,0. 000157474,0.000863933,0,0,4.10454×10<sup>-8</sup>,0,5.49112×10<sup>-6</sup>,0.0000130 575,0,0.000141394,0.0000185698,0.0000834369,0},

<u>2<sup>n</sup> γραμμή</u> {0, -0.0229273, 0, -0.000497046, -0.000144714, 0, -0.00016827 3, -0.000130915, -0.000190711, -0.0000141343, -0.0000246186, -0.000 108869, -0.0000348567, -0.0128345, -0.000071075, -0.000114575, -1.7 3648×10<sup>-7</sup>, -0.000241241, -0.0000378522, -0.0000317238, -0.00004746 03, -0.0000533182, -0.0000177034, -0.000 0117482, -6.2423×10<sup>-6</sup>, -6.5 6971×10<sup>-6</sup>, -0.0000178382, -6.16856×10<sup>-6</sup>, -0.0000259003, -0.00018976 5, -0.000149208, -2.27353×10<sup>-7</sup>, 0, -2.48253×10<sup>-7</sup>, -1.21979×10<sup>-8</sup>, -0.0 0001 54122, -2.67196×10<sup>-7</sup>, -0.000108766, -4.37269×10<sup>-6</sup>, 0, 0, -0.00 00106651, -1.79934×10<sup>-7</sup>, 0, 0, 0, -6.22401×10<sup>-6</sup>, -0.0000303008, 0, 0, -0.000183011, 0, -0.00438908, -2.32817×10<sup>-9</sup>, 0, -0.000030042, -9.761 41×10<sup>-7</sup>, -1.31902×10<sup>-6</sup>, 0},

<u>3<sup>n</sup> γραμμή</u> {0,0,0.00571329,0,0,0,0,0,0.0000868286,0,1.20564 ×10<sup>-6</sup> ,0,5.44711×10<sup>-10</sup>,2.97723×10<sup>-6</sup>,1.44559×10<sup>-6</sup>,6.56135×10<sup>-10</sup>,0,3.087 1×10<sup>-7</sup>,8.11237×10<sup>-6</sup>,2.15392×10<sup>-8</sup>,1.57914×10<sup>-8</sup>,9.42151×10<sup>-7</sup>,5.599 47×10<sup>-7</sup>,0,1.79088×10<sup>-8</sup>,0,7.48251×10<sup>-7</sup>,3.00277×10<sup>-8</sup>,2.03681×10<sup>-6</sup>,0 .000225952,0,0,0,8.06158×10<sup>-13</sup>,0,1.61913×10<sup>-6</sup>,9.88135×10<sup>-7</sup>,0.00 0396125,4.42042×10<sup>-7</sup>,0.0000297572,0,4.56582×10<sup>-6</sup>,7.59014×10<sup>-7</sup>,0, 1.12657×10<sup>-6</sup>,0,2.45×10<sup>-6</sup>,6.75737×10<sup>-6</sup>,0,0,1.00527×10<sup>-9</sup>,0,0,4.49 996×10<sup>-7</sup>,0,6.40077×10<sup>-6</sup>,3.37844×10<sup>-6</sup>,4.80379×10<sup>-6</sup>,0},

<u>4<sup>η</sup> γραμμή</u> {0,0,0,0.000230879,0,0,0,7.77329×10<sup>-6</sup>,0,4.00837×10<sup>-8</sup>,0 ,0,3.33624×10<sup>-8</sup>,1.24747×10<sup>-7</sup>,0,2.72999×10<sup>-7</sup>,3.41809×10<sup>-7</sup>,3.98276 ×10<sup>-6</sup>,0.0000649265,0.000277313,0.0000150358,2.10453×10<sup>-6</sup>,0,0,0, 0,0,3.82603×10<sup>-8</sup>,0,0.0000192116,0.00773008,0,1.03547×10<sup>-7</sup>,0,4. 637 76×10<sup>-7</sup>,0,0,3.0245×10<sup>-7</sup>,0,0,6.82311×10<sup>-7</sup>,0,0,0,0,0.00003147 47,0.00030822,0,0,7.35537×10<sup>-11</sup>,0,0,0,0,0,2.03211×10<sup>-8</sup>,0,0},

<u>5<sup>n</sup> γραμμή</u> {0,0,0,0,0,0,0,0,0,0.00179379,0.00155499,0.0155395,0.010 6627,0.00335517,0.00326413,0.00290213,0.00211399,0.62618,0.008 58176,0.00383301,0.00420902,0.0209154,0.00826405,0.0302484,0.0 0441191,0.0170696,0.0154378,0.0014765,0.0399221,0.0777704,0.00 465257,0,0.00977852,0,0,0.0000790891,0.00491761,3.22944×10<sup>-6</sup>,0 ,0.000318181,0,0,0.000670898,0,0,0,0.000407512,0.00250091,0, 0,0,0,0,0,0,0,0,0,0,0},

<u>8<sup>n</sup> γραμμή</u> {0.0000488987,0.0000184516,0,0,0,0,0,0.00441712,0.00003 87582,0,3.52444×10<sup>-6</sup>,5.774×10<sup>-8</sup>,5.6188×10<sup>-6</sup>,0.0000295003,0.00015 0251,5.21391×10<sup>-7</sup>,1.79681×10<sup>-7</sup>,0.000903406,0.000196211,0.0179776 ,0.0000481867,0.0000343069,0.000160407,0,3.98647×10<sup>-6</sup>,3.32466×1 0<sup>-9</sup>,2.63179×10<sup>-6</sup>,2.36607×10<sup>-6</sup>,2.01167×10<sup>-9</sup>,6.91138×10<sup>-7</sup>,0.0001820 38, 6.8494×10<sup>-7</sup>,0,0.00360693,4.18037×10<sup>-9</sup>,0.0000413416,1.94344×1 0<sup>-7</sup>,0.0000968435,0.0000219787,0,0,0.0000635213,1.6021×10<sup>-7</sup>,0,0, 0,0.0000276727,0.000155002,0,0,9.43973×10<sup>-11</sup>,0,2.26394×10<sup>-8</sup>,0,0 ,0,7.77171×10<sup>-7</sup>, 1.17443×10<sup>-6</sup>,0},

<u>9<sup>n</sup> γραμμή</u> {0.00458546,0.0017303,0.00122827,0,0,0,0,0,0,0.0148748,3. 18015×10<sup>-6</sup>,0.000301175,4.77464×10<sup>-6</sup>,0.00346647,0.0000173682,0.00 0647953,0.0000289838,6.23451×10<sup>-7</sup>,0.000673597,0.000781643,0.000 0169736,1.18036×10<sup>-6</sup>,1.61367×10<sup>-6</sup>,0.0000434 419,5.22257×10<sup>-7</sup>,6.85 83×10<sup>-9</sup>,9.79136×10<sup>-7</sup>,2.67631×10<sup>-6</sup>,1.149 93×10<sup>-8</sup>,0.000124294,0.000 0874987,5.78692×10<sup>-7</sup>,3.18692×10<sup>-7</sup>,0,4.70521×10<sup>-7</sup>,2.13287×10<sup>-8</sup>,0.0 00240714,0.0000475598,0.0218019,0.0000630749,0.0018159,0,0.000 33558,0.0000423952,0,0.000155552,4.07533×10<sup>-6</sup>,0.000183503,0.000 901706,0,3.09006×10<sup>-7</sup>,0.000147339,0.000445513,0.0000555988,0.0 <u>10<sup>n</sup> γραμμή</u> {0,0,0,0,0,0,0,0,0,0.00332969,0,0,0,0,0,2.40716×10<sup>-8</sup>,0 ,0,0,0,0,0,0,0,0,0,0,0,3.48032×10<sup>-7</sup>,0,0,0,0,1.22597×10<sup>-11</sup>,0,1.3 2265×10<sup>-6</sup>, 6.01597×10<sup>-9</sup>, 1.07502×10<sup>-9</sup>, 3.50961×10<sup>-7</sup>,5.08466×10<sup>-6</sup>,0, 9.00762×10<sup>-7</sup>, 1.77207×10<sup>-8</sup>, 0,1.93129×10<sup>-7</sup>,0, 4.22496×10<sup>-7</sup>,2.35521 ×10<sup>-6</sup>,0,0,1.0776×10<sup>-7</sup>,0,0.0000211439,0.000016509,0,0,7.73325×10 <sup>-8</sup>,0,0},

<u>11<sup>n</sup> γραμμή</u>{0.000323508,0.000121934,0.0133986,0,0,0,6.44133×10<sup>-8</sup>, 0.000100178,0.00074131,0.00770125,0.0593902,0.0957044,0.018528 1,0.000412247,0.00266412,0.000235251,9.64707×10<sup>-6</sup>,0.0021751**3**,0. 00354995,0.00065366,0.000436626,0.00682272,0.000224976,0.00005 90374,0.000107952,0.000128666,0.000166585,0.0000958741,0.00016 1149,0.0169984,0.0000604222,1.6256×10<sup>-6</sup>,1.14996×10<sup>-6</sup>,0.00002508 14,0.00042343,0.00323315,0.0118809,0.00598503,0.0000912632,0.0 00305369,0,0.000243488,0.0000109653,0,0.0000115605,0,0.0004349 48,0.000681762,8.37485×10<sup>-6</sup>,4.81919×10<sup>-7</sup>,0.000211871,0,0.000019 6516,0.00006 43651,2.23452×10<sup>-7</sup>,0.0000761737,0.000376928,0.0001

<u>12<sup>n</sup> γραμμή</u> {2.19765×10<sup>-8</sup>, 0, 5.99447×10<sup>-6</sup>, 0, 0, 0, 0, 0, 4.87923×10<sup>-7</sup>, 6.2 0348×10<sup>-7</sup>, 0.000128357, 0.0180158, 0, 3.93543×10<sup>-6</sup>, 0, 0.0000338475, 1.51821×10<sup>-8</sup>, 1.19697×10<sup>-7</sup>, 0, 0, 2.83066×10<sup>-6</sup>, 0, 4.856 99×10<sup>-7</sup>, 3.6523 3×10<sup>-6</sup>, 0, 6.85903×10<sup>-6</sup>, 2.88577×10<sup>-6</sup>, 0, 0.0000130 492, 4.66168×10<sup>-9</sup>, 4 .03508×10<sup>-6</sup>, 0.0000390493, 0.00187926, 7.593 45×10<sup>-7</sup>, 0.0000317444, 0 .000217377, 0.00010349, 0.00036749, 8.60545×10<sup>-6</sup>, 0.000181943, 0.00 0348763, 0.0000512723, 1.37006×10<sup>-6</sup>, 0.0000452556, 6.92836×10<sup>-6</sup>, 2.8 6744×10<sup>-6</sup>, 0.000024042, 0.0000699731, 0.0000117744, 0.0000417223, 0. 000250702, 0.000610258, 0.0000667438, 0.000272763, 0.00702872, 0.00 00544766, 0.000380533, 0.0000834419, 0},

<u>13<sup>n</sup> γραμμή</u> {0.0000555406,0.0000209579,0,0,0,0,0,0,0,1.50051×10<sup>-6</sup>,0, 0.0000147595,0.00204539,0.104986,0.000014504,7.11033×10<sup>-6</sup>,0.0 00400742,8.75419×10<sup>-9</sup>,0.0000520282,1.14876×10<sup>-6</sup>,1.37991×10<sup>-8</sup>,6. 27502×10<sup>-8</sup>, 3.89481×10<sup>-7</sup>,8.40516×10<sup>-6</sup>,0,3.72128×10<sup>-9</sup>,4.57832×10<sup>-10</sup>, 0.0000467097,0.000177711,2.95087×10<sup>-6</sup>,0.0000470698,3.509×10<sup>-10</sup>, 6.08767×10<sup>-6</sup>,0,1.45571×10<sup>-9</sup>,0.000010058,0.0000367605,3.66695×10 <sup>-6</sup>,9.23862×10<sup>-9</sup>,9.52383×10<sup>-6</sup>,0.0000431114,0,0.0000206141,1.50249 ×10<sup>-7</sup>,0,1.63897×10<sup>-6</sup>,0,0.00 00107572,0.0000605081,1.20898×10<sup>-6</sup>,8 .49519×10<sup>-6</sup>,0.000141352,0,9.48927×10<sup>-7</sup>,0.0000903434,3.67352×10<sup>-8</sup> ,0.0000171774,0.00012066,0.0000524323,0},

<u>14<sup>n</sup> γραμμή</u> {0,0,0.0015833,0,0,0,0.000069572,0.000380605,0.0025057 1,0.00316531,0.00093195,0.000254589,0.000405013,0.111007,0.000 720455,0.000116255,0.0000317504,0.00455535,0.00102124,0.000662 688,0.0000854054,0.000779763,0.000974561,0.0000284569,0.00085 1897,0.0000598292,0.00114081,0.000278635,0.000251033,0.0594966 ,0.0000198647,0.000122678,0,0.00132112,4.56945×10<sup>-7</sup>,0.000250515 ,0.0000549701,0.00666626,0.0000730021,0.0000750294,0.000016544 6,0.00037011,0.0000181899,7.63517×10<sup>-8</sup>,0.0000168188,5.8045×10<sup>-7</sup>, 0.000115818,0.00 0539959,9.00373×10<sup>-6</sup>,4.58427×10<sup>-6</sup>,0.000489332,0 ,0,5.22917×10<sup>-6</sup>,5.22711×10<sup>-8</sup>,7.7722×10<sup>-7</sup>,0.000343827,0.00392626 ,0},

<u>15<sup>n</sup> γραμμή</u>{0.000671623,0.0000249081,0.00203737,0.00235186,0.000 684738,0,0.000796416,0.000939088,0.00378203,0.0195731,0.001029 16,0.000817912,0.00418603,**0**.00643934,0.172597,0.0929797,0.0034 4924,0.00667679,0.00396995,0.00170164,0.000926756,0.000568499, 0.00044901,0.000339877,0.000989964,0.00046818,0.000534622,0.00 0089388,0.000260062,0.000506374,0.0012402,0.0000441778,6.5038× 10<sup>-6</sup>,0.0000843987,0.00215456,0.00874233,0.00408258,0.0107649,0 .000849778,0.00064915,0.00131326,0.00323167,0.0012859,0.000014 006,0.00371298,0.00215883,0.000581002,0.00178181,0.0180697,0.0 00431677,0.00419746,0.000372512,6.94893×10<sup>-9</sup>,0.0000399926,2.43 698×10<sup>-7</sup>,0.00120099,0.000537667,0.000322255,0},

<u>16<sup>n</sup> γραμμή</u> {6.21576×10<sup>-7</sup>, 2.30603×10<sup>-7</sup>, 0, 0.000198982, 0.0000579331, 0 ,0.0000673643, 0.0000524089, 0.000101054, 0.000327414, 0.000060916 2, 0.0000617042, 0.000085666, 0.0000821708, 0.0000849378, 0.0007213 28, 6.53247×10<sup>-6</sup>, 0.000333285, 0.0000641393, 0.000117926, 0.00004114 12, 0.0000389636, 0.0000188867, 0.0000128599, 0.0000131429, 0.00001 08059, 0.000023413, 4.8464×10<sup>-6</sup>, 0.0000319085, 0.000020575, 0.000090 1084, 0.0000159736, 3.05017×10<sup>-6</sup>, 0.000136904, 5.46669×10<sup>-6</sup>, 0.00008 08152, 0.0000331711, 0.000218674, 0.0000801188, 0.000181024, 0.0002 88398, 0.0000333932, 0.0000126555, 0.000361696, 0.000299947, 0.0002 89959, 0.0000107461, 0.000818435, 0.00271322, 0.00252614, 0.0014088 9, 0.000307602, 0.000294066, 0.0000698248, 1.66229×10<sup>-7</sup>, 0.00245898 , 0.000818217, 0.000023392, 0},

<u>17<sup>n</sup> γραμμή</u>{0.00936998,0.00356373,0.0159145,0.0102181,0.00435395, 0,0.0118506,0.0193192,0.00201041,0.00136877,0.00103493,0.00040 1023,0.00718205,0.00501805,0.00253358,0.00252513,0.0185457,0.0 0149065,0.0019989,0.00590998,0.00538528,0.00307857,0.00212035, 0.000965326,0.00159979,0.00109524,0.00125578,0.000676721,0.002 30874,0.00121202,0.0074191,0.012989,0.00651776,0.00654768,0.00 0204617,0.00378022,0.00166637,0.0022991,0.031495,0.0133105,0.0 16493,0.00773352,0.00164862,0.00108243,0.000793542,0.00114508, 0.000270016,0.00307024,0.000596763,0.00085005,0.00236058,0.001 35887,0.00014977,0.00438247,0.00620743,0.00273872,0.000959303, 0.00019384,0}, <u>18<sup>n</sup> γραμμή</u>{0.0225519,0.00852387,0.00044009,0.0247191,0.00719692, 0,0.0236842,0.0168971,0.00844065,0.00100072,0.0466481,0.001893 94,0.0150493,0.0232554,0.036953,0.0185304,0.0136296,0.234318,0 .156734,0.00893074,0.0103265,0.0248731,0.0119726,0.0190237,0.0 333189,0.00369895,0.0967657,0.150589,0.00685031,0.0137972,0.00 53497,0.0000439407,0.00129966,0.0013363,0.00432021,0.024952,0. 00419932,0.0124963,0.00117667,0.00210498,0.000281901,0.0018822 1,0.0000724575,0.000811907,0.00174283,0.000129769,0.00163075,0 .00485354,0,0.00476751,0.00513268,0.00521594,0.00061036,0.0702 28,0.0104127,0.00704069,0.00840357,0.00430787,0},

<u>19<sup>n</sup> γραμμή</u> {0.000690686,0.000260414, 8.83896×10<sup>-6</sup>,0.00306311,0.000 891817,0,0.00103817,0.00262709,0.00319019,0.00270733,0.0022453 5,0.000860486,0.00679719,0.00382542,0.00442534,0.00241187,0.00 00271953,0.00294729,0.0146502,0.000751405,0.000435255,0.002610 18,0.0037298,0.00635448,0.00552196,0.00319288,0.00340977,0.000 932845,0.000399569,0.00518858,0.00103917,0.0000734257,0.000100 401,0.00759516,0.000491849,0.00424623,0.00306895,0.000975197,0 .00157246,0.000385236,0.000907922,0.000543606,0.000171633,1.5 7207×10<sup>-7</sup>,0.0000173249,0.000047033,0.000212845,0.00180476,0.000 230265,0.0000881601,0.000251669,0,0.0000274511,0.0000752657,8. 06599×10<sup>-6</sup>,0.0000116132,0.000151528,0.003444,0},

<u>20<sup>n</sup> γραμμή</u>{8.90412×10<sup>-13</sup>,0,0,0,0,0,0,0,0.000648377,0.000809317,0. 000129651,0.0000644774,0.000103099,0.000185692,0.000155058,0.0 000250915,0.0000103885,0.00112599,0.000688395,0.0190992,0.0001 70023,0.000182597,0.000989188,0.000410448,0.00204023,0.0000654 441,0.00434313,0.00043354,0.000451569,0.000383903,1.91555×10<sup>-7</sup> ,0.0000142577,4.31537×10<sup>-6</sup>,0.0176238,6.93418×10<sup>-7</sup>,0.0000837304, 1.32045×10<sup>-6</sup>,0.000424468,0.0000912394,0.0000453866,0.000057072, 0.0000791676,8.60349×10<sup>-7</sup>,0,1.80141×10<sup>-6</sup>,6.85532×10<sup>-11</sup>,0.0000349 472,0.000204768,0,9.506×10<sup>-6</sup>,0.0000163744,0,3.84361×10<sup>-6</sup>,0.000 390979,1.46594×10<sup>-6</sup>,4.25383×10<sup>-6</sup>,0.000212838,0.0000308177,0},

<u>21<sup>n</sup> γραμμή</u>{0,0,0,0,0,0,0,0,0.00219474,0.00277205,0.0327043,0.000 219326,0.000376284,0.00177774,0.00101942,0.000791478,0.0000276 266,0.00321504,0.0152203,0.00331477,0.249009,0.15438,0.0525886 ,0.0194275,0.118037,0.0178593,0.0103513,0.0296927,0.0598879,0. 00771642,0.197702,0.000142838,0.0000442174,0.0147807,0.0044187 1,0.00114518,5.53242×10<sup>-6</sup>,2.54161×10<sup>-8</sup>,0.000363386,0.000122873, 0,0.000757996,4.28226×10<sup>-7</sup>,0,4.65165×10<sup>-6</sup>,0,0.000459527,0.00238 654,0,4.3848×10<sup>-8</sup>,2.50448×10<sup>-6</sup>,0,0.0000157835,7.46926×10<sup>-6</sup>,0.000 0650571,6.57307×10<sup>-7</sup>,0.000671428,0,0}, 22<sup>n</sup> γραμμή {0.0000596074,0.0018191,0,0.00045099,0.000131305,0,0.0 0015268,0.000118784,0.00185817,0.00225305,0.00234189,0.0004932 15,0.00138089,0.000816188,0.000966829,0.00115497,0.0000224089, 0.00234348,0.00224173,0.000658815,0.000855666,0.00848499,0.001 8767,0.0019629,0.00307174,0.000615797,0.000414033,0.000511358, 0.00294804,0.00136933,0.000729085,0.000183954,0.000392096,0.01 3215,0.0000485917,0.000112007,0.0000308032,0.000710964,0.00015 9208,0.000650864,0.0000199319,0.0000978585,0.0000111761,8.5549 9×10<sup>-8</sup>,0.0000248353,2.83954×10<sup>-6</sup>,0.0000578596,0.000213356,0.000 24485,0.0000103268,0.000785041,0.000209432,0.00340004,0.000022 8551,0.00247049,0.000204613,0.000130074,0.000103859,0},

<u>23<sup>n</sup> γραμμή</u>{0.00508874,0.0019202,0,0.0236734,0.0836445,0,0.025387 6,0.0298659,0.00208821,0.00280157,0.00418543,0.00214392,0.0022 2235,0.0103859,0.0039291,0.00854366,0.000287653,0.00343929,0.0 0565562,0.0149272,0.00537002,0.00681879,0.118652,0.000176418,0 .00366416,0.00186532,0.00106576,0.006026,0.014146,0.00224953,0 .00796171,0.00886004,0.0387197,0.00536058,0.000320119,0.000570 347,0.0000479029,0.00170305,0.00175999,0.00101563,0.00567855,0 .00226235,0.000455384,4.96833×10<sup>-6</sup>,0.0000496107,1.63779×10<sup>-10</sup>,0. 000666591,0.0038561,0.000136093,0.0000444694,0.00153887,0.0458 697,0.0000415565,0.0000287417,0.0114996,0.00195628,0.000283585 ,0.000369487,0},

<u>24<sup>n</sup> γραμμή</u>{0,0,0,0,0,0,0,0,0,000229571,0.000351052,0.000465023,0 .000268552,0.000278387,0.000382175,0.000474312,0.000789572,0.0 000360393,0.000356679,0.000525704,0.00177849,0.000626205,0.000 381186,0.0000689599,0.0106887,0.0000420124,0.0000354286,0.0000 275515,0.000101133,0.000206194,0.000254513,0.000432177,5.10747 ×10<sup>-6</sup>,6.3165×10<sup>-7</sup>,0.0000371037,1.96×10<sup>-7</sup>,0.0000172694,3.56143×10 <sup>-6</sup>,0.00030033,0.000378457,0.000158846,0.000468241,0.000325584,0 .0000860755,9.40774×10<sup>-7</sup>,8.3842×10<sup>-6</sup>,0.00144701,0.0000144991,0.0 0196959,0.00791798,0.000494346,0.0000738328,0.000622026,0.0003 96978,0.0000148525,1.01952×10<sup>-7</sup>,0.000410878,0.000112625,0.0001 33455,0},

<u>25<sup>n</sup> γραμμή</u> { 6.19802×10<sup>-10</sup>, 0, 0, 0.00253833, 0.00073903, 0, 0.000859341, 0.00066856, 0.000529796, 0.000810033, 0.00116742, 0.000619668, 0.00 0642401, 0.000902748, 0.00109821, 0.00174479, 0.0000831586, 0.00088 2158, 0.00172532, 0.00416341, 0.00146418, 0.00149093, 0.00784295, 0. 000942179, 0.0378607, 0.00138168, 0.000736489, 0.00227158, 0.002104 28, 0.000788614, 0.023677, 0.00285341, 0.01259, 0.0208093, 1.56316×1 0<sup>-6</sup>, 0.000138377, 0.000112898, 0.000985889, 0.00187364, 0.000684494, 0.0069807, 0.00184115, 0.000286729, 3.12813×10<sup>-6</sup>, 0.0000371957, 8.55 527×10<sup>-8</sup>, 0.0000623212, 0.000553439, 0.00199779, 0.00010186, 0.00028

6974,0,0.0000798528,0.000119482,3.74646×10<sup>-7</sup>,0.0000477543,0.00 315438,0.0000632103,0},

26<sup>n</sup> γραμμή {2.41302×10<sup>-8</sup>,0,0,0,0,0,0,0,1.29634×10<sup>-7</sup>,0,6.85646×10<sup>-6</sup>,0,0,5.4207×10<sup>-6</sup>,0,0.000116335,0,6.72587×10<sup>-6</sup>,0.0000172441,7.26415×10<sup>-6</sup>,1.67767×10<sup>-6</sup>,0.000117011,0.00155815,0.0679762,0.00287404,0.0856755,0.000414051,0.0000940014,3.69165×10<sup>-6</sup>,0.000410888,0.0000865646,0.0000507877,0.0000292501,0.00220186,0,0.000335916,0.0042313,0.0000843566,0.000172949,0.000051799,0.0000807479,0.000243821,0.010449,0.00011561,3.16436×10<sup>-6</sup>,6.89991×10<sup>-8</sup>,0.000133392,0.000362516,0.00192954,0.000140714,0.00241203,0,9.63665×10<sup>-9</sup>,0.0000119236,4.08629×10<sup>-7</sup>,2.68682×10<sup>-6</sup>,0.00218807,0.0000240444,0},

 $\frac{27^{n} v p α μ μ μ}{27^{n} 9 6 \cdot 15798 \times 10^{-7}, 4 \cdot 79957 \times 10^{-7}, 0 \cdot 00033033, 0, 4 \cdot 83218 \times 10^{-6}, 0 \cdot 00004}{73014, 5 \cdot 8573 \times 10^{-6}, 2 \cdot 59162 \times 10^{-6}, 0 \cdot 0000759556, 0 \cdot 00158017, 1 \cdot 46889 \times 10^{-6}, 0 \cdot 000213786, 0 \cdot 000608258, 0 \cdot 114717, 0 \cdot 00011 8487, 0 \cdot 0048277, 0 \cdot 000356631, 0 \cdot 000236657, 0 \cdot 0000765736, 0 \cdot 0000484052, 0 \cdot 000384641, 4 \cdot 90063 \times 10^{-7}, 0 \cdot 0000545485, 4 \cdot 18404 \times 10^{-6}, 0 \cdot 000175825, 0 \cdot 0000606945, 0 \cdot 000139066, 0 \cdot 00696198, 0 \cdot 000649125, 0 \cdot 000105811, 1 \cdot 16218 \times 10^{-6}, 6 \cdot 964 07 \times 10^{-6}, 1 \cdot 18406 \times 10^{-9}, 0 \cdot 0000888659, 0 \cdot 000106858, 0 \cdot 000146165, 0 \cdot 005 23841, 0 \cdot 000804754, 0 \cdot 00482883, 0 \cdot 0000109282, 0 \cdot 0450227, 1 \cdot 8437 \times 10^{-6}, 0 \cdot 0000695324, 0 \cdot 000992541, 0 \cdot 0000139972, 0 \}$ 

 $\frac{28^{n} v \rho \alpha \mu \mu n}{(0, 0.0000265813, 0, 0.000473736, 0.0021181, 0, 0.000508039, 0.000837565, 0.00126285, 0.00073464, 0.000633961, 0.0010988, 0.000795104, 0.00166492, 0.00094915, 0.00307488, 7.58715×10<sup>-7</sup>, 0.00112992, 0.00219037, 0.0068922, 0.00016744, 0.00142819, 0.000900372, 0.000888053, 0.00718812, 0.000142274, 0.000893091, 0.0569335, 0.000361749, 0.0014882, 0.00256628, 3.39404×10<sup>-7</sup>, 0.00440595, 0.0000339448, 0.0257627, 0.0000645821, 4.5168×10<sup>-6</sup>, 8.05271×10<sup>-7</sup>, 0.00378552, 0.000028146, 0.00318441, 0.00139526, 0.000107279, 1.18592×10<sup>-6</sup>, 8.94243×10<sup>-6</sup>, 1.34579×10<sup>-11</sup>, 0.000476823, 0.00498017, 3.15181×10<sup>-6</sup>, 3.47402×10<sup>-6</sup>, 0.000634236, 0.0192869, 0.000095643, 0.000123474, 0.0180997, 0.00617321, 0.000548041, 8.99281×10<sup>-6</sup>, 0.$ 

<u>29<sup>n</sup> γραμμή</u> {0,0,0.00718659,0.00111263,0.00497464,0,0.0011932,0.00 196713,0,0,0,0,0,0,0,2.1191×10<sup>-8</sup>,0.000283539,1.3352 6×10<sup>-7</sup>,0,0,6 .77576×10<sup>-7</sup>,0.0000329121,0.0000296171,0,0,0.00 459614,0,0.00342 221,0.0379482,6.29047×10<sup>-8</sup>,0.00023578,0,0,0.000133436,0.001183 65,3.73781×10<sup>-6</sup>,0.0000275007,4.8317 7×10<sup>-6</sup>,0.000655983,0.0216847 ,0.012603,0.00148523,0.000108 22,3.61212×10<sup>-7</sup>,0.000823171,0,0.0 000201025,0.00112807,7.40243×10<sup>-7</sup>,0,3.02456×10<sup>-6</sup>,0,0,0.00001453 34,4.99833×10<sup>-9</sup>,0.0000102817,0.0000918196,8.0259×10<sup>-6</sup>,0},

<u>30<sup>n</sup> γραμμή</u> {9.45061×10<sup>-8</sup>, 8.61434×10<sup>-6</sup>, 0, 0.000347365, 0.000101134, 0, 0.000117599, 0.0000914908, 0.000173831, 0.000100307, 0.00047574, 0. 00279052, 0.000557504, 0.000350872, 0.000223085, 0.000798571, 1.017 3×10<sup>-6</sup>, 0.000189796, 0.000234719, 0.000127005, 0.000350884, 0.000657 499, 0.000147495, 0.0000968174, 0.0000430272, 0.0000880005, 0.00018 0548, 0.000111915, 0.000301072, 0.01654, 0.0107108, 0.0000561371, 5. 47112×10<sup>-6</sup>, 0.0003319, 0.000018311, 0.000732226, 0.000524435, 0.001 99912, 0.000327419, 0.000277179, 0.000323888, 0.00127339, 0.0005974 51, 0.00158641, 0.00002152, 0.000451302, 0.0000544756, 0.000199941, 0.000132289, 0.00153621, 0.000692533, 0.000124663, 0.000191757, 0.0 00520287, 2.67454×10<sup>-6</sup>, 0.00156677, 0.0015429, 0.000483364, 0},

32<sup>n</sup> γραμμή {0.000189682,0.0000720815,3.54045×10<sup>-6</sup>,0.00247314,0.001 34984,0,0.000361841,0.00105615,0.000374674,0.000187708,0.00101 615,0.00034379,0.000395156,0.000561655,0.000903927,0.000545301 ,0.00016513,0.000406219,0.000982667,0.00140985,0.00176574,0.00 0523018,0.000265041,0.000246752,0.000363559,0.000251719,0.0002 96424,0.000155243,0.000512397,0.000201302,0.00101996,0.0017578 3,0.000889146,0.0000459087,0.000813351,0.00038047,0.000219094, 0.000595882,0.00018584,0.0000591217,0.000133743,0.000391573,0. 000192087,0.0000946945,0.0000358406,0.0000633904,0.0000436021, 0.000306059,0.000216034,0.000246491,0.000187437,0.000123938,0. 0000198943,0.000158223,0.000325519,0.000154484,0.000245538,0.0 00130658,0},

<u>34<sup>n</sup> γραμμή</u>{0.000013024,0.0000127966,0,0.000564587,0.0000506871,0 ,0.0002571,0.000256163,0.0000643883,0.0000861731,0.0000865866, 0.000050963,0.000535953,0.000524453,0.000112191,0.000117454,0. 0000311623,0.000109431,0.0000945051,0.000141636,0.000130084,0. 0000628836,0.0000129299,9.17214×10<sup>-6</sup>,0.0000200762,0.0000113789, 8.39184×10<sup>-6</sup>,0.0000335271,0.0000411859,0.0000546138,0.00017736 7,0.0000466829,0.0000646066,1.52557×10<sup>-6</sup>,4.36311×10<sup>-6</sup>,0.0000671 351,0.0000419428,0.000731738,2.80865×10<sup>-6</sup>,0.0000425146,0.0000 634805,0.000103706,0.0000192267,0.0000686776,0.000507835,0.000 189146,0.000971521,0.0000198924,7.22484×10<sup>-6</sup>,0.000208638,0.000 154117,0.000236992,0.0000350515,0.0000958942,8.94709×10<sup>-7</sup>,0.00 0 65 7411,0.000246584,4.00342×10<sup>-6</sup>,0},

<u>38<sup>n</sup> γραμμή</u> {1.3×10<sup>-8</sup>, 6.41062×10<sup>-6</sup>, 0, 0.0000122387, 0.00028089, 0, 0.00 00379373, 0.0000350582, 0.000164919, 0.00030636, 0.000273027, 0.000 518441, 0.000332935, 0.000195684, 0.000226185, 0.000248833, 0.00003 29203, 0.000394584, 0.000283653, 0.000230165, 0.000184751, 0.000405 261, 0.000352241, 0.000911457, 0.000268828, 0.000868188, 0.00019039 4, 0.000166114, 0.000696748, 0.000212702, 0.000204134, 0.0000384021 ,0.0000272414, 0.0000108689, 4.00923×10<sup>-7</sup>, 0.000106855, 0.00006630 42, 5.96679×10<sup>-6</sup>, 0.000212181, 0.00420181, 0.0127982, 0.00961227, 0.0 000152785, 0.000127464, 0.00833448, 0.00961405, 0.0000474675, 0.001 00635, 0.00130111, 0.00304858, 0.00338939, 0.000622451, 4.45491×10<sup>-6</sup> ,0.00 0213013, 1.41145×10<sup>-6</sup>, 0.0053853, 0.00197868, 0.0213648, 0},

#### <u>39<sup>η</sup> γραμμή</u> {0.0000677356,

0.0000268521,0.0000964124,0.000125868,0.

00236253,0,0.00191775,0.000806266,0.0000473743,0.0000744894,0. 0000804376,0.00012708,0.000076713,0.0000784474,0.0000545649,0. 0000812628,7.60673×10<sup>-6</sup>,0.000184145,0.0000675596,0.0000567524, 0.0000655819,0.0000983618,0.0000849391,0.000236124,0.000061014,0.00025216,0.0000673481,0.0000392258,0.0000952917,0.000049030 5,0.000220828,0.0000451274,2.71489×10<sup>-8</sup>,0.0000918317,0.0001125,0.00129377,0.000587287,3.48613×10<sup>-7</sup>,0.0000684879,0.000093449, 7.47391×10<sup>-6</sup>,0.000590091,1.99331×10<sup>-6</sup>,0.0000828163,0.0000100174,0.0000330437,0.0000455824,0.000217162,0.0000298843,0.00022218 2,0.0000569654,0.0000918423,0.0000148187,0.0000237658,8.85547× 10<sup>-7</sup>,0.000173352,0.0000649105,0.00030758,0},

<u>40<sup>η</sup> γραμμή</u> {8.46776×10<sup>-8</sup>,0,0.000990449,0,0,0,0,0,1.88663×10<sup>-6</sup>, 2.40 136×10<sup>-6</sup>,0,3.32043×10<sup>-6</sup>,0,0.000015234,0,8.72193×10<sup>-6</sup>,5.87697×10 <sup>-8</sup>,4.62008×10<sup>-7</sup>,0,0,0.0000109564,0,1.87798×10<sup>-6</sup>,0.0000141381,0,0 .0000265431,0.0000111708,0,0.000339843,1.80453×10<sup>-8</sup>,0.000017453 7,1.64944×10<sup>-6</sup>,2.63764×10<sup>-8</sup>,7.23997×10<sup>-6</sup>,0.0000269936,0.00061445 4,0.000338893,1.66627×10<sup>-6</sup>,0.00252296,0.00496506,0,0.00107913, 0.0000173507,5.20271×10<sup>-10</sup>,0.000203572,3.00181×10<sup>-6</sup>,0.000023345 3,0.00010087,0.000027847,0.000998639,0.000204526,0.000158603, 1.26821×10<sup>-6</sup>,0.0000195518,3.76061×10<sup>-7</sup>,5.01321×10<sup>-7</sup>,0.000120099, 5.29691×10<sup>-7</sup>,0},

<u>41<sup>n</sup> γραμμή</u>{1.44912×10<sup>-7</sup>,0,0,0,0,0,0,0,0.000242814,0.000449418,0.0 00397336,0.000759427,0.00048452,0.000307443,0.000329167,0.0006 50055,0.0000479963,0.000574924,0.0004128,0.000334959,0.0002851 68,0.000589775,0.00051541,0.00134748,0.000391225,0.00130296,0. 000293699,0.000241746,0.000605459,0.000309571,0.000313789,0.00 0218528,1.97463×10<sup>-6</sup>,0.0000863698,0.0000179996,0.00106984,0.00 0606931,0.000104218,0.000103866,0.000592035,0.000756988,0.0062 6672,0.00068964,0.000472059,0.000101737,0.000450315,0.00010325 9,0.000833892,0.00112118,0.000620876,0.00279866,0.00616693,2.4 7098×10<sup>-6</sup>,4.67174×10<sup>-6</sup>,3.36123×10<sup>-7</sup>,0.00228614,0.000694334,0.000

<u>42<sup>n</sup> γραμμή</u> {7.57325×10<sup>-6</sup>, 2.58611×10<sup>-6</sup>, 0.00368218, 0, 0, 0, 0, 0.0010674 2, 0.00129803, 0.0000201327, 0.00024433, 0.000335565, 0.000044115, 0 .000822717, 0.000973718, 0.000574462, 0.000940044, 0.000592094, 0.0 00265859, 0.000278047, 0.000126836, 0.00045682, 0.00040303, 0.00016 4205, 0.0000906436, 0.000282112, 0.000315536, 0.0001445, 0.0150398, 0.000225351, 0.000227289, 0.0000157792, 4.19023×10<sup>-7</sup>, 0.0152456, 5.0 9852×10<sup>-6</sup>, 0.00529315, 0.00491923, 0.00397914, 0.0723542, 0.218757, 0 .0350219, 0.0579723, 0.00681323, 0.000474298, 0.00872424, 0.0000275 99, 0.000286512, 0.00386417, 0.00677774, 0.00220166, 0.00103441, 0, 4 .4694×10<sup>-9</sup>, 0.00589016, 1.52722×10<sup>-6</sup>, 1.88143×10<sup>-6</sup>, 0.00171263, 0.000 08189 62, 0},

<u>43<sup>n</sup> γραμμή</u>{1.44206×10<sup>-6</sup>, 4.47464×10<sup>-7</sup>, 0.000112061, 7.21485×10<sup>-6</sup>, 0.00 015555, 0, 0.0000834032, 0.000219912, 0.000144058, 0.0000853009, 0.0 00254885, 0.000396496, 0.000324098, 0.000310197, 0.000259317, 0.001 05287, 0.0000169028, 0.000242601, 0.000274452, 0.000252948, 0.00010 6122, 0.000315698, 0.000270901, 0.00059717, 0.000212477, 0.00042381 1, 0.000384518, 0.000100373, 0.000167233, 0.00028857, 0.000217419, 0 .000443101, 0.0000989161, 0.00025578, 0.000473544, 0.00187198, 0.00 137461, 0.000583569, 0.000364746, 0.000467191, 0.000807784, 0.00118 565, 0.00368731, 0.00157962, 0.0023057, 0.0021284, 0.0000996424, 0.0 0153299, 0.00328885, 0.00082843, 0.0022711, 0.000682578, 0.00002516 19, 0.000151999, 1.49573×10<sup>-6</sup>, 0.000886781, 0.000739731, 0.00008349 95, 0}, 44<sup>n</sup> γραμμή {0.00155981,0.00152939,0.00122599,0.00113648,0.0011175
1,0,0.00178289,0.00125321,0.001082,0.000986238,0.00112849,0.00
105134,0.00109968,0.00116743,0.00113109,0.00151632,0.00113518,
0.0011151,0.00110152,0.00110162,0.00116259,0.0012621,0.0009623
1,0.00115167,0.00109799,0.00118647,0.00109445,0.00064184,0.001
0287,0.000849137,0.00119689,0.00145786,0.000497668,0.000698363
,0.0019459,0.00278888,0.00249919,0.000804389,0.00119945,0.0001
54806,0.00134203,0.00111181,0.00106138,0.00234148,0.00167734,0
.0022295,0.00106628,0.00112645,0.00086081,0.00144655,0.0023295
4,0.00168086,0.000245549,0.000467916,0.000150713,0.00250292,0.
00138493,0.00106781,0},

<u>45<sup>n</sup> γραμμή</u>{0.000111925,0.0000422084,0.000348001,0.0000121805,0.0 034092,0,0.000401094,0.000464338,0.000339701,0.000705925,0.001 01853,0.000531363,0.000444073,0.000623199,0.000669921,0.000683 847,0.000253065,0.000531329,0.000715999,0.000556856,0.00037315 1,0.000476989,0.000464284,0.000224142,0.000464867,0.00034733,0 .000290093,0.000168848,0.000827266,0.000531173,0.000260613,4.2 3617×10<sup>-6</sup>, 8.44683×10<sup>-6</sup>,0.000397346,0.0000692633,0.000515379,0.0 00390177,0.0000667038,0.00233313,0.0035524,0.000811763,0.00051 6598,0.0000255818,0.000468853,0.00519674,0.000454507,0.0000425 176,0.00057031,0.0000306185,0.000117412,0.000160817,0.00011698 6,0.0000374022,8.49415×10<sup>-6</sup>,4.00572×10<sup>-7</sup>,0.000190586,0.000170221 , 8.19763×10<sup>-6</sup>,0},

<u>47<sup>n</sup> γραμμή</u>{-3.75492×10<sup>-10</sup>, 0, -4.12599×10<sup>-7</sup>, -4.63536×10<sup>-6</sup>, -2.33898×10 -<sup>6</sup>, 0, -0.0000256315, -0.0000217791, -4.27638×10<sup>-6</sup>, -0.00 00163269, -0.0000165333, -0.0000287131, -0.0000167512, -0.000 0223679, -0.0000 262816, -0.0000297585, -9.43213×10<sup>-6</sup>, -5.1892 2×10<sup>-6</sup>, -0.0000163316 , -0.0000131113, -3.57346×10<sup>-6</sup>, -0.0000190 724, -0.0000176799, -8.12 299×10<sup>-6</sup>, -0.0000104977, -8.80502×10<sup>-6</sup>, -8.39496×10<sup>-6</sup>, -3.95767×10<sup>-6</sup>, -3.69154×10<sup>-6</sup>, -0.0000212822, -3.85004×10<sup>-6</sup>, -3.45632×10<sup>-6</sup>, -3.92275 ×10<sup>-6</sup>, -0.0000119659, -0.00 00825274, -3.67085×10<sup>-6</sup>, -0.0000524714, -0.0000100922, -7.755×10<sup>-6</sup>, -2.447×10<sup>-6</sup>, -0.0000144689, -0.00001667 91, -0.0000125487, -8.33113×10<sup>-6</sup>, -0.0000408444, -0.0000311892, -3. 61335×10<sup>-6</sup>, -0.0000653998, -0.0000430739, -0.0000128292, -0.000041 5963, -9.69509×10<sup>-6</sup>, -7.91189×10<sup>-7</sup>, -9.22119×10<sup>-6</sup>, -0.0000139856, -0. .00 0166227, -0.0000303897, -0.0000188418, 0},

<u>48<sup>n</sup> γραμμή</u> {0.000075117,0.0000283449,0,0.000156394,1.2477×10<sup>-6</sup>,0, 0.000262955,0.000760014,1.97878×10<sup>-6</sup>,0,0,0,0,0,0,2.82598×10<sup>-8</sup>,0 ,0,0,0,0,0,0,0,0,0,0,0,0.000115893,0,0.0000594341,0.000558359, 0.00415009,0.000149502,0,3.67547×10<sup>-7</sup>,2.38898×10<sup>-6</sup>,0.0000684234 ,0.00201698,0.00153038,0.00652895,0.00280667,9.46047×10<sup>-6</sup>,0.00 141925,0.000452066,0.000107283,8.65619×10<sup>-6</sup>,0.00275119,0.00022 4664,0.000341279,0.000713548,0,0.0000271279,0.0000193814,0.001 55846,0.000473042,0.00225183,4.75788×10<sup>-6</sup>,0},

<u>49<sup>n</sup> γραμμή</u>{0,0,0,0,0,0,0,0.000033687,0.0000925433,0.0000200255,6.7 9825×10<sup>-6</sup>,0.0000568724,0.000108366,0.0000533139,0.0000371345,0 .0000773997,0.000343673,0.0000107057,0.0000222321,0.0000276504 ,0.000117513,0.0000386684,0.0000614817,0.0000879754,0.00003963 91,0.0000686573,9.07265×10<sup>-6</sup>,0.0000385607,0.0000177483,0.00001 09741,0.0000566125,0.000023815,0.000155894,0.0000858608,0.0000 200659,2.83583×10<sup>-8</sup>,2.34543×10<sup>-6</sup>,0.0000140895,1.52027×10<sup>-6</sup>,0.00 0451349,0.000609551,0.000109826,0.00017586,0.000446118,0.00088 7362,0.00118827,0.00289939,9.41516×10<sup>-6</sup>,0.00073944,0.00633723,0 .000937394,0.00159294,0.000327812,0.000113811,0.000483374,1.52 627×10<sup>-6</sup>,0.000170089,0.00270248,0.0000254076,0},

<u>50<sup>n</sup> γραμμή</u> {0,0,0.000189241,0,0,0,0,0,0,0,0,0,0,0,0,0,4.09113 ×10<sup>-6</sup>, 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,5.66648×10<sup>-8</sup>,0,0,0,0,0,0,0,0, 1.9073×10<sup>-7</sup>, 0,0,0,0,2.08545×10<sup>-6</sup>, 0,0.000115795,0.0184322,0.001 17178,0.0000544885,0.00110061,0.000757481,2.11669×10<sup>-8</sup>,3.40716 ×10<sup>-6</sup>,3.65447×10<sup>-6</sup>,0,0},

<u>51<sup>n</sup> γραμμή</u> {0.00012755,0.000048067,0.000178761,0.00015276,0.0003 73361,0,0.00148908,0.00199715,0.00153821,0.00602468,0.00172121 ,0.00202246,0.00170633,0.00165546,0.00253888,0.00432224,0.0016 1995,0.00241854,0.000848133,0.00157277,0.00135492,0.0026368,0. 00442245,0.00477282,0.00146299,0.00468293,0.00120873,0.0043709 5,0.00616883,0.000903018,0.00123486,0.000205938,0.0000567797,0 .00250627,0.00255305,0.00132514,0.00116276,0.000764061,0.00311 56,0.00086584,0.000961087,0.00142229,0.000459039,0.00443848,0. 00743755,0.00407687,0.000174012,0.00461209,0.00702808,0.007255 25,0.008112,0.00136566,0.000121763,0.000762627,8.05726×10<sup>-6</sup>,0. 00818874,0.0031848,0.000232089,0},

<u>53<sup>η</sup> γραμμή</u> {-7.35056×10<sup>-13</sup>, 0, 0, 0, 0, 0, 0, 0, -3.94892×10<sup>-12</sup>, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, -3.78835×10<sup>-7</sup>, 0, -2.50169×10<sup>-12</sup>, 0, 0, -1.89879×10<sup>-12</sup>, 0, -4.03266×10<sup>-12</sup>, 0, 0, -1.5242×10<sup>-11</sup>, 0, 0, -5.66501×10<sup>-8</sup>, 0, -8.98197×10<sup>-13</sup>, -4.55756

×10<sup>-8</sup>, -3.66402×10<sup>-7</sup>, -6.80653×10<sup>-9</sup>, -7.82416×10<sup>-8</sup>, -6.11181×10<sup>-9</sup>, -1 .20256×10<sup>-7</sup>, -2.5937×10<sup>-10</sup>, -1.22967×10<sup>-9</sup>, -8.27642×10<sup>-7</sup>, 0, -3.81441 ×10<sup>-8</sup>, -1.32383×10<sup>-8</sup>, -3.65789×10<sup>-6</sup>, -3.13325×10<sup>-8</sup>, -1.79372×10<sup>-6</sup>, -9.0 7203×10<sup>-8</sup>, -7.89595×10<sup>-8</sup>, -0.0000358395, -6.60983×10<sup>-6</sup>, -6.22458×10<sup>-6</sup> , -6.51894×10<sup>-6</sup>, -2.10209×10<sup>-6</sup>, -0.0000147553, -4.17916×10<sup>-9</sup>, -1.8314 9×10<sup>-7</sup>, -2.09361×10<sup>-6</sup>, -1.60406×10<sup>-7</sup>, 0},

54<sup>n</sup> γραμμή {6.66836×10<sup>-6</sup>,2.51626×10<sup>-6</sup>,0,0,0,0,0,0,0,1.75662×10<sup>-7</sup>,0,0,0,0,0,0,0,0,0,6.17197×10<sup>-6</sup>,0,0,0,0,0,0,0,0,0,0,0,0,0,2.97746×10<sup>-7</sup>,0,5. 91001×10<sup>-9</sup>, 1.43645×10<sup>-7</sup>, 3.46446×10<sup>-7</sup>,1.39863×10<sup>-7</sup>,0,0,8.26615×10<sup>-9</sup>,3.18759×10<sup>-9</sup>, 8.09123×10<sup>-6</sup>,4.34759×10<sup>-6</sup>, 9.60136×10<sup>-8</sup>,9.27753×10<sup>-7</sup>,3.1441×10<sup>-7</sup>,0.0000692376,0.000158435,0.0000163755,1.48494×10<sup>-6</sup>,2.95886×10<sup>-7</sup>,0.0000292609,7.60333×10<sup>-6</sup>,7.39944×10<sup>-6</sup>,0.000110423,3.06664×10<sup>-9</sup>,0.0000818783,5.76268×10<sup>-8</sup>,0.0000315831,8.36492×10<sup>-6</sup>,2.08719×10<sup>-6</sup>,0},

<u>55<sup>n</sup> γραμμή</u> {3.67479×10<sup>-9</sup>,0,0,0,0,0,0,0,8.15938×10<sup>-8</sup>,1.03741×10<sup>-7</sup>,0 ,1.43446×10<sup>-7</sup>,0,6.58126×10<sup>-7</sup>,0,1.05413×10<sup>-7</sup>,2.53891×10<sup>-9</sup>,2.00158 ×10<sup>-8</sup>,0,0,4.73373×10<sup>-7</sup>,0,8.12219×10<sup>-8</sup>,6.10782×10<sup>-7</sup>,0,1.14703×10<sup>-6</sup>,4.8259×10<sup>-7</sup>,0,1.27715×10<sup>-6</sup>,7.79577×10<sup>-10</sup>,6.75976×10<sup>-7</sup>,7.24329×1 0<sup>-7</sup>,2.34821×10<sup>-7</sup>,2.35754×10<sup>-8</sup>,2.4944×10<sup>-8</sup>,0.0000266833,0.0000171 381,5.69412×10<sup>-6</sup>,1.7472×10<sup>-6</sup>,0.0000186589,0,2.09176×10<sup>-6</sup>,8.17127 ×10<sup>-7</sup>,0.0000362443,7.21232×10<sup>-7</sup>,4.11247×10<sup>-6</sup>,1.33406×10<sup>-6</sup>,1.0293 8×10<sup>-6</sup>,7.78494×10<sup>-6</sup>,7.1596×10<sup>-6</sup>,0.0000185166,1.59315×10<sup>-6</sup>,0.0000 66 8419,0.0000124 055,8.97445×10<sup>-7</sup>,3.38062×10<sup>-6</sup>,1.91748×10<sup>-6</sup>,2.09 6×10<sup>-6</sup>,0},

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## Α.1.γ Εισαγωγή διαγώνιας μήτρας – Κ

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## Α.1.δ Εισαγωγή διανύσματος γραμμή τιμής – P<sub>0</sub>

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### A.2 Εισαγωγή Δεδομένων 2<sup>ου</sup> Μοντέλου Στο Mathematica

## A.2.α Εισαγωγή μήτρα εγχώριας παραγωγής – Dom

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<u>Ι<sup>n</sup> γραμμή</u> {0.126946,0.0477458,0.00172129,0,0,0,0,0,0.245943, 0.149809,0.0444033,0.00223641,1.3603×10<sup>-6</sup>,0.000106714,0.00 47378,3.68562×10<sup>-6</sup>,4.52211×10<sup>-6</sup>,0.00130946,0.0138855,0.0000 147069,1.65847×10<sup>-6</sup>,0.000056558,0.000685221,0,5.3691×10<sup>-7</sup>,0 ,0.0000238964,8.84973×10<sup>-7</sup>,0.0000826534,0.00695805,0,1.7342×10<sup>-7</sup>,0,2.39872×10<sup>-10</sup>,0,0.00354461,0.0000397895,0.0166462, 0.000921933,0.0011965,0,0.00218118,0.000032148,0,0.0000445336, 0,0.00123012,0.00652269,0,0,3.0647×10<sup>-7</sup>,0,0.000042784 3,0.0000995706,0,0.00104704,0.000140842,0.000646977,0},

<u>3<sup>n</sup> γραμμή</u> {0,0,0.0457736,0,0,0,0,0,0.000731957,0,9.77715×10<sup>-6</sup>,0,4.26655×10<sup>-9</sup>,0.0000239114,0.0000116675,5.266×10<sup>-9</sup>,0,2.4 6663×10<sup>-6</sup>,0.0000653596,1.71286×10<sup>-7</sup>,1.27426×10<sup>-7</sup>,7.56075×10<sup>-6</sup>,4.48613×10<sup>-6</sup>,0,1.43633×10<sup>-7</sup>,0,5.95829×10<sup>-6</sup>,2.36747×10<sup>-7</sup>,0. 0000162399,0.00183243,0,0,0,6.34739×10<sup>-12</sup>,0,0.0000131568,8 .05252×10<sup>-6</sup>,0.00321548,3.39945×10<sup>-6</sup>,0.000235091,0,0.0000366 562,6.22424×10<sup>-6</sup>,0,8.74798×10<sup>-6</sup>,0,0.0000202603,0.0000540092 ,0,0,7.94605×10<sup>-9</sup>,0,0,3.63265×10<sup>-6</sup>,0,0.0000501774,0.0000271 259,0.0000394328,0},

,0,0.000465592,0.00440669,0, 0,1.04×10<sup>-9</sup>,0,0,0,0,0,2.91862 ×10<sup>-</sup> <sup>7</sup>,0,0},

<u>5<sup>η</sup> γραμμή</u>{0,0,0,0,0,0,0,0,8.56448×10<sup>-6</sup>,7.08637×10<sup>-6</sup>,0.000071 3735,0.0000483319,0.0000148844,0.0000148479,0.0000132664,9.609 42×10<sup>-6</sup>,0.00282915,0.000038836,0.0000174907,0.000018 9574,0.0000955891,0.0000375615,0.000137256,0.0000200686,0.0000 775384,0.0000703776,6.65907×10<sup>-6</sup>,0.000178272,0.00035 12,0.0000213702,0,0.0000447417,0,0,3.62007×10<sup>-7</sup>,0.0000226 323,1.49055×10<sup>-8</sup>,0,1.38588×10<sup>-6</sup>,0,0,3.05064×10<sup>-6</sup>,0,0,0,0,1. 90866×10<sup>-6</sup>,0.0000113212,0,0,0,0,0,0,0,0,0,0,0,0,0,0,

<u>7<sup>n</sup> γραμμή</u> {0,0,0,0,0,0,0.0050268,7.70003×10<sup>-6</sup>,4.75495×10<sup>-7</sup>,0, 4.34394×10<sup>-7</sup>,0,1.4081×10<sup>-6</sup>,0.0000157141,0.0000187172,0,1.04 447×10<sup>-7</sup>,0.000623554,0.000239327,0.000353922,0.0181995,0.0 00974773,0.000102473,0,0,0,1.9628×10<sup>-6</sup>,0,2.48192×10<sup>-6</sup>,8.586 93×10<sup>-8</sup>,0.000259676,0,0,4.68403×10<sup>-7</sup>,0,0.0000188498,0,0,0.0 00014005,0,0,0.0000313671,0,0,0,0,0.0000177296,0.0000967773,0, 0,0,0,0,0,0,0,0,0,0},

8<sup>η</sup> γραμμή {0.000284247,0.000106908,0,0,0,0,0,0.0245064,0.000 229288,0,0.0000200576,3.24288×10<sup>-7</sup>,0.0000308851,0.00016626 9,0.00085103,2.93661×10<sup>-6</sup>,1.00588×10<sup>-6</sup>,0.00506559,0.0011093 8,0.100327,0.000272871,0.000193206,0.000901867,0,0.0000224373, 1.87796×10<sup>-8</sup>,0.0000147068,0.0000130914,1.1256×10<sup>-8</sup>,3.9 3342×10<sup>-6</sup> 6,0.00102014,3.88312×10<sup>-6</sup>,0,0.01993,2.37085×10<sup>-8</sup>,0. 00023575,1.11142×10<sup>-6</sup>,0.000551668,0.000118615,0,0,0.000357 884,9.21978×10<sup>-7</sup>,0,0,0,0.000160593,0.000869402,0,0,5.23626 ×10<sup>-10</sup>,0,1.31047×10<sup>-7</sup>,0,0,0,4.37905×10<sup>-6</sup>,6.76546×10<sup>-6</sup>,0},

<u>9<sup>n</sup> γραμμή</u> {0.0194725,0.00732384,0.00504497,0,0,0,0,0,0.06428 51,0.0000131182,0.00125213,0.0000195901,0.0139198,0.0000715128 ,0.00268109,0.000119256,2.5497×10<sup>-6</sup>,0.00275923,0.0032 2854,0.0000691994,4.88299×10<sup>-6</sup>,6.63888×10<sup>-6</sup>,0.00017843,2.15 033×10<sup>-6</sup>,2.81994×10<sup>-8</sup>,4.04038×10<sup>-6</sup>,0.0000109256,4.64803×10<sup>-8</sup> ,0.000508065,0.000363788,2.36911×10<sup>-6</sup>,1.3199×10<sup>-6</sup>,0,1.89928×10<sup>-6</sup> 6,8.83678×10<sup>-8</sup>,0.00100278,0.000198697,0.0907283,0.00024 8678,0.0073548,0,0.00138121,0.000178234,0,0.000619239,0.000016 7569,0.000777968,0.0036948,0,1.26308×10<sup>-6</sup>,0.000597063 ,0.00185077,0.000235108,0.008342,0.000908876,0.00307365,0.0010 5705,0.00131535,0},
11<sup>n</sup> γραμμή {0.000217366,0.0000816603,0.00870745,0,0,0,4.1961 9×10<sup>-</sup> <sup>8</sup>,0.0000642426,0.000506904,0.00502638,0.0390673,0.062 1292,0.0117719,0.000268567,0.00174417,0.000153152,6.24236×10<sup>-</sup> <sup>6</sup>,0.00140975,0.00231999,0.000421647,0.000285792,0.0044 4125,0.000146205,0.0000384606,0.0000702301,0.0000840057,0.0001 076,0.0000613151,0.000104224,0.011182,0.0000391383,1.06525×10<sup>-</sup> <sup>6</sup>,7.56809×10<sup>-7</sup>,0.0000160188,0.000277574,0.0021310 7,0.00785357,0.00394079,0.0000569305,0.000195691,0,0.000158566 ,7.29391×10<sup>-6</sup>,0,7.28161×10<sup>-6</sup>,0,0.000291758,0.000442004 ,5.401×10<sup>-6</sup>,3.11677×10<sup>-7</sup>,0.000135845,0,0.0000131483,0.00004 21472,1.46683×10<sup>-7</sup>,0.0000484378,0.000245488,0.000105302,0},

<u>12<sup>n</sup> γραμμή</u> {2.87137×10<sup>-8</sup>, 0, 7.57541×10<sup>-6</sup>, 0, 0, 0, 0, 0, 6.48786×10<sup>-7</sup>, 7.87324×10<sup>-7</sup>, 0.000164188, 0.0227426, 0, 4.98554×10<sup>-6</sup>, 0, 0.0000 428492, 1.91033×10<sup>-8</sup>, 1.50856×10<sup>-7</sup>, 0, 0, 3.6029×10<sup>-6</sup>, 0, 6.13789×10<sup>-7</sup>, 4.62682×10<sup>-6</sup>, 0, 8.70829×10<sup>-6</sup>, 3.62463×10<sup>-6</sup>, 0, 0.0000164114, 5.96321×10<sup>-9</sup>, 5.08255×10<sup>-6</sup>, 0.0000497593, 0.002405, 9.43064×10<sup>-7</sup>, 0.0000404658, 0.000278619, 0.000133027, 0.000470528, 0.0 000104387, 0.000226729, 0.000434628, 0.000064929, 1.77216×10<sup>-6</sup>, 0.0000578483, 8.48605×10<sup>-6</sup>, 3.62758×10<sup>-6</sup>, 0.0000313602, 0.000 0882162, 0.000014766, 0.0000524715, 0.000312573, 0.000780002, 0.000 0868369, 0.000347318, 0.00897212, 0.0000673617, 0.000481935, 0.0001 0804, 0},

<u>13<sup>n</sup> γραμμή</u> {0.0000341333, 0.0000128379, 0, 0, 0, 0, 0, 0, 9.38482 ×10<sup>-</sup> <sup>7</sup>, 0, 8.88037×10<sup>-6</sup>, 0.00121451, 0.0610106, 8.64261×10<sup>-6</sup>, 4.25 781×10<sup>-</sup> <sup>6</sup>, 0.000238626, 5.1812×10<sup>-9</sup>, 0.0000308429, 6.86679×10<sup>-7</sup>, 8.14156×10<sup>-</sup> <sup>9</sup>, 3.75678×10<sup>-8</sup>, 2.31897×10<sup>-7</sup>, 4.99614×10<sup>-6</sup>, 0, 2.2143 4×10<sup>-</sup> <sup>9</sup>, 2.73409×10<sup>-10</sup>, 0.0000275959, 0.000103954, 1.74561×10<sup>-6</sup>, 0 .0000283215, 2.07897×10<sup>-10</sup>, 3.64878×10<sup>-6</sup>, 0, 8.50383×10<sup>-10</sup>, 6.030 72×10<sup>-6</sup>, 0.0000221623, 2.2171×10<sup>-6</sup>, 5.56396×10<sup>-9</sup>, 5.43402×10<sup>-6</sup>, 0 .0000252697, 0, 0.0000122788, 9.14136×10<sup>-8</sup>, 0, 9.44241×10<sup>-7</sup>, 0, 6. 60003×10<sup>-6</sup>, 0.0000358812, 7.13144×10<sup>-7</sup>, 5.02534×10<sup>-6</sup>, 0.0000828 958, 0, 5.80715×10<sup>-7</sup>, 0.0000541097, 2.20566×10<sup>-8</sup>, 9.99074×10<sup>-6</sup>, 0 .0000718782, 0.0000319328, 0},

<u>14<sup>η</sup> γραμμή</u> {0,0,0.00239547,0,0,0,0.000105514,0.000568223,0.0 0398889,0.00480957,0.00142721,0.000384767,0.00059907,0.168361, 0.00109809,0.000176197,0.0000478297,0.00687342,0.00155377,0.00 0995177,0.000130143,0.0011817,0.00147446,0.0000431591,0.001290 25,0.0000909399,0.00171548,0.000414855,0.000377975,0.0911174,0 .0000299559,0.000187153,0,0.00196434,6.9736×10<sup>-7</sup> 7,0.000384416,0.0000845941,0.0102187,0.00010601 8,0.000111937,0.000024684,0.000561123,0.0000281686,1.16845×10<sup>-7</sup> 7,0.0000246627,8.7914×10<sup>-7</sup>,0.000180865,0.000814983,0. 0000135181,6.90234×10<sup>-6</sup>,0.000730414,0,0,7.97162×10<sup>-6</sup>,7.9882 4×10<sup>-8</sup>,1.15058×10<sup>-6</sup>,0.000521323,0.00608627,0},

15" γραμμή {0.0000410046,0.0000151574,0.0012031,0.0013984,0. 000408058,0,0.000471432,0.000547211,0.00234991,0.0116079,0.000 615153,0.000482469,0.00241666,0.00381186,0.102676,0.0550021,0. 00202804,0.00393209,0.00235749,0.000997385,0.000551195,0.00033 6262,0.000265145,0.000201192,0.000585209,0.000277753,0.0003137 79,0.0000519452,0.000152832,0.000302681,0.000729954,0.00002630 51,3.88928×10<sup>-6</sup>,0.0000489794,0.00 128338,0.005236,0.00245218,0.0064406,0.000481675,0.000378,0.00 076474,0.00191231,0.000777228,8.36582×10<sup>-6</sup>,0.00212507 ,0.0012762,0.00035413,0.00104967,0.0105888,0.000253683,0.00244 544,0.000222484,4.22462×10<sup>-9</sup>,0.0000237957,1.4536×10<sup>-7</sup>, 0.000693936,0.000318189,0.000194974,0},

16<sup>n</sup> γραμμή {6.70792×10<sup>-6</sup>, 2.48049×10<sup>-6</sup>, 0, 0.00209132, 0.00061025 4, 0, 0.00070485, 0.00053981, 0.00110985, 0.00343224, 0.000643604, 0. 000643376, 0.000874196, 0.000859804, 0.000893149, 0.00754242, 0.000 0678919, 0.00346943, 0.000673249, 0.00122178, 0.000432518, 0.000407 375, 0.000197138, 0.000134559, 0.000137332, 0.000113316, 0.00024289 7, 0.000049782, 0.000331459, 0.00021739, 0.000937471, 0.000168123, 0 .0000322413, 0.00140437, 0.0000575584, 0.000855565, 0.000352181, 0. 023126, 0.000802731, 0.00186324, 0.00296855, 0.000349283, 0.000135 209, 0.00381879, 0.00303446, 0.00302986, 0.000115777, 0.00852245, 0. 0281041, 0.0262408, 0.0145089, 0.0032474, 0.00316011, 0.00073437, 1. 75262×10<sup>-6</sup>, 0.0251143, 0.00855908, 0.000250168, 0},

<u>17<sup>n</sup> γραμμή</u> {0.028833,0.0109304,0.0473663,0.0306221,0.013077 5,0,0.0353562,0.0567391,0.00629586,0.00409139,0.00311783,0.001 19228,0.0208981,0.0149718,0.00759653,0.00752869,0.0549593,0.00 442462,0.00598274,0.0174593,0.0161433,0.00917788,0.00631075,0. 0028801,0.0047665,0.00327492,0.00371479,0.00198208,0.00683844, 0.00365147,0.022009,0.0389814,0.0196447,0.0191518,0.000614306, 0.0114113,0.0050447,0.00693295,0.0899778,0.0390648,0.0484069,0 .023065,0.00502234,0.00325866,0.0022891,0.00341177,0.000829505 ,0.00911613,0.00176256,0.0025178,0.0069316,0.00409055,0.000458 921,0.0131426,0.0186617,0.00797575,0.00286136,0.000591105,0}, <u>18<sup>n</sup> γραμμή</u>{0.00684559,0.00257895,0.000129209,0.00730759,0.0 0213238,0,0.00697041,0.00489533,0.00260749,0.00029507,0.013862 9,0.000555458,0.00431968,0.00684447,0.0109297,0.00545002,0.003 98435,0.0686092,0.0462752,0.00260258,0.00305361,0.00731475,0.0 0351511,0.00559892,0.00979271,0.00109105,0.0282371,0.043509,0. 00200156,0.00410039,0.00156551,0.0000130084,0.000386413,0.0003 85569,0.00127945,0.00743018,0.00125406,0.00371722,0.000331607, 0.000609417,0.0000816171,0.000553758,0.0000217743,0.000241114, 0.000495938,0.0000381407,0.000494189,0.00142159,0,0.00139298,0 .00148674,0.00154886,0.000184492,0.0207754,0.00308802,0.002022 62,0.00247262,0.00129587,0},

<u>19<sup>n</sup> γραμμή</u>{0.0011319,0.000425373,0.0000140105,0.0048888,0.0 0142657,0,0.00164956,0.00410906,0.00532063,0.00430977,0.003602 49,0.00136247,0.0105333,0.00607847,0.00706647,0.0038297,0.0000 429207,0.00465905,0.0233522,0.0011822,0.00069487,0.00414418,0. 00591198,0.0100969,0.00876202,0.0050845,0.00537183,0.00145511, 0.000630302,0.00832495,0.00164177,0.000117356,0.000161161,0.01 18313,0.00078641,0.00682646,0.00494798,0.00156613,0.00239248,0 .000602134,0.00141916,0.000863446,0.0000278459,2.5205×10<sup>-7</sup>, 0.000026616,0.0000746313,

0.000348232,0.00285385,0.000362197,0.000139067,0.000393568,0,0 .000044797,0.000120208,0.0000129143,0.0000180115,0.000240705,0 .0055932,0},

20<sup>n</sup> γραμμή {4.68973×10<sup>-12</sup>,0,0,0,0,0,0,0,0,0034754,0.0041406,0 .000668536,0.000328111,0.000513474,0.000948285,0.000795756,0.0 00128047,0.0000526932,0.00572057,0.00352657,0.0965743,0.000872 367,0.000931737,0.00503915,0.00209603,0.0104045,0.00033494,0.0 219903,0.00217343,0.00228935,0.00197964,9.72635×10<sup>-7</sup> 7,0.0000732381,0.0000222624,0.0882325,3.56322×10<sup>-6</sup> ,0.00043262,6.84211×10<sup>-6</sup>,0.00219085,0.000446151,0.00022799 5,0.000286706,0.000404138,4.48606×10<sup>-6</sup>,0,8.89437×10<sup>-6</sup>,3.496 04×10<sup>-10</sup>,0.000183759,0.00104065,0,0.0000481925,0.000082297 6,0,0.0000201586,0.00200688,7.54332×10<sup>-6</sup>,0.0000212036,0.00 108661,0.000160853,0},

<u>21<sup>n</sup> γραμμή</u> {0,0,0,0,0,0,0,0,0.00245796, 0.00296319,0.0352345, 0.000233194,0.000391556,0.00189683,0.00109308,0.000843908,0.00 00292783,0.00341277,0.0162911,0.00350199,0.266944,0.16459,0.05 59737,0.0207287,0.125769,0.0190974,0.0109506,0.0311015,0.06343 68,0.0083137,0.20974,0.000153302,0.0000476608,0.015461,0.00474 415,0.00123627,5.98961×10<sup>-6</sup>,2.74089×10<sup>-</sup>

<sup>8</sup>,0.000371263,0.000128964,0,0.000808469,4.66529×10<sup>-7</sup>,0,4.7 987×10<sup>-6</sup>,0,0.000504848,0.00253411,0,4.64457×10<sup>-8</sup>,2.62998×10<sup>-7</sup> <sup>6</sup>,0,0.0000172957,8.01052×10<sup>-6</sup>,0.0000699446,6.8456×10<sup>-7</sup>,0.0 00716203,0,0},

<u>22<sup>n</sup> γραμμή</u>{0.000274984, 0.00836455, 0, 0.00202622, 0.000591259, 0, 0.000682911, 0.000523008, 0.00872395, 0.0100964, 0.0105771, 0.002 19837, 0.00602384, 0.00365079, 0.00434597, 0.00516253, 0.0000995579 , 0.0104284, 0.0100589, 0.00291784, 0.00384543, 0.0379228, 0.0083738 3, 0.00877984, 0.0137207, 0.00276048, 0.00183617, 0.00224539, 0.0130 91, 0.00618477, 0.00324254, 0.000827651, 0.00177172, 0.0579491, 0.00 0218706, 0.000506897, 0.000139802, 0.00321414, 0.000681889, 0.00286 377, 0.000087703, 0.000437554, 0.0000510424, 3.86114×10<sup>-7</sup>, 0.000107404, 0.0000126837, 0.0002

66478,0.000949728,0.00108417,0.0000458563,0.00345592,0.0009451 56,0.0156191,0.000102755,0.0111347,0.000893333,0.000581652,0.0 00474812,0},

 $\frac{23^{n} γραμμή}{1000918408,0.000345424,0,0.00416102,0.0147351,0}{0.00444243,0.0051445,0.000383547,0.00049115,0.000739533,0.000}{373844,0.000379267,0.00181743,0.000690952,0.00149401,0.0000499}{967,0.000598748,0.000992805,0.00258638,0.000944136,0.00119227,0.020712,0.0000308709,0.000640302,0.000327129,0.000184909,0.00}{103518,0.00245748,0.000397488,0.00138526,0.00155952,0.00684469,0.000919621,0.0000563673,0.000100979,8.5055×10^{-6}{0.000301206,0.000294902,0.000174824,0.0}{00977508,0.000395741,0.0000813647,8.77252×10^{-7},8.39354×10^{-6}{6,2.86204×10^{-11},0.000120106,0.000671523,0.000023575,7.72523×10^{-6}{0.00265027,0.00809848,7.46841×10^{-6},5.05533×10^{-6}{0.000265027,0.00809848,7.46841×10^{-6}{0.000066084,0}},$ 

24<sup>n</sup> γραμμή {0,0,0,0,0,0,0,0,0,0,0000191595,0.0000279645,0.0000 373348,0.0000212781,0.0000215876,0.0000303877,0.0000379002,0.0 00062737,2.84624×10<sup>-6</sup>,0.0000282146,0.0000419322,0.00 014002,0.0000500262,0.0000302849,5.46973×10<sup>-6</sup>,0.000849876, 3.33588×10<sup>-6</sup>,2.8232×10<sup>-6</sup>,2.17202×10<sup>-6</sup>,7.89402×10<sup>-6</sup>,0.0000162 762,0.0000204346,0.0000341672,4.08492×10<sup>-7</sup>,5.07365×10<sup>-8</sup>,2.8 9226×10<sup>-6</sup>,1.56817×10<sup>-8</sup>,1.38928×10<sup>-6</sup>,2.87332×10<sup>-7</sup>,0.000024135 5,0.0000288143,0.0000124241,0.0000366247,0.0000258783,6.98813× 10<sup>-6</sup>,7.54782×10<sup>-8</sup>,6.44546×10<sup>-7</sup>,0.000114897,1.18704×10<sup>-6</sup> ,0.000155851,0.000623236,0.0000390215,5.77778×10<sup>-6</sup>,0.00004 99009,0.0000324174,1.18702×10<sup>-6</sup>,8.16827×10<sup>-9</sup>,0.0000318884,8 .95256×10<sup>-6</sup>,0.0000108456,0},

25<sup>η</sup> γραμμή{5.48978×10<sup>-10</sup>,0,0,0.0021896,0.000638932,0,0.00073 7973,0.000565177,0.000477562,0.000696935,0.00101233,0.00053029 6,0.00053804,0.000775278,0.000947801,0.00149737,0.0000709342,0 .000753699,0.00148638,0.0035403,0.00126336,0.00127938,0.006718 97,0.000809129,0.0324695,0.00118918,0.000627103,0.00191509,0.0 0179406,0.00068387,0.0202175,0.00246489,0.0109225,0.0175198,1. 35081×10<sup>-6</sup>, 0.000120235,0.0000983

785,0.000855736,0.00154074,0.000578245,0.00589737,0.00158058,0 .000251424,2.71066×10<sup>-6</sup>,0.0000308844,7.33714×10<sup>-8</sup>,0.0 000551082,0.000472997,0.0016984,0.0000868417,0.000242554,0,0.0 000704295,0.000103137,3.24199×10<sup>-7</sup>,0.0000400301,0.002 70821,0.0000554831,0},

<u>26<sup>η</sup> γραμμή</u> {8.72188×10<sup>-9</sup>, 0, 0, 0, 0, 0, 0, 0, 4.76856×10<sup>-8</sup>, 0, 2.42629×10<sup>-6</sup>, 0, 0, 1.89974×10<sup>-6</sup>, 0, 0.0000407422, 0, 2.34503×10<sup>-6</sup>, 6.06247×10<sup>-6</sup>, 2.52072×10<sup>-6</sup>, 5.90732×10<sup>-7</sup>, 0.0000409748, 0.000544729, 0.0238226, 0.00100584, 0.0300917, 0.000143871, 0.0000323403, 1.2844×10<sup>-6</sup>, 0.000145405, 0.000030164, 0.0000179035, 0.000010355 6, 0.000756502, 0, 0.00011911, 0.00150465, 0.0000298799, 0.000058037 8, 0.0000178571, 0.000027838, 0.0000854175, 0.00373902, 0.000040882 3, 1.07221×10<sup>-6</sup>, 2.41482×10<sup>-8</sup>, 0.0000481345, 0.00012 6434, 0.000669411, 0.0000489567, 0.000831948, 0, 3.46848×10<sup>-9</sup>, 4.2002×10<sup>-6</sup>, 1.443×10<sup>-7</sup>, 9.19096×10<sup>-7</sup>, 0.000766612, 8.61261×10<sup>-6</sup>, 0},

27<sup>n</sup> γραμμή {0,0,0,0,0,0,0,0,2.04283×10<sup>-9</sup>,0,2.3912×10<sup>-6</sup>,0,1.05 922×10<sup>-9</sup>,1.33463×10<sup>-7</sup>,1.04536×10<sup>-7</sup>,0.0000715427,0,1.0419×10<sup>-6</sup>,0.0000102841,1.25695×10<sup>-6</sup>,5.64334×10<sup>-7</sup>,0.0000164488,0.000 341631,3.18349×10<sup>-7</sup>,0.0000462697,0.000132117,0.0246508,0.0 000252094,0.00103873,7.80475×10<sup>-6</sup>,0.0000509977,0.000016693 3,0.0000105979,0.0000817257,1.06875×10<sup>-7</sup>,0.0000119614,9.20 11×10<sup>-7</sup>,0.0000385144,0.0000125957,0.0000296479,0.0014843,0 .000140633,0.0000234151,2.54152×10<sup>-7</sup>,1.45928×10<sup>-6</sup>,2.56269×10<sup>-10</sup>,0.0000198311,0.0000230476,0.0000313592,0.00112709,0 .000171656,0.00105591,2.43245×10<sup>-6</sup>,0.00980789,4.02634×10<sup>-7</sup>, 0.0000147093,0.000215053,3.10059×10<sup>-6</sup>,0},

<u>28<sup>n</sup> γραμμή</u>{0,1.68535×10<sup>-6</sup>,0,0.0000293483,0.000131513,0,0.000
0313331,0.0000508503,0.000081753,0.0000453936,0.0000394809,0.0
000675316,0.0000478259,0.000102687,0.0000588297,0.000189516,4.
64791×10<sup>-8</sup>,0.0000693312,0.000135521,0.000420901,
0.0000103759,0.0000880159,0.0000553957,0.0000547714,0.00044272
4,8.79425×10<sup>-6</sup>,0.0000546134,0.00344715,0.0000221499,0
.0000926831,0.000157375,2.10562×10<sup>-8</sup>,0.000274516,2.05247×10<sup>-6</sup>
6,0.00159888,4.03005×10<sup>-6</sup>,2.82667×10<sup>-7</sup>,5.01978×10<sup>-8</sup>,0.0002
23563,1.70753×10<sup>-6</sup>,0.000193206,0.0000860224,6.75587×10<sup>-6</sup>,7.
38033×10<sup>-8</sup>,5.33252×10<sup>-7</sup>,8.28898×10<sup>-13</sup>,0.000302809,0.0003056
77,1.92434×10<sup>-7</sup>,2.12711×10<sup>-7</sup>,0.0000384988,0.00120019,6.0582

 $7 \times 10^{-6}$ , 7.65457×10<sup>-6</sup>, 0.00112484, 0.000371634, 0.0000337918, 5.6 689×10<sup>-7</sup>, 0},

<u>29<sup>n</sup> γραμμή</u> {0,0,0.00420147,0.000654964,0.00293498,0,0.000699 26,0.00113482,0,0,0,0,0,0,0,1.24105×10<sup>-8</sup>,0.000165049,7.785 17×10<sup>-8</sup>,0,0,3.98974×10<sup>-7</sup>,0.000019273,0.0000173148,0,0,0.002 69952,0,0.00196888,0.0220788,3.72258×10<sup>-8</sup>,0.000137391,0,0, 0.000076665,0.00069802,2.21634×10<sup>-6</sup>,0.0000163534,2.862×10<sup>-6</sup> 6,0.000368119,0.0125011,0.00726585,0.000870104,0.0000647579,2.1 3601×10<sup>-7</sup>,0.000466431,0,0.0000121306,0.000657923,4.29455×10<sup>-7</sup> 7,0,1.74453×10<sup>-6</sup>,0,0,8.56115×10<sup>-6</sup>,2.95166×10<sup>-9</sup>,5.88153×10<sup>-6</sup> 6,0.0000537965,4.80748×10<sup>-6</sup>,0},

30<sup>n</sup> γραμμή {8.83114×10<sup>-8</sup>, 8.02339×10<sup>-6</sup>, 0, 0.000316123, 0.0000922 457, 0, 0.000106545, 0.0000815974, 0.000165311, 0.0000910489, 0.0004 3523, 0.00251941, 0.000492619, 0.000317903, 0.000203122, 0.00072302 8, 9.15487×10<sup>-7</sup>, 0.000171078, 0.000213336, 0.0001139 37, 0.000319414, 0.000595241, 0.000133308, 0.0000877187, 0.00003893 , 0.0000799065, 0.000162189, 0.0000995413, 0.000270805, 0.0151321, 0 .00964887, 0.0000511607, 5.00759×10<sup>-6</sup>, 0.000294806, 0.0000166939, 0.000671225, 0.000482126, 0.00183065, 0.000284055, 0. 000247034, 0.000288675, 0.0011533, 0.000552704, 0.00145031, 0.00001 88514, 0.000408334, 0.0000508203, 0.000180279, 0.000118651, 0.00138 176, 0.000617534, 0.000113958, 0.000178432, 0.000473818, 2.44171×10<sup>-6</sup> , 0.00138559, 0.00139753, 0.000447612, 0 },

32<sup>n</sup> γραμμή {0.0089878,0.00340433,0.00016226,0.114128,0.06243 11,0,0.0166234,0.0477633,0.0180676,0.00863968,0.0471389,0.0157 39,0.0177053,0.0258039,0.041734,0.0250351,0.00753532,0.0185668 ,0.045289,0.0641342,0.0815056,0.0240096,0.0121468,0.0113363,0. 0166797,0.01159,0.0135024,0.00700165,0.0233703,0.00933864,0.04 65919,0.0812334,0.0412664,0.00206773,0.0376008,0.0176854,0.010 2134,0.0276693,0.00817542,0.00267187,0.00604445,0.0179832,0.00 901069,0.00438976,0.00159202,0.00290832,0.00206259,0.0139933,0 .00982517,0.0112423,0.00847514,0.00574493,0.000938683,0.007306 51,0.0150693,0.00692762,0.0112775,0.00613529,0},

<u>33<sup>η</sup> γραμμή</u>{0.00873037,0.00330805,0,0.0087688,0.00255877,0,0 .0029554,0.0022634,0.000508749,0.000174097,0.00028242,0.000468 764,0.00040869,0.000141433,0.000393739,0.00255992,1.7032×10<sup>-</sup> <sup>6</sup>,0.000331707,0.000325928,0.000221602,0.000584652, 0.000523801,0.00020652,0.000151612,0.0000719538,0.0000960087,0 .000203982,0.0000736008,0.000530538,0.000183396,0.00211468,2.1 1486×10<sup>-6</sup>,4.09817×10<sup>-6</sup>,0.000494556,0.000523478,0.

000385122,0.000267534,0.00014235,0.000600115,0.0031239,0.00075 3092,0.0284089,0.000305465,0.00424129,0.000431523,0.000269272, 0.000250438,0.00042778,2.2895×10<sup>-6</sup>,0.000381868,

0.000752884,0.021396,0.000811771,0.00218777,0.0110003,0.0 0300905,0.00122861,0.000864266,0},

<u>34<sup>n</sup> γραμμή</u> {0.000919227,0.000900223,0,0.038808,0.00349193,0, 0.0175935,0.0172558,0.00462492,0.00590795,0.00598302,0.0034752 8,0.0357694,0.0358899,0.00771551,0.00803209,0.00211814,0.00745 019,0.0064877,0.00959712,0.00894406,0.00429988,0.000882664,0.0 00627668,0.00137197,0.000780401,0.000569384,0.00225233,0.00279 806,0.00377387,0.0120684,0.0032134,0.00446633,0.000102348,0.00 0300444,0.00464829,0.00291237,0.00506107,0.000184042,0.0028619 ,0.00427341,0.00709426,0.00134343,0.00474221,0.0336004,0.01292 61,0.0684554,0.00135472,0.000489436,0.0141741,0.0103798,0.0163 63,0.00246347,0.00659601,0.0000616946,0.0439123,0.0168697,0.00 0280014,0},

35<sup>n</sup> γραμμή {0.00769553,0.00615432,0.00644081,0.0116984,0.04 05172,0,0.0118609,0.0185036,0.0156678,0.00977826,0.011003,0.01 18505,0.0114389,0.016779,0.0125594,0.00943453,0.00541723,0.015 3247,0.0128447,0.0144417,0.0048313,0.00702794,0.0064531,0.0109 206,0.00972103,0.0106382,0.0133052,0.011787,0.00451974,0.01189 25,0.0123526,0.00263923,0.00356529,0.0106542,0.0018474,0.01605 52,0.0103679,0.00962265,0.036417,0.00339776,0.00335961,0.00576 438,0.00161083,0.00045657,0.000591271,0.00181822,0.00101487,0. 0363786,0.00654482,0.00239443,0.00644718,0.0147604,0.00149463, 0.00708167,0.00345879,0.00364197,0.0023787,0.00134422,0},

36<sup>n</sup> γραμμή {0.0422249,0.0337764,0.0353488,0.0180082,0.015331 ,0,0.0158682,0.0246569,0.0793232,0.0498131,0.0574134,0.0593387 ,0.0590145,0.0822399,0.0642973,0.0384745,0.0297207,0.0786264,0 .059998,0.0461499,0.0244468,0.0325893,0.0313664,0.0539857,0.05 12759,0.0547679,0.0676478,0.0637389,0.0238287,0.0579858,0.0444 318,0.0139052,0.0179368,0.0505966,0.0100701,0.0155059,0.011766 6,0.0492029,0.020276,0.0146209,0.0184383,0.00935174,0.00775727 ,0.00249415,0.0029943,0.00272795,0.00213314,0.0132174,0.018951 6,0.011708,0.011409,0.0162821,0.00819503,0.0382589,0.0188491,0 .0144914,0.010981,0.00525064,0}, 37<sup>n</sup> γραμμή {0.0309665,0.0247706,0.0259237,0.0131953,0.011214 3,0,0.0115577,0.0157565,0.0581732,0.0365315,0.0421053,0.043517 2,0.0432795,0.0603123,0.0471537,0.0283878,0.0217963,0.0576622, 0.0440007,0.033845,0.0179285,0.0239,0.0230032,0.0395915,0.0376 042,0.0401652,0.0496109,0.0467442,0.0174755,0.042525,0.0324831 ,0.0101977,0.0131543,0.037109,0.00738508,0.0113711,0.00862924, 0.0360839,0.0148698,0.0107268,0.0135221,0.00686054,0.00568897, 0.00182914,0.00219609,0.0020006,0.00159263,0.00990786,0.014031 7,0.00875285,0.00861974,0.0151041,0.0060103,0.0280631,0.013823 3,0.0106336,0.00805494,0.00398143,0},

38<sup>η</sup> γραμμή {3.62377×10<sup>-8</sup>,0.0000178113,0,0.000033225,0.0007642 63,0,0.000102531,0.0000932715,0.000467851,0.000829538,0.000745 1,0.00139628,0.000877573,0.000528884,0.000614342,0.000672062,0 .0000883745,0.00106098,0.000769063,0.000615951,0.00050169,0.00 109444,0.000949681,0.0024634,0.000725564,0.00235164,0.0005102, 0.000440741,0.00186949,0.00058049,0.00054857,0.0001044, 0.0000743776,0.0000287987,1.09036×10<sup>-6</sup>, 0.000292198,0.000181832,0.0000162992,0.000549119,0.011171,0.03 40269,0.0259698,0.000042163,0.00034761,0.0217791,0.0259487,0.0 00132097,0.00270679,0.00348112,0.00817974,0.00901576,0.0016973 6,0.0000123657,0.000578674,3.84389×10<sup>-6</sup>,0.

0142069,0.00534634,0.0590182,0},

<u>39<sup>n</sup> γραμμή</u>{0.00253277,0.00100078,0.00348688,0.00458362,0.08
62276,0,0.0695253,0.0287739,0.00180277,0.00270558,0.00294463,0
.00459105,0.00271241,0.00284411,0.00198803,0.00294412,0.000273
92,0.00664184,0.00245711,0.00203729,0.00238889,0.00356326,0.00
307191,0.00856053,0.00220899,0.00916209,0.00242089,0.00139608,
0.00342977,0.00179495,0.00796034,0.00164569,9.94322×10<sup>-7</sup>,0.00326395,0.00410415,0.0474571,0.021

6044,0.0000127741,0.00237758,0.00333268,0.000266554,0.0213857, 0.0000737884,0.00302958,0.000351139,0.00119635,0.00170159,0.00 78352,0.00107254,0.00799672,0.00203261,0.00335949,0.000551762, 0.000866052,0.0000323503,0.00613452,0.00235266,0.0113975,0},

<u>40<sup>n</sup> γραμμή</u> {3.76733×10<sup>-7</sup>,0,0.00426208,0,0,0,0,0,8.54224×10<sup>-6</sup>, 0.0000103779,0,0.000014273,0,0.0000657156,0,0.0000375978,2.518 06×10<sup>-7</sup>, 1.98273×10<sup>-6</sup>,0,0,0.0000474863,0,8.08123×10<sup>-6</sup>, 0.0000609872,0,0.000114751,0.0000477772,0,0.00145537,7.86026×1 0<sup>-8</sup>,0.0000748604,7.157×10<sup>-6</sup>,1.14942×10<sup>-7</sup>,0.0000306177, 0.00011717,0.00268176,0.00148333,7.26476×10<sup>-6</sup>,0.0104212,0. 0210683,0,0.00465333,0.0000764214,2.26456×10<sup>-9</sup>,0.000849039, 0.0000129312,0.000103691,0.000433026,0.000118914,0.0042766,0. 000868316,0.000690283,5.61849×10<sup>-6</sup>,0.000084774,1.6346×10<sup>-6</sup>,2.11083×10<sup>-6</sup>,0.000517927,2.33538×10<sup>-6</sup>,0},

<u>41<sup>n</sup> γραμμή</u>{2.55124×10<sup>-7</sup>,0,0,0,0,0,0,0,0,0.000435052,0.00076857 5,0.000684854,0.00129179,0.000806616,0.000524809,0.000564668,0 .00110888,0.0000813771,0.000976356,0.00070688,0.000566148,0.00 0489082,0.00100595,0.000877651,0.00230012,0.000666898,0.002229 05,0.000497075,0.000405104,0.00102604,0.0005336,0.00053258,0.0 00375219, 3.40509×10<sup>-6</sup>,0.000144538,0.0 000309174,0.0018477,0.00105123,0.000179804,0.00016977,0.000994 112,0.00127114,0.0106934,0.001202,0.000813078,0.000167908,0.00 0767637,0.000181491,0.00141659,0.00189458,0.00105215,0.0047017 8,0.0106211,4.33192×10<sup>-6</sup>,8.01564×10<sup>-6</sup>,5.781 4 1×10<sup>-7</sup>,0.00380911,0.0011849,0.000185685,0},

<u>42<sup>n</sup> γραμμή</u> {2.52485×10<sup>-6</sup>, 8.59367×10<sup>-7</sup>, 0.00118736, 0, 0, 0, 0, 0, 0.00 0339649, 0.00044041, 6.51993×10<sup>-6</sup>, 0.0000797484, 0.00010809, 0. 0000139074, 0.000265945, 0.000316312, 0.000185566, 0.00030182, 0.00 0190412, 0.0000862108, 0.0000889941, 0.0000411934, 0.00014755, 0.00 0129961, 0.0000530789, 0.0000292601, 0.0000913934, 0.000101128, 0.0 000458542, 0.00482643, 0.0000735565, 0.0000730516, 5.13061×10<sup>-6</sup> 6, 1.36832×10<sup>-7</sup>, 0.00483134, 1.6584×10<sup>-6</sup>, 0.001 73115, 0.00161347, 0.00130003, 0.0223954, 0.0695591, 0.0111365, 0.01 87326, 0.00224874, 0.000154701, 0.00272662, 8.9092×10<sup>-6</sup>, 0 .0000953619, 0.00124307, 0.00216884, 0.000706525, 0.000329087, 0, 1. 48377×10<sup>-9</sup>, 0.00191378, 4.97441×10<sup>-7</sup>, 5.93626×10<sup>-7</sup>, 0.0005 53455, 0.0000270575, 0},

<u>43<sup>n</sup> γραμμή</u> {0.000252101, 7.79699×10<sup>-6</sup>, 0.00189482, 0.000122837, 0.0026543, 0, 0.00141366, 0.00366927, 0.00256299, 0.00144854, 0.0043 6241, 0.00669707, 0.00535763, 0.00525795, 0.00441723, 0.0178341, 0.0 00284574, 0.00409101, 0.00466675, 0.00424532, 0.00180729, 0.0053469 2, 0.00458059, 0.0101221, 0.00359656, 0.00719949, 0.00646215, 0.0016 7018, 0.00281412, 0.00493911, 0.00366425, 0.00755479, 0.00169376, 0. 00425038, 0.00807684, 0.0321039, 0.0236417, 0.00999751, 0.00592002, 0.00778975, 0.0134692, 0.0200895, 0.0638165, 0.0270166, 0.0377865, 0. 0360275, 0.00173905, 0.0258592, 0.0551854, 0.0139402, 0.0378869, 0. 0116733, 0.000438022, 0.00258966, 0.0000255464, 0.0146716, 0.012535 1, 0.00144659, 0},

<u>44<sup>η</sup> γραμμή</u> {0.0228817,0.0223622,0.0173952,0.0162365,0.016001 4,0,0.0253579,0.0175461,0.0161534,0.0140535,0.0162071,0.014901 ,0.0152542,0.0166048,0.0161675,0.0215522,0.0160372,0.0157791,0 .0157169,0.0155145,0.0166141,0.017937,0.0136538,0.0163805,0.01 55955,0.0169126,0.0154341,0.00896195,0.0145257,0.0121956,0.016 9266,0.0208575,0.00715076,0.00973799,0.0278502,0.0401341,0.036 0684,0.0115636,0.0163358,0.00216593,0.0187774,0.0158078,0.0154 141,0.0336044,0.0230666,0.0316677,0.0156158,0.0159446,0.012120 3,0.0204256,0.0326099,0.0241213,0.00358688,0.00668954,0.002160 01,0.0347485,0.0196929,0.0155232,0},

45<sup>n</sup> γραμμή {0.000474165,0.000178231,0.00142597,0.0000502554, 0.0140976,0,0.00164749,0.0018775,0.00146461,0.00290503,0.00422 446,0.00217497,0.00177896,0.00255988,0.0027654,0.00280704,0.00 103248,0.00217129,0.00295036,0.00226484,0.00154,0.00195773,0.0 0190244,0.000920682,0.00190685,0.00142984,0.00118144,0.0006808 63,0.0033735,0.00220317,0.00106439,0.0000175028,0.0000350505,0 .00160009,0.000286285,0.00214189,0.00162622,0.000276927,0.0091 7668,0.0143538,0.00328013,0.0021212,0.000107292,0.00194325,0.0 206386,0.00186439,0.000179826,0.00233132,0.000124503,0.0004787 86,0.00065013,0.00048483,0.000157784,0.00003507,1.65795×10<sup>-</sup> <sup>6</sup>,0.000764129,0.000699007,0.0000344162,0},

46<sup>n</sup> γραμμή {0.0000799166,0.0000299297,0,0,0,0,0,0,9.7249×10<sup>-</sup> <sup>6</sup>,9.17857×10<sup>-6</sup>,0,0.0000126235,0,0.000058121,0,5.26473×10<sup>-9</sup> ,2.22705×10<sup>-7</sup>,1.77551×10<sup>-6</sup>,0,0,0.0000420152,0,7.18273×10<sup>-6</sup>, 0.0000539391,0,0.000101624,0.0000422557,0,0.0000487944,6.95187 ×10<sup>-8</sup>,0.0000592739,0.0000201462,3.23548×10<sup>-7</sup>,0.000840 435,0.00410189,0.00242764,0.00237521,0.000297236,0.0000376941, 0.000675325,0.00124354,0.0000971671,0.000627806,0.000159107,0. 13817,0.050598,0.000493647,0.00016376,5.18264×10<sup>-6</sup>,4.05157×10<sup>-6</sup> <sup>6</sup>,0.00369911,0,0,3.63178×10<sup>-6</sup>,2.67153×10<sup>-8</sup>,0. 0137737,0.0002523,0.000112553,0},

<u>47<sup>n</sup> γραμμή</u> {4.353×10<sup>-7</sup>,0,0.000462637,0.00523341,0.0026467,0, 0.0288094,0.0240973,0.00504526,0.0183856,0.0187646,0.0321606,0 .0183629,0.0251421,0.0296872,0.0334259,0.0105304,0.00580281,0. 0184151,0.0145923,0.00403562,0.0214207,0.0198239,0.00913031,0. 0117833,0.00991877,0.00935572,0.00436704,0.00411932,0.0241553, 0.0043028,0.00390779,0.00445425,0.0131857,0.0933419,0.00417465 ,0.0598443,0.0114652,0.00834664,0.00270559,0.0159986,0.0187407 ,0.0144019,0.00944886,0.0443879,0.0350092,0.00418193,0.0731561 ,0.0479283,0.0143156,0.0460157,0.0109949,0.000913336,0.010418, 0.0158401,0.182374,0.0341491,0.0216461,0},

<u>48<sup>η</sup> γραμμή</u>{0.000559655,0.000210492,0,0.00113479,9.07366×10<sup>-6</sup> ,0,0.00189949,0.00540437,0.0000150037,0,0,0,0,0,0,2.04002×10<sup>-7</sup>,0,0,0,0,0,0,0,0,0,0,0,0.00083113,0,0.00042689,0.00 405719,0.0302855,0.00105876,0,2.68634×10<sup>-6</sup>,0.0000175108,0. 00049957,0.0139516,0.0108748,0.0463962,0.0202674,0.0000697795, 0.0103449,0.00315739,0.000773934,0.0000643853,0.0197783,0.0016 0659,0.00244747,0.00507304,0,0.000201262,0.000140727,0.011344, 0.00333545,0.0162623,0.0000351291,0},

<u>49<sup>n</sup> γραμμή</u> {0,0,0,0,0,0,0,0.000276595,0.000747989,0.000172588, 0.0000559233,0.000471522,0.000886665,0.000426929,0.000304912,0 .00063867,0.00281993,0.0000873111,0.00018161,0.000227755,0.000 955398,0.000319005,0.000504424,0.000720594,0.000325472,0.00056 2963,0.000074659,0.000313923,0.000143062,0.000461151,0.0004693 83,0.000194428,0.00128756,0.000712195,0.000161524,2.34304×10<sup>-7</sup>, 0.0000194848,0.000117386,0.0000

126165,0.00354865,0.00492332,0.000887096,0.00144345,0.00374017 ,0.00735186,0.00943336,0.0237742,0.0000796002,0.00604224,0.051 5107,0.00764109,0.0128727,0.00271572,0.000959741,0.00398936,0. 0000126278,0.00136319,0.0221838,0.000213228,0},

<u>50<sup>η</sup> γραμμή</u> {0,0,0.000682329,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,000014 7769,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,2.00789×10<sup>-7</sup>,0,0,0, 0,0,0,6.89128×10<sup>-7</sup>,0,0,0,0,7.76127×10<sup>-6</sup>,0,0.000414318,0.0 661387,0.00416835,0.000198706,0.00408555,0.00275194,7.70905×10<sup>-8</sup>,0.0000120204,0.0000132052,0,0},

<u>51<sup>n</sup> γραμμή</u> {0.00201072, 0.00075 5261, 0.00272564, 0.00234528, 0. 00574501, 0, 0.0227595, 0.0300485, 0.0246777, 0.0922556, 0.0265643, 0. 0308041, 0.0254355, 0.0253033, 0.0389981, 0.0660184, 0.0245935, 0.0 367768, 0.0130045, 0.0238026, 0.0208073, 0.0402707, 0.0674303, 0.072 9505, 0.0223304, 0.0717347, 0.0183177, 0.0655853, 0.0936062, 0.01393 72, 0.0187667, 0.00316619, 0.000876718, 0.0375552, 0.0392664, 0.0204 927, 0.0180332, 0.0118035, 0.045599, 0.0130181, 0.0144508, 0.0217312 , 0.00716397, 0.0684531, 0.109912, 0.0622285, 0.0027386, 0.0701545, 0. 10634, 0.11009, 0.122029, 0.0210604, 0.00191139, 0.0117164, 0.00012 4093, 0.122169, 0.0486652, 0.00362574, 0},

<u>53<sup>n</sup> γραμμή</u> {1.42721×10<sup>-10</sup>, 0, 0, 0, 0, 0, 0, 0, 7.80305×10<sup>-10</sup>, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0.0000712691, 0, 4.68544×10<sup>-10</sup>, 0, 0, 3.59151×10<sup>-10</sup>, 0, 7.5732 1×10<sup>-10</sup>, 0, 0, 2.87574×10<sup>-9</sup>, 0, 0, 0.0000105876, 0, 1.68127×10<sup>-10</sup>, 8.63036×10<sup>-6</sup>, 0.0000696819, 1.25621×10<sup>-6</sup>, 0.0000148216, 1.16413×1 0<sup>-6</sup>, 0.0000229713, 4.93511×10<sup>-8</sup>, 2.21665×10<sup>-7</sup>, 0.000153267, 0, 7. 17826×10<sup>-6</sup>, 2.54467×10<sup>-6</sup>, 0.000694842, 5.70303×10<sup>-6</sup>, 0.00033721 9, 0.0000175853, 0.0000147931, 0.00667911, 0.00123533, 0.0011533, 0. 00123822,0.000406426,0.00279207,7.92765×10<sup>-7</sup>,0.000033 6545,0.000394029,0.0000308644,0},

<u>54<sup>η</sup> γραμμή</u> {0.000402559,0.000151407,0,0,0,0,0,0,0,0.0000107922 ,0,0,0,0,0,0,0.00036101,0,0,0,0,0,0,0,0,0,0,0,0,0.0000173016,0 ,3.43952×10<sup>-7</sup>,8.45726×10<sup>-6</sup>,0.0000204853,8.02574×10<sup>-6</sup>,0 ,0,4.90937×10<sup>-7</sup>,1.88575×10<sup>-7</sup>,0.00045349,0.000250322,5.52842×10<sup>-6</sup>,0.0000542836,0.0000187906,0.00408923,0.00896618,0.00 0957186,0.0000894949,0.0000172354,0.00169546,0.000441814,0.000 426258,0.00652113,1.84347×10<sup>-7</sup>,0.00481716,3.39878×10<sup>-6</sup>,0.00180442,0.000489483,0.000124866,0},

 $\frac{55^{n} γραμμή}{8.28763 \times 10^{-7}, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0000187273, 0.0000227}{267, 0, 0.0000312566, 0, 0.000143911, 0, 0.0000230343, 5.51432 \times 10^{-7}, 4.35432 \times 10^{-6}, 0, 0, 0.000104, 0, 0.0000177171, 0.000133557, 0, 0.00025137, 0.000104628, 0, 0.000277249, 1.72133 \times 10^{-7}, 0.00014 697, 0.000159317, 0.0000518717, 5.05391 \times 10^{-6}, 5.48851 \times 10^{-6}, 0.00 590342, 0.00380253, 0.00125845, 0.000365833, 0.0040135, 0, 0.0004572 3, 0.00018244, 0.00799697, 0.000152481, 0.000898033, 0.000300367, 0.000224007, 0.00168517, 0.00155422, 0.00398494, 0.000351484, 0.01501 1, 0.00272661, 0.00019774, 0.000721549, 0.000419174, 0.000468446, 0 \}$ 

<u>56<sup>η</sup> γραμμή</u>{0,0,0,0.000267868,0.000377576,0,0.00121103,0.001 72775,0.00127077,0.00133936,0.00175593,0.00170194,0.00131284,0 .00159768,0.00158075,0.00339724,0.000389534,0.00164031,0.00169 395,0.00146442,0.000657395,0.00178033,0.00165896,0.00150748,0. 00143228,0.00143873,0.00148212,0.000935306,0.00077496,0.001544 86,0.00179314,0.000881623,0.000362374,5.84212×10<sup>-7</sup>,1.73222×10<sup>-6</sup>, 0.000067285,1.13138×10<sup>-6</sup>,3.4536×10<sup>-7</sup>

<sup>8</sup>,0.0000918522,0.000042025,0,0.0000912784,1.5202×10<sup>-7</sup>, 0,1.88665×10<sup>-6</sup>,0,0.0000356663,0.00126063,0.000741218,0.00 0829957,0.00272415,0,0,0.0000388116,3.05665×10<sup>-6</sup>,0,0.0003 16898,0.0000430903,0},

<u>58<sup>η</sup> γραμμή</u> {0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,8.79362×10<sup>-7</sup>,0,0,0, 0,0,0,0,0,0,0,0,0,0.0000659446,0,7.8538×10<sup>-9</sup>,0,0,4.64035×10<sup>-</sup> <sup>8</sup>,0,0,4.24629×10<sup>-6</sup>,0.00153292,0.0000114344,0.000954624,0, 0.000128518,6.01483×10<sup>-6</sup>,0,0.00141334,0.0000803295,0.00001 20692,0.0000206296,8.0822×10<sup>-6</sup>,0.000336977,0.000093025,0,2 .44789×10<sup>-7</sup>,0.000606611,1.38873×10<sup>-6</sup>,0.000202003,0.00081665 9,0.00155665,0},

}

Α.2.β Εισαγωγή μήτρα εισαγωγών – Imp

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<u>Ι<sup>n</sup> γραμμή</u> {0.0161921,0.00609002,0.000219552,0,0,0,0,0,0.0.0313
703,0.0191083,0.00566368,0.000285256,1.73507×10<sup>-7</sup>,0.000013
6115,0.00060431,4.70104×10<sup>-7</sup>,5.76799×10<sup>-7</sup>,0.000167023,0.001
77111,1.87588×10<sup>-6</sup>,2.11539×10<sup>-7</sup>,7.21402×10<sup>-6</sup>,0.0000874005,0
,6.84833×10<sup>-8</sup>,0,3.048×10<sup>-6</sup>,1.12879×10<sup>-7</sup>,0.0000105425,0.0008
87506,0,2.21199×10<sup>-8</sup>,0,3.05959×10<sup>-11</sup>,0,0.000452118,5.07519×10<sup>-6</sup>
6,0.00212324,0.000117593,0.000152614,0,0.000278211,4.1005×10<sup>-6</sup>
6,0,5.68031×10<sup>-6</sup>,0,0.000156903,0.000831974,0,0,3.90905×10<sup>-8</sup>
8,0,5.45717×10<sup>-6</sup>,0.0000127003,0,0.00013355,0.00001796
45,0.000825225,0},

<u>2<sup>η</sup> γραμμή</u> {0,-0.0228074,0,-0.000483118,-0.000140976,0,-0.000 162828,-0.000124702,-0.000193704,-0.0000137027,-0.0000240 547,-0.000104979,-0.0000328955,-0.0124197,-0.0000691178,-0.000110794,-1.66902×10<sup>-7</sup>,-0.000232244,-0.0000367446,-0.00 00303961,-0.0000461432,-0.0000515538,-0.0000170892,-0.000 0113684,-6.03216×10<sup>-6</sup>,-6.37132×10<sup>-6</sup>,-0.0000171145,-5.85985×10<sup>-6</sup>,-0.0000248816,-0.000185424,-0.000143561,-2.21296×10<sup>-7</sup>,0,-2.3551×10<sup>-7</sup>,-1.18774×10<sup>-8</sup>,-0.0000150895,-2.62353×10<sup>-7</sup>,-0.000106377,-4.05167×10<sup>-6</sup>,0,0,-0.0000103165,-1.77783×10<sup>-7</sup>,0 ,0,0,-6.20143×10<sup>-6</sup>,-0.0000291799,0,0,-0.0000174295,0,-0.00 436195,-2.26449×10<sup>-9</sup>,0,-0.0000283756,-9.44324×10<sup>-7</sup>,-1.30457×10<sup>-6</sup>,0},

<u>3<sup>n</sup> γραμμή</u> {0,0,0.00551512,0,0,0,0,0,0.0000881913,0,1.17802×1 0<sup>-6</sup>,0,5.14063×10<sup>-10</sup>,2.88101×10<sup>-6</sup>,1.40579×10<sup>-6</sup>,6.34485×10<sup>-10</sup>,0 ,2.97196×10<sup>-7</sup>,7.87498×10<sup>-6</sup>,2.06378×10<sup>-8</sup>,1.53532×10<sup>-8</sup>,9.10972×10<sup>-7</sup>,5.4052×10<sup>-7</sup>,0,1.73059×10<sup>-8</sup>,0,7.17896×10<sup>-7</sup>,2.85249×10<sup>-8</sup>, 1.9567×10<sup>-6</sup>,0.000220784,0,0,0,7.64777×10<sup>-13</sup>,0,1.58523×10<sup>-6</sup>,9 .70223×10<sup>-7</sup>,0.000387423,4.0959×10<sup>-7</sup>,0.0000283253,0,4.41659×10<sup>-6</sup>,7.4994×10<sup>-7</sup>,0,1.05402×10<sup>-6</sup>,0,2.44111×10<sup>-6</sup>,6.5074×10<sup>-6</sup>,0 ,0,9.57395×10<sup>-10</sup>,0,0,4.37687×10<sup>-7</sup>,0,6.04572×10<sup>-6</sup>,3.26832×10<sup>-6</sup> ,4.75114×10<sup>-6</sup>,0},

<u>7<sup>n</sup> γραμμή</u> {0,0,0,0,0,0,0.000841493,1.289×10<sup>-6</sup>, 7.95986×10<sup>-8</sup>,0, 7.27182×10<sup>-8</sup>,0,2.35719×10<sup>-7</sup>,2.63056×10<sup>-6</sup>,3.13328×10<sup>-6</sup>,0,1.74 846×10<sup>-8</sup>,0.000104384,0.0000400638,0.000059247,0.00304663,0 .000163178,0.0000171542,0,0,0,3.28575×10<sup>-7</sup>,0,4.15477×10<sup>-7</sup>,1 .43747×10<sup>-8</sup>,0.0000434701,0,0,7.84113×10<sup>-8</sup>,0,3.15549×10<sup>-6</sup>,0, 0,2.34445×10<sup>-6</sup>,0,0,5.25091×10<sup>-6</sup>,0,0,0,0,2.96797×10<sup>-6</sup>,0.0000 162007,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,

 $\frac{8^{n} γραμμή}{9} {0.0000488024, 0.0000183551, 0, 0, 0, 0, 0, 0.0042075, 0.0}{000393664, 0, 3.4437×10<sup>-6</sup>, 5.56772×10<sup>-8</sup>, 5.30266×10<sup>-6</sup>, 0.0000285}{468, 0.000146114, 5.04187×10<sup>-7</sup>, 1.727×10<sup>-7</sup>, 0.000869712, 0.00019}{0469, 0.0172252, 0.0000468494, 0.0000331715, 0.000154842, 0, 3.85226}{10^{-6}, 3.22427×10<sup>-9</sup>, 2.52502×10<sup>-6</sup>, 2.24766×10<sup>-6</sup>, 1.93255×10<sup>-7</sup>}{}, 6.75329×10<sup>-7</sup>, 0.000175147, 6.66693×10<sup>-7</sup>, 0, 0.00342178, 4.070 51×10<sup>-9</sup>, 0.0000404759, 1.90821×10<sup>-7</sup>, 0.0000947161, 0.0000203651}{}, 0, 0, 0.0000614452, 1.58295×10<sup>-7</sup>, 0, 0, 0, 0.0000275723, 0.000149}{268, 0, 0, 8.99014×10<sup>-11</sup>, 0, 2.24994×10<sup>-8</sup>, 0, 0, 0, 7.5184×10<sup>-7</sup>, 1.161}{}$ 

<u>9<sup>n</sup> γραμμή</u> {0.00457643,0.00172125,0.00118567,0,0,0,0,0,0,0.0151 082,3.08304×10<sup>-6</sup>,0.000294275,4.60406×10<sup>-6</sup>,0.00327143,0.0000 168069,0.00063011,0.0000280275,5.99229×10<sup>-7</sup>,0.000648474,0. 000758769,0.0000162632,1.1476×10<sup>-6</sup>,1.56027×10<sup>-6</sup>,0.000041934 7,5.0537×10<sup>-7</sup>,6.62742×10<sup>-9</sup>,9.49568×10<sup>-7</sup>,2.56774×10<sup>-6</sup>,1.09238×10<sup>-8</sup>,0.000119405,0.0000854973,5.56788×10<sup>-7</sup>,3.10202×10<sup>-7</sup>,0, 4.46369×10<sup>-7</sup>,2.07682×10<sup>-8</sup>,0.000235673,0.0000466977,0.02132 29,0.0000584443,0.00172852,0,0.000324612,0.0000418884,0,0.0001 45533,3.9382×10<sup>-6</sup>,0.000182838,0.00086835,0,2.96849×10<sup>-7</sup> 7,0.000140322,0.000434967,0.0000552551,0.00196053,0.00021 3604,0.000722369,0.000248427,0.000309132,0},

11<sup>n</sup> γραμμή {0.00032287,0.000121296,0.0129338,0,0,0,6.23292×10-8,0.0000954245,0.000752944,0.00746607,0.0580297,0.092285 2,0.0174856,0.000398924,0.00259075,0.000227489,9.27226×10-6,0.00209401,0.00344606,0.000626304,0.000424508,0.00659694,0.00 021717,0.0000571285,0.000104318,0.00012478,0.000159827,0.00009 1076,0.000154811,0.0166096,0.0000581351,1.5823×10<sup>-6</sup>,1.12415×10<sup>-6</sup> 6,0.000023794,0.000412302,0.00316545,0.0116 655,0.00585356,0.0000845632,0.000290675,0,0.00023553,0.0000108 342,0,0.0000108159,0,0.00043337,0.000656542,8.02251×10<sup>-6</sup> <sup>6</sup>,4.62958×10<sup>-7</sup>,0.000201781,0,0.0000195301,0.0000626045,2 .17879×10<sup>-7</sup>,0.0000719483,0.000364642,0.000156413,0},

<u>12<sup>n</sup> γραμμή</u> {2.19332×10<sup>-8</sup>, 0, 5.78654×10<sup>-6</sup>, 0, 0, 0, 0, 0, 4.9558×10<sup>-7</sup>, 6.01404×10<sup>-7</sup>, 0.000125416, 0.0173721, 0, 3.80824×10<sup>-6</sup>, 0, 0.0000 327307, 1.45922×10<sup>-8</sup>, 1.15233×10<sup>-7</sup>, 0, 0, 2.7521×10<sup>-6</sup>, 0, 4.68848×10<sup>-7</sup>, 3.53423×10<sup>-6</sup>, 0, 6.6519×10<sup>-6</sup>, 2.7687×10<sup>-6</sup>, 0, 0.000012536, 4 .55505×10<sup>-9</sup>, 3.88235×10<sup>-6</sup>, 0.000038009, 0.00183708, 7.20367×10<sup>-7</sup> 7, 0.0000309101, 0.000212825, 0.000101614, 0.000359417, 7.97369×10<sup>-6</sup> 6, 0.000173188, 0.000331994, 0.0000495965, 1.35368×10<sup>-6</sup>, 0.0 000441879, 6.48213×10<sup>-6</sup>, 2.77096×10<sup>-6</sup>, 0.0000239547, 0.00006738 46, 0.0000112791, 0.0000400808, 0.000238762, 0.000595811, 0.0000663 311, 0.000265302, 0.00685343, 0.0000514547, 0.00036813, 0.000082527 5, 0},

13<sup>n</sup> γραμμή{0.0000554311,0.0000208483,0,0,0,0,0,0,0,1.52406×10<sup>-</sup> 6,0,0.0000144214,0.00197231,0.099079,0.0000140353,6.91452×10<sup>-</sup> 6,0.000387519,8.41407×10<sup>-9</sup>,0.0000500877,1.11514×10<sup>-6</sup>,1.32216×10<sup>-</sup> 8,6.10087×10<sup>-8</sup>,3.76592×10<sup>-7</sup>,8.11355×10<sup>-6</sup>,0,3.59601×10<sup>-</sup> 9,4.44006×10<sup>-10</sup>,0.0000448147,0.000168817,2.83481×10<sup>-6</sup>,0.00 00459931,3.37618×10<sup>-10</sup>,5.92549×10<sup>-6</sup>,0,1.38099×10<sup>-9</sup>,9.79366×10<sup>-</sup> 6,0.0000359908,3.60048×10<sup>-6</sup>,9.03567×10<sup>-9</sup>,8.82465×10<sup>-6</sup>,0.00 0041037,0,0.0000199403,1.48452×10<sup>-7</sup>,0,1.53341×10<sup>-6</sup>,0,0.0000 107182,0.0000582697,1.15812×10<sup>-6</sup>,8.16096×10<sup>-6</sup>,0.00013462,0, 9.4306×10<sup>-7</sup>,0.0000878721,3.58191×10<sup>-8</sup>,0.0000162246,0.000116 728,0.0000518577,0},

<u>14<sup>n</sup> γραμμή</u>{0,0,0.00152838,0,0,0,0.000067321,0.000362544,0.0 0254504,0.00306865,0.000910601,0.000245493,0.000382225,0.10742 ,0.000700616,0.000112419,0.0000305168,0.00438545,0.000991356,0 .000634954,0.0000830352,0.000753958,0.000940749,0.0000275368,0 .000823219,0.0000580225,0.00109453,0.00026469,0.000241159,0.05 81357,0.0000191128,0.000119409,0,0.00125331,4.44937×10<sup>-7</sup> 7,0.000245269,0.0000539736,0.00651982,0. 0000676427,0.0000714191,0.0000157492,0.000358014,0.0000179725, 7.45504×10<sup>-8</sup>,0.0000157356,5.60918×10<sup>-7</sup>,0.000115398,0. 000519984,8.62494×10<sup>-6</sup>,4.40391×10<sup>-6</sup>,0.000466027,0,0,5.0861 4×10<sup>-6</sup> 6,5.09674×10<sup>-8</sup>,7.34107×10<sup>-7</sup>,0.00033262,0.00388323,0},

<u>15<sup>η</sup> γραμμή</u>{0.00006703,0.0000247778,0.0019667,0.00228596,0.0 0066705,0,0.000770648,0.000894523,0.00384138,0.0189753,0.00100 559,0.000788691,0.0039505,0.00623123,0.167844,0.0899117,0.0033 1523,0.00642777,0.00385378,0.00163042,0.000901036,0.000549686, 0.000433432,0.000328887,0.000956638,0.000454042,0.000512933,0. 0000849145,0.000249833,0.000494791,0.00119325,0.0000430009,6.3 578×10<sup>-6</sup>,0.0000800664,0.00209794,

0.00855927,0.00400857,0.0105284,0.000787392,0.000617914,0.0012 5012,0.00312605,0.00127053,0.0000136756,0.00347385,0.00208619, 0.000578894,0.0017159,0.0173095,0.000414694,0.00399755, 0.000363693,6.90596×10<sup>-9</sup>, 0.0000388987,2.3762×10<sup>-7</sup>, 0.00113438,0.000520142,0.000318724,0},

16<sup>η</sup> γραμμή {6.20352×10<sup>-7</sup>, 2.29397×10<sup>-7</sup>, 0, 0.000193406, 0.0000564 366, 0, 0.0000651848, 0.0000499218, 0.00010264, 0.000317415, 0.00005 95207, 0.0000594997, 0.000080846, 0.0000795151, 0.0000825988, 0.000 697526, 6.27867×10<sup>-6</sup>, 0.000320854, 0.0000622624, 0.0 00112991, 0.0000399994, 0.0000376742, 0.0000182314, 0.0000124441, 0 .0000127005, 0.0000104795, 0.0000224632, 4.60386×10<sup>-6</sup>, 0. 0000306535, 0.0000201043, 0.0000866977, 0.0000155481, 2.98169×10<sup>-6</sup> 6, 0.000129877, 5.32303×10<sup>-6</sup>, 0.000079123, 0.0000325698, 0.0 0021387, 0.0000742369, 0.000172314, 0.000274532, 0.0000323018, 0.00 00125042, 0.000353163, 0.000280628, 0.000280202, 0.0000107071, 0.00 078816, 0.00259908, 0.00242676, 0.00134179, 0.000300321, 0.00029224 8, 0.0000679149, 1.62083×10<sup>-7</sup>, 0.00232258, 0.00 0791548, 0.0000231357, 0},

<u>17<sup>n</sup> γραμμή</u>{0.00935152,0.0035451,0.0153625,0.00993178,0.0042 4148,0,0.0114672,0.0184024,0.00204196,0.00132697,0.00101122,0. 000386695,0.00677796,0.00485587,0.00246381,0.00244181,0.017825 2,0.00143506,0.00194041,0.00566264,0.00523583,0.0029767,0.0020 4679,0.000934113,0.00154594,0.00106217,0.00120483,0.000642854, 0.00221794,0.0011843,0.00713828,0.012643,0.00637144,0.00621158 ,0.00019924,0.00370106,0.00163617,0.00224859,0.0291828,0.01267 ,0.0157,0.00748076,0.00162892,0.00105689,0.000742433,0.0011065 5,0.000269036,0.00295667,0.000571657,0.000816607,0.00224815,0. 0013267,0.000148843,0.0042626,0.00605261,0.0025868,0.000928035 ,0.000191715,0},

<u>18<sup>n</sup> γραμμή</u>{0.0225075,0.00847929,0.000424824,0.0240265,0.007 01101,0,0.0229179,0.0160952,0.00857312,0.000970155,0.0455795,0 .00182628,0.0142026,0.0225038,0.0359354,0.017919,0.0131001,0.2 25579,0.152147,0.00855698,0.0100399,0.02405,0.0115572,0.018408 6,0.0321972,0.00358725,0.0928401,0.143052,0.00658088,0.0134816 ,0.00514721,0.0000427701,0.00127048,0.00126771,0.00420668,0.02 44295,0.0041232,0.0122218,0.00109029,0.00200369,0.000268347,0. 00182069,0.0000715912,0.000792753,0.00163058,0.000125402,0.001 62484,0.004674,0,0.00457994,0.00488823,0.00509246,0.000606586, 0.068307,0.0101531,0.00665014,0.00812966,0.00426066,0}, <u>19<sup>n</sup> γραμμή</u>{0.000689325,0.000259052,8.53237×10<sup>-6</sup>,0.00297728,0 .00086878,0,0.00100458,0.00250242,0.00324026,0.00262465,0.0021 9392,0.000829744,0.00641476,0.00370179,0.00430348,0.00233228,0 .0000261387,0.00283736,0.0142215,0.000719958,0.000423176,0.002 5238,0.00360039,0.00614902,0.00533607,0.00309646,0.00327144,0. 00088616,0.000383854,0.00506989,0.000999836,0.0000714696,0.000 0981468,0.00720529,0.000478924,0.00415731,0.00301332,0.0009537 74,0.00145702,0.0003667,0.000864269,0.000525839,0.0000169581,1 .53499×10<sup>-7</sup>,0.000016209

1,0.0000454504,0.000212073,0.00173799,0.000220578,0.0000846916 ,0.000239683,0,0.0000272814,0.0000732069,7.86482×10<sup>-</sup> <sup>6</sup>,0.000010969,0.000146589,0.00340626,0},

20<sup>η</sup> γραμμή {8.88657×10<sup>-13</sup>,0,0,0,0,0,0,0,0,0.000658553,0.0007846 02,0.000126681,0.0000621738,0.0000972981,0.00017969,0.00015078 8,0.0000242635,9.98484×10<sup>-6</sup>,0.00108399,0.00066825,0.0 182999,0.000165305,0.000176555,0.000954868,0.000397177,0.00197 154,0.0000634678,0.00416694,0.000411843,0.000433808,0.00037512 2,1.84305×10<sup>-7</sup>,0.0000138779,4.21849×10<sup>-6</sup>,0.0167192,6.75195×10<sup>-7</sup> 7,0.0000819772,1.29651×10<sup>-6</sup>,0.000415144,0.0000 845412,0.0000432027,0.000054328,0.0000765801,8.50064×10<sup>-7</sup>, 0,1.68539×10<sup>-6</sup>,6.62464×10<sup>-11</sup>,0.0000348204,0.000197193,0,9.1 32×10<sup>-6</sup>,0.0000155946,0,3.81985×10<sup>-6</sup>,0.000380284,1.42938×10<sup>-6</sup> 6,4.01787×10<sup>-6</sup>,0.000205901,0.00003048,0},

<u>21<sup>n</sup> γραμμή</u>{0,0,0,0,0,0,0,0,0.00222919,0.0026874,0.0319551,0 .00021149,0.000355112,0.00172029,0.000991344,0.000765362,0.000 0265532,0.00309513,0.0147749,0.00317604,0.242099,0.149271,0.05 0764,0.0187994,0.114063,0.01732,0.00993135,0.0282068,0.0575325 ,0.00753991,0.190218,0.000139033,0.0000432248,0.014022,0.00430 259,0.0011212,5.43213×10<sup>-6</sup>,2.48578×10<sup>-</sup>

<sup>8</sup>,0.000336708,0.00011696,0,0.000733222,4.23107×10<sup>-7</sup>,0,4.35 206×10<sup>-6</sup>,0,0.00045786,0.00229825,0,4.21228×10<sup>-8</sup>,2.3852×10<sup>-6</sup>,0,0.0000156859,7.26494×10<sup>-6</sup>,0.0000634346,6.20846×10<sup>-7</sup>,0.0 00649543,0,0},

<u>22<sup>n</sup> γραμμή</u> {0.00005949,0.00180958,0,0.000438352,0.000127913, 0,0.000147741,0.000113147,0.00188733,0.00218425,0.00228824,0.0 00475594,0.00130319,0.00078981,0.000940205,0.00111686,0.000021 5383,0.00225608,0.00217613,0.000631243,0.000831919,0.00820419, 0.00181159,0.00189943,0.00296833,0.000597201,0.000397236,0.000 485767,0.00283209,0.00133801,0.000701488,0.000179054,0.0003832 94,0.0125367,0.0000473147,0.000109662,0.0000302448,0.000695346 ,0.00014752,0.000619546,0.0000189736,0.0000946602,0.0000110425 ,8.35317×10<sup>-8</sup>,0.0000232358,2.74399×10<sup>-</sup> <sup>6</sup>,0.0000576497,0.000205464,0.000234549,9.92053×10<sup>-</sup> <sup>6</sup>,0.000747651,0.000204475,0.00337902,0.0000222299,0 .00240887,0.000193263,0.000125834,0.000102721,0},

<u>23<sup>n</sup> γραμμή</u> {0.00507871,0.00191016,0,0.0230101,0.0814838,0,0. 0245662,0.0284486,0.00212098,0.00271601,0.00408955,0.00206732, 0.00209731,0.0100502,0.0038209,0.00826175,0.000276477,0.003311 02,0.00549012,0.0143025,0.00522098,0.00659313,0.114535,0.00017 0713,0.00354081,0.00180899,0.00102253,0.00572443,0.0135896,0.0 0219807,0.00766035,0.00862401,0.0378505,0.00508542,0.000311706 ,0.000558404,0.0000470346,0.00166564,0.00163078,0.000966761,0. 00540553,0.00218841,0.000449939,4.85112×10<sup>-</sup>

<sup>6</sup>,0.0000464155,1.58268×10<sup>-10</sup>,0.000664172,0. 00371346,0.000130368,0.0000427198,0.00146557,0.0447838,0.00004 12996,0.0000279555,0.0112128,0.00184776,0.000274342,0.00036543 8,0},

24<sup>η</sup> γραμμή {0,0,0,0,0,0,0,0,0,000233174,0.000340332,0.000454 37,0.000258958,0.000262724,0.000369823,0.000461251,0.000763518 ,0.000346391,0.000343376,0.000510321,0.00170406,0.000608826,0 .000368571,0.0000665674,0.0103431,0.0000405981,0.0000343588,0. 0000264337,0.0000960713,0.000198084,0.000248692,0.000415819,4. 9714×10<sup>-6</sup>,6.1747×10<sup>-7</sup>,0.0000351992,1.90849×10<sup>-7</sup> 7,0.0000169078,3.49687×10<sup>-6</sup>,0.000293733,0.000350673 ,0.000151203,0.000445728,0.000314943,0.0000850465,9.1858×10<sup>-7</sup> 7,7.84421×10<sup>-6</sup>,0.00139832,0.0000144465,0.00189673,0.007 58487,0.000474897,0.0000703163,0.000607301,0.000394524,0.00001 44462,9.9409×10<sup>-8</sup>,0.000388086,0.000108954,0.000131993,0},

25<sup>η</sup> γραμμή { 6.1858×10<sup>-10</sup>, 0, 0, 0.00246721, 0.000719939, 0, 0.00083 1537, 0.000636834, 0.000538111, 0.000785296, 0.00114068, 0.00059752 9, 0.000606256, 0.000873572, 0.00106797, 0.00168722, 0.0000799277, 0 .000849257, 0.00167483, 0.00398917, 0.00142354, 0.00144159, 0.00757 085, 0.000911715, 0.0365862, 0.00133995, 0.000706611, 0.0021579, 0.0 0202152, 0.000770575, 0.0227808, 0.0027774, 0.0123074, 0.0197411, 1. 52208×10<sup>-6</sup>, 0.000135479, 0.00011085

2,0.000964231,0.00173609,0.000651558,0.00664507,0.00178097,0.0 00283301,3.05433×10<sup>-6</sup>,0.0000348002,8.26739×10<sup>-8</sup>,0.0000 620951,0.000532966,0.00191374,0.0000978521,0.000273307,0,0.000 079359,0.000116214,3.65303×10<sup>-7</sup>,0.0000451053,0.003051 57,0.0000625176,0},

<u>26<sup>η</sup> γραμμή</u>{2.40826×10<sup>-8</sup>,0,0,0,0,0,0,0,1.31668×10<sup>-7</sup>,0,6.6994×10<sup>-6</sup>,0,0,5.24551×10<sup>-6</sup>,0,0.000112496,0,6.47502×10<sup>-6</sup>,0.0000167 395,6.96014×10<sup>-6</sup>,1.63111×10<sup>-6</sup>,0.000113138,0.00150409,0.0657 782,0.00277729,0.0830883,0.000397254,0.0000892971,3.54646×10<sup>-6</sup>,0.000401489,0.0000832881,0.0000494346,0.0000285935,0 .00208883,0,0.000328882,0.0041546,0.0000825035,0.000160252,0.0 000493066,0.0000768655,0.000235852,0.0103241,0.000112883,2.960 55×10<sup>-6</sup>,6.66773×10<sup>-8</sup>,0.000132908,0.000349106,0.00 184836,0.000135178,0.00229715,0,9.57706×10<sup>-9</sup>,0.0000115975, 3.98437×10<sup>-7</sup>,2.53778×10<sup>-6</sup>,0.00211675,0.0000237809,0},

 $\frac{27^{\eta} \, \gamma \rho \alpha \mu \mu \dot{\eta}}{2929 \times 10^{-9}, 5.95896 \times 10^{-7}, 4.6674 \times 10^{-7}, 0.00031943, 0, 4.65196 \times 10^{-6}}{, 0.0000459172, 5.61217 \times 10^{-6}, 2.51969 \times 10^{-6}, 0.000073442, 0.00152}{535, 1.4214 \times 10^{-6}, 0.000206589, 0.00058989, 0.110063, 0.00011255}{7, 0.00463783, 0.0000348474, 0.000227699, 0.0000745336, 0.000047318}{6, 0.000364896, 4.77184 \times 10^{-7}, 0.0000534063, 4.10819 \times 10^{-6}, 0.000171963, 0.0000562386, 0.000132374, 0.00662726, 0.00062791, 0.0000104546, 1.13476 \times 10^{-6}, 6.51555 \times 10^{-6}, 1.14421 \times 10^{-9}, 0.00008}{85435, 0.00012905, 0.000140015, 0.00503231, 0.000766425, 0.0047145}{2, 0.0000108606, 0.0437912, 1.79772 \times 10^{-6}, 0.0000656754, 0.000138438, 0},$ 

28<sup>n</sup> γραμμή {0,0.0000264423,0,0.000460461,0.00206339,0,0.0004 91602,0.000797818,0.00128267,0.000712206,0.000619438,0.0010595 4,0.000750368,0.00161111,0.000923013,0.00297342,7.29237×10<sup>-7</sup>,0.00108778,0.00212627,0.00660376,0.000162793,0.00 138093,0.000869134,0.000859339,0.00694614,0.000137978,0.000856 86,0.0540842,0.000347522,0.00145416,0.00246914,3.30362×10<sup>-7</sup> 7,0.00430704,0.0000322024,0.0250857,0.0000632297,4.4 3492×10<sup>-6</sup> 6,7.87581×10<sup>-7</sup>,0.00350761,0.0000267903,0.00303131,0 .00134965,0.000105997,1.15794×10<sup>-6</sup>,8.36649×10<sup>-6</sup>,1.30051×10<sup>-11</sup>,0.000475093,0.00479594,3.01921×10<sup>-6</sup>,3.33734×10<sup>-6</sup>,0.00060 4029,0.0188304,0.0000950516,0.000120097,0.0176483,0.00583078,0 .000530178,8.89425×10<sup>-6</sup>,0},

<u>29<sup>n</sup> γραμμή</u> {0,0,0.00693731,0.00108145,0.00484613,0,0.0011545 9,0.00187378,0,0,0,0,0,0,2.04918×10<sup>-8</sup>,0.000272523,1.2854 6×10<sup>-7</sup>,0,0,6.58771×10<sup>-7</sup>,0.0000318229,0.0000285896,0,0,0.004 45734,0,0.00325094,0.0364557,6.14658×10<sup>-8</sup>,0.000226855,0,0, 0.000126586,0.00115255,3.65954×10<sup>-6</sup>,0.0000270022,4.72562×10<sup>-6</sup> 6,0.000607824,0.0206413,0.0119971,0.00143668,0.000106926 ,3.52691×10<sup>-7</sup>,0.000770154,0,0.0000200296,0.00108634,7.091×10<sup>-7</sup> 7,0,2.88051×10<sup>-6</sup>,0,0,0.0000141358,4.87367×10<sup>-9</sup>,9.71137×10<sup>-6</sup> 6,0.0000888268,7.93794×10<sup>-6</sup>,0},

<u>30<sup>η</sup> γραμμή</u> {9.43199×10<sup>-8</sup>,8.56928×10<sup>-6</sup>,0,0.000337631,0.0000985 219,0,0.000113794,0.0000871491,0.000176559,0.0000972436,0.0004 64842,0.00269082,0.000526136,0.000339532,0.000216942,0.0007722 21,9.77774×10<sup>-7</sup>,0.000182717,0.000227851,0.000121

689,0.000341146,0.00063574,0.000142378,0.0000936869,0.00004157 87,0.0000853431,0.000173224,0.000106314,0.00028923,0.0161617,0 .0103054,0.0000546415,5.34829×10<sup>-6</sup>,0.000314864,0

.0000178298,0.000716894,0.000514929,0.00195521,0.000303382,0.0 00263842,0.000308316,0.00123177,0.000590309,0.00154899,0.00002 0134,0.000436116,0.000054278,0.000192545,0.000126724,0.0014757 7,0.00065955,0.000121712,0.000190572,0.000506056,2.60784×10<sup>-</sup> <sup>6</sup>,0.00147986,0.00149261,0.000478067,0},

32<sup>n</sup> γραμμή {0.000189308,0.0000717046,3.41764×10<sup>-6</sup>,0.00240384 ,0.00131497,0,0.000350134,0.00100603,0.000380554,0.000181976,0 .000992876,0.000331507,0.000372923,0.000543503,0.000879035,0.0 00527308,0.000158715,0.000391068,0.000953911,0.00135084,0.0017 1674,0.00050571,0.000255846,0.000238774,0.00035132,0.000244117 ,0.000284399,0.000147474,0.000492244,0.000196698,0.000981355,0 .001711,0.000869185,0.0000435522,0.000791977,0.000372503,0.000 215122,0.000582792,0.000172197,0.0000562769,0.000127313,0.0003 78775,0.00018979,0.0000924606,0.0000335323,0.0000612574,0.0000 434439,0.000294738,0.000206945,0.000236794,0.00017851,0.000121 004,0.0000197713,0.000153895,0.0003174,0.000145915,0.000237535 ,0.000129226,0},

<u>34<sup>n</sup> γραμμή</u>{0.0000129984,0.0000127296,0,0.000548767,0.000049
3777,0,0.000248781,0.000244006,0.0000653988,0.0000835416,0.000
0846031,0.0000491423,0.000505798,0.000507503,0.000109101,0.000
113578,0.0000299516,0.00010535,0.0000917396,0.000135709,0.0001
26474,0.0000608026,0.0000124813,8.87557×10<sup>-6</sup>
6,0.0000194003,0.0000110353,8.05139×10<sup>-6</sup>,0.0000318492,0.00
00395661,0.0000533646,0.000170654,0.0000454393,0.0000631563,1.
44726×10<sup>-6</sup>,4.24844×10<sup>-6</sup>,0.0000657293,0.0000411825,0.0
000715663,2.60245×10<sup>-6</sup>,0.0000404688,0.0000604284,0.0001003
17,0.0000189969,0.0000670574,0.000475128,0.000182782,0.0009679
96,0.0000191565,6.92089×10<sup>-6</sup>,0.00020043,0.000146777,

0.000231382,0.0000348348,0.0000932711,8.72395×10<sup>-7</sup>,0.0006 20944,0.000238547,3.95955×10<sup>-6</sup>,0},

38<sup>n</sup> γραμμή {1.29744×10<sup>-8</sup>, 6.37709×10<sup>-6</sup>, 0, 0.0000118958, 0.000273 634, 0, 0.0000367098, 0.0000333945, 0.000167508, 0.000297004, 0.0002 66772, 0.000499919, 0.000314203, 0.000189359, 0.000219956, 0.000240 623, 0.000316413, 0.000379867, 0.000275352, 0.000220533, 0.0001796 23, 0.000391849, 0.00034002, 0.000881985, 0.000259778, 0.000841971, 0.00018267, 0.000157801, 0.000669345, 0.000207836, 0.000196408, 0.0 000373791, 0.0000266299, 0.000010311, 3.90386×10<sup>-7</sup> 7, 0.000104617, 0.0000651023, 5.83571×10<sup>-6</sup>, 0.00 0196604, 0.00399963, 0.0121829, 0.00929811, 0.0000150959, 0.0001244 57, 0.00779769, 0.00929055, 0.0000472953, 0.000969127, 0.00124637, 0 .00292864, 0.00322797, 0.000607716, 4.42737×10<sup>-6</sup>, 0. 000207186, 1.37625×10<sup>-6</sup>, 0.00508658, 0.00191418, 0.0211306, 0},

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39<sup>n</sup> γραμμή{0.0000676022,0.0000267117,0.0000930682,0.0001223
41,0.0023015,0,0.0018557,0.000768004,0.0000481177,0.0000722147
,0.0000785949,0.000122539,0.0000723968,0.0000759121,0.00005306
23,0.0000785814,7.3112×10<sup>-6</sup>,0.000177277,0.00006
55826,0.0000543773,0.0000637618,0.0000951067,0.0000819922,0.00
0228489,0.00005896,0.000244545,0.0000646159,0.0000372627,0.000
0915439,0.000047909,0.000212469,0.0000439251,2.65394×10<sup>-</sup>
*,0.0000871179,0.000109544,0.00126668,0.000576641,3.40954×10<sup>-</sup>
7,0.0000634599,0.0000889524,7.11457×10<sup>-6</sup>,0.000
570805,1.96948×10<sup>-6</sup>,0.0000808625,9.37225×10<sup>-6</sup>,0.0000319318,
0.000045417,0.000209129,0.0000286271,0.00021344,0.0000542523,0
.0000896682,0.0000147271,0.0000231158,8.63462×10<sup>-7</sup>,0.
000163736,0.0000627948,0.000304209,0},
```

<u>40<sup>η</sup> γραμμή</u> {8.45108×10<sup>-8</sup>,0,0.000956093,0,0,0,0,0,1.91624×10<sup>-6</sup> ,2.32803×10<sup>-6</sup>,0,3.2018×10<sup>-6</sup>,0,0.0000147417,0,8.43414×10<sup>-6</sup>,5 .64864×10<sup>-8</sup>,4.44777×10<sup>-7</sup>,0,0,0.0000106524,0,1.81282×10<sup>-6</sup>,0. 000013681,0,0.0000257416,0.0000107176,0,0.000326477,1.76326×10<sup>-</sup> <sup>8</sup>,0.0000167931,1.6055×10<sup>-6</sup>,2.57843×10<sup>-8</sup>,6.86833×10<sup>-6</sup>,0 .0000262842,0.000601587,0.000332749,1.62967×10<sup>-6</sup>,0.0023377 4,0.00472615,0,0.00104386,0.0000171433,5.07997×10<sup>-10</sup>,0.000 190461,2.9008×10<sup>-6</sup>,0.0000232606,0.0000971388,0.0000266754, 0.000959349,0.000194785,0.000154848,1.26037×10<sup>-6</sup>,0.0000190 17,3.66682×10<sup>-7</sup>,4.73513×10<sup>-7</sup>,0.000116184,5.23886×10<sup>-7</sup>,0},

<u>41<sup>n</sup> γραμμή</u>{1.44626×10<sup>-7</sup>,0,0,0,0,0,0,0,0.000246625,0.00043569
4,0.000388234,0.000732295,0.000457259,0.000297507,0.000320102,
0.000628605,0.0000461315,0.000553482,0.00040072,0.000320941,0.
000277254,0.000570258,0.000497528,0.00130391,0.000378055,0.001
26362,0.000281785,0.000229648,0.000581646,0.00030249,0.0003019
12,0.000212706,1.9303×10<sup>-6</sup>,0.000081936

3,0.0000175266,0.00104744,0.000595929,0.000101928,0.0000962404 ,0.000563548,0.000720592,0.00606191,0.000681395,0.000460922,0. 0000951845,0.000435162,0.000102885,0.000803044,0.00107401,0.00 0596449,0.00266537,0.00602094,2.4557×10<sup>-6</sup>,4.54395×10<sup>-6</sup> 6,3.2774×10<sup>-7</sup>,0.00215933,0.000671703,0.000105262,0},

42<sup>n</sup> γραμμή {7.55833×10<sup>-6</sup>, 2.57258×10<sup>-6</sup>, 0.00355446, 0, 0, 0, 0, 0, 0.00 101677, 0.0013184, 0.0000195179, 0.000238733, 0.000323576, 0.000041 6329, 0.000796127, 0.000946904, 0.000555507, 0.000903521, 0.0005700 11, 0.000258079, 0.00026641, 0.000123316, 0.000441702, 0.000389047, 0.000158896, 0.0000875922, 0.000273593, 0.000302735, 0.000137268, 0 .0144483, 0.000220197, 0.000218685, 0.0000153589, 4.09617×10<sup>-7</sup>, 0.014463, 4.96453×10<sup>-6</sup>, 0.00518232, 0.0 0483006, 0.00389173, 0.0670424, 0.20823, 0.0333381, 0.0560776, 0.006 73178, 0.000463109, 0.00816236, 0.0000266704, 0.000285473, 0.003721 22, 0.0064926, 0.00211504, 0.000985147, 0, 4.44177×10<sup>-9</sup>, 0.00572904, 1.48913×10<sup>-6</sup>, 1.77706×10<sup>-6</sup>, 0.00165681, 0.00008 09987, 0},

<u>43<sup>n</sup> γραμμή</u>{1.43922×10<sup>-6</sup>, 4.45124×10<sup>-7</sup>, 0.000108174, 7.01267×10<sup>-6</sup>
,0.000151531, 0, 0.0000807047, 0.000209476, 0.000146319, 0.00008269
6,0.000249047, 0.00038233, 0.000305862, 0.000300172, 0.000252176, 0
.00101813, 0.0000162461, 0.000233552, 0.000266421, 0.000242362, 0.0
00103176, 0.000305251, 0.000261502, 0.000577861, 0.000205325, 0.000
411013, 0.000368919, 0.0000953493, 0.000160656, 0.00028197, 0.00020
9189, 0.000431296, 0.0000966955, 0.000242651, 0.0004611, 0.00183278
,0.00134969, 0.000570749, 0.000337969, 0.00044471, 0.000768946, 0.0
011469, 0.00364323, 0.00154236, 0.0021572, 0.002205678, 0.0000992809
,0.00147628, 0.00315049, 0.000795837, 0.00216293, 0.00066642, 0.000

<sup>6</sup>,0.000837591,0.000715619,0.0000825844,0},

44<sup>n</sup> γραμμή{0.00155674,0.00152139,0.00118347,0.00110464,0.00
108864,0,0.0017252,0.00119374,0.00109899,0.00095612,0.00110264
,0.00101378,0.0010378,0.0011297,0.00109994,0.00146629,0.001091
08,0.00107351,0.00106928,0.00105552,0.00113032,0.00122033,0.00
0928923,0.00111444,0.00106103,0.00115064,0.00105005,0.00060971
9,0.000988242,0.000829714,0.00115159,0.00141902,0.000486496,0.
000662515,0.00189476,0.00273049,0.00245388,0.000786719,0.00111
139,0.000147357,0.00127751,0.00107547,0.00104869,0.00228624,0.
00156932,0.00215448,0.00106241,0.00108478,0.000824595,0.001389
64,0.00221859,0.00164107,0.000244031,0.000455117,0.000146954,0.
00236408,0.00133979,0.00105611,0},

<u>45<sup>n</sup> γραμμή</u>{0.000111704,0.0000419877,0.00033593,0.0000118392,0.00332113,0,0.000388116,0.000442302,0.000345032,0.000684368,0.0009952,0.000512379,0.000419087,0.000603058,0.000651473,0.000661282,0.000243233,0.000511513,0.000695046,0.000533551,0.000362795,0.000461204,0.000448176,0.000216895,0.000449217,0.000336842,0.000278324,0.000160398,0.000794729,0.000519024,0.000250749,4.12332×10<sup>-6</sup>,8.2572×10<sup>-6</sup>,0.00037

695,0.0000674431,0.000504587,0.000383104,0.0000652385,0.002161 84,0.00338146,0.000772734,0.000499713,0.000025276,0.000457792, 0.00486204,0.000439213,0.0000423634,0.000549213,0.0000293304,0 .000112793,0.000153158,0.000114216,0.0000371709,8.26181×10<sup>-</sup> <sup>6</sup>,3.90581×10<sup>-7</sup>,0.000180014,0.000164672,8.10779×10<sup>-6</sup>,0},

 $\frac{47^{n}}{970} \frac{73}{7} \frac{970}{10} + 3.74753 \times 10^{-10}, 0, -3.98287 \times 10^{-7}, -4.50547 \times 10^{-6}, -2.27$ 856×10<sup>-6</sup>, 0, -0.0000248022, -0.0000207455, -4.3435×10<sup>-6</sup>, -0.000
0158283, -0.0000161545, -0.0000276873, -0.0000158088, -0.0000
21645, -0.0000255579, -0.0000287766, -9.06567 \times 10^{-6}, -4.99568 \times 10^{-6}, -0.0000158537, -0.0000125626, -3.47429 \times 10^{-6}, -0.0000184412, -0.0000170665, -7.86034 \times 10^{-6}, -0.0000101443, -8.53913 \times 10^{-6}, -8
.0544×10<sup>-6</sup>, -3.75961×10<sup>-6</sup>, -3.54635×10<sup>-6</sup>, -0.0000207954, -3.704
31×10<sup>-6</sup>, -3.36424×10<sup>-6</sup>, -3.83469×10<sup>-6</sup>, -0.0000113517, -0.000080
3586, -3.59398×10<sup>-6</sup>, -0.0000515203, -9.87046×10<sup>-6</sup>, -7.18567×10<sup>-6</sup>, -2.32926×10<sup>-6</sup>, -0.0000137733, -0.000016134, -0.0000123987, -8.13458 \times 10^{-6}, -0.0000382138, -0.0000301397, -3.60024 \times 10^{-6}, -0.0
000629805, -0.0000412618, -0.0000123244, -0.0000396152, -9.46
558×10<sup>-6</sup>, -7.86297 \times 10^{-7}, -8.96896 \times 10^{-6}, -0.0000136368, -0.00015
7007, -0.0000293991, -0.0000186353, 0},

<u>48<sup>n</sup> γραμμή</u> {0.000074969,0.0000281967,0,0.000152011,1.21547×10<sup>-6</sup>,0,0.000254447,0.000723947,2.00984×10<sup>-6</sup>,0,0,0,0,0,0,2.73 273×10<sup>-8</sup>,0,0,0,0,0,0,0,0,0,0,0,0,0.000111335,0,0.000057184 4,0.000543484,0.00405692,0.000141828,0,3.59851×10<sup>-7</sup>,2.34568×10<sup>-6</sup>,0.0000669203,0.0018689,0.00145674,0.00621504,0.0027 1494,9.34737×10<sup>-6</sup>,0.00138577,0.00042295,0.000103673,8.62478×10<sup>-6</sup>,0.00264941,0.000215212,0.000327852,0.000679563,0,0. 0000269602,0.0000188512,0.00151959,0.000446802,0.00217843,4.70 574×10<sup>-6</sup>,0},

49" γραμμή {0,0,0,0,0,0,0,0.0000325971,0.0000881517,0.00002033
98,6.59064×10<sup>-6</sup>,0.0000555695,0.000104495,0.0000503142,0.00
00359343,0.0000752683,0.000332333,0.0000102897,0.000021403,0.0
000268412,0.000112595,0.0000375953,0.0000594471,0.0000849231,0
.0000383574,0.000066346,8.79867×10<sup>-6</sup>,0.000036996
3,0.0000168601,0.0000543473,0.0000553175,0.0000229136,0.000151
74,0.0000839333,0.0000190359,2.76131×10<sup>-8</sup>,2.29632×10<sup>-6</sup>
6,0.0000138341,1.48688×10<sup>-6</sup>,0.000418214,0.00058022,0.00010
4546,0.000170112,0.000440785,0.000866427,0.00111174,0.00280183
,9.381×10<sup>-6</sup>,0.000712087,0.00607062,0.000900514,0.0015
1707,0.000320052,0.000113107,0.000470152,1.4882×10<sup>-6</sup>,0.000

<u>51<sup>n</sup> γραμμή</u> {0.000127299,0.0000478156,0.00017256,0.000148479, 0.000363716,0,0.0014409,0.00190237,0.00156235,0.0058407,0.0016 8178,0.00195021,0.00161032,0.00160195,0.00246897,0.00417962,0. 00155701,0.00232834,0.000823313,0.00150695,0.00131731,0.002549 54,0.00426901,0.0046185,0.00141374,0.00454152,0.0011597,0.0041 522,0.00592621,0.000882363,0.00118812,0.000200451,0.000055505, 0.00237762,0.00248595,0.00129739,0.00114168,0.000747276,0.0028 8687,0.000824178,0.000914878,0.0013758,0.000453551,0.00433377, 0.00695854,0.00393969,0.000173381,0.00444148,0.00673241,0.0069 6981,0.00772565,0.00133333,0.00012101,0.000741766,7.85631×10<sup>-</sup> <sup>6</sup>,0.00773451,0.003081,0.000229545,0},

 $\frac{53^{n} γραμμή}{9} \{-7.33608 \times 10^{-13}, 0, 0, 0, 0, 0, 0, -4.01089 \times 10^{-12}, 0, 0, 0, 0, 0, -3.66334 \times 10^{-7}, 0, -2.40839 \times 10^{-12}, 0, 0, -1.84609 \times 10^{-12}, 0, -3.89275 \times 10^{-12}, 0, 0, -1.47818 \times 10^{-11}, 0, 0, -5.4422 \times 10^{-8}, 0, -8.642 \times 10^{-13}, -4.43614 \times 10^{-8}, -3.58176 \times 10^{-7}, -6.45714 \times 10^{-9}, -7.61854 \times 10^{-8}, -5.98384 \times 10^{-9}, -1.18076 \times 10^{-7}, -2.53672 \times 10^{-10}, -1.1394 \times 10^{-9}, -7.87818 \times 10^{-7}, 0, -3.68974 \times 10^{-8}, -1.308 \times 10^{-8}, -3.57159 \times 10^{-6}, -2.93145 \times 10^{-8}, -1.73336 \times 10^{-6}, -9.03912 \times 10^{-8}, -7.60387 \times 10^{-8}, -0.0000343317, -6.34978 \times 10^{-6}, -5.92812 \times 10^{-6}, -6.36462 \times 10^{-6}, -2.08909 \times 10^{-6}, -0.0000143517, -4.07494 \times 10^{-9}, -1.72989 \times 10^{-7}, -2.02537 \times 10^{-6}, -1.58648 \times 10^{-7}, 0\},$ 

<u>54<sup>η</sup> γραμμή</u> {6.65522×10<sup>-6</sup>, 2.5031×10<sup>-6</sup>, 0, 0, 0, 0, 0, 0, 1.78419×10<sup>-7</sup>, 0, 0, 0, 0, 0, 0, 5.96831×10<sup>-6</sup>, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 2.86035×1 0<sup>-7</sup>, 0, 5.68631×10<sup>-9</sup>, 1.39818×10<sup>-7</sup>, 3.38668×10<sup>-7</sup>, 1.32684×10<sup>-7</sup>, 0, 0, 8.11631×10<sup>-9</sup>, 3.11757×10<sup>-9</sup>, 7.49722×10<sup>-6</sup>, 4.13839×10<sup>-6</sup>, 9.13973×10<sup>-8</sup>, 8.97431×10<sup>-7</sup>, 3.10651×10<sup>-7</sup>, 0.0000676042, 0.000148231, 0. 0000158245, 1.47955×10<sup>-6</sup>, 2.84941×10<sup>-7</sup>, 0.0000280298, 7.30419×1 0<sup>-6</sup>, 7.04702×10<sup>-6</sup>, 0.000107809, 3.04767×10<sup>-9</sup>, 0.0000796386, 5.61 896×10<sup>-8</sup>, 0.0000298312, 8.09227×10<sup>-6</sup>, 2.06432×10<sup>-6</sup>, 0},

<u>55<sup>n</sup> γραμμή</u> {3.66755×10<sup>-9</sup>, 0,0,0,0,0,0,0,8.28744×10<sup>-8</sup>,1.00573×10<sup>-7</sup>,0,1.38321×10<sup>-7</sup>,0,6.36856×10<sup>-7</sup>,0,1.01935×10<sup>-7</sup>,2.44027×10<sup>-9</sup>,1.92693×10<sup>-8</sup>,0,0,4.60235×10<sup>-7</sup>,0,7.84039×10<sup>-8</sup>,5.91033×10<sup>-7</sup>,0,1.1124×10<sup>-6</sup>,4.63013×10<sup>-7</sup>,0,1.22692×10<sup>-6</sup>,7.61745×10<sup>-10</sup>,6.5039×10<sup>-7</sup>,7.05032×10<sup>-7</sup>,2.29549×10<sup>-7</sup>,2.23652×10<sup>-8</sup>,2.42885×10<sup>-8</sup>,0.0000261246,0.0000168274,5.56903×10<sup>-6</sup>,1.61893×10<sup>-6</sup>,0.0000177 611,0,2.02339×10<sup>-6</sup>,8.07359×10<sup>-7</sup>,0.0000353892,6.74781×10<sup>-7</sup>,3.97409×10<sup>-6</sup>,1.32922×10<sup>-6</sup>,9.91303×10<sup>-7</sup>,7.45742×10<sup>-6</sup>,6.87791×10<sup>-6</sup>,0.0000176347,1.55543×10<sup>-6</sup>,0.0000664287,0.0000120661,8.7 5063×10<sup>-7</sup>,3.19309×10<sup>-6</sup>,1.85498×10<sup>-6</sup>,2.07303×10<sup>-6</sup>,0},

}

## Α.2.γ Εισαγωγή διαγώνιας μήτρας – Β

{

## 51<sup>η</sup> γραμμή

}

## Α.2.δ Εισαγωγή διαγώνιας μήτρας – F

{

## <u>11<sup>η</sup> γραμμή</u>
}

# Α.2.ε Εισαγωγή διαγώνιας μήτρας – R

#### {

}

### Α.2.στ Εισαγωγή διανύσματος γραμμή τιμής – Ρ<sub>0</sub>

{

}

#### A.3 Εισαγωγή Δεδομένων 3<sup>ου</sup> Μοντέλου Στο Mathematica

#### A.3.α Εισαγωγή μήτρα εγχώριας παραγωγής – Dom

Η μήτρα εγχώριας παραγωγής είναι όμοια με τη μήτρα εγχώριας παραγωγής στο παράρτημα Α.1.α (βλέπε σελίδα 138)

### Α.3.β Εισαγωγή μήτρα εισαγωγών – Imp

Η μήτρα εισαγωγών είναι όμοια με τη μήτρα εισαγωγών στο παράρτημα Α.1.β (βλέπε σελίδα 152)

### Α.3.γ Εισαγωγή διάνυσμα γραμμή – Α.ν

{

{0.624653,0.717128,0.719635,0.622132,0.576672,0,0.630184,0.556 326,0.345325,0.454955,0.411333,0.51199,0.426895,0.247822,0.327 385,0.484305,0.140906,0.324563,0.403103,0.410319,0.174,0.33458 1,0.43812,0.528004,0.359862,0.535848,0.443509,0.377083,0.42559 8,0.503927,0.232775,0.631353,0.755469,0.448768,0.701316,0.6545 99,0.712942,0.578143,0.521669,0.431864,0.592089,0.585222,0.823 545,0.776048,0.448868,0.658275,0.880538,0.583337,0.529833,0.58 8205,0.528025,0.694402,0.907625,0.662566,0.800381,0.393875,0.6 10325,0.809669,1}

}

# Α.3.δΕισαγωγή διανύσματος γραμμή τιμής – P $_0$

{

# Παράρτημα Β

# Β.1 Αποτελέσματα 1ου μοντέλου

#### **Β.1.α Αποτελέσματα 1<sup>ου</sup> μοντέλου για υποτίμηση 15%**

Οι επιδράσεις στο επίπεδο τιμών των εμπορευμάτων στην ελληνική οικονομία μετά από υποτίμησης του νομίσματος κατά 15% είναι οι εξής<sup>51</sup>:

 $\begin{array}{l} \textbf{P_1:} \{1.00918, 1.00045, 1.00819, 1.01103, 1.01708, 0., 1.01095, 1.01292, 1.01239, 1.012, 1.02722, 1.02172, 1.02638, 1.0245, 1.03605, 1.02212, 1.10003, 1.0423, 1.03334, 1.01471, 1.04584, 1.03422, 1.03662, 1.02152, 1.03585, 1.022, 1.03632, 1.04478, 1.0355, 1.02068, 1.03966, 1.00721, 1.01079, 1.01726, 1.00681, 1.01047, 1.00635, 1.01171, 1.01952, 1.04201, 1.01731, 1.01636, 1.00431, 1.00249, 1.00663, 1.00419, 1.00136, 1.0078, 1.00927, 1.00799, 1.00781, 1.01367, 1.00046, 1.01992, 1.00871, 1.00696, 1.00814, 1.00564, 1. \end{array}$ 

 $\begin{array}{l} \mathbf{P_2:} \{1.02061,\,1.0036,\,1.02093,\,1.02417,\,1.03216,\,0.,\,1.02476,\,1.02932,\,1.02312,\,1.02282,\,\\ 1.04502,\,1.03733,\,1.0453,\,1.04009,\,1.05568,\,1.03851,\,1.12105,\,1.0631,\,1.05367,\,1.02806,\,\\ 1.07025,\,1.05793,\,1.05925,\,1.03768,\,1.05929,\,1.0382,\,1.05781,\,1.06768,\,1.05778,\,1.03704,\,\\ 1.06446,\,1.01835,\,1.02274,\,1.03421,\,1.01325,\,1.02167,\,1.01339,\,1.02302,\,1.04214,\,1.06825,\,\\ 1.03517,\,1.03148,\,1.00924,\,1.00625,\,1.01342,\,1.00939,\,1.00416,\,1.0161,\,1.01793,\,1.01645,\,\\ 1.01604,\,1.02593,\,1.00197,\,1.03716,\,1.01913,\,1.01453,\,1.01637,\,1.01194,\,1. \end{array}$ 

 $\begin{array}{l} \textbf{P_3:} \{1.03136, 1.00813, 1.03312, 1.0363, 1.04526, 0., 1.03759, 1.04314, 1.03307, 1.03273, 1.05745, 1.04908, 1.05849, 1.0507, 1.06747, 1.05049, 1.1264, 1.07483, 1.0667, 1.03972, 1.08403, 1.07322, 1.0735, 1.05001, 1.07431, 1.05044, 1.07119, 1.08044, 1.07204, 1.04964, 1.07914, 1.02937, 1.03391, 1.04806, 1.01952, 1.03232, 1.02055, 1.03323, 1.05847, 1.0838, 1.04918, 1.04402, 1.01436, 1.01086, 1.0203, 1.01512, 1.00812, 1.02397, 1.02594, 1.02491, 1.02392, 1.03675, 1.00432, 1.05102, 1.02925, 1.02188, 1.02438, 1.01864, 1. \end{array}$ 

 $\begin{array}{l} \textbf{P_4:} \{1.04102, 1.01346, 1.04393, 1.04692, 1.05622, 0., 1.04863, 1.05413, 1.04216, 1.04165, 1.06666, 1.05829, 1.06807, 1.05868, 1.07545, 1.05954, 1.12857, 1.0825, 1.07567, 1.04971, 1.0926, 1.08321, 1.08292, 1.05962, 1.0842, 1.05997, 1.08016, 1.08839, 1.0816, 1.05942, 1.08834, 1.03949, 1.04395, 1.05897, 1.02566, 1.04188, 1.02751, 1.04236, 1.06969, 1.09343, 1.05985, 1.05423, 1.01953, 1.01599, 1.02705, 1.02109, 1.01286, 1.03127, 1.03328, 1.03299, 1.03128, 1.04623, 1.00728, 1.06207, 1.03862, 1.02883, 1.03199, 1.02547, 1. \end{array}$ 

 $\begin{array}{l} \textbf{P5:} \{1.04963, 1.01926, 1.05336, 1.05613, 1.06526, 0., 1.05789, 1.06292, 1.05035, 1.04961, 1.07387, 1.06576, 1.07541, 1.06518, 1.08147, 1.06667, 1.13002, 1.08817, 1.08235, 1.05823, 1.09854, 1.09012, 1.08955, 1.06732, 1.09109, 1.06761, 1.08667, 1.09396, 1.0884, 1.0672, 1.09466, 1.04862, 1.05289, 1.0676, 1.03164, 1.05026, 1.03414, 1.05049, 1.07767, 1.09987, 1.06815, 1.06264, 1.02471, 1.02142, 1.03355, 1.02711, 1.01807, 1.03801, 1.04002, 1.04052, 1.0381, 1.05451, 1.01068, 1.07096, 1.04717, 1.03536, 1.03913, 1.03223, 1. \end{array}$ 

<sup>&</sup>lt;sup>51</sup> Ο δείκτης στη τιμή P μας δείχνει τον αριθμό της επανάληψης και οι τιμές μέσα στο άγκιστρο την τιμή που θα έχουν τα εμπορεύματα ανά κλάδο

 $\begin{array}{l} \textbf{P_6:} \{1.05731, 1.02529, 1.06158, 1.06411, 1.07272, 0., 1.06564, 1.07011, 1.05769, 1.0567, 1.07979, 1.07201, 1.08132, 1.07077, 1.08638, 1.07257, 1.13125, 1.09275, 1.08768, 1.06554, 1.10306, 1.09525, 1.09456, 1.07366, 1.09624, 1.07392, 1.09174, 1.09826, 1.09359, 1.07358, 1.09942, 1.0568, 1.06082, 1.07457, 1.03744, 1.05757, 1.04039, 1.05776, 1.08369, 1.10456, 1.07482, 1.06966, 1.02984, 1.02698, 1.03974, 1.03306, 1.02351, 1.04426, 1.04621, 1.04745, 1.04443, 1.06176, 1.0144, 1.07823, 1.05494, 1.04148, 1.04576, 1.03879, 1. \end{array}$ 

 $\begin{array}{l} \mathbf{P7:} \{1.06417, 1.03137, 1.06876, 1.07107, 1.07895, 0., 1.07219, 1.07614, 1.06425, 1.06305, 1.08482, 1.07738, 1.08627, 1.07572, 1.0906, 1.07762, 1.13236, 1.09663, 1.09213, 1.07185, 1.10675, 1.09935, 1.09858, 1.07904, 1.10034, 1.07928, 1.09592, 1.10183, 1.09777, 1.07898, 1.10328, 1.06411, 1.06786, 1.08034, 1.04306, 1.06397, 1.04626, 1.06426, 1.08851, 1.10822, 1.08036, 1.07564, 1.0349, 1.03255, 1.0456, 1.03886, 1.02903, 1.05007, 1.05192, 1.0538, 1.05031, 1.06813, 1.01834, 1.08428, 1.06198, 1.04723, 1.05192, 1.0451, 1. \end{array}$ 

 $\begin{array}{l} \mathbf{P_8:} \{1.07032,\ 1.0374,\ 1.07507,\ 1.07716,\ 1.08424,\ 0.,\ 1.07779,\ 1.08131,\ 1.07015,\ 1.06876, \\ 1.08922,\ 1.08208,\ 1.09054,\ 1.08019,\ 1.09434,\ 1.08208,\ 1.13338,\ 1.10004,\ 1.096,\ 1.07737, \\ 1.10988,\ 1.1028,\ 1.10199,\ 1.08371,\ 1.10378,\ 1.08394,\ 1.09951,\ 1.10492,\ 1.10131,\ 1.08366, \\ 1.10655,\ 1.07064,\ 1.07411,\ 1.08526,\ 1.04846,\ 1.06963,\ 1.05179,\ 1.07009,\ 1.09257,\ 1.11124, \\ 1.0851,\ 1.08082,\ 1.03986,\ 1.03805,\ 1.05113,\ 1.04446,\ 1.03452,\ 1.0555,\ 1.05723,\ 1.05962, \\ 1.05579,\ 1.07378,\ 1.02243,\ 1.08939,\ 1.06835,\ 1.05264,\ 1.05762,\ 1.05111,\ 1. \end{array}$ 

**P9**: {1.07585, 1.04328, 1.08064, 1.08254, 1.08882, 0., 1.08266, 1.08584, 1.07546, 1.07393, 1.09314, 1.08628, 1.09431, 1.08427, 1.09771, 1.08609, 1.13432, 1.1031, 1.09944, 1.08224, 1.11263, 1.10582, 1.10497, 1.08785, 1.10678, 1.08806, 1.10268, 1.10767, 1.10441, 1.08781, 1.10941, 1.07648, 1.07969, 1.08954, 1.05365, 1.07468, 1.05698, 1.07535, 1.09611, 1.11384, 1.08924, 1.08539, 1.0447, 1.04342, 1.05635, 1.04982, 1.03991, 1.06059, 1.06218, 1.06495, 1.0609, 1.07882, 1.02663, 1.09378, 1.07413, 1.05774, 1.0629, 1.0568, 1.}

 $\begin{array}{l} \textbf{P_{10}:} \{1.08084, 1.04897, 1.08558, 1.08732, 1.09286, 0., 1.08697, 1.08987, 1.08027, 1.07864, \\ 1.09668, 1.09008, 1.09769, 1.08804, 1.10079, 1.08975, 1.13519, 1.10587, 1.10253, 1.0866, \\ 1.11507, 1.10852, 1.10765, 1.09157, 1.10945, 1.09178, 1.10552, 1.11016, 1.10718, 1.09155, \\ 1.11198, 1.08172, 1.08469, 1.09333, 1.05861, 1.07923, 1.06188, 1.08012, 1.09928, 1.11613, \\ 1.09294, 1.08947, 1.0494, 1.04863, 1.06128, 1.05495, 1.04516, 1.06536, 1.06681, 1.06987, \\ 1.06568, 1.08336, 1.03087, 1.09761, 1.07937, 1.06255, 1.06781, 1.06217, 1. \\ \end{array}$ 

**P**<sub>11</sub> : {1.08536, 1.05443, 1.09, 1.0916, 1.09646, 0., 1.09082, 1.09352, 1.08464, 1.08294, 1.0999, 1.09355, 1.10077, 1.09154, 1.10362, 1.09313, 1.13601, 1.10841, 1.10536, 1.09053, 1.11728, 1.11097, 1.11009, 1.09496, 1.11186, 1.09516, 1.10811, 1.11245, 1.10969, 1.09495, 1.1143, 1.08643, 1.08918, 1.09675, 1.06334, 1.08338, 1.0665, 1.08446, 1.10216, 1.11818, 1.09629, 1.09316, 1.05397, 1.05365, 1.06593, 1.05983, 1.05024, 1.06985, 1.07116, 1.07441, 1.07017, 1.08746, 1.03514, 1.1011, 1.08413, 1.0671, 1.07238, 1.06723, 1.}

 $\begin{array}{l} \mathbf{P_{12}:} \{1.08947, 1.05965, 1.09397, 1.09545, 1.09972, 0., 1.09431, 1.09684, 1.08864, 1.0869, \\ 1.10285, 1.09675, 1.10359, 1.09479, 1.10624, 1.09626, 1.13677, 1.11076, 1.10795, 1.09411, \\ 1.11929, 1.11323, 1.11234, 1.09807, 1.11408, 1.09827, 1.11049, 1.11455, 1.112, 1.09808, \\ 1.11642, 1.09069, 1.09324, 1.09987, 1.06784, 1.08718, 1.07086, 1.08843, 1.10483, 1.12005, \\ 1.09936, 1.09652, 1.05838, 1.05847, 1.07032, 1.06447, 1.05513, 1.07408, 1.07525, 1.07863, \\ 1.07439, 1.0912, 1.0394, 1.10405, 1.08848, 1.07141, 1.07665, 1.07198, 1. \\ \end{array}$ 

**P**<sub>13</sub> : {1.09322, 1.0646, 1.09755, 1.09894, 1.10269, 0., 1.0975, 1.09989, 1.09231, 1.09055, 1.10557, 1.09971, 1.1062, 1.09783, 1.10868, 1.09919, 1.13748, 1.11294, 1.11035, 1.09738, 1.12113, 1.11531, 1.11442, 1.10095, 1.11612, 1.10114, 1.11269, 1.11651, 1.11414, 1.10099, 1.11837, 1.09454, 1.09691, 1.10273, 1.07212, 1.09069, 1.07498, 1.09207, 1.1073, 1.12176, 1.10219, 1.09961, 1.06263, 1.06309, 1.07447, 1.06888, 1.05983, 1.07807, 1.07911, 1.08255, 1.07837, 1.09463, 1.04362, 1.1068, 1.09245, 1.07548, 1.08064, 1.07644, 1.}

 $\begin{array}{l} \textbf{P_{14}:} \{1.09666,\,1.0693,\,1.10081,\,1.10212,\,1.10543,\,0.,\,1.10045,\,1.10272,\,1.09569,\,1.09394,\\ 1.10809,\,1.10247,\,1.10862,\,1.10068,\,1.11095,\,1.10192,\,1.13815,\,1.11497,\,1.11257,\,1.1004,\\ 1.12282,\,1.11725,\,1.11636,\,1.10363,\,1.11801,\,1.10382,\,1.11474,\,1.11833,\,1.11612,\,1.10368,\\ 1.12018,\,1.09805,\,1.10027,\,1.10538,\,1.07618,\,1.09395,\,1.07888,\,1.09544,\,1.10961,\,1.12335,\\ 1.10481,\,1.10246,\,1.06673,\,1.0675,\,1.07839,\,1.07306,\,1.06434,\,1.08184,\,1.08276,\,1.08622,\\ 1.08212,\,1.0978,\,1.04779,\,1.10931,\,1.09609,\,1.07934,\,1.08438,\,1.08063,\,1.\} \end{array}$ 

 $\begin{array}{l} \textbf{P_{15}:} \{1.09983, 1.07375, 1.10379, 1.10503, 1.10796, 0., 1.10318, 1.10534, 1.09882, 1.09708, \\ 1.11044, 1.10505, 1.11088, 1.10335, 1.11307, 1.10449, 1.13878, 1.11686, 1.11464, 1.1032, \\ 1.12438, 1.11905, 1.11818, 1.10614, 1.11978, 1.10631, 1.11666, 1.12004, 1.11797, 1.10621, \\ 1.12185, 1.10126, 1.10333, 1.10784, 1.08003, 1.097, 1.08256, 1.09855, 1.11177, 1.12482, \\ 1.10726, 1.10511, 1.07067, 1.0717, 1.0821, 1.07702, 1.06864, 1.0854, 1.08621, 1.08965, \\ 1.08565, 1.10073, 1.05189, 1.11162, 1.09943, 1.08299, 1.08789, 1.08455, 1. \end{array}$ 

 $\begin{array}{l} \textbf{P_{16}:} \{1.10275, 1.07794, 1.10652, 1.1077, 1.11031, 0., 1.10573, 1.10779, 1.10172, 1.10001, \\ 1.11262, 1.10746, 1.11299, 1.10586, 1.11506, 1.10691, 1.13937, 1.11864, 1.11658, 1.10581, \\ 1.12583, 1.12074, 1.11989, 1.10848, 1.12142, 1.10865, 1.11845, 1.12164, 1.1197, 1.10857, \\ 1.12341, 1.1042, 1.10614, 1.11013, 1.08368, 1.09984, 1.08605, 1.10144, 1.1138, 1.1262, \\ 1.10956, 1.10758, 1.07445, 1.07569, 1.08562, 1.08078, 1.07275, 1.08877, 1.08947, 1.09287, \\ 1.089, 1.10345, 1.0559, 1.11376, 1.1025, 1.08645, 1.09118, 1.08823, 1. \\ \end{array}$ 

 $\begin{array}{l} \textbf{P_{17}:} \{1.10546,\,1.0819,\,1.10904,\,1.11017,\,1.1125,\,0.,\,1.10811,\,1.11009,\,1.10442,\,1.10275,\,1.11467,\,1.10973,\,1.11498,\,1.10822,\,1.11693,\,1.10918,\,1.13993,\,1.12031,\,1.11839,\,1.10823,\,1.12718,\,1.12232,\,1.12149,\,1.11069,\,1.12297,\,1.11085,\,1.12013,\,1.12315,\,1.12133,\,1.11079,\,1.12487,\,1.10691,\,1.10873,\,1.11228,\,1.08714,\,1.10251,\,1.08936,\,1.10414,\,1.11571,\,1.12748,\,1.11171,\,1.10988,\,1.07808,\,1.07949,\,1.08894,\,1.08434,\,1.07667,\,1.09195,\,1.09257,\,1.09589,\,1.09216,\,1.106,\,1.05982,\,1.11575,\,1.10534,\,1.08974,\,1.09429,\,1.09168,\,1.\} \end{array}$ 

**P**<sub>18</sub>: {1.10797, 1.08563, 1.11137, 1.11245, 1.11455, 0., 1.11035, 1.11223, 1.10694, 1.10532, 1.11658, 1.11186, 1.11684, 1.11045, 1.11869, 1.11132, 1.14045, 1.12189, 1.12009, 1.1105, 1.12844, 1.12381, 1.123, 1.11276, 1.12442, 1.11292, 1.12172, 1.12457, 1.12285, 1.11287, 1.12624, 1.10941, 1.11113, 1.1143, 1.09041, 1.10502, 1.09249, 1.10665, 1.11752, 1.12869, 1.11374, 1.11205, 1.08155, 1.0831, 1.09209, 1.08771, 1.0804, 1.09496, 1.0955, 1.09874, 1.09515, 1.10837, 1.06364, 1.1176, 1.10797, 1.09284, 1.09722, 1.09491, 1.}

**P**<sub>19</sub>: {1.11032, 1.08915, 1.11353, 1.11457, 1.11646, 0., 1.11246, 1.11425, 1.10929, 1.10773, 1.11838, 1.11388, 1.11859, 1.11254, 1.12035, 1.11335, 1.14095, 1.12337, 1.12168, 1.11263, 1.12962, 1.1252, 1.12442, 1.11472, 1.12578, 1.11487, 1.12321, 1.1259, 1.12429, 1.11484, 1.12752, 1.11173, 1.11335, 1.1162, 1.09351, 1.10739, 1.09546, 1.10901, 1.11922, 1.12982, 1.11565, 1.11408, 1.08487, 1.08653, 1.09507, 1.09091, 1.08395, 1.09781, 1.09828, 1.10143, 1.09798, 1.11061, 1.06734, 1.11934, 1.11041, 1.09579, 1.09998, 1.09795, 1.}

**P**<sub>20</sub> : {1.11251, 1.09246, 1.11555, 1.11655, 1.11827, 0., 1.11444, 1.11615, 1.1115, 1.10999, 1.12006, 1.11577, 1.12025, 1.11452, 1.12191, 1.11526, 1.14142, 1.12477, 1.12319, 1.11463, 1.13072, 1.12651, 1.12576, 1.11657, 1.12706, 1.11671, 1.12462, 1.12716, 1.12564, 1.11669, 1.12872, 1.11389, 1.11542, 1.11799, 1.09645, 1.10962, 1.09827, 1.11122, 1.12083, 1.13089, 1.11745, 1.11598, 1.08805, 1.08979, 1.09789, 1.09394, 1.08732, 1.10051, 1.10091, 1.10396, 1.10066, 1.1127, 1.07094, 1.12097, 1.11267, 1.09859, 1.10259, 1.1008, 1.}

**P21**: {1.11455, 1.09558, 1.11744, 1.11839, 1.11996, 0., 1.1163, 1.11794, 1.11357, 1.11211, 1.12165, 1.11756, 1.12181, 1.11639, 1.12338, 1.11706, 1.14187, 1.12609, 1.1246, 1.11651, 1.13176, 1.12775, 1.12703, 1.11831, 1.12827, 1.11844, 1.12594, 1.12836, 1.12691, 1.11844, 1.12985, 1.1159, 1.11734, 1.11967, 1.09923, 1.11173, 1.10094, 1.11329, 1.12235, 1.1319, 1.11915, 1.11778, 1.09108, 1.09288, 1.10057, 1.09682, 1.09053, 1.10307, 1.10342, 1.10636, 1.1032, 1.11467, 1.07442, 1.12251, 1.11478, 1.10123, 1.10506, 1.10348, 1.}

 $\begin{array}{l} \mathbf{P_{22}:} \{1.11647, 1.09852, 1.1192, 1.12012, 1.12155, 0., 1.11807, 1.11963, 1.11551, 1.11412, \\ 1.12315, 1.11926, 1.12328, 1.11816, 1.12477, 1.11877, 1.14229, 1.12733, 1.12594, 1.11829, \\ 1.13273, 1.12892, 1.12822, 1.11996, 1.12941, 1.12008, 1.1272, 1.12948, 1.12812, 1.12009, \\ 1.13092, 1.11778, 1.11914, 1.12126, 1.10186, 1.11372, 1.10346, 1.11524, 1.12378, 1.13285, \\ 1.12075, 1.11948, 1.09398, 1.09581, 1.10311, 1.09954, 1.09358, 1.10549, 1.10579, 1.10862, \\ 1.1056, 1.11653, 1.07778, 1.12395, 1.11675, 1.10375, 1.10739, 1.10601, 1. \end{array}$ 

**P**<sub>23</sub>: {1.11827, 1.10129, 1.12085, 1.12174, 1.12306, 0., 1.11973, 1.12122, 1.11735, 1.11601, 1.12456, 1.12086, 1.12467, 1.11983, 1.12609, 1.12039, 1.14269, 1.12851, 1.1272, 1.11996, 1.13365, 1.13002, 1.12936, 1.12152, 1.13049, 1.12164, 1.12838, 1.13055, 1.12925, 1.12165, 1.13192, 1.11953, 1.12082, 1.12276, 1.10436, 1.1156, 1.10586, 1.11708, 1.12514, 1.13374, 1.12227, 1.12108, 1.09674, 1.09859, 1.10551, 1.10213, 1.09647, 1.10779, 1.10804, 1.11076, 1.10789, 1.11829, 1.08102, 1.12531, 1.11859, 1.10613, 1.1096, 1.10838, 1.}

 $\begin{array}{l} \textbf{P_{24}:} \{1.11996,\,1.1039,\,1.12241,\,1.12326,\,1.12447,\,0.,\,1.12131,\,1.12273,\,1.11907,\,1.11779,\\ 1.1259,\,1.12237,\,1.12599,\,1.1214,\,1.12733,\,1.12192,\,1.14307,\,1.12963,\,1.12839,\,1.12153,\\ 1.13451,\,1.13107,\,1.13043,\,1.12299,\,1.13151,\,1.12311,\,1.12951,\,1.13155,\,1.13033,\,1.12312,\\ 1.13287,\,1.12118,\,1.1224,\,1.12418,\,1.10672,\,1.11738,\,1.10813,\,1.11881,\,1.12643,\,1.13459,\\ 1.12371,\,1.12259,\,1.09938,\,1.10122,\,1.10779,\,1.10458,\,1.09922,\,1.10996,\,1.11018,\,1.11279,\\ 1.11005,\,1.11994,\,1.08415,\,1.1266,\,1.12032,\,1.10838,\,1.11169,\,1.11061,\,1.\} \end{array}$ 

**P**<sub>25</sub> : {1.12156, 1.10637, 1.12387, 1.12468, 1.12581, 0., 1.1228, 1.12415, 1.1207, 1.11947, 1.12715, 1.1238, 1.12724, 1.12289, 1.12851, 1.12337, 1.14343, 1.13068, 1.12952, 1.12302, 1.13533, 1.13205, 1.13144, 1.12439, 1.13247, 1.1245, 1.13057, 1.13251, 1.13134, 1.12452, 1.13377, 1.12272, 1.12388, 1.12552, 1.10896, 1.11906, 1.11028, 1.12045, 1.12765, 1.13539, 1.12507, 1.12401, 1.10189, 1.10372, 1.10995, 1.10691, 1.10183, 1.11202, 1.11221, 1.11471, 1.1121, 1.12151, 1.08716, 1.12782, 1.12193, 1.11053, 1.11366, 1.11272, 1.}

 $\begin{array}{l} \mathbf{P_{26}:} \{1.12306, 1.10869, 1.12525, 1.12603, 1.12707, 0., 1.12421, 1.12549, 1.12224, 1.12106, \\ 1.12834, 1.12516, 1.12841, 1.1243, 1.12962, 1.12475, 1.14376, 1.13168, 1.13058, 1.12443, \\ 1.1361, 1.13298, 1.1324, 1.12571, 1.13338, 1.12581, 1.13157, 1.13341, 1.13231, 1.12584, \\ 1.13461, 1.12418, 1.12528, 1.12679, 1.11108, 1.12066, 1.11233, 1.122, 1.1288, 1.13615, \\ 1.12636, 1.12536, 1.10429, 1.10609, 1.11201, 1.10911, 1.10431, 1.11398, 1.11413, 1.11653, \\ 1.11404, 1.12299, 1.09005, 1.12896, 1.12345, 1.11256, 1.11554, 1.1147, 1. \\ \end{array}$ 

**P**<sub>27</sub> : {1.12448, 1.11088, 1.12655, 1.12729, 1.12827, 0., 1.12555, 1.12677, 1.12369, 1.12257, 1.12947, 1.12644, 1.12953, 1.12564, 1.13068, 1.12605, 1.14409, 1.13263, 1.13159, 1.12576, 1.13682, 1.13387, 1.13331, 1.12696, 1.13424, 1.12706, 1.13252, 1.13427, 1.13322, 1.12709, 1.13541, 1.12555, 1.12659, 1.12799, 1.11309, 1.12217, 1.11426, 1.12345, 1.12989, 1.13686, 1.12758, 1.12664, 1.10657, 1.10834, 1.11395, 1.1112, 1.10666, 1.11583, 1.11596, 1.11825, 1.11588, 1.12438, 1.09283, 1.13005, 1.12488, 1.11448, 1.11731, 1.11657, 1.}

**P**<sub>28</sub> : {1.12581, 1.11295, 1.12778, 1.12849, 1.1294, 0., 1.12681, 1.12797, 1.12506, 1.12399, 1.13053, 1.12766, 1.13059, 1.1269, 1.13168, 1.12728, 1.14439, 1.13352, 1.13254, 1.12702, 1.13751, 1.1347, 1.13417, 1.12815, 1.13505, 1.12824, 1.13342, 1.13508, 1.13408, 1.12828, 1.13617, 1.12684, 1.12782, 1.12913, 1.115, 1.1236, 1.1161, 1.12483, 1.13093, 1.13754, 1.12873, 1.12785, 1.10874, 1.11048, 1.1158, 1.11319, 1.10889, 1.11759, 1.11769, 1.11988, 1.11763, 1.12571, 1.09549, 1.13108, 1.12622, 1.11631, 1.11899, 1.11834, 1.}

**P**<sub>29</sub> : {1.12708, 1.1149, 1.12893, 1.12962, 1.13047, 0., 1.12801, 1.12911, 1.12635, 1.12534, 1.13154, 1.12881, 1.13159, 1.1281, 1.13262, 1.12845, 1.14468, 1.13437, 1.13344, 1.12821, 1.13816, 1.13549, 1.13498, 1.12927, 1.13583, 1.12936, 1.13428, 1.13585, 1.13489, 1.1294, 1.13689, 1.12805, 1.12899, 1.13021, 1.1168, 1.12496, 1.11784, 1.12614, 1.13191, 1.13818, 1.12983, 1.12899, 1.11081, 1.1125, 1.11755, 1.11507, 1.111, 1.11925, 1.11934, 1.12143, 1.11929, 1.12696, 1.09804, 1.13206, 1.12748, 1.11804, 1.12059, 1.12, 1.}

**P<sub>30</sub>**: {1.12827, 1.11675, 1.13003, 1.13068, 1.13148, 0., 1.12914, 1.13019, 1.12758, 1.12661, 1.1325, 1.1299, 1.13254, 1.12923, 1.13352, 1.12955, 1.14495, 1.13518, 1.1343, 1.12933, 1.13877, 1.13624, 1.13576, 1.13034, 1.13656, 1.13042, 1.13509, 1.13657, 1.13657, 1.13046, 1.13756, 1.1292, 1.13009, 1.13123, 1.11851, 1.12624, 1.11949, 1.12738, 1.13284, 1.13879, 1.13086, 1.13008, 1.11277, 1.11442, 1.11921, 1.11686, 1.11301, 1.12083, 1.1209, 1.12289, 1.12086, 1.12815, 1.10049, 1.13298, 1.12867, 1.11968, 1.1221, 1.12158, 1.}

**P**<sub>31</sub>: {1.1294, 1.11849, 1.13107, 1.13169, 1.13243, 0., 1.13022, 1.13121, 1.12874, 1.12782, 1.1334, 1.13093, 1.13344, 1.1303, 1.13436, 1.1306, 1.14521, 1.13594, 1.13511, 1.1304, 1.13935, 1.13695, 1.13649, 1.13135, 1.13725, 1.13143, 1.13585, 1.13726, 1.1364, 1.13147, 1.13821, 1.13029, 1.13113, 1.13219, 1.12013, 1.12746, 1.12105, 1.12855, 1.13372, 1.13937, 1.13185, 1.1311, 1.11465, 1.11624, 1.12078, 1.11855, 1.11491, 1.12233, 1.12239, 1.12428, 1.12235, 1.12927, 1.10284, 1.13386, 1.1298, 1.12124, 1.12353, 1.12307, 1.}

**P**<sub>32</sub>: {1.13047, 1.12014, 1.13205, 1.13264, 1.13334, 0., 1.13123, 1.13218, 1.12984, 1.12896, 1.13426, 1.13191, 1.13429, 1.13132, 1.13517, 1.1316, 1.14546, 1.13666, 1.13587, 1.13141, 1.1399, 1.13762, 1.13718, 1.1323, 1.13791, 1.13238, 1.13658, 1.13792, 1.13709, 1.13242, 1.13881, 1.13131, 1.13211, 1.13311, 1.12167, 1.12862, 1.12254, 1.12965, 1.13456, 1.13992, 1.13278, 1.13207, 1.11642, 1.11797, 1.12228, 1.12016, 1.11672, 1.12375, 1.12379, 1.1256, 1.12377, 1.13034, 1.10508, 1.13469, 1.13086, 1.12271, 1.12489, 1.12448, 1.}

**P**<sub>33</sub> : {1.13148, 1.1217, 1.13297, 1.13354, 1.1342, 0., 1.1322, 1.1331, 1.13088, 1.13005, 1.13507, 1.13284, 1.1351, 1.13228, 1.13593, 1.13254, 1.14569, 1.13735, 1.1366, 1.13237, 1.14042, 1.13826, 1.13784, 1.13321, 1.13853, 1.13328, 1.13727, 1.13854, 1.13775, 1.13333, 1.13939, 1.13228, 1.13304, 1.13398, 1.12313, 1.12971, 1.12395, 1.1307, 1.13535, 1.14043, 1.13366, 1.133, 1.11812, 1.11961, 1.1237, 1.12168, 1.11843, 1.12509, 1.12513, 1.12685, 1.12511, 1.13135, 1.10722, 1.13547, 1.13186, 1.12411, 1.12618, 1.12581, 1.}

**P**<sub>34</sub> : {1.13243, 1.12318, 1.13385, 1.13439, 1.13501, 0., 1.13311, 1.13397, 1.13187, 1.13108, 1.13583, 1.13373, 1.13586, 1.1332, 1.13665, 1.13344, 1.14591, 1.138, 1.13729, 1.13328, 1.14092, 1.13886, 1.13847, 1.13407, 1.13912, 1.13414, 1.13792, 1.13913, 1.13838, 1.13419, 1.13994, 1.1332, 1.13392, 1.1348, 1.12451, 1.13075, 1.12528, 1.1317, 1.1361, 1.14092, 1.1345, 1.13387, 1.11973, 1.12116, 1.12504, 1.12313, 1.12005, 1.12637, 1.1264, 1.12804, 1.12638, 1.13231, 1.10928, 1.13622, 1.13281, 1.12544, 1.1274, 1.12706, 1.}

**P**<sub>35</sub> : {1.13334, 1.12457, 1.13468, 1.1352, 1.13579, 0., 1.13398, 1.13479, 1.1328, 1.13205, 1.13656, 1.13456, 1.13659, 1.13406, 1.13734, 1.13429, 1.14612, 1.13861, 1.13794, 1.13414, 1.14138, 1.13943, 1.13906, 1.13489, 1.13968, 1.13495, 1.13854, 1.13968, 1.13897, 1.135, 1.14045, 1.13407, 1.13475, 1.13558, 1.12582, 1.13174, 1.12655, 1.13264, 1.13682, 1.14139, 1.1353, 1.1347, 1.12126, 1.12264, 1.12632, 1.12451, 1.12159, 1.12758, 1.1276, 1.12916, 1.12759, 1.13322, 1.11123, 1.13692, 1.1337, 1.1267, 1.12856, 1.12826, 1.}

 $\begin{array}{l} \textbf{P_{36}:} \{1.1342, 1.12589, 1.13547, 1.13596, 1.13652, 0., 1.13481, 1.13557, 1.13368, 1.13297, \\ 1.13725, 1.13535, 1.13728, 1.13488, 1.13799, 1.13509, 1.14632, 1.1392, 1.13856, 1.13495, \\ 1.14183, 1.13998, 1.13962, 1.13566, 1.14021, 1.13573, 1.13913, 1.14021, 1.13953, 1.13577, \\ 1.14094, 1.13489, 1.13554, 1.13632, 1.12706, 1.13267, 1.12775, 1.13353, 1.13749, 1.14183, \\ 1.13605, 1.13548, 1.12271, 1.12404, 1.12753, 1.12581, 1.12305, 1.12873, 1.12874, 1.13023, \\ 1.12874, 1.13408, 1.11311, 1.13759, 1.13455, 1.1279, 1.12966, 1.12938, 1. \\ \end{array}$ 

**P**<sub>37</sub> : {1.13501, 1.12714, 1.13622, 1.13669, 1.13721, 0., 1.13559, 1.13631, 1.13452, 1.13385, 1.13791, 1.1361, 1.13793, 1.13566, 1.13861, 1.13586, 1.14651, 1.13975, 1.13915, 1.13573, 1.14225, 1.14049, 1.14015, 1.1364, 1.14071, 1.13646, 1.13969, 1.14071, 1.14006, 1.1365, 1.14141, 1.13567, 1.13629, 1.13702, 1.12824, 1.13356, 1.12889, 1.13438, 1.13813, 1.14225, 1.13677, 1.13623, 1.12409, 1.12536, 1.12868, 1.12705, 1.12444, 1.12982, 1.12983, 1.13124, 1.12983, 1.13489, 1.11489, 1.13823, 1.13535, 1.12903, 1.1307, 1.13045, 1.}

**P**<sub>38</sub> : {1.13578, 1.12832, 1.13693, 1.13737, 1.13787, 0., 1.13632, 1.13702, 1.13532, 1.13467, 1.13853, 1.13682, 1.13855, 1.1364, 1.13919, 1.13658, 1.14669, 1.14028, 1.13971, 1.13646, 1.14265, 1.14098, 1.14066, 1.13709, 1.14119, 1.13715, 1.14022, 1.14119, 1.14056, 1.13719, 1.14185, 1.13641, 1.13699, 1.13769, 1.12936, 1.1344, 1.12997, 1.13518, 1.13874, 1.14265, 1.13744, 1.13693, 1.1254, 1.12662, 1.12977, 1.12822, 1.12575, 1.13086, 1.13086, 1.1322, 1.13086, 1.13567, 1.1166, 1.13883, 1.13611, 1.13011, 1.13169, 1.13146, 1.}

**P**<sub>39</sub> : {1.13651, 1.12944, 1.1376, 1.13802, 1.13849, 0., 1.13703, 1.13768, 1.13607, 1.13546, 1.13912, 1.13749, 1.13913, 1.13709, 1.13974, 1.13727, 1.14686, 1.14077, 1.14023, 1.13715, 1.14302, 1.14144, 1.14114, 1.13775, 1.14164, 1.13781, 1.14072, 1.14164, 1.14104, 1.13785, 1.14227, 1.13711, 1.13766, 1.13832, 1.13042, 1.1352, 1.131, 1.13594, 1.13932, 1.14302, 1.13809, 1.1376, 1.12665, 1.12782, 1.1308, 1.12933, 1.127, 1.13184, 1.13183, 1.13311, 1.13184, 1.1364, 1.11822, 1.1394, 1.13683, 1.13112, 1.13263, 1.13242, 1.}

**P**<sub>40</sub> : {1.13721, 1.13051, 1.13824, 1.13864, 1.13908, 0., 1.13769, 1.13831, 1.13679, 1.13621, 1.13967, 1.13813, 1.13969, 1.13776, 1.14027, 1.13792, 1.14702, 1.14125, 1.14074, 1.13781, 1.14338, 1.14188, 1.14159, 1.13838, 1.14207, 1.13843, 1.14119, 1.14207, 1.1415, 1.13847, 1.14266, 1.13777, 1.1383, 1.13892, 1.13142, 1.13596, 1.13197, 1.13666, 1.13987, 1.14338, 1.1387, 1.13824, 1.12783, 1.12895, 1.13178, 1.13039, 1.12818, 1.13277, 1.13276, 1.13398, 1.13277, 1.1371, 1.11978, 1.13995, 1.13751, 1.13209, 1.13352, 1.13333, 1.}

**P**<sub>41</sub>: {1.13786, 1.13151, 1.13884, 1.13922, 1.13964, 0., 1.13832, 1.13891, 1.13746, 1.13691, 1.1402, 1.13874, 1.14022, 1.13838, 1.14077, 1.13854, 1.14717, 1.1417, 1.14121, 1.13844, 1.14372, 1.1423, 1.14202, 1.13898, 1.14247, 1.13903, 1.14164, 1.14248, 1.14193, 1.13906, 1.14304, 1.1384, 1.1389, 1.13949, 1.13237, 1.13668, 1.1329, 1.13734, 1.14038, 1.14372, 1.13928, 1.13884, 1.12896, 1.13003, 1.13272, 1.13139, 1.1293, 1.13365, 1.13364, 1.1348, 1.13365, 1.13776, 1.12125, 1.14046, 1.13815, 1.13301, 1.13436, 1.13419, 1.}

**P**<sub>42</sub> : {1.13849, 1.13246, 1.13941, 1.13977, 1.14017, 0., 1.13892, 1.13948, 1.13811, 1.13758, 1.14071, 1.13932, 1.14072, 1.13898, 1.14124, 1.13913, 1.14732, 1.14212, 1.14166, 1.13903, 1.14404, 1.14269, 1.14243, 1.13954, 1.14286, 1.13959, 1.14207, 1.14286, 1.14234, 1.13962, 1.1434, 1.139, 1.13947, 1.14003, 1.13328, 1.13736, 1.13377, 1.13799, 1.14088, 1.14404, 1.13982, 1.13941, 1.13003, 1.13105, 1.1336, 1.13234, 1.13036, 1.13449, 1.13448, 1.13557, 1.13448, 1.13839, 1.12266, 1.14095, 1.13876, 1.13388, 1.13516, 1.135, 1.]

**P**<sub>43</sub> : {1.13908, 1.13337, 1.13995, 1.1403, 1.14067, 0., 1.13949, 1.14002, 1.13872, 1.13822, 1.14118, 1.13987, 1.1412, 1.13955, 1.14169, 1.13968, 1.14745, 1.14252, 1.14209, 1.13959, 1.14435, 1.14306, 1.14282, 1.14008, 1.14322, 1.14012, 1.14248, 1.14323, 1.14272, 1.14016, 1.14373, 1.13956, 1.14001, 1.14054, 1.13414, 1.138, 1.1346, 1.13861, 1.14134, 1.14435, 1.14034, 1.13996, 1.13104, 1.13202, 1.13444, 1.13324, 1.13137, 1.13528, 1.13527, 1.13631, 1.13528, 1.13898, 1.12401, 1.14141, 1.13934, 1.13471, 1.13592, 1.13577, 1.}

**P**<sub>44</sub> : {1.13964, 1.13422, 1.14047, 1.1408, 1.14115, 0., 1.14003, 1.14053, 1.13929, 1.13882, 1.14163, 1.14038, 1.14165, 1.14008, 1.14212, 1.14021, 1.14758, 1.14291, 1.14249, 1.14012, 1.14464, 1.14342, 1.14318, 1.14058, 1.14357, 1.14063, 1.14286, 1.14357, 1.14309, 1.14066, 1.14406, 1.1401, 1.14052, 1.14102, 1.13495, 1.13862, 1.13539, 1.13919, 1.14179, 1.14464, 1.14084, 1.14047, 1.13201, 1.13294, 1.13523, 1.1341, 1.13233, 1.13604, 1.13602, 1.13701, 1.13603, 1.13954, 1.12529, 1.14185, 1.13989, 1.13549, 1.13664, 1.1365, 1.}

**P**<sub>45</sub> : {1.14017, 1.13503, 1.14096, 1.14127, 1.14161, 0., 1.14054, 1.14102, 1.13984, 1.1394, 1.14206, 1.14088, 1.14208, 1.14059, 1.14252, 1.14071, 1.14771, 1.14327, 1.14288, 1.14063, 1.14491, 1.14376, 1.14353, 1.14107, 1.1439, 1.14111, 1.14323, 1.1439, 1.14344, 1.14114, 1.14436, 1.1406, 1.14101, 1.14148, 1.13572, 1.1392, 1.13614, 1.13975, 1.14221, 1.14491, 1.14131, 1.14096, 1.13292, 1.13381, 1.13599, 1.13491, 1.13323, 1.13675, 1.13673, 1.13767, 1.13674, 1.14008, 1.12651, 1.14227, 1.14041, 1.13623, 1.13732, 1.1372, 1.}

**P**<sub>46</sub> : {1.14067, 1.1358, 1.14142, 1.14172, 1.14204, 0., 1.14102, 1.14148, 1.14036, 1.13994, 1.14247, 1.14134, 1.14248, 1.14107, 1.1429, 1.14119, 1.14782, 1.14361, 1.14324, 1.14111, 1.14517, 1.14408, 1.14386, 1.14152, 1.14421, 1.14156, 1.14358, 1.14421, 1.14377, 1.14159, 1.14465, 1.14109, 1.14147, 1.14192, 1.13645, 1.13975, 1.13685, 1.14027, 1.14261, 1.14517, 1.14175, 1.14142, 1.13379, 1.13464, 1.13671, 1.13568, 1.13409, 1.13743, 1.13741, 1.13831, 1.13742, 1.14059, 1.12767, 1.14266, 1.1409, 1.13694, 1.13797, 1.13786, 1.}

**P**<sub>47</sub> : {1.14115, 1.13653, 1.14186, 1.14214, 1.14244, 0., 1.14148, 1.14191, 1.14086, 1.14045, 1.14285, 1.14179, 1.14287, 1.14153, 1.14327, 1.14164, 1.14794, 1.14394, 1.14359, 1.14157, 1.14542, 1.14438, 1.14418, 1.14196, 1.14451, 1.14199, 1.1439, 1.14451, 1.14408, 1.14202, 1.14492, 1.14154, 1.14191, 1.14233, 1.13715, 1.14027, 1.13752, 1.14077, 1.14298, 1.14542, 1.14217, 1.14186, 1.13462, 1.13542, 1.13738, 1.13642, 1.13491, 1.13807, 1.13805, 1.1389, 1.13806, 1.14107, 1.12877, 1.14304, 1.14137, 1.13761, 1.13859, 1.13848, 1.}

**P**<sub>48</sub> : {1.1416, 1.13722, 1.14228, 1.14254, 1.14283, 0., 1.14192, 1.14233, 1.14132, 1.14094, 1.14322, 1.14221, 1.14323, 1.14196, 1.14361, 1.14207, 1.14804, 1.14425, 1.14392, 1.142, 1.14565, 1.14467, 1.14448, 1.14237, 1.14479, 1.1424, 1.14422, 1.14479, 1.14438, 1.14243, 1.14518, 1.14198, 1.14232, 1.14272, 1.13781, 1.14077, 1.13816, 1.14124, 1.14334, 1.14565, 1.14257, 1.14228, 1.1354, 1.13617, 1.13803, 1.13711, 1.13568, 1.13868, 1.13866, 1.13947, 1.13867, 1.14152, 1.12983, 1.14339, 1.14181, 1.13824, 1.13917, 1.13907, 1.}

**P**<sub>49</sub> : {1.14203, 1.13788, 1.14267, 1.14293, 1.1432, 0., 1.14233, 1.14272, 1.14177, 1.14141, 1.14357, 1.14261, 1.14358, 1.14237, 1.14394, 1.14247, 1.14814, 1.14454, 1.14423, 1.14241, 1.14588, 1.14494, 1.14476, 1.14276, 1.14506, 1.14279, 1.14451, 1.14506, 1.14466, 1.14282, 1.14543, 1.14239, 1.14272, 1.1431, 1.13843, 1.14124, 1.13877, 1.14169, 1.14368, 1.14587, 1.14295, 1.14267, 1.13614, 1.13687, 1.13864, 1.13777, 1.13642, 1.13926, 1.13924, 1.14001, 1.13925, 1.14196, 1.13083, 1.14373, 1.14223, 1.13884, 1.13973, 1.13963, 1.}

**P**<sub>50</sub> : {1.14244, 1.1385, 1.14305, 1.14329, 1.14355, 0., 1.14272, 1.14309, 1.14219, 1.14185, 1.1439, 1.14298, 1.14391, 1.14276, 1.14425, 1.14286, 1.14824, 1.14482, 1.14452, 1.1428, 1.14609, 1.1452, 1.14503, 1.14313, 1.14531, 1.14316, 1.14479, 1.14531, 1.14493, 1.14319, 1.14566, 1.14278, 1.14309, 1.14345, 1.13902, 1.14169, 1.13934, 1.14212, 1.14401, 1.14608, 1.14331, 1.14305, 1.13685, 1.13754, 1.13922, 1.13839, 1.13711, 1.13981, 1.13979, 1.14052, 1.1398, 1.14237, 1.13178, 1.14405, 1.14263, 1.13941, 1.14025, 1.14016, 1.}

**P**<sub>51</sub> : {1.14283, 1.13909, 1.1434, 1.14363, 1.14388, 0., 1.1431, 1.14345, 1.14259, 1.14226, 1.14421, 1.14334, 1.14422, 1.14313, 1.14454, 1.14322, 1.14833, 1.14509, 1.1448, 1.14316, 1.14629, 1.14544, 1.14528, 1.14348, 1.14555, 1.14351, 1.14506, 1.14555, 1.14519, 1.14353, 1.14588, 1.14315, 1.14344, 1.14378, 1.13958, 1.14212, 1.13989, 1.14252, 1.14431, 1.14628, 1.14366, 1.1434, 1.13752, 1.13818, 1.13977, 1.13899, 1.13778, 1.14033, 1.14031, 1.141, 1.14032, 1.14276, 1.13269, 1.14436, 1.14301, 1.13996, 1.14075, 1.14067, 1.}

 $\begin{array}{l} \textbf{P}_{52}: \{1.14319, 1.13965, 1.14374, 1.14396, 1.14419, 0., 1.14345, 1.14378, 1.14297, 1.14266, \\ 1.1445, 1.14368, 1.14451, 1.14349, 1.14482, 1.14357, 1.14841, 1.14534, 1.14507, 1.14351, \\ 1.14648, 1.14568, 1.14552, 1.14381, 1.14578, 1.14384, 1.14531, 1.14578, 1.14543, 1.14387, \\ 1.1461, 1.1435, 1.14378, 1.1441, 1.14012, 1.14252, 1.1404, 1.1429, 1.1446, 1.14647, \\ 1.14398, 1.14374, 1.13816, 1.13878, 1.1403, 1.13955, 1.1384, 1.14083, 1.14081, 1.14146, \\ 1.14082, 1.14313, 1.13355, 1.14465, 1.14337, 1.14047, 1.14122, 1.14115, 1. \\ \end{array}$ 

 $P_{53}: \{1.14354, 1.14018, 1.14406, 1.14427, 1.14449, 0., 1.14379, 1.1441, 1.14333, 1.14303, 1.14479, 1.14401, 1.1448, 1.14382, 1.14509, 1.1439, 1.14849, 1.14558, 1.14532, 1.14385, 1.14666, 1.1459, 1.14575, 1.14413, 1.14599, 1.14416, 1.14555, 1.14599, 1.14566, 1.14418, 1.1463, 1.14383, 1.1441, 1.1444, 1.14062, 1.1429, 1.14089, 1.14326, 1.14488, 1.14665, 1.14429, 1.14406, 1.13876, 1.13936, 1.14079, 1.14008, 1.139, 1.1413, 1.14128, 1.1419, 1.14129, 1.14348, 1.13437, 1.14492, 1.14371, 1.14096, 1.14167, 1.1416, 1. \}$ 

**P**<sub>54</sub> : {1.14387, 1.14068, 1.14436, 1.14456, 1.14477, 0., 1.1441, 1.1444, 1.14367, 1.14339, 1.14505, 1.14431, 1.14506, 1.14414, 1.14534, 1.14421, 1.14857, 1.1458, 1.14556, 1.14416, 1.14683, 1.14611, 1.14597, 1.14443, 1.1462, 1.14445, 1.14578, 1.1462, 1.14587, 1.14448, 1.14648, 1.14414, 1.14449, 1.1411, 1.14326, 1.14136, 1.14361, 1.14514, 1.14683, 1.14458, 1.14436, 1.13933, 1.1399, 1.14126, 1.14059, 1.13956, 1.14174, 1.14172, 1.14231, 1.14173, 1.14381, 1.13515, 1.14518, 1.14403, 1.14142, 1.1421, 1.14203, 1.}

**P**<sub>55</sub> : {1.14419, 1.14116, 1.14465, 1.14484, 1.14504, 0., 1.1444, 1.14469, 1.14399, 1.14373, 1.14531, 1.1446, 1.14531, 1.14464, 1.14558, 1.14451, 1.14864, 1.14602, 1.14579, 1.14446, 1.14699, 1.14631, 1.14617, 1.14471, 1.14639, 1.14474, 1.14599, 1.14639, 1.14608, 1.14476, 1.14666, 1.14444, 1.14469, 1.14496, 1.14156, 1.14361, 1.1418, 1.14394, 1.14539, 1.14699, 1.14486, 1.14465, 1.13988, 1.14042, 1.14171, 1.14107, 1.14009, 1.14216, 1.14215, 1.14271, 1.14216, 1.14413, 1.1359, 1.14543, 1.14434, 1.14186, 1.1425, 1.14244, 1.}

 $P_{57}: \{1.14477, 1.14204, 1.14518, 1.14535, 1.14553, 0., 1.14496, 1.14522, 1.14459, 1.14435, 1.14577, 1.14514, 1.14578, 1.14499, 1.14602, 1.14505, 1.14878, 1.14642, 1.14621, 1.14501, 1.14729, 1.14668, 1.14656, 1.14524, 1.14675, 1.14526, 1.14639, 1.14675, 1.14646, 1.14528, 1.147, 1.145, 1.14522, 1.14546, 1.1424, 1.14425, 1.14262, 1.14454, 1.14585, 1.14729, 1.14537, 1.14518, 1.14088, 1.14137, 1.14254, 1.14196, 1.14108, 1.14295, 1.14293, 1.14343, 1.14294, 1.14472, 1.13727, 1.14588, 1.1449, 1.14267, 1.14325, 1.14319, 1. \}$ 

**P**<sub>58</sub> : {1.14503, 1.14245, 1.14543, 1.14559, 1.14576, 0., 1.14522, 1.14546, 1.14487, 1.14464, 1.14599, 1.14539, 1.146, 1.14525, 1.14622, 1.14531, 1.14884, 1.1466, 1.1464, 1.14527, 1.14743, 1.14685, 1.14673, 1.14548, 1.14692, 1.1455, 1.14658, 1.14692, 1.14664, 1.14552, 1.14715, 1.14525, 1.14546, 1.1457, 1.14279, 1.14454, 1.143, 1.14482, 1.14606, 1.14743, 1.14561, 1.14543, 1.14135, 1.14181, 1.14292, 1.14237, 1.14154, 1.14331, 1.14329, 1.14377, 1.1433, 1.14499, 1.13791, 1.14609, 1.14516, 1.14305, 1.14359, 1.14354, 1.}

**P**<sub>59</sub>: {1.14529, 1.14284, 1.14566, 1.14582, 1.14598, 0., 1.14546, 1.14569, 1.14513, 1.14492, 1.14619, 1.14563, 1.1462, 1.14549, 1.14641, 1.14555, 1.1489, 1.14677, 1.14659, 1.14551, 1.14756, 1.14701, 1.1469, 1.14572, 1.14708, 1.14573, 1.14675, 1.14708, 1.1468, 1.14575, 1.1473, 1.1455, 1.14569, 1.14592, 1.14316, 1.14482, 1.14336, 1.14508, 1.14626, 1.14756, 1.14583, 1.14566, 1.14179, 1.14223, 1.14328, 1.14276, 1.14197, 1.14365, 1.14363, 1.14409, 1.14364, 1.14524, 1.13852, 1.14629, 1.14541, 1.1434, 1.14392, 1.14387, 1.}

 $\begin{array}{l} \textbf{P_{60}:} \{1.14553, 1.1432, 1.14589, 1.14603, 1.14618, 0., 1.1457, 1.14591, 1.14538, 1.14518, \\ 1.14639, 1.14585, 1.1464, 1.14572, 1.1466, 1.14577, 1.14896, 1.14694, 1.14676, 1.14574, \\ 1.14769, 1.14716, 1.14706, 1.14593, 1.14723, 1.14595, 1.14692, 1.14722, 1.14696, 1.14597, \\ 1.14743, 1.14573, 1.14591, 1.14612, 1.14351, 1.14508, 1.14369, 1.14534, 1.14645, 1.14768, \\ 1.14604, 1.14589, 1.14221, 1.14263, 1.14362, 1.14313, 1.14238, 1.14397, 1.14396, 1.14439, \\ 1.14397, 1.14548, 1.1391, 1.14648, 1.14565, 1.14374, 1.14423, 1.14419, 1. \end{array}$ 

 $\begin{array}{l} \textbf{P_{61}:} \{1.14576, 1.14355, 1.1461, 1.14623, 1.14638, 0., 1.14592, 1.14612, 1.14562, 1.14542, \\ 1.14657, 1.14606, 1.14658, 1.14594, 1.14677, 1.14599, 1.14901, 1.14709, 1.14693, 1.14596, \\ 1.1478, 1.14731, 1.14721, 1.14614, 1.14737, 1.14616, 1.14708, 1.14737, 1.14711, 1.14618, \\ 1.14757, 1.14595, 1.14612, 1.14632, 1.14384, 1.14533, 1.14402, 1.14557, 1.14664, 1.1478, \\ 1.14625, 1.1461, 1.14261, 1.143, 1.14395, 1.14348, 1.14277, 1.14428, 1.14427, 1.14468, \\ 1.14428, 1.14572, 1.13965, 1.14666, 1.14587, 1.14406, 1.14453, 1.14448, 1. \end{array}$ 

 $\begin{array}{l} \mathbf{P_{62}:} \{1.14597,\,1.14388,\,1.1463,\,1.14643,\,1.14656,\,0.,\,1.14613,\,1.14632,\,1.14584,\,1.14566,\\ 1.14675,\,1.14626,\,1.14676,\,1.14615,\,1.14694,\,1.1462,\,1.14906,\,1.14724,\,1.14708,\,1.14616,\\ 1.14792,\,1.14744,\,1.14735,\,1.14634,\,1.1475,\,1.14636,\,1.14723,\,1.1475,\,1.14726,\,1.14637,\\ 1.14769,\,1.14615,\,1.14632,\,1.14651,\,1.14416,\,1.14557,\,1.14432,\,1.1458,\,1.14681,\,1.14791,\\ 1.14644,\,1.1463,\,1.14298,\,1.14336,\,1.14426,\,1.14382,\,1.14314,\,1.14457,\,1.14456,\,1.14495,\\ 1.14457,\,1.14593,\,1.14017,\,1.14683,\,1.14608,\,1.14436,\,1.14481,\,1.14477,\,1. \end{array}$ 

 $\begin{array}{l} \mathbf{P_{63}:} \{1.14618, 1.14419, 1.14648, 1.14661, 1.14674, 0., 1.14632, 1.14651, 1.14605, 1.14588, \\ 1.14692, 1.14645, 1.14692, 1.14634, 1.14709, 1.14639, 1.14911, 1.14738, 1.14723, 1.14636, \\ 1.14802, 1.14757, 1.14749, 1.14653, 1.14763, 1.14654, 1.14737, 1.14763, 1.14739, 1.14656, \\ 1.14781, 1.14635, 1.14651, 1.14669, 1.14445, 1.1458, 1.14461, 1.14602, 1.14697, 1.14802, \\ 1.14662, 1.14649, 1.14334, 1.1437, 1.14455, 1.14413, 1.1435, 1.14485, 1.14484, 1.14521, \\ 1.14485, 1.14614, 1.14066, 1.14699, 1.14628, 1.14465, 1.14507, 1.14503, 1. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{64}:} \{1.14638, 1.14449, 1.14666, 1.14678, 1.1469, 0., 1.14651, 1.14669, 1.14626, 1.14609, \\ 1.14707, 1.14664, 1.14708, 1.14653, 1.14724, 1.14657, 1.14915, 1.14752, 1.14737, 1.14655, \\ 1.14812, 1.1477, 1.14762, 1.1467, 1.14775, 1.14672, 1.1475, 1.14775, 1.14752, 1.14673, \\ 1.14792, 1.14654, 1.14669, 1.14686, 1.14474, 1.14601, 1.14489, 1.14622, 1.14713, 1.14812, \\ 1.14679, 1.14666, 1.14368, 1.14402, 1.14483, 1.14443, 1.14383, 1.14511, 1.1451, 1.14545, \\ 1.14511, 1.14634, 1.14113, 1.14715, 1.14647, 1.14493, 1.14532, 1.14529, 1. \\ \end{array}$ 

**P**<sub>65</sub> : {1.14656, 1.14477, 1.14683, 1.14695, 1.14706, 0., 1.14669, 1.14686, 1.14645, 1.14629, 1.14722, 1.14681, 1.14723, 1.14671, 1.14738, 1.14675, 1.1492, 1.14764, 1.14751, 1.14672, 1.14822, 1.14782, 1.14774, 1.14687, 1.14787, 1.14689, 1.14763, 1.14787, 1.14764, 1.1469, 1.14803, 1.14671, 1.14686, 1.14702, 1.14501, 1.14622, 1.14515, 1.14641, 1.14727, 1.14822, 1.14696, 1.14684, 1.14401, 1.14433, 1.14509, 1.14472, 1.14414, 1.14536, 1.14535, 1.14568, 1.14536, 1.14536, 1.1458, 1.1458, 1.14596, 1.14556, 1.14553, 1.]

 $\begin{array}{l} \mathbf{P_{66}:} \{1.14674, 1.14504, 1.147, 1.1471, 1.14721, 0., 1.14686, 1.14702, 1.14663, 1.14648, 1.14736, 1.14697, 1.14737, 1.14688, 1.14752, 1.14692, 1.14924, 1.14777, 1.14764, 1.14689, 1.14831, 1.14793, 1.14785, 1.14703, 1.14797, 1.14705, 1.14775, 1.14797, 1.14776, 1.14706, 1.14813, 1.14688, 1.14702, 1.14717, 1.14526, 1.14641, 1.1454, 1.1466, 1.14741, 1.14831, 1.14711, 1.147, 1.14431, 1.14462, 1.14535, 1.14499, 1.14444, 1.1456, 1.14559, 1.14591, 1.1456, 1.1467, 1.142, 1.14743, 1.14682, 1.14543, 1.14579, 1.14576, 1. \end{array}$ 

 $\begin{array}{l} \mathbf{P_{67}:} \{1.1469, 1.14529, 1.14715, 1.14725, 1.14736, 0., 1.14702, 1.14717, 1.1468, 1.14666, \\ 1.1475, 1.14713, 1.14751, 1.14704, 1.14764, 1.14707, 1.14928, 1.14788, 1.14776, 1.14705, \\ 1.1484, 1.14803, 1.14796, 1.14718, 1.14808, 1.1472, 1.14787, 1.14808, 1.14787, 1.14721, \\ 1.14822, 1.14704, 1.14717, 1.14732, 1.14551, 1.14659, 1.14563, 1.14677, 1.14754, 1.14839, \\ 1.14726, 1.14715, 1.1446, 1.14489, 1.14558, 1.14524, 1.14473, 1.14583, 1.14581, 1.14611, \\ 1.14582, 1.14687, 1.14241, 1.14756, 1.14699, 1.14567, 1.14601, 1.14597, 1. \\ \end{array}$ 

**P**<sub>68</sub> : {1.14706, 1.14553, 1.1473, 1.14739, 1.14749, 0., 1.14717, 1.14732, 1.14696, 1.14683, 1.14763, 1.14727, 1.14763, 1.14719, 1.14776, 1.14722, 1.14931, 1.14799, 1.14787, 1.1472, 1.14848, 1.14813, 1.14807, 1.14733, 1.14818, 1.14734, 1.14798, 1.14818, 1.14797, 1.14735, 1.14831, 1.14719, 1.14731, 1.14745, 1.14574, 1.14677, 1.14586, 1.14694, 1.14767, 1.14848, 1.1474, 1.1473, 1.14488, 1.14515, 1.14581, 1.14549, 1.145, 1.14604, 1.14603, 1.14603, 1.14603, 1.14603, 1.14709, 1.14769, 1.14714, 1.14589, 1.14621, 1.14618, 1.}

**P**<sub>69</sub> : {1.14721, 1.14576, 1.14743, 1.14752, 1.14762, 0., 1.14732, 1.14745, 1.14712, 1.14699, 1.14775, 1.14741, 1.14775, 1.14733, 1.14788, 1.14737, 1.14935, 1.14809, 1.14798, 1.14734, 1.14856, 1.14823, 1.14817, 1.14746, 1.14827, 1.14748, 1.14808, 1.14827, 1.14807, 1.14749, 1.1484, 1.14734, 1.14745, 1.14758, 1.14595, 1.14693, 1.14607, 1.14709, 1.14779, 1.14855, 1.14753, 1.14743, 1.14514, 1.1454, 1.14602, 1.14572, 1.14525, 1.14624, 1.14623, 1.14623, 1.1465, 1.14624, 1.14718, 1.14316, 1.14781, 1.14729, 1.1461, 1.1464, 1.14638, 1.}

**P**<sub>70</sub>: {1.14735, 1.14598, 1.14756, 1.14765, 1.14774, 0., 1.14745, 1.14758, 1.14727, 1.14715, 1.14786, 1.14754, 1.14787, 1.14747, 1.14799, 1.1475, 1.14938, 1.14819, 1.14808, 1.14748, 1.14863, 1.14832, 1.14826, 1.14759, 1.14836, 1.1476, 1.14818, 1.14836, 1.14816, 1.14762, 1.14848, 1.14747, 1.14758, 1.14771, 1.14616, 1.14709, 1.14627, 1.14724, 1.1479, 1.14863, 1.14766, 1.14757, 1.14539, 1.14564, 1.14623, 1.14594, 1.1455, 1.14643, 1.14642, 1.14668, 1.14643, 1.14733, 1.1435, 1.14792, 1.14742, 1.1463, 1.14659, 1.14656, 1.}

 $\begin{array}{l} \mathbf{P_{71}:} \{1.14749, 1.14618, 1.14769, 1.14777, 1.14786, 0., 1.14758, 1.14771, 1.14741, 1.14729, \\ 1.14797, 1.14767, 1.14798, 1.1476, 1.14809, 1.14763, 1.14941, 1.14828, 1.14818, 1.14761, \\ 1.1487, 1.14841, 1.14835, 1.14772, 1.14844, 1.14773, 1.14827, 1.14844, 1.14825, 1.14774, \\ 1.14856, 1.1476, 1.14771, 1.14782, 1.14636, 1.14724, 1.14646, 1.14738, 1.14801, 1.1487, \\ 1.14778, 1.14769, 1.14562, 1.14586, 1.14642, 1.14614, 1.14573, 1.14662, 1.14661, 1.14685, \\ 1.14661, 1.14746, 1.14383, 1.14802, 1.14756, 1.14649, 1.14676, 1.14674, 1. \\ \end{array}$ 

**P**<sub>72</sub>: {1.14762, 1.14638, 1.14781, 1.14789, 1.14797, 0., 1.14771, 1.14782, 1.14754, 1.14743, 1.14808, 1.14779, 1.14808, 1.14772, 1.14819, 1.14775, 1.14944, 1.14837, 1.14827, 1.14773, 1.14877, 1.14849, 1.14843, 1.14783, 1.14852, 1.14784, 1.14836, 1.14852, 1.14854, 1.14785, 1.14863, 1.14772, 1.14782, 1.14794, 1.14654, 1.14738, 1.14664, 1.14752, 1.14811, 1.14876, 1.14789, 1.14781, 1.14585, 1.14607, 1.1466, 1.14634, 1.14595, 1.14679, 1.14678, 1.14701, 1.14679, 1.14759, 1.14414, 1.14812, 1.14768, 1.14667, 1.14693, 1.14691, 1.}

**P**<sub>73</sub>: {1.14774, 1.14657, 1.14792, 1.14799, 1.14807, 0., 1.14782, 1.14793, 1.14766, 1.14756, 1.14818, 1.1479, 1.14818, 1.14784, 1.14828, 1.14786, 1.14947, 1.14845, 1.14836, 1.14785, 1.14883, 1.14856, 1.14851, 1.14794, 1.14866, 1.14795, 1.14844, 1.1486, 1.14842, 1.14796, 1.1487, 1.14784, 1.14793, 1.14804, 1.14672, 1.14751, 1.14681, 1.14764, 1.14821, 1.14883, 1.148, 1.14792, 1.14606, 1.14627, 1.14678, 1.14653, 1.14615, 1.14695, 1.14694, 1.14716, 1.14695, 1.14772, 1.14444, 1.14822, 1.1478, 1.14684, 1.14708, 1.14706, 1.}

**P**<sub>74</sub> : {1.14786, 1.14674, 1.14803, 1.1481, 1.14817, 0., 1.14794, 1.14804, 1.14778, 1.14769, 1.14827, 1.14801, 1.14827, 1.14795, 1.14837, 1.14797, 1.1495, 1.14853, 1.14845, 1.14796, 1.14889, 1.14864, 1.14859, 1.14805, 1.14867, 1.14806, 1.14852, 1.14867, 1.14849, 1.14807, 1.14877, 1.14795, 1.14804, 1.14814, 1.14689, 1.14764, 1.14698, 1.14776, 1.1483, 1.14889, 1.1481, 1.14803, 1.14626, 1.14646, 1.14694, 1.14671, 1.14635, 1.14711, 1.14711, 1.14731, 1.14711, 1.14723, 1.14723, 1.14721, 1.}

**P**<sub>75</sub> : {1.14796, 1.14691, 1.14813, 1.14819, 1.14826, 0., 1.14804, 1.14814, 1.1479, 1.1478, 1.14836, 1.14836, 1.14805, 1.14845, 1.14808, 1.14953, 1.14861, 1.14853, 1.14806, 1.14895, 1.14895, 1.14871, 1.14866, 1.14815, 1.14874, 1.14816, 1.1486, 1.14874, 1.14857, 1.14817, 1.14883, 1.14806, 1.14814, 1.14824, 1.14705, 1.14776, 1.14713, 1.14788, 1.14839, 1.14894, 1.1482, 1.1482, 1.14813, 1.14645, 1.14664, 1.1471, 1.14687, 1.14654, 1.14726, 1.14725, 1.14745, 1.14725, 1.14799, 1.1484, 1.14802, 1.14715, 1.14738, 1.14735, 1.}

**P**<sub>76</sub> : {1.14807, 1.14707, 1.14822, 1.14829, 1.14835, 0., 1.14814, 1.14824, 1.148, 1.14792, 1.14844, 1.14821, 1.14845, 1.14815, 1.14853, 1.14818, 1.14955, 1.14868, 1.1486, 1.14816, 1.149, 1.14877, 1.14873, 1.14824, 1.1488, 1.14825, 1.14867, 1.1488, 1.14863, 1.14826, 1.14889, 1.14815, 1.14824, 1.14833, 1.1472, 1.14788, 1.14728, 1.14799, 1.14847, 1.149, 1.14829, 1.14822, 1.14663, 1.14682, 1.14725, 1.14703, 1.14671, 1.1474, 1.14739, 1.14758, 1.14739, 1.14739, 1.14754, 1.14848, 1.14812, 1.1473, 1.14751, 1.14749, 1.}

**P**<sub>77</sub>: {1.14817, 1.14722, 1.14831, 1.14837, 1.14844, 0., 1.14824, 1.14833, 1.14811, 1.14802, 1.14852, 1.1483, 1.14853, 1.14825, 1.14861, 1.14827, 1.14957, 1.14875, 1.14867, 1.14825, 1.14905, 1.14884, 1.14879, 1.14833, 1.14886, 1.14834, 1.14874, 1.14886, 1.1487, 1.14835, 1.14895, 1.14825, 1.14833, 1.14841, 1.14734, 1.14798, 1.14742, 1.14809, 1.14855, 1.14905, 1.14838, 1.14831, 1.1468, 1.14698, 1.14739, 1.14719, 1.14688, 1.14753, 1.14752, 1.1477, 1.14753, 1.14815, 1.14548, 1.14856, 1.14822, 1.14744, 1.14764, 1.14762, 1.}

**P**<sub>78</sub> : {1.14826, 1.14736, 1.1484, 1.14846, 1.14852, 0., 1.14833, 1.14841, 1.1482, 1.14812, 1.1486, 1.14839, 1.1486, 1.14834, 1.14868, 1.14836, 1.14959, 1.14881, 1.14874, 1.14834, 1.1491, 1.1489, 1.14886, 1.14842, 1.14892, 1.14843, 1.1488, 1.14892, 1.14876, 1.14843, 1.149, 1.14834, 1.14841, 1.14849, 1.14748, 1.14809, 1.14755, 1.14819, 1.14862, 1.1491, 1.14846, 1.1484, 1.14697, 1.14713, 1.14752, 1.14733, 1.14704, 1.14766, 1.14765, 1.14765, 1.14765, 1.14863, 1.14831, 1.14757, 1.14776, 1.14774, 1.}

**P**79: {1.14835, 1.14749, 1.14848, 1.14854, 1.14859, 0., 1.14841, 1.14849, 1.1483, 1.14822, 1.14867, 1.14847, 1.14867, 1.14842, 1.14874, 1.14844, 1.14962, 1.14887, 1.1488, 1.14843, 1.14915, 1.14895, 1.14891, 1.1485, 1.14898, 1.14851, 1.14886, 1.14898, 1.14882, 1.14851, 1.14905, 1.14842, 1.14849, 1.14857, 1.14761, 1.14819, 1.14767, 1.14828, 1.14869, 1.14914, 1.14854, 1.14848, 1.14712, 1.14728, 1.14765, 1.14747, 1.14719, 1.14778, 1.14777, 1.14793, 1.14777, 1.14833, 1.14593, 1.1487, 1.14839, 1.14769, 1.14787, 1.14786, 1.}

**P**<sub>80</sub>: {1.14843, 1.14762, 1.14856, 1.14861, 1.14866, 0., 1.14849, 1.14857, 1.14838, 1.14831, 1.14874, 1.14855, 1.14874, 1.1485, 1.14881, 1.14852, 1.14963, 1.14893, 1.14887, 1.14851, 1.14919, 1.14901, 1.14897, 1.14858, 1.14903, 1.14858, 1.14892, 1.14903, 1.14888, 1.14859, 1.1491, 1.1485, 1.14857, 1.14864, 1.14773, 1.14828, 1.14779, 1.14837, 1.14876, 1.14919, 1.14861, 1.14856, 1.14727, 1.14742, 1.14777, 1.1476, 1.14734, 1.14789, 1.14788, 1.14804, 1.14789, 1.14877, 1.14848, 1.14781, 1.14798, 1.14797, 1.}

 $\begin{array}{l} \textbf{P_{81}:} \{1.14851, 1.14774, 1.14863, 1.14868, 1.14873, 0., 1.14857, 1.14864, 1.14847, 1.1484, \\ 1.1488, 1.14862, 1.14881, 1.14858, 1.14887, 1.1486, 1.14965, 1.14898, 1.14892, 1.14858, \\ 1.14923, 1.14906, 1.14902, 1.14865, 1.14908, 1.14866, 1.14898, 1.14908, 1.14893, 1.14866, \\ 1.14915, 1.14858, 1.14864, 1.14871, 1.14784, 1.14837, 1.14791, 1.14845, 1.14882, 1.14923, \\ 1.14868, 1.14863, 1.14741, 1.14755, 1.14788, 1.14772, 1.14747, 1.148, 1.14799, 1.14814, \\ 1.148, 1.1485, 1.14633, 1.14883, 1.14855, 1.14792, 1.14808, 1.14807, 1. \\ \end{array}$ 

 $\begin{array}{l} \textbf{P82:} \{1.14859, 1.14786, 1.1487, 1.14875, 1.1488, 0., 1.14864, 1.14871, 1.14854, 1.14848, 1.14886, 1.14869, 1.14887, 1.14865, 1.14893, 1.14867, 1.14967, 1.14903, 1.14898, 1.14866, 1.14927, 1.1491, 1.14907, 1.14872, 1.14913, 1.14872, 1.14903, 1.14913, 1.14898, 1.14873, 1.14919, 1.14865, 1.14871, 1.14878, 1.14795, 1.14845, 1.14801, 1.14853, 1.14888, 1.14927, 1.14875, 1.1487, 1.14754, 1.14768, 1.14799, 1.14783, 1.1476, 1.1481, 1.14809, 1.14823, 1.1481, 1.14858, 1.14852, 1.14899, 1.14863, 1.14803, 1.14818, 1.14817, 1. \end{array}$ 

**P**<sub>83</sub>: {1.14866, 1.14797, 1.14877, 1.14881, 1.14886, 0., 1.14871, 1.14878, 1.14862, 1.14856, 1.14892, 1.14876, 1.14892, 1.14872, 1.14898, 1.14874, 1.14969, 1.14908, 1.14903, 1.14873, 1.14931, 1.14915, 1.14912, 1.14878, 1.14917, 1.14879, 1.14908, 1.14917, 1.14903, 1.14879, 1.14923, 1.14872, 1.14878, 1.14884, 1.14806, 1.14853, 1.14811, 1.14861, 1.14894, 1.14931, 1.14882, 1.14877, 1.14767, 1.14779, 1.14809, 1.14795, 1.14772, 1.1482, 1.14819, 1.14832, 1.1482, 1.14865, 1.1467, 1.14895, 1.1487, 1.14813, 1.14827, 1.14826, 1.}

**P**<sub>84</sub>: {1.14873, 1.14807, 1.14883, 1.14887, 1.14892, 0., 1.14878, 1.14884, 1.14869, 1.14863, 1.14898, 1.14898, 1.14898, 1.14879, 1.14903, 1.1488, 1.1497, 1.14913, 1.14908, 1.14879, 1.14934, 1.14919, 1.14917, 1.14885, 1.14921, 1.14885, 1.14913, 1.14921, 1.14907, 1.14886, 1.14927, 1.14879, 1.14884, 1.1489, 1.14816, 1.1486, 1.14821, 1.14868, 1.14899, 1.14934, 1.14888, 1.14883, 1.14779, 1.14791, 1.14819, 1.14805, 1.14784, 1.14829, 1.14828, 1.14841, 1.14829, 1.14872, 1.14686, 1.149, 1.14876, 1.14822, 1.14836, 1.14835, 1.]

**P**<sub>85</sub> : {1.1488, 1.14817, 1.14889, 1.14893, 1.14897, 0., 1.14884, 1.1489, 1.14876, 1.1487, 1.14903, 1.14888, 1.14903, 1.14885, 1.14908, 1.14886, 1.14972, 1.14918, 1.14913, 1.14885, 1.14938, 1.14924, 1.14921, 1.14891, 1.14925, 1.14891, 1.14917, 1.14925, 1.14911, 1.14891, 1.14931, 1.14885, 1.1489, 1.14896, 1.14825, 1.14868, 1.1483, 1.14874, 1.14905, 1.14937, 1.14893, 1.14889, 1.1479, 1.14801, 1.14828, 1.14815, 1.14795, 1.14838, 1.14837, 1.14847, 1.14849, 1.14878, 1.14878, 1.14905, 1.14883, 1.14831, 1.14845, 1.14844, 1.}

**P**<sub>86</sub> : {1.14886, 1.14826, 1.14895, 1.14899, 1.14902, 0., 1.1489, 1.14896, 1.14882, 1.14877, 1.14908, 1.14894, 1.14908, 1.14891, 1.14913, 1.14892, 1.14973, 1.14922, 1.14917, 1.14891, 1.14941, 1.14927, 1.14925, 1.14896, 1.14929, 1.14897, 1.14921, 1.14929, 1.14915, 1.14897, 1.14934, 1.14891, 1.14896, 1.14901, 1.14834, 1.14874, 1.14839, 1.14881, 1.14909, 1.14941, 1.14899, 1.14895, 1.14801, 1.14812, 1.14837, 1.14824, 1.14806, 1.14846, 1.14845, 1.14857, 1.14846, 1.14885, 1.14718, 1.1491, 1.14889, 1.1484, 1.14853, 1.14852, 1.}

**P**<sub>87</sub>: {1.14892, 1.14835, 1.149, 1.14904, 1.14907, 0., 1.14896, 1.14901, 1.14888, 1.14883, 1.14912, 1.14899, 1.14913, 1.14896, 1.14918, 1.14898, 1.14975, 1.14926, 1.14921, 1.14897, 1.14944, 1.14931, 1.14929, 1.14901, 1.14933, 1.14902, 1.14925, 1.14933, 1.14919, 1.14902, 1.14938, 1.14896, 1.14901, 1.14906, 1.14843, 1.14881, 1.14847, 1.14887, 1.14914, 1.14944, 1.14904, 1.149, 1.14811, 1.14821, 1.14845, 1.14833, 1.14816, 1.14854, 1.14853, 1.14864, 1.14854, 1.14894, 1.14894, 1.14848, 1.1486, 1.14859, 1.}

**P**<sub>88</sub>: {1.14897, 1.14844, 1.14905, 1.14909, 1.14912, 0., 1.14901, 1.14906, 1.14894, 1.14889, 1.14917, 1.14905, 1.14917, 1.14902, 1.14922, 1.14903, 1.14976, 1.1493, 1.14925, 1.14902, 1.14947, 1.14935, 1.14935, 1.14906, 1.14936, 1.14936, 1.14907, 1.14929, 1.14936, 1.14923, 1.14907, 1.14941, 1.14902, 1.14906, 1.14911, 1.14851, 1.14887, 1.14855, 1.14893, 1.14918, 1.14947, 1.14909, 1.14905, 1.14821, 1.1483, 1.14853, 1.14842, 1.14825, 1.14861, 1.14861, 1.14871, 1.14861, 1.14896, 1.14746, 1.14919, 1.149, 1.14856, 1.14867, 1.14866, 1.}

**P**<sub>89</sub>: {1.14902, 1.14852, 1.1491, 1.14913, 1.14917, 0., 1.14906, 1.14911, 1.14899, 1.14895, 1.14921, 1.14909, 1.14922, 1.14907, 1.14926, 1.14908, 1.14977, 1.14933, 1.14929, 1.14907, 1.14949, 1.14938, 1.14936, 1.14911, 1.14939, 1.14912, 1.14933, 1.14939, 1.14926, 1.14912, 1.14944, 1.14907, 1.14911, 1.14915, 1.14858, 1.14893, 1.14862, 1.14898, 1.14923, 1.14949, 1.14914, 1.1491, 1.1483, 1.14839, 1.14861, 1.1485, 1.14834, 1.14868, 1.14868, 1.14877, 1.14868, 1.14901, 1.14759, 1.14923, 1.14905, 1.14863, 1.14874, 1.14873, 1.}

**P**<sub>90</sub> : {1.14907, 1.14859, 1.14915, 1.14918, 1.14921, 0., 1.14911, 1.14915, 1.14904, 1.149, 1.14925, 1.14914, 1.14926, 1.14911, 1.1493, 1.14912, 1.14978, 1.14937, 1.14933, 1.14912, 1.14952, 1.14941, 1.14939, 1.14916, 1.14943, 1.14916, 1.14936, 1.14942, 1.1493, 1.14917, 1.14947, 1.14911, 1.14915, 1.1492, 1.14866, 1.14898, 1.14869, 1.14903, 1.14927, 1.14952, 1.14918, 1.14915, 1.14838, 1.14847, 1.14868, 1.14858, 1.14842, 1.14875, 1.14875, 1.14875, 1.14884, 1.14875, 1.14906, 1.14771, 1.14927, 1.1491, 1.1487, 1.14881, 1.1488, 1.}

 $\begin{array}{l} \textbf{P_{91}:} \{1.14912, 1.14866, 1.14919, 1.14922, 1.14925, 0., 1.14915, 1.1492, 1.14909, 1.14905, \\ 1.14929, 1.14918, 1.14929, 1.14916, 1.14933, 1.14917, 1.14979, 1.1494, 1.14936, 1.14916, \\ 1.14955, 1.14944, 1.14942, 1.1492, 1.14945, 1.1492, 1.14939, 1.14945, 1.14933, 1.14921, \\ 1.1495, 1.14916, 1.1492, 1.14924, 1.14872, 1.14903, 1.14876, 1.14908, 1.1493, 1.14954, \\ 1.14922, 1.14919, 1.14847, 1.14855, 1.14875, 1.14865, 1.1485, 1.14882, 1.14881, 1.1489, \\ 1.14881, 1.14911, 1.14782, 1.14931, 1.14914, 1.14877, 1.14887, 1.14886, 1. \\ \end{array}$ 

**P**<sub>92</sub> : {1.14917, 1.14873, 1.14923, 1.14926, 1.14929, 0., 1.1492, 1.14924, 1.14914, 1.1491, 1.14933, 1.14923, 1.14933, 1.1492, 1.14937, 1.14921, 1.14981, 1.14943, 1.14944, 1.14921, 1.14957, 1.14947, 1.14945, 1.14924, 1.14948, 1.14924, 1.14943, 1.14948, 1.14936, 1.14925, 1.14952, 1.1492, 1.14924, 1.14928, 1.14979, 1.14908, 1.14882, 1.14913, 1.14934, 1.14957, 1.14926, 1.14923, 1.14855, 1.14862, 1.14881, 1.14872, 1.14858, 1.14888, 1.14887, 1.14895, 1.14887, 1.14934, 1.14934, 1.14919, 1.14883, 1.14892, 1.14892, 1.}

**P**<sub>93</sub> : {1.14921, 1.1488, 1.14927, 1.1493, 1.14932, 0., 1.14924, 1.14928, 1.14918, 1.14915, 1.14936, 1.14927, 1.14937, 1.14924, 1.1494, 1.14925, 1.14982, 1.14946, 1.14943, 1.14925, 1.14959, 1.1495, 1.14948, 1.14928, 1.14951, 1.14928, 1.14945, 1.14945, 1.14951, 1.14938, 1.14929, 1.14955, 1.14924, 1.14928, 1.14931, 1.14885, 1.14913, 1.14888, 1.14917, 1.14937, 1.14959, 1.1493, 1.14927, 1.14862, 1.14869, 1.14887, 1.14878, 1.14865, 1.14893, 1.14893, 1.14901, 1.14893, 1.1492, 1.14804, 1.14938, 1.14923, 1.14889, 1.14898, 1.14897, 1.}

**P94 :** {1.14925, 1.14886, 1.14931, 1.14933, 1.14936, 0., 1.14928, 1.14931, 1.14922, 1.14919, 1.14939, 1.1493, 1.1494, 1.14928, 1.14943, 1.14929, 1.14982, 1.14949, 1.14946, 1.14928, 1.14961, 1.14952, 1.14951, 1.14932, 1.14953, 1.14932, 1.14948, 1.14953, 1.14941, 1.14932, 1.14957, 1.14928, 1.14931, 1.14935, 1.14891, 1.14917, 1.14894, 1.14922, 1.1494, 1.14961, 1.14933, 1.14931, 1.14869, 1.14876, 1.14893, 1.1485, 1.14872, 1.14899, 1.14898, 1.14906, 1.14899, 1.14924, 1.14814, 1.14941, 1.14927, 1.14895, 1.14903, 1.14902, 1.}

**P95 :** {1.14929, 1.14892, 1.14934, 1.14937, 1.14939, 0., 1.14931, 1.14935, 1.14926, 1.14923, 1.14942, 1.14934, 1.14943, 1.14932, 1.14946, 1.14933, 1.14983, 1.14951, 1.14948, 1.14932, 1.14963, 1.14955, 1.14955, 1.14956, 1.14935, 1.14956, 1.14935, 1.14956, 1.14956, 1.14956, 1.14944, 1.14936, 1.14959, 1.14932, 1.14935, 1.14938, 1.14897, 1.14922, 1.149, 1.14926, 1.14943, 1.14963, 1.14937, 1.14934, 1.14876, 1.14882, 1.14898, 1.14891, 1.14879, 1.14904, 1.14904, 1.14911, 1.14904, 1.14928, 1.14824, 1.14944, 1.14931, 1.149, 1.14908, 1.14907, 1.}

**P**<sub>96</sub> : {1.14932, 1.14897, 1.14938, 1.1494, 1.14942, 0., 1.14935, 1.14938, 1.1493, 1.14927, 1.14945, 1.14937, 1.14946, 1.14935, 1.14949, 1.14936, 1.14936, 1.14954, 1.14951, 1.14956, 1.14965, 1.14957, 1.14956, 1.14939, 1.14958, 1.14939, 1.14953, 1.14958, 1.14958, 1.14946, 1.14939, 1.14961, 1.14935, 1.14935, 1.14941, 1.14902, 1.14926, 1.14905, 1.14929, 1.14946, 1.14965, 1.14965, 1.14939, 1.14958, 1.14946, 1.14958,

1.1494, 1.14938, 1.14882, 1.14888, 1.14904, 1.14896, 1.14885, 1.14909, 1.14909, 1.14915, 1.14909, 1.14932, 1.14833, 1.14947, 1.14934, 1.14905, 1.14913, 1.14912, 1.}

**P97 :** {1.14936, 1.14903, 1.14941, 1.14943, 1.14945, 0., 1.14938, 1.14941, 1.14934, 1.14931, 1.14948, 1.1494, 1.14949, 1.14939, 1.14951, 1.14939, 1.14985, 1.14956, 1.14956, 1.14954, 1.14939, 1.14967, 1.14967, 1.14959, 1.14958, 1.14942, 1.1496, 1.14942, 1.14956, 1.1496, 1.14948, 1.14942, 1.14963, 1.14939, 1.14941, 1.14944, 1.14907, 1.14929, 1.1491, 1.14933, 1.14949, 1.14967, 1.14943, 1.14941, 1.14888, 1.14894, 1.14908, 1.14901, 1.14891, 1.14914, 1.14913, 1.14919, 1.14913, 1.14913, 1.14914, 1.14949, 1.14938, 1.14917, 1.14917, 1.]

**P**<sub>98</sub> : {1.14939, 1.14907, 1.14944, 1.14946, 1.14948, 0., 1.14941, 1.14944, 1.14937, 1.14934, 1.14951, 1.14951, 1.14951, 1.14942, 1.14954, 1.14942, 1.14986, 1.14958, 1.14956, 1.14942, 1.14968, 1.14961, 1.1496, 1.14945, 1.14962, 1.14945, 1.14945, 1.14958, 1.14962, 1.14965, 1.14942, 1.14944, 1.14947, 1.14912, 1.14933, 1.14914, 1.14937, 1.14952, 1.14968, 1.14946, 1.14944, 1.14894, 1.149, 1.14913, 1.14906, 1.14896, 1.14918, 1.14918, 1.14918, 1.14914, 1.14921, 1.}

**P99 :** {1.14942, 1.14912, 1.14947, 1.14949, 1.14951, 0., 1.14944, 1.14947, 1.1494, 1.14938, 1.14953, 1.14946, 1.14954, 1.14945, 1.14956, 1.14945, 1.14987, 1.1496, 1.14968, 1.14958, 1.14945, 1.1497, 1.14963, 1.14962, 1.14947, 1.14964, 1.14948, 1.1496, 1.14964, 1.14952, 1.14948, 1.14967, 1.14945, 1.14945, 1.1495, 1.14916, 1.14936, 1.14919, 1.14944, 1.14954, 1.1497, 1.14949, 1.14947, 1.14899, 1.14905, 1.14918, 1.14911, 1.14902, 1.14922, 1.14922, 1.14928, 1.14922, 1.14955, 1.14955, 1.14944, 1.14919, 1.14925, 1.14925, 1.3

**P100 :** {1.14945, 1.14917, 1.14949, 1.14951, 1.14953, 0., 1.14947, 1.1495, 1.14943, 1.14941, 1.14956, 1.14949, 1.14956, 1.14948, 1.14958, 1.14948, 1.14987, 1.14962, 1.14962, 1.14964, 1.14954, 1.14958, 1.14955, 1.14962, 1.14966, 1.14954, 1.14951, 1.14969, 1.14965, 1.14964, 1.14952, 1.14966, 1.1495, 1.14966, 1.14954, 1.14951, 1.14951, 1.14951, 1.14951, 1.14951, 1.14951, 1.14904, 1.1491, 1.14922, 1.14916, 1.14907, 1.14926, 1.14926, 1.14926, 1.14931, 1.14927, 1.14947, 1.14923, 1.14929, 1.14929, 1.}

 $\begin{array}{l} \textbf{P_{101}:} \{1.14948, 1.14921, 1.14952, 1.14954, 1.14956, 0., 1.1495, 1.14952, 1.14946, 1.14944, \\ 1.14958, 1.14952, 1.14958, 1.1495, 1.1496, 1.14951, 1.14988, 1.14964, 1.14962, 1.1495, \\ 1.14973, 1.14967, 1.14966, 1.14953, 1.14968, 1.14953, 1.14964, 1.14968, 1.14956, 1.14953, \\ 1.1497, 1.1495, 1.14952, 1.14955, 1.14925, 1.14943, 1.14927, 1.14946, 1.14959, 1.14973, \\ 1.14954, 1.14952, 1.14909, 1.14914, 1.14926, 1.1492, 1.14912, 1.1493, 1.1493, 1.14935, \\ 1.1493, 1.14947, 1.14871, 1.14959, 1.14949, 1.14927, 1.14933, 1.14932, 1.\} \end{array}$ 

**P**<sub>103</sub> : {1.14953, 1.14929, 1.14957, 1.14958, 1.1496, 0., 1.14955, 1.14957, 1.14952, 1.14949, 1.14962, 1.14957, 1.14963, 1.14955, 1.14964, 1.14956, 1.14956, 1.14989, 1.14968, 1.14966, 1.14955, 1.14976, 1.14976, 1.1497, 1.14969, 1.14957, 1.14971, 1.14958, 1.14968, 1.14971, 1.1496, 1.14958, 1.14973, 1.14955, 1.14957, 1.14959, 1.14932, 1.14948, 1.14934, 1.14951, 1.14963, 1.14976,

1.14958, 1.14957, 1.14918, 1.14923, 1.14933, 1.14928, 1.1492, 1.14937, 1.14937, 1.14941, 1.14937, 1.14953, 1.14884, 1.14963, 1.14954, 1.14934, 1.1494, 1.14939, 1.}

 $\begin{array}{l} \textbf{P_{106}:} \{1.1496, 1.14939, 1.14963, 1.14964, 1.14966, 0., 1.14961, 1.14963, 1.14959, 1.14957, \\ 1.14968, 1.14963, 1.14968, 1.14962, 1.1497, 1.14962, 1.14991, 1.14973, 1.14971, 1.14962, \\ 1.14979, 1.14975, 1.14974, 1.14964, 1.14975, 1.14964, 1.14972, 1.14975, 1.14964, 1.14964, \\ 1.14977, 1.14962, 1.14963, 1.14965, 1.14942, 1.14956, 1.14944, 1.14958, 1.14968, 1.14979, \\ 1.14964, 1.14963, 1.14963, 1.14934, 1.14943, 1.14939, 1.14932, 1.14946, 1.14946, 1.14954, \\ 1.14964, 1.14964, 1.14963, 1.14901, 1.14968, 1.14961, 1.14944, 1.14948, 1.14948, 1.14948, 1.\} \end{array}$ 

**P107** : {1.14962, 1.14942, 1.14965, 1.14966, 1.14968, 0., 1.14963, 1.14965, 1.14961, 1.14959, 1.14969, 1.14965, 1.1497, 1.14964, 1.14971, 1.14964, 1.14991, 1.14974, 1.14972, 1.14964, 1.1498, 1.14976, 1.14976, 1.14965, 1.14965, 1.14976, 1.14966, 1.14974, 1.14976, 1.14966, 1.14964, 1.14964, 1.14965, 1.14967, 1.14945, 1.14958, 1.14946, 1.1496, 1.1496, 1.1497, 1.1498, 1.14966, 1.14965, 1.14934, 1.14937, 1.14946, 1.14942, 1.14935, 1.14949, 1.14949, 1.14949, 1.14952, 1.14962, 1.14962, 1.14906, 1.1497, 1.14963, 1.14947, 1.14951, 1.14951, 1.}

**P**<sub>108</sub> : {1.14964, 1.14945, 1.14967, 1.14968, 1.14969, 0., 1.14965, 1.14967, 1.14963, 1.14961, 1.14971, 1.14967, 1.14971, 1.14966, 1.14973, 1.14966, 1.14992, 1.14975, 1.14974, 1.14966, 1.14981, 1.14977, 1.14976, 1.14967, 1.14978, 1.14967, 1.14967, 1.14975, 1.14978, 1.14967, 1.14968, 1.14979, 1.14966, 1.14967, 1.14969, 1.14948, 1.1496, 1.14949, 1.14962, 1.14971, 1.14981, 1.14968, 1.14967, 1.14937, 1.14941, 1.14949, 1.14945, 1.14939, 1.14951, 1.14951, 1.14951, 1.14964, 1.14911, 1.14972, 1.14965, 1.1495, 1.14954, 1.14953, 1.}

**P109 :** {1.14966, 1.14948, 1.14968, 1.1497, 1.14971, 0., 1.14967, 1.14969, 1.14965, 1.14963, 1.14972, 1.14968, 1.14973, 1.14967, 1.14974, 1.14968, 1.14992, 1.14977, 1.14975, 1.14967, 1.14982, 1.14978, 1.14978, 1.14969, 1.14979, 1.14969, 1.14976, 1.14976, 1.14979, 1.14968, 1.14969, 1.1498, 1.14967, 1.14969, 1.1497, 1.14951, 1.14962, 1.14952, 1.14964, 1.14973, 1.14982, 1.1497, 1.14969, 1.14944, 1.14951, 1.14947, 1.14942, 1.14954, 1.14954, 1.14957, 1.14954, 1.14954, 1.14957, 1.14954, 1.

**P**<sub>110</sub> : {1.14968, 1.14951, 1.1497, 1.14971, 1.14972, 0., 1.14969, 1.1497, 1.14966, 1.14965, 1.14974, 1.14974, 1.14974, 1.14969, 1.14975, 1.14969, 1.14992, 1.14978, 1.14976, 1.14969, 1.14983, 1.14979, 1.14979, 1.14971, 1.1498, 1.14971, 1.14978, 1.1498, 1.14969, 1.14969, 1.14971, 1.14981, 1.14969, 1.14974, 1.14972, 1.14953, 1.14964, 1.14954, 1.14966, 1.14974, 1.14983,

1.14971, 1.1497, 1.14943, 1.14946, 1.14954, 1.1495, 1.14945, 1.14956, 1.14956, 1.14959, 1.14956, 1.14967, 1.1492, 1.14974, 1.14968, 1.14955, 1.14958, 1.14958, 1.14958, 1.]

**P**<sub>111</sub> : {1.14969, 1.14953, 1.14972, 1.14973, 1.14974, 0., 1.1497, 1.14972, 1.14968, 1.14967, 1.14975, 1.14971, 1.14976, 1.14971, 1.14977, 1.14971, 1.14993, 1.14979, 1.14978, 1.14971, 1.14984, 1.1498, 1.1498, 1.14972, 1.14981, 1.14972, 1.14979, 1.14979, 1.14981, 1.1497, 1.14972, 1.14982, 1.14971, 1.14972, 1.14973, 1.14955, 1.14966, 1.14957, 1.14968, 1.14976, 1.14984, 1.14973, 1.14972, 1.14946, 1.14949, 1.14956, 1.14953, 1.14948, 1.14959, 1.14958, 1.14961, 1.14958, 1.14969, 1.14924, 1.14976, 1.1497, 1.14957, 1.1496, 1.1496, 1.3

 $\begin{array}{l} \textbf{P_{112}:} \{1.14971, 1.14956, 1.14973, 1.14974, 1.14975, 0., 1.14972, 1.14973, 1.1497, 1.14968, \\ 1.14976, 1.14973, 1.14977, 1.14972, 1.14978, 1.14972, 1.14993, 1.1498, 1.14979, 1.14972, \\ 1.14985, 1.14981, 1.14981, 1.14973, 1.14973, 1.14982, 1.14974, 1.1498, 1.14982, 1.14971, 1.14974, \\ 1.14983, 1.14972, 1.14973, 1.14975, 1.14958, 1.14968, 1.14959, 1.1497, 1.14977, 1.14985, \\ 1.14974, 1.14973, 1.14973, 1.14952, 1.14958, 1.14955, 1.1495, 1.14961, 1.1496, 1.14963, \\ 1.14961, 1.1497, 1.14928, 1.14977, 1.14972, 1.14959, 1.14962, 1.14962, 1. \\ \end{array}$ 

**P**<sub>113</sub>: {1.14972, 1.14958, 1.14974, 1.14975, 1.14976, 0., 1.14973, 1.14975, 1.14971, 1.1497, 1.14978, 1.14978, 1.14978, 1.14978, 1.14973, 1.14979, 1.14974, 1.14994, 1.14981, 1.14981, 1.1498, 1.14974, 1.14986, 1.14982, 1.14975, 1.14975, 1.14983, 1.14975, 1.14983, 1.14974, 1.14975, 1.14976, 1.1496, 1.1497, 1.14961, 1.14971, 1.14978, 1.14975, 1.14975, 1.14974, 1.14952, 1.14954, 1.1496, 1.14957, 1.14953, 1.14963, 1.14963, 1.14963, 1.14978, 1.14978, 1.14978, 1.14978, 1.14978, 1.14964, 1.14974, 1.14972, 1.14978, 1.14973, 1.14961, 1.14964, 1.14964, 1.}

**P**<sub>114</sub>: {1.14974, 1.1496, 1.14976, 1.14977, 1.14977, 0., 1.14975, 1.14976, 1.14973, 1.14972, 1.14979, 1.14976, 1.14979, 1.14975, 1.1498, 1.14975, 1.14994, 1.14982, 1.14981, 1.14975, 1.14986, 1.14983, 1.14983, 1.14976, 1.14984, 1.14976, 1.14982, 1.14984, 1.14973, 1.14976, 1.14985, 1.14975, 1.14976, 1.14977, 1.14962, 1.14971, 1.14963, 1.14973, 1.14979, 1.14986, 1.14977, 1.14976, 1.14954, 1.14957, 1.14962, 1.1496, 1.14955, 1.14965, 1.14964, 1.14967, 1.14965, 1.14973, 1.14979, 1.14974, 1.14963, 1.14966, 1.14966, 1.}

**P**<sub>115</sub> : {1.14975, 1.14962, 1.14977, 1.14978, 1.14979, 0., 1.14976, 1.14977, 1.14974, 1.14973, 1.1498, 1.14977, 1.1498, 1.14976, 1.14981, 1.14976, 1.14994, 1.14983, 1.14982, 1.14976, 1.14987, 1.14984, 1.14984, 1.14977, 1.14985, 1.14977, 1.14983, 1.14984, 1.14974, 1.14978, 1.14978, 1.14986, 1.14976, 1.14977, 1.14978, 1.14964, 1.14973, 1.14965, 1.14974, 1.1498, 1.14987, 1.14978, 1.14977, 1.14956, 1.14959, 1.14964, 1.14962, 1.14958, 1.14966, 1.14966, 1.14966, 1.14966, 1.14965, 1.14966, 1.14968, 1.]

**P**<sub>116</sub>: {1.14976, 1.14964, 1.14978, 1.14979, 1.1498, 0., 1.14977, 1.14978, 1.14976, 1.14974, 1.14981, 1.14978, 1.14981, 1.14977, 1.14982, 1.14978, 1.14994, 1.14984, 1.14983, 1.14977, 1.14988, 1.14985, 1.14985, 1.14978, 1.14978, 1.14979, 1.14984, 1.14985, 1.14975, 1.14979, 1.14986, 1.14977, 1.14978, 1.14979, 1.14966, 1.14974, 1.14967, 1.14975, 1.14981, 1.14988, 1.14979, 1.14968, 1.14978, 1.14959, 1.14961, 1.14966, 1.14964, 1.1496, 1.14968, 1.14968, 1.14978, 1.14977, 1.14981, 1.14977, 1.14967, 1.14969, 1.14968, 1.14978, 1.14981, 1.14977, 1.14967, 1.14969, 1.14969, 1.}

**P**<sub>117</sub>: {1.14978, 1.14966, 1.14979, 1.1498, 1.14981, 0., 1.14978, 1.14979, 1.14977, 1.14976, 1.14982, 1.14979, 1.14982, 1.14978, 1.14983, 1.14979, 1.14995, 1.14985, 1.14984, 1.14979, 1.14988, 1.14986, 1.14986, 1.14986, 1.14986, 1.14986, 1.14986, 1.14987, 1.14987, 1.14979, 1.14979, 1.14981, 1.14967, 1.14975, 1.14968, 1.14977, 1.14982, 1.14988, 1.14988, 1.14979, 1.14989, 1.14981, 1.14967, 1.14975, 1.14968, 1.14977, 1.14982, 1.14988, 1.14988, 1.14997, 1.14988, 1.14988, 1.14979, 1.14988, 1.14988, 1.14997, 1.14988

1.1498, 1.14979, 1.14961, 1.14963, 1.14968, 1.14965, 1.14962, 1.1497, 1.1497, 1.14972, 1.1497, 1.14977, 1.14974, 1.14982, 1.14978, 1.14969, 1.14971, 1.14971, 1.}

**P**<sub>118</sub> : {1.14979, 1.14968, 1.1498, 1.14981, 1.14982, 0., 1.14979, 1.1498, 1.14978, 1.14977, 1.14983, 1.14983, 1.14983, 1.14984, 1.14984, 1.1498, 1.14995, 1.14985, 1.14985, 1.14985, 1.14986, 1.14986, 1.14981, 1.14987, 1.14981, 1.14985, 1.14987, 1.14976, 1.14981, 1.14988, 1.1498, 1.14981, 1.14982, 1.14969, 1.14977, 1.1497, 1.14978, 1.14983, 1.14989, 1.14981, 1.14963, 1.14965, 1.1497, 1.14967, 1.14964, 1.14971, 1.14971, 1.14973, 1.14971, 1.14973, 1.14977, 1.14978, 1.14978, 1.14983, 1.14983, 1.14979, 1.14977, 1.14972, 1.14972, 1.}

**P**<sub>119</sub>: {1.1498, 1.14969, 1.14981, 1.14982, 1.14983, 0., 1.14981, 1.14981, 1.14979, 1.14978, 1.14984, 1.14984, 1.14984, 1.14981, 1.14985, 1.14981, 1.14995, 1.14986, 1.14986, 1.14985, 1.14981, 1.1499, 1.14987, 1.14987, 1.14982, 1.14987, 1.14982, 1.14982, 1.14986, 1.14986, 1.14987, 1.14977, 1.14982, 1.14988, 1.14981, 1.14982, 1.14982, 1.14971, 1.14978, 1.14971, 1.14979, 1.14984, 1.14989, 1.14982, 1.14981, 1.14965, 1.14967, 1.14971, 1.14969, 1.14966, 1.14973, 1.14973, 1.14975, 1.14973, 1.14975, 1.14973, 1.14984, 1.14984, 1.1498, 1.14972, 1.14974, 1.14974, 1.}

**P**<sub>120</sub> : {1.14981, 1.14971, 1.14982, 1.14983, 1.14984, 0., 1.14982, 1.14982, 1.1498, 1.14979, 1.14984, 1.14982, 1.14985, 1.14982, 1.14985, 1.14982, 1.14986, 1.14987, 1.14986, 1.14982, 1.14999, 1.14988, 1.14987, 1.14983, 1.14988, 1.14983, 1.14987, 1.14988, 1.14978, 1.14983, 1.14989, 1.14982, 1.14982, 1.14983, 1.14972, 1.14979, 1.14973, 1.14988, 1.14974, 1.14974, 1.14974, 1.14974, 1.14976, 1.14974, 1.14974, 1.14975, 1.14981, 1.14975, 1.14981, 1.14975, 1.14975, 1.3

 $\begin{array}{l} \textbf{P_{121}:} \{1.14982, 1.14972, 1.14983, 1.14984, 1.14984, 0., 1.14982, 1.14983, 1.14981, 1.1498, 1.14985, 1.14983, 1.14986, 1.14983, 1.14986, 1.14983, 1.14983, 1.14996, 1.14988, 1.14988, 1.14983, 1.14983, 1.14983, 1.14983, 1.14983, 1.14984, 1.14984, 1.14984, 1.14983, 1.14983, 1.14984, 1.14974, 1.14984, 1.14974, 1.14981, 1.14986, 1.1499, 1.14984, 1.14984, 1.14974, 1.14974, 1.14974, 1.14975, 1.14975, 1.14975, 1.14975, 1.14975, 1.14976, 1.14976, 1.\}$ 

**P**<sub>122</sub> : {1.14983, 1.14974, 1.14984, 1.14985, 1.14985, 0., 1.14983, 1.14984, 1.14982, 1.14981, 1.14986, 1.14984, 1.14986, 1.14983, 1.14987, 1.14984, 1.14996, 1.14988, 1.14987, 1.14984, 1.14991, 1.14989, 1.14989, 1.14984, 1.14989, 1.14984, 1.14988, 1.14988, 1.14989, 1.14979, 1.14984, 1.14991, 1.14983, 1.14984, 1.14985, 1.14975, 1.14981, 1.14976, 1.14982, 1.14986, 1.14991, 1.14985, 1.14984, 1.14971, 1.14975, 1.14973, 1.14971, 1.14977, 1.14977, 1.14977, 1.14977, 1.14978, 1.14978, 1.14978, 1.14978, 1.14985, 1.14986, 1.14983, 1.14976, 1.14978, 1.149

**P**<sub>123</sub> : {1.14984, 1.14975, 1.14985, 1.14985, 1.14986, 0., 1.14984, 1.14985, 1.14983, 1.14982, 1.14987, 1.14985, 1.14987, 1.14984, 1.14984, 1.14996, 1.14989, 1.14988, 1.14984, 1.14992, 1.14999, 1.14989, 1.14985, 1.1499, 1.14985, 1.14985, 1.14991, 1.14984, 1.14985, 1.14986, 1.14976, 1.14982, 1.14977, 1.14983, 1.14987, 1.14991, 1.14985, 1.14985, 1.14973, 1.14973, 1.14977, 1.14975, 1.14972, 1.14978, 1.14978, 1.14979, 1.14979, 1.14979, 1.14979, 1.14979, 1.3497

1.14992, 1.14986, 1.14986, 1.14973, 1.14974, 1.14978, 1.14976, 1.14974, 1.14979, 1.14979, 1.14979, 1.1498, 1.1498, 1.14988, 1.14985, 1.14985, 1.14978, 1.1498, 1.1498, 1.]

 $\begin{array}{l} \mathbf{P_{125}:} \{1.14985, \ 1.14978, \ 1.14986, \ 1.14987, \ 1.14987, \ 0., \ 1.14986, \ 1.14986, \ 1.14986, \ 1.14986, \ 1.14988, \ 1.14988, \ 1.14988, \ 1.14988, \ 1.14989, \ 1.14986, \ 1.14997, \ 1.1499, \ 1.14991, \ 1.14981, \ 1.14981, \ 1.14992, \ 1.14986, \ 1.14986, \ 1.14976, \ 1.14979, \ 1.14977, \ 1.14975, \ 1.14988, \ 1.14988, \ 1.14981, \ 1.14981, \ 1.14985, \ 1.14988, \ 1.14988, \ 1.14988, \ 1.14988, \ 1.14988, \ 1.14988, \ 1.14988, \ 1.14979, \ 1.14975, \ 1.14988,$ 

 $\begin{array}{l} \mathbf{P_{126}:} \{1.14986, 1.14979, 1.14987, 1.14988, 1.14988, 0., 1.14986, 1.14987, 1.14986, 1.14987, 1.14986, 1.14987, 1.14987, 1.14989, 1.14987, 1.14987, 1.14987, 1.14997, 1.14997, 1.14991, 1.14987, 1.14987, 1.14997, 1.14997, 1.14991, 1.14987, 1.14987, 1.14987, 1.14987, 1.14987, 1.14987, 1.14987, 1.14987, 1.14987, 1.14987, 1.14988, 1.14988, 1.14985, 1.14988, 1.14985, 1.14988, 1.14988, 1.14988, 1.14988, 1.14976, 1.14981, 1.14981, 1.14981, 1.14981, 1.14981, 1.14982, 1.14986, 1.14986, 1.14965, 1.14989, 1.14986, 1.14986, 1.14982, 1.1498$ 

 $\begin{array}{l} \textbf{P_{127}:} \{1.14987, 1.1498, 1.14988, 1.14988, 1.14989, 0., 1.14987, 1.14988, 1.14986, 1.14986, 1.14986, 1.14989, 1.14989, 1.14988, 1.14991, 1.14987, 1.14997, 1.14991, 1.14991, 1.14998, 1.14993, 1.14993, 1.14992, 1.14991, 1.14988, 1.14992, 1.14988, 1.14992, 1.14988, 1.14992, 1.14988, 1.14992, 1.14988, 1.14981, 1.14985, 1.14981, 1.14986, 1.14989, 1.14983, 1.14988, 1.14988, 1.14977, 1.14988, 1.14978, 1.14981, 1.1498, 1.14977, 1.14982, 1.14982, 1.14983, 1.14983, 1.14982, 1.14983,$ 

 $\begin{array}{l} \mathbf{P_{128}:} \{1.14987, 1.14981, 1.14988, 1.14989, 1.14989, 0., 1.14988, 1.14988, 1.14987, 1.14986, 1.1499, 1.14988, 1.1499, 1.14988, 1.1499, 1.14988, 1.14997, 1.14991, 1.14991, 1.14991, 1.14992, 1.14988, 1.14992, 1.14992, 1.14989, 1.14992, 1.14989, 1.14991, 1.14992, 1.14982, 1.14989, 1.14993, 1.14993, 1.14988, 1.14988, 1.14989, 1.14989, 1.14986, 1.14982, 1.14982, 1.14987, 1.14983, 1.14988, 1.14979, 1.14982, 1.14981, 1.14979, 1.14983, 1.14983, 1.14984, 1.14984, 1.14983, 1.14987, 1.14969, 1.1499, 1.14988, 1.14982, 1.14984, 1$ 

**P**<sub>129</sub>: {1.14988, 1.14982, 1.14989, 1.14989, 1.1499, 0., 1.14988, 1.14989, 1.14988, 1.14987, 1.1499, 1.14989, 1.14991, 1.14989, 1.14991, 1.14989, 1.14997, 1.14992, 1.14991, 1.14989, 1.14993, 1.14994, 1.14992, 1.14992, 1.14989, 1.14993, 1.14989, 1.14993, 1.14983, 1.14983, 1.14983, 1.14983, 1.14983, 1.14984,

1.1499, 1.1499, 1.14981, 1.14982, 1.14985, 1.14983, 1.14982, 1.14985, 1.14985, 1.14986, 1.14985, 1.14989, 1.14973, 1.14992, 1.1499, 1.14985, 1.14986, 1.14986, 1.14986, 1.}

 $\begin{array}{l} \textbf{P_{132}:} \{1.1499, 1.14984, 1.1499, 1.14991, 1.14991, 0., 1.1499, 1.14991, 1.14989, 1.14989, 1.14989, 1.14992, 1.14991, 1.14992, 1.14992, 1.14992, 1.14993, 1.14993, 1.14993, 1.14993, 1.14994, 1.14991, 1.14991, 1.14991, 1.14985, 1.14986, 1.14986, 1.14986, 1.14986, 1.14986, 1.14987, 1.14986, 1.14987, 1.14986, 1.14997, 1.14992, 1.14992, 1.14994, 1.14986, 1.14987,$ 

 $\begin{array}{l} \textbf{P_{133}:} \{1.1499, 1.14985, 1.14991, 1.14991, 1.14992, 0., 1.14991, 1.14991, 1.1499, 1.1499, 1.1499, 1.14992, 1.14992, 1.14991, 1.14993, 1.14991, 1.14993, 1.14993, 1.14993, 1.14993, 1.14991, 1.14995, 1.14994, 1.14994, 1.14991, 1.14994, 1.14991, 1.14994, 1.14991, 1.14994, 1.14991, 1.14994, 1.14991, 1.14992, 1.14986, 1.14989, 1.14986, 1.14994, 1.14991, 1.14992, 1.14991, 1.14986, 1.14986, 1.14986, 1.14983, 1.14987, 1.14987, 1.14987, 1.14987, 1.14988, 1.14991, 1.14991, 1.14992, 1.14991, 1.14986, 1.14985, 1.14987, 1.14987, 1.14987, 1.14988, 1.14987, 1.14987, 1.14987, 1.14987, 1.14987, 1.14987, 1.14987, 1.14988, 1.14986, 1.14986, 1.14987, 1.14987, 1.14987, 1.14988, 1.14987, 1.14986, 1.14986, 1.14986, 1.14987, 1.14987, 1.14987, 1.14988, 1.14986, 1.14986, 1.14986, 1.14987, 1.14987, 1.14987, 1.14988, 1.14986, 1.14986, 1.14986, 1.14987, 1.14987, 1.14987, 1.14988, 1.14987, 1.14987, 1.14987, 1.14987, 1.14987, 1.14987, 1.14987, 1.14987, 1.14987, 1.14987, 1.14987, 1.14987, 1.14987, 1.14987, 1.14987, 1.14987, 1.14988, 1.14986, 1.14986, 1.14987, 1$ 

 $\begin{array}{l} \textbf{P_{134}:} \{1.14991, 1.14986, 1.14991, 1.14992, 1.14992, 0., 1.14991, 1.14992, 1.1499, 1.1499, 1.14993, 1.14993, 1.14993, 1.14991, 1.14993, 1.14991, 1.14993, 1.14994, 1.14993, 1.14991, 1.14993, 1.14991, 1.14994, 1.14994, 1.14994, 1.14992, 1.14994, 1.14994, 1.14994, 1.14992, 1.14995, 1.14991, 1.14994, 1.14992, 1.14994, 1.14992, 1.14992, 1.14994, 1.14993, 1.14993, 1.14992, 1.14992, 1.14991, 1.14992, 1.14992, 1.14987, 1.14986, 1.14987, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14993, 1.14993, 1.14991, 1.14993, 1.14991, 1.14987, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14993, 1.14991, 1.14991, 1.14987, 1.14988,$ 

 $\begin{array}{l} \mathbf{P_{135}:} \{1.14991, \ 1.14987, \ 1.14992, \ 1.14992, \ 0., \ 1.14992, \ 1.14992, \ 1.14992, \ 1.14992, \ 1.14992, \ 1.14993, \ 1.14993, \ 1.14994, \ 1.14994, \ 1.14994, \ 1.14994, \ 1.14994, \ 1.14994, \ 1.14994, \ 1.14994, \ 1.14994, \ 1.14994, \ 1.14994, \ 1.14995, \ 1.14994, \ 1.14994, \ 1.14992, \ 1.14995, \ 1.14995, \ 1.14995, \ 1.14992, \ 1.14992, \ 1.14992, \ 1.14992, \ 1.14993, \ 1.14995, \ 1.14992, \ 1.14992, \ 1.14992, \ 1.14993, \ 1.14993, \ 1.14993, \ 1.14988$ 

**P**<sub>136</sub> : {1.14992, 1.14987, 1.14992, 1.14993, 1.14993, 0., 1.14992, 1.14992, 1.14991, 1.14991, 1.14993, 1.14992, 1.14994, 1.14992, 1.14994, 1.14994, 1.14994, 1.14994, 1.14994, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14993, 1.14993, 1.14995, 1.14992, 1.14992, 1.14993, 1.14988, 1.14991, 1.14988, 1.14991, 1.14993, 1.14995, 1.14992, 1.14992, 1.14986, 1.14986, 1.14988, 1.14987, 1.14986, 1.14989, 1.14998, 1.14999, 1.14999, 1.14992, 1.14993, 1.14993, 1.14992, 1.14993, 1.14993, 1.14988, 1.14987, 1.14986, 1.14989, 1.14999, 1.14999, 1.14999, 1.14993, 1.14993, 1.14992, 1.14988, 1.14988, 1.14989, 1.14989, 1.14999, 1.14999, 1.14993, 1.14993, 1.14992, 1.14988, 1.14989, 1.14989, 1.14989, 1.14999, 1.14993, 1.14993, 1.14992, 1.14988, 1.14989, 1.14989, 1.14989, 1.14999, 1.14993, 1.14993, 1.14992, 1.14988, 1.14989, 1.14989, 1.14989, 1.14999, 1.14999, 1.14993, 1.14992, 1.14988, 1.14989, 1.14989, 1.14989, 1.14989, 1.14999, 1.14993, 1.14992, 1.14988, 1.14989, 1.14

**P**<sub>137</sub> : {1.14992, 1.14988, 1.14993, 1.14993, 1.14993, 0., 1.14992, 1.14993, 1.14992, 1.14992, 1.14994, 1.14993, 1.14994, 1.14994, 1.14994, 1.14993, 1.14998, 1.14995, 1.14994, 1.14992, 1.14996, 1.14995, 1.14995, 1.14993, 1.14995, 1.14993, 1.14995, 1.14995, 1.14995, 1.14993, 1.14993, 1.14995, 1.14995, 1.14993, 1.14993, 1.14993, 1.14994, 1.14994, 1.14994, 1.14996, 1.14993, 1.14993, 1.14986, 1.14987, 1.14989, 1.14988, 1.14987, 1.14989, 1.14998, 1.14998, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14994, 1.14992, 1.14992, 1.14999, 1.149

1.14993, 1.14996, 1.14993, 1.14993, 1.14994, 1.14989, 1.14992, 1.14989, 1.14992, 1.14994, 1.14996, 1.14993, 1.14993, 1.14987, 1.14988, 1.14989, 1.14989, 1.14987, 1.1499, 1.14991, 1.14991, 1.14992, 1.14994, 1.14994, 1.14993, 1.14993, 1.1499, 1.1499, 1.1499, 1.14994, 1.14994, 1.14993, 1.14994, 1.1494, 1.1444, 1.1444, 1.144, 1.144, 1.1444, 1.1444, 1.1444,

**P**<sub>140</sub> : {1.14993, 1.1499, 1.14994, 1.14994, 1.14994, 0., 1.14994, 1.14994, 1.14993, 1.14993, 1.14993, 1.14995, 1.14995, 1.14995, 1.14995, 1.14994, 1.14995, 1.14994, 1.14995, 1.14995, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14994, 1.14996, 1.14996, 1.14994, 1.14996, 1.14996, 1.14994, 1.14996, 1.14996, 1.14997, 1.14997, 1.14994, 1.14994, 1.14994, 1.14999, 1.14993, 1.14991, 1.14993, 1.14995, 1.14996, 1.14994, 1.14994, 1.14999, 1.14999, 1.14999, 1.14999, 1.14991, 1.1491

**P**<sub>141</sub> : {1.14994, 1.1499, 1.14994, 1.14994, 1.14994, 0., 1.14994, 1.14994, 1.14993, 1.14993, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14994, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14994, 1.14996, 1.14991, 1.14993, 1.14991, 1.14993, 1.14995, 1.14996, 1.14996, 1.14994, 1.14994, 1.14994, 1.14991, 1.14991, 1.14993, 1.14991, 1.14991, 1.14991, 1.14991, 1.14991, 1.14991, 1.14991, 1.14991, 1.14991, 1.14992, 1.14991, 1.14991, 1.14992, 1.14991, 1.14992, 1.14991, 1.14992, 1.14991, 1.14992, 1.14991, 1.14992, 1.14991, 1.14992, 1.14991, 1.14992, 1.14992, 1.34992, 1.34991, 1.14992, 1.34992, 1.34992, 1.34991, 1.14992, 1.3492

 $\begin{array}{l} \mathbf{P_{143}:} \{1.14994, 1.14991, 1.14995, 1.14995, 1.14995, 0., 1.14994, 1.14995, 1.14994, 1.14995, 1.14995, 1.14996, 1.14995, 1.14996, 1.14996, 1.14995, 1.14996, 1.14996, 1.14995, 1.14996, 1.14996, 1.14995, 1.14997, 1.14997, 1.14994, 1.14995, 1.14995, 1.14995, 1.14992, 1.14994, 1.14992, 1.14994, 1.14995, 1.14997, 1.14995, 1.14995, 1.14991, 1.14992, 1.14991, 1.14992, 1.14992, 1.14992, 1.14992, 1.14993, 1.14992, 1.14993, 1.14993, 1.14994, 1.14995, 1.14995, 1.14994, 1.14992, 1.14993, 1.1493, 1.14993, 1.14993, 1.14993, 1.14993, 1.14993, 1.14993$ 

1.14995, 1.14997, 1.14995, 1.14995, 1.14996, 1.14992, 1.14994, 1.14993, 1.14995, 1.14996, 1.14997, 1.14995, 1.14995, 1.14991, 1.14991, 1.14993, 1.14992, 1.14991, 1.14993, 1.14993, 1.14993, 1.14995, 1.14995, 1.14996, 1.14995, 1.14995, 1.14993, 1.1493, 1

 $\begin{array}{l} \mathbf{P_{146}:} \{1.14995, 1.14993, 1.14995, 1.14996, 1.14996, 0., 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14997, 1.14996, 1.14995, 1.14995, 1.14997, 1.14997, 1.14997, 1.14996, 1.14997, 1.14995, 1.14997, 1.14997, 1.14996, 1.14996, 1.14995, 1.14995, 1.14997, 1.14996, 1.14996, 1.14993, 1.14995, 1.14995, 1.14995, 1.14996, 1.14993, 1.14993, 1.14992, 1.14995, 1.14995, 1.14995, 1.14995, 1.14996, 1.14995, 1.14993, 1.14992, 1.14993, 1.14993, 1.14993, 1.14994, 1.14993, 1.14995, 1.14995, 1.14996, 1.14996, 1.14995, 1.14993, 1.14994, 1.14994, 1.\}$ 

 $\begin{array}{l} \mathbf{P_{147}:} \{1.14995, 1.14993, 1.14996, 1.14996, 1.14996, 0., 1.14995, 1.14996, 1.14995, 1.14995, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14997, 1.14997, 1.14997, 1.14996, 1.14996, 1.14997, 1.14997, 1.14997, 1.14996, 1.14997, 1.14997, 1.14996, 1.14997, 1.14996, 1.14996, 1.14997, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14992, 1.14993, 1.14993, 1.14993, 1.14992, 1.14994, 1.14994, 1.14994, 1.14994, 1.14994, 1.14994, 1.14994, 1.14995, 1.14996, 1.14996, 1.14996, 1.14995, 1.14995, 1.14996, 1.14994, 1.1494$ 

 $\begin{array}{l} \mathbf{P_{148}:} \{1.14996, 1.14993, 1.14996, 1.14996, 1.14996, 0., 1.14996, 1.14996, 1.14995, 1.14996, 1.14996, 1.14997, 1.14996, 1.14997, 1.14996, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14996, 1.14997, 1.14997, 1.14996, 1.14997, 1.14997, 1.14996, 1.14997, 1.14996, 1.14997, 1.14996, 1.14997, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14993, 1.14994, 1.14995, 1.14994, 1.1494$ 

 $\begin{array}{l} \mathbf{P_{149}:} \{1.14996, 1.14994, 1.14996, 1.14996, 1.14996, 0., 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14997, 1.14996, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14996, 1.14997, 1.14997, 1.14996, 1.14997, 1.14997, 1.14996, 1.14996, 1.14998, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14994, 1.14995, 1.14995, 1.14996, 1.14996, 1.14997, 1.14997, 1.14996, 1.14996, 1.14997, 1.14996, 1.14996, 1.14997, 1.14996, 1.14994, 1.14995, 1.14995, 1.14996, 1.14996, 1.14997, 1.14996, 1.1499$ 

 $\begin{array}{l} \textbf{P_{150}:} \{1.14996, 1.14994, 1.14996, 1.14996, 1.14997, 0., 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14997, 1.14996, 1.14997, 1.14996, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14996, 1.14997, 1.14997, 1.14996, 1.14998, 1.14997, 1.14997, 1.14996, 1.14998, 1.14998, 1.14996, 1.14996, 1.14997, 1.14996, 1.14997, 1.14998, 1.14996, 1.14996, 1.14997, 1.14997, 1.14994, 1.14996, 1.14996, 1.14997, 1.14997, 1.14993, 1.14994, 1.14994, 1.14993, 1.14995, 1.14995, 1.14996, 1.14996, 1.14997, 1.14997, 1.14996, 1.14997, 1.14995, 1.14995, 1.14996, 1.14997, 1.14997, 1.14996, 1.14994, 1.14993, 1.14995, 1.14995, 1.14996, 1.14997, 1.14996, 1.14996, 1.14995, 1.1495$ 

 $\begin{array}{l} \textbf{P_{151}:} \{1.14996, 1.14994, 1.14996, 1.14997, 1.14997, 0., 1.14996, 1.14997, 1.14996, 1.14996, 1.14997, 1.14996, 1.14997, 1.14996, 1.14997, 1.14996, 1.14997, 1.14996, 1.14997, 1.14998, 1.14998, 1.14998, 1.14998, 1.14997, 1.14998, 1.14997, 1.14998, 1.14998, 1.14998, 1.14997, 1.14998, 1.14998, 1.14997, 1.14997, 1.14994, 1.14996, 1.14996, 1.14996, 1.14997, 1.14997, 1.14994, 1.14996, 1.14996, 1.14996, 1.14997, 1.14994, 1.14995, 1.14994, 1.14994, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14996, 1.14991, 1.14997, 1.14996, 1.14995, 1.1495, 1.1495, 1.1495, 1.1495, 1.1495, 1.1495, 1.1495, 1.14$ 

**P**<sub>152</sub> : {1.14996, 1.14995, 1.14997, 1.14997, 1.14997, 0., 1.14997, 1.14997, 1.14996, 1.14996, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14998, 1.14997, 1.14998, 1.14988, 1.14888, 1.14888, 1.14888, 1.14888, 1.14888, 1.14888, 1.14888, 1.14888, 1.148

1.14997, 1.14998, 1.14997, 1.14997, 1.14997, 1.14995, 1.14996, 1.14995, 1.14996, 1.14997, 1.14998, 1.14997, 1.14997, 1.14994, 1.14994, 1.14995, 1.14994, 1.14995, 1.14995, 1.14995, 1.14995, 1.14996, 1.14991, 1.14997, 1.14997, 1.14995, 1.1495, 1.1405, 1.1405, 1.14

 $\begin{array}{l} \textbf{P_{153}:} \{1.14997, 1.14995, 1.14997, 1.14997, 1.14997, 0., 1.14997, 1.14997, 1.14996, 1.14996, 1.14997, 1.14997, 1.14998, 1.14998, 1.14997, 1.14997, 1.14997, 1.14999, 1.14998, 1.14998, 1.14998, 1.14997, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14997, 1.14998, 1.14998, 1.14998, 1.14997, 1.14997, 1.14998, 1.14997, 1.14997, 1.14997, 1.14995, 1.14996, 1.14995, 1.14996, 1.14996, 1.14995, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14995, 1.14995, 1.14994, 1.14995, 1.14995, 1.14996, 1.14996, 1.14995, 1.14996, 1.1496$ 

 $\begin{array}{l} \mathbf{P_{154}:} \{1.14997, \ 1.14995, \ 1.14997, \ 1.14997, \ 0., \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14998, \ 1.14998, \ 1.14998, \ 1.14998, \ 1.14998, \ 1.14998, \ 1.14998, \ 1.14998, \ 1.14998, \ 1.14998, \ 1.14998, \ 1.14998, \ 1.14998, \ 1.14998, \ 1.14998, \ 1.14998, \ 1.14997, \ 1.14998, \ 1.14997, \ 1.14998, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14996, \ 1.1496, \$ 

 $\begin{array}{l} \textbf{P_{155}:} \{1.14997, \ 1.14995, \ 1.14997, \ 1.14997, \ 0., \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14998, \ 1.14997, \ 1.14996, \ 1.14997, \ 1.14996, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1$ 

 $\begin{array}{l} \mathbf{P_{156}:} \{1.14997, \ 1.14996, \ 1.14997, \ 1.14997, \ 1.14997, \ 0., \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14998, \ 1.14997, \ 1.14998, \ 1.14998, \ 1.14998, \ 1.14997, \ 1.14997, \ 1.14998, \ 1.14997, \ 1.14998, \ 1.14996, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496,$ 

 $\begin{array}{l} \mathbf{P_{157}:} \{1.14997, \ 1.14996, \ 1.14997, \ 1.14998, \ 1.14998, \ 0., \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14997, \ 1.14998, \ 1.14997, \ 1.14998, \ 1.14997, \ 1.14997, \ 1.14998, \ 1.14996, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \ 1.1496, \$ 

**P**<sub>158</sub> : {1.14997, 1.14996, 1.14997, 1.14998, 1.14998, 0., 1.14997, 1.14998, 1.14997, 1.14998, 1.14997, 1.14998, 1.14998, 1.14997, 1.14998, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14997, 1.14998, 1.14993, 1.14998, 1.14998, 1.14997, 1.14996, 1.14996, 1.14997, 1.14996, 1.14997, 1.14998, 1.14998, 1.14998, 1.14997, 1.14996, 1.14997, 1.14997, 1.14998, 1.14997, 1.14998, 1.14997, 1.14997, 1.14997, 1.14998, 1.14997, 1.14998, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14998, 1.14997, 1.14998, 1.14997, 1.14998, 1.14997, 1.149

**P**<sub>159</sub> : {1.14998, 1.14996, 1.14998, 1.14998, 1.14998, 0., 1.14998, 1.14998, 1.14997, 1.14997, 1.14998, 1.1498, 1.1498, 1.1498, 1.1498, 1.1498, 1.1498, 1.1498, 1.1498, 1.1498, 1.14988, 1.1498, 1.1488, 1.1488, 1.1488, 1.1488, 1.1488, 1.1488, 1.1488, 1.1488, 1.148

1.14998, 1.14999, 1.14998, 1.14998, 1.14998, 1.14996, 1.14997, 1.14996, 1.14997, 1.14998, 1.14998, 1.14998, 1.14996, 1.14996, 1.14996, 1.14996, 1.14997, 1.1

 $\begin{array}{l} \textbf{P_{160}:} \{1.14998, 1.14996, 1.14998, 1.14998, 1.14998, 0., 1.14998, 1.14997, 1.14997, 1.14997, 1.14998, 1.14998, 1.14998, 1.14996, 1.14996, 1.14997, 1.14996, 1.14996, 1.14997, 1.1499$ 

 $\begin{array}{l} \mathbf{P_{164}:} \{1.14998, 1.14997, 1.14998, 1.14998, 1.14998, 0., 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14998, 1.14999, 1.14999, 1.14998, 1.14999, 1.14998, 1.14999, 1.14998, 1.14998, 1.14998, 1.14997, 1.14998, 1.14997, 1.14998, 1.14998, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14998, 1.14998, 1.14995, 1.14998, 1.14998, 1.14998, 1.14997, 1.14998, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.1498$ 

 $\begin{array}{l} \mathbf{P_{165}:} \{1.14998, 1.14997, 1.14998, 1.14998, 1.14998, 0., 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14998, 1.14999, 1.14999, 1.14998, 1.14999, 1.14998, 1.14999, 1.14998, 1.14997, 1.14998, 1.14999, 1.14998, 1.14999, 1.14998, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14998, 1.14998, 1.14998, 1.14998, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14997, 1.14997, 1.14997, 1.14997, 1.14998, 1.14998, 1.14998, 1.14998, 1.14999, 1.14999, 1.14998, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.1498$ 

1.14998, 1.14999, 1.14998, 1.14998, 1.14998, 1.14997, 1.14998, 1.14998, 1.14998, 1.14999, 1.14999, 1.14998, 1.14997, 1.14997, 1.14997, 1.14998, 1.1498, 1.

 $\begin{array}{l} \mathbf{P_{167}:} \{1.14998, 1.14998, 1.14998, 1.14999, 1.14999, 0., 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14999, 1.14998, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.1498$ 

 $\begin{array}{l} \mathbf{P_{169}:} \{1.14999, 1.14998, 1.14998, 1.14999, 1.14999, 0., 1.14999, 1.14999, 1.14998, 1.14998, 1.14999, 1.14998, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.1498$ 

1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14998, 1.14999, 1.14998, 1.14999, 1.14999, 1.14999, 1.14999, 1.14998, 1.1498, 1.1488, 1.14

 $\begin{array}{l} \mathbf{P_{176}:} \{1.14999, 1.14998, 1.14999, 1.14999, 1.14999, 0., 1.14999, 1.1499$ 

 $P_{180}$ : {1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 0., 1.14999, 1.14

1.14999, 1.15, 1.14999, 1.1499

 $\begin{array}{l} \mathbf{P_{183}:} \{1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 0., \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.15, \ 1.15, \ 1.15, \ 1.15, \ 1.14999,$ 

 $\begin{array}{l} \mathbf{P_{184}:} \{1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 0., \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.15, \ 1.15, \ 1.15, \ 1.15, \ 1.15, \ 1.15, \ 1.15, \ 1.14999, \ 1.15, \ 1.14999, \ 1.15, \ 1.14999, \ 1$ 

 $\begin{array}{l} \mathbf{P_{185}:} \{1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 0., \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.15, \ 1.14999, \ 1.15, \ 1.15, \ 1.15, \ 1.15, \ 1.15, \ 1.15, \ 1.14999, \ 1.15, \ 1.14999, \ 1.15, \ 1.14999, \ 1.15, \ 1.14999, \ 1.15, \ 1.14999$
1.14999, 1.14999, 1.14999, 1.14999, 1.15, 1.14999, 1.1498

**P**<sub>189</sub> : {1.14999, 1.14999, 1.14999, 1.15, 1.14999, 0., 1.14999, 1.14999, 1.14999, 1.14999, 1.15, 1.14999, 1.15, 1.15, 1.14999, 1.149

 $\begin{array}{l} \textbf{P_{190}:} \{1.15,\ 1.14999,\ 1.14999,\ 1.15,\ 1.14999,\ 0.,\ 1.14999,\ 1.15,\ 1.14999,\ 1.14999,\ 1.14999,\ 1.15,\ 1.14999,\ 1$ 

 $\begin{array}{l} \textbf{P_{191}:} \{1.15,\ 1.14999,\ 1.14999,\ 1.15,\ 1.15,\ 0.,\ 1.15,\ 1.15,\ 1.15,\ 1.14999,\ 1.15,\ 1.$ 

 $\begin{array}{l} \mathbf{P_{192}:} \{1.15,\ 1.14999,\ 1.14999,\ 1.15,\ 1.15,\ 0.,\ 1.15,\ 1.14999,\ 1.14999,\ 1.14999,\ 1.14999,\ 1.14999,\ 1.14999,\ 1.14999,\ 1.14999,\ 1.14999,\ 1.14999,\ 1.14999,\ 1.15,\ 1.14999,\ 1.14$ 

 $\begin{array}{l} \mathbf{P_{193}:} \{1.15, \ 1.14999, \ 1.14999, \ 1.15, \ 1.15, \ 0., \ 1.15, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.15, \ 1.15, \ 1.14999, \ 1.15, \ 1.15, \ 1.14999, \ 1.15, \ 1.15, \ 1.14999, \ 1.15, \ 1.15, \ 1.14999, \ 1.149$ 

 $\begin{array}{l} \mathbf{P_{194}:} \{1.15, \ 1.14999, \ 1.14999, \ 1.15, \ 1.15, \ 0., \ 1.15, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.14999, \ 1.15, \ 1.15, \ 1.14999, \ 1.15, \ 1.15, \ 1.14999, \ 1.15, \ 1.15, \ 1.14999, \ 1.15, \ 1.15, \ 1.14999, \ 1.15, \ 1.15, \ 1.14999, \ 1.15, \ 1.14999, \ 1.15, \ 1.15, \ 1.14999, \ 1$ 

 $P_{195}$ : {1.15, 1.14999, 1.14999, 1.15, 1.15, 0., 1.15, 1

1.15, 1.15, 1.15, 1.15, 1.14999, 1.15, 1.14999, 1.15, 1.15, 1.15, 1.15, 1.14999, 1.15, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.15, 1.14999, 1.15, 1.14999, 1.15, 1.14999, 1.15, 1.14999, 1.15, 1.14999, 1.15, 1.14999, 1.15, 1.14999, 1.15, 1.14999, 1.15, 1.14999, 1.15, 1.14999, 1.15, 1.14999, 1.15, 1.14999, 1.15, 1.14999, 1.15, 1.14999, 1.15, 1.15, 1.14999, 1.15, 1.15, 1.15, 1.14999, 1.15, 1

 $\begin{array}{l} \textbf{P_{196}:} \{1.15,\ 1.14999,\ 1.14999,\ 1.15,\ 1.15,\ 0.,\ 1.15,$ 

 $\begin{array}{l} \mathbf{P_{197}:} \{1.15,\,1.14999,\,1.14999,\,1.15,\,1.15,\,0.,\,1.15,$ 

**P**<sub>198</sub> : {1.15, 1.14999, 1.15, 1.15, 1.15, 0., 1.15,

**P**<sub>200</sub> : {1.15, 1.15, 1.15, 1.15, 1.15, 0., 1.15, 1.

## **Β.1.** βΑποτελέσματα 1<sup>ου</sup> μοντέλου για υποτίμηση 50%

Οι επιδράσεις στο επίπεδο τιμών των εμπορευμάτων στην ελληνική οικονομία μετά από υποτίμησης του νομίσματος κατά 50% είναι οι εξής<sup>52</sup>:

<sup>&</sup>lt;sup>52</sup> Ο δείκτης στη τιμή P μας δείχνει τον αριθμό της επανάληψης και οι τιμές μέσα στο άγκιστρο την τιμή που θα έχουν τα εμπορεύματα ανά κλάδο

 $\begin{array}{l} \textbf{P_1:} \{1.03061, 1.0015, 1.02729, 1.03676, 1.05692, 0., 1.03651, 1.04307, 1.04129, 1.03999, \\ 1.09074, 1.07241, 1.08793, 1.08165, 1.12015, 1.07374, 1.33344, 1.14101, 1.11112, 1.04902, \\ 1.15279, 1.11407, 1.12205, 1.07173, 1.1195, 1.07333, 1.12107, 1.14928, 1.11845, 1.06892, \\ 1.13222, 1.02405, 1.03596, 1.05754, 1.02271, 1.0349, 1.02117, 1.03903, 1.06507, 1.14002, \\ 1.05769, 1.05455, 1.01438, 1.00829, 1.02209, 1.01397, 1.00455, 1.026, 1.03089, 1.02663, \\ 1.02605, 1.04557, 1.00152, 1.06639, 1.02903, 1.0232, 1.02713, 1.0188, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_2:} \{1.0687,\ 1.012,\ 1.06978,\ 1.08058,\ 1.10721,\ 0.,\ 1.08252,\ 1.09774,\ 1.07705,\ 1.07606,\\ 1.15007,\ 1.12442,\ 1.15101,\ 1.13362,\ 1.1856,\ 1.12836,\ 1.40351,\ 1.21033,\ 1.1789,\ 1.09354,\\ 1.23415,\ 1.1931,\ 1.1975,\ 1.12561,\ 1.19763,\ 1.12732,\ 1.19271,\ 1.22561,\ 1.19277,\ 1.12345,\\ 1.21487,\ 1.06118,\ 1.0758,\ 1.11403,\ 1.04415,\ 1.07225,\ 1.04464,\ 1.07673,\ 1.14048,\ 1.22751,\\ 1.11724,\ 1.10494,\ 1.03081,\ 1.02085,\ 1.04475,\ 1.03131,\ 1.01385,\ 1.05366,\ 1.05977,\ 1.05483,\\ 1.05348,\ 1.08642,\ 1.00657,\ 1.12386,\ 1.06378,\ 1.04844,\ 1.05456,\ 1.03979,\ 0.\} \end{array}$ 

 $\begin{array}{l} \mathbf{P_5:} \{1.16543,\,1.06421,\,1.17785,\,1.1871,\,1.21753,\,0.,\,1.19295,\,1.20974,\,1.16784,\,1.16535,\\ 1.24623,\,1.2192,\,1.25138,\,1.21728,\,1.27156,\,1.22225,\,1.43342,\,1.29392,\,1.27451,\,1.19411,\\ 1.32848,\,1.30039,\,1.2985,\,1.22439,\,1.30364,\,1.22536,\,1.2889,\,1.3132,\,1.29487,\,1.224,\\ 1.31554,\,1.16207,\,1.17631,\,1.22532,\,1.10545,\,1.16753,\,1.1138,\,1.1683,\,1.25889,\,1.33291,\\ 1.22718,\,1.20879,\,1.08237,\,1.0714,\,1.11183,\,1.09037,\,1.06024,\,1.1267,\,1.13339,\,1.13507,\\ 1.12702,\,1.18169,\,1.03561,\,1.23654,\,1.15725,\,1.11786,\,1.13042,\,1.10743,\,0.\} \end{array}$ 

 $\begin{array}{l} \mathbf{P_6:} \{1.19103,\ 1.0843,\ 1.20526,\ 1.21371,\ 1.24239,\ 0.,\ 1.2188,\ 1.2337,\ 1.19229,\ 1.189,\\ 1.26595,\ 1.24004,\ 1.27107,\ 1.23589,\ 1.28794,\ 1.24189,\ 1.43752,\ 1.30915,\ 1.29225,\ 1.21846,\\ 1.34355,\ 1.31751,\ 1.31519,\ 1.24554,\ 1.3208,\ 1.2464,\ 1.30581,\ 1.32755,\ 1.31214,\ 1.24527,\\ 1.33142,\ 1.18933,\ 1.20274,\ 1.24855,\ 1.12481,\ 1.1919,\ 1.13462,\ 1.19252,\ 1.27896,\ 1.34853,\\ 1.24941,\ 1.2322,\ 1.09948,\ 1.08992,\ 1.13245,\ 1.1102,\ 1.07838,\ 1.14753,\ 1.15402,\ 1.15817,\\ 1.14811,\ 1.20585,\ 1.04799,\ 1.26077,\ 1.18314,\ 1.13826,\ 1.15254,\ 1.12931,\ 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_7:} \{1.2139,\ 1.10458,\ 1.22921,\ 1.23689,\ 1.26315,\ 0.,\ 1.24062,\ 1.25379,\ 1.21417,\ 1.21016,\\ 1.28274,\ 1.25792,\ 1.28756,\ 1.25238,\ 1.30201,\ 1.25873,\ 1.44121,\ 1.3221,\ 1.30711,\ 1.2395,\\ 1.35582,\ 1.33117,\ 1.32862,\ 1.26347,\ 1.33448,\ 1.26426,\ 1.31974,\ 1.33944,\ 1.32609,\ 1.26325,\\ 1.34425,\ 1.2137,\ 1.22618,\ 1.26781,\ 1.14352,\ 1.21324,\ 1.15421,\ 1.21418,\ 1.29504,\ 1.36074,\\ 1.26787,\ 1.25213,\ 1.11634,\ 1.10849,\ 1.15199,\ 1.12953,\ 1.09677,\ 1.16691,\ 1.17308,\ 1.17934,\\ 1.1677,\ 1.22711,\ 1.06113,\ 1.28092,\ 1.20659,\ 1.15743,\ 1.17305,\ 1.15033,\ 0. \} \end{array}$ 

 $\begin{array}{l} \mathbf{P_8:} \{1.2344, \ 1.12466, \ 1.25024, \ 1.2572, \ 1.2808, \ 0., \ 1.2593, \ 1.27103, \ 1.23382, \ 1.2292, \\ 1.29741, \ 1.27361, \ 1.3018, \ 1.26728, \ 1.31447, \ 1.27359, \ 1.44461, \ 1.33347, \ 1.32001, \ 1.25789, \\ 1.36627, \ 1.34267, \ 1.33997, \ 1.27904, \ 1.34595, \ 1.27979, \ 1.3317, \ 1.34974, \ 1.33789, \ 1.27886, \\ 1.35516, \ 1.23547, \ 1.24703, \ 1.28419, \ 1.16154, \ 1.2321, \ 1.17262, \ 1.23364, \ 1.30856, \ 1.37082, \\ 1.28366, \ 1.26941, \ 1.13287, \ 1.12682, \ 1.17043, \ 1.14819, \ 1.11506, \ 1.18501, \ 1.19077, \ 1.19872, \\ 1.18595, \ 1.24595, \ 1.07477, \ 1.29795, \ 1.22783, \ 1.17546, \ 1.19205, \ 1.17036, \ 0. \} \end{array}$ 

 $\begin{array}{l} \mathbf{P_9:} \{1.25283, 1.14428, 1.2688, 1.27513, 1.29608, 0., 1.27555, 1.28613, 1.25152, 1.24643, \\ 1.31047, 1.28761, 1.31436, 1.28091, 1.32571, 1.28696, 1.44774, 1.34365, 1.33145, 1.27414, \\ 1.37542, 1.35272, 1.34991, 1.29283, 1.35593, 1.29355, 1.34225, 1.35891, 1.34821, 1.2927, \\ 1.36471, 1.25494, 1.26563, 1.29846, 1.17883, 1.24893, 1.18995, 1.25118, 1.32036, 1.37947, \\ 1.29748, 1.28464, 1.149, 1.14473, 1.18784, 1.16608, 1.13303, 1.20195, 1.20726, 1.21651, \\ 1.20299, 1.26275, 1.08875, 1.3126, 1.24708, 1.19246, 1.20967, 1.18933, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{10}:} \{1.26946, 1.16324, 1.28528, 1.29106, 1.30953, 0., 1.28989, 1.29958, 1.26755, 1.26212, \\ 1.32225, 1.30027, 1.32564, 1.29347, 1.33597, 1.29917, 1.45065, 1.3529, 1.34178, 1.28866, \\ 1.38358, 1.36173, 1.35883, 1.30523, 1.36482, 1.30593, 1.35173, 1.36721, 1.35745, 1.30515, \\ 1.37325, 1.2724, 1.28229, 1.31111, 1.19536, 1.26411, 1.20627, 1.26707, 1.33092, 1.38709, \\ 1.30981, 1.29824, 1.16468, 1.1621, 1.20426, 1.18317, 1.15053, 1.21787, 1.2227, 1.23289, \\ 1.21894, 1.27785, 1.10291, 1.32538, 1.26456, 1.20851, 1.22604, 1.20724, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{11}:} \{1.28452, \ 1.18145, \ 1.3, \ 1.30532, \ 1.32154, \ 0., \ 1.30273, \ 1.31172, \ 1.28213, \ 1.27647, \\ 1.33298, \ 1.31183, \ 1.33589, \ 1.30512, \ 1.34541, \ 1.31043, \ 1.45336, \ 1.36137, \ 1.35119, \ 1.30177, \\ 1.39094, \ 1.36991, \ 1.36696, \ 1.31652, \ 1.37288, \ 1.3172, \ 1.36037, \ 1.37482, \ 1.36584, \ 1.31651, \\ 1.38099, \ 1.28811, \ 1.29726, \ 1.32251, \ 1.21113, \ 1.27792, \ 1.22166, \ 1.28154, \ 1.34055, \ 1.39394, \\ 1.32097, \ 1.31053, \ 1.17989, \ 1.17884, \ 1.21977, \ 1.19945, \ 1.16747, \ 1.23284, \ 1.2372, \ 1.24804, \\ 1.23391, \ 1.29153, \ 1.11714, \ 1.33669, \ 1.28045, \ 1.22368, \ 1.24128, \ 1.2241, \ 0. \} \end{array}$ 

 $\begin{array}{l} \mathbf{P}_{12}: \{1.29822, 1.19883, 1.31322, 1.31816, 1.3324, 0., 1.31436, 1.32279, 1.29546, 1.28966, \\ 1.34282, 1.32249, 1.3453, 1.31596, 1.35415, 1.32088, 1.45589, 1.36919, 1.35983, 1.31369, \\ 1.39763, 1.37743, 1.37445, 1.3269, 1.38025, 1.32756, 1.3683, 1.38184, 1.37354, 1.32695, \\ 1.38806, 1.30229, 1.31079, 1.33289, 1.22613, 1.2906, 1.23619, 1.29476, 1.34942, 1.40016, \\ 1.33119, 1.32173, 1.19459, 1.19492, 1.23441, 1.21492, 1.18378, 1.24694, 1.25084, 1.26209, \\ 1.24798, 1.304, 1.13133, 1.34682, 1.29493, 1.23803, 1.2555, 1.23995, 0. \} \end{array}$ 

 $\begin{array}{l} \mathbf{P_{13}:} \{1.31074, 1.21535, 1.32517, 1.3298, 1.34232, 0., 1.32501, 1.33297, 1.30769, 1.30184, \\ 1.3519, 1.33236, 1.35399, 1.3261, 1.36226, 1.33063, 1.45826, 1.37645, 1.36782, 1.32461, \\ 1.40376, 1.38438, 1.3814, 1.3365, 1.38706, 1.33714, 1.37565, 1.38836, 1.38065, 1.33662, \\ 1.39457, 1.31515, 1.32305, 1.34243, 1.24039, 1.30231, 1.24993, 1.30691, 1.35766, 1.40588, \\ 1.34062, 1.33203, 1.20877, 1.2103, 1.24824, 1.2296, 1.19945, 1.26025, 1.26371, 1.27517, \\ 1.26123, 1.31544, 1.14541, 1.356, 1.30816, 1.2516, 1.2688, 1.25481, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{14}:} \{1.3222, 1.23101, 1.33603, 1.34039, 1.35143, 0., 1.33483, 1.34239, 1.31896, 1.31312, \\ 1.36031, 1.34156, 1.36206, 1.33559, 1.36983, 1.33975, 1.46049, 1.38322, 1.37523, 1.33468, \\ 1.4094, 1.39083, 1.38788, 1.34544, 1.39337, 1.34605, 1.38248, 1.39445, 1.38727, 1.34562, \\ 1.40059, 1.32685, 1.33422, 1.35125, 1.25393, 1.31318, 1.26292, 1.31812, 1.36535, 1.41117, \\ 1.34938, 1.34154, 1.22243, 1.22499, 1.26131, 1.24353, 1.21446, 1.2728, 1.27587, 1.28739, \\ 1.27372, 1.32598, 1.1593, 1.36437, 1.32029, 1.26446, 1.28125, 1.26876, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{16}:} \{1.3425,\,1.25981,\,1.35506,\,1.359,\,1.36769,\,0.,\,1.35243,\,1.35931,\,1.33906,\,1.33338,\\ 1.37541,\,1.3582,\,1.37664,\,1.35286,\,1.38355,\,1.35635,\,1.46456,\,1.39548,\,1.38859,\,1.35268,\\ 1.41945,\,1.40247,\,1.39962,\,1.36162,\,1.40475,\,1.36218,\,1.39484,\,1.40548,\,1.39921,\,1.36189,\\ 1.41138,\,1.34734,\,1.35381,\,1.36711,\,1.27893,\,1.33281,\,1.28685,\,1.33814,\,1.37934,\,1.42067,\\ 1.3652,\,1.35859,\,1.24817,\,1.25231,\,1.28538,\,1.26925,\,1.2425,\,1.29589,\,1.29825,\,1.30955,\\ 1.29666,\,1.34484,\,1.18633,\,1.3792,\,1.34167,\,1.28818,\,1.30395,\,1.29409,\,0. \} \end{array}$ 

 $\begin{array}{l} \mathbf{P_{17}:} \{1.35153,\ 1.273,\ 1.36346,\ 1.36722,\ 1.375,\ 0.,\ 1.36038,\ 1.36695,\ 1.34806,\ 1.34251,\ 1.38222,\ 1.36577,\ 1.38324,\ 1.36074,\ 1.38978,\ 1.36393,\ 1.46642,\ 1.40105,\ 1.39462,\ 1.36078,\ 1.42395,\ 1.40774,\ 1.40496,\ 1.36897,\ 1.40989,\ 1.3695,\ 1.40045,\ 1.4105,\ 1.40462,\ 1.36928,\ 1.41624,\ 1.35637,\ 1.36245,\ 1.37428,\ 1.29045,\ 1.34171,\ 1.29787,\ 1.34712,\ 1.38571,\ 1.42495,\ 1.37238,\ 1.36628,\ 1.26025,\ 1.26498,\ 1.29646,\ 1.28112,\ 1.25555,\ 1.3065,\ 1.30856,\ 1.31964,\ 1.30719,\ 1.35332,\ 1.1994,\ 1.38583,\ 1.35114,\ 1.29912,\ 1.3143,\ 1.30559,\ 0. \} \end{array}$ 

 $\begin{array}{l} \mathbf{P_{18}:} \{1.35991, 1.28544, 1.37123, 1.37483, 1.38182, 0., 1.36784, 1.37412, 1.35645, 1.35107, \\ 1.3886, 1.37288, 1.38946, 1.36815, 1.39564, 1.37108, 1.46818, 1.40629, 1.40029, 1.36835, \\ 1.42814, 1.41269, 1.40999, 1.37588, 1.41472, 1.3764, 1.40573, 1.41522, 1.4097, 1.37624, \\ 1.42079, 1.36472, 1.37044, 1.38101, 1.30137, 1.35008, 1.30831, 1.35551, 1.39173, 1.42898, \\ 1.37913, 1.37349, 1.27183, 1.27701, 1.30695, 1.29237, 1.26799, 1.31654, 1.31833, 1.32913, \\ 1.31716, 1.36125, 1.21212, 1.39201, 1.3599, 1.30948, 1.32406, 1.31638, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{19}:} \{1.36772, 1.29716, 1.37845, 1.38191, 1.38822, 0., 1.37485, 1.38085, 1.3643, 1.35909, \\ 1.39459, 1.37959, 1.3953, 1.37515, 1.40116, 1.37782, 1.46984, 1.41123, 1.40561, 1.37545, \\ 1.43207, 1.41734, 1.41473, 1.3824, 1.41926, 1.38289, 1.4107, 1.41968, 1.41449, 1.38279, \\ 1.42506, 1.37245, 1.37784, 1.38733, 1.31171, 1.35796, 1.3182, 1.36336, 1.3974, 1.43275, \\ 1.3855, 1.38025, 1.2829, 1.28844, 1.31689, 1.30303, 1.27982, 1.32604, 1.3276, 1.33809, \\ 1.3266, 1.36869, 1.22448, 1.3978, 1.36802, 1.31931, 1.33327, 1.3265, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{20}:} \{1.37502,\,1.3082,\,1.38518,\,1.38849,\,1.39422,\,0.,\,1.38145,\,1.38718,\,1.37166,\,1.36662,\\ 1.40021,\,1.38591,\,1.40082,\,1.38175,\,1.40637,\,1.38419,\,1.47141,\,1.41589,\,1.41062,\,1.38211,\\ 1.43575,\,1.42172,\,1.4192,\,1.38855,\,1.42354,\,1.38902,\,1.41539,\,1.42388,\,1.41899,\,1.38896,\\ 1.42907,\,1.37964,\,1.38472,\,1.39328,\,1.3215,\,1.3654,\,1.32758,\,1.37072,\,1.40276,\,1.43631,\\ 1.3915,\,1.38662,\,1.29349,\,1.29929,\,1.3263,\,1.31314,\,1.29107,\,1.33504,\,1.33638,\,1.34654,\\ 1.33553,\,1.37567,\,1.23647,\,1.40324,\,1.37557,\,1.32862,\,1.34197,\,1.33601,\,0. \\ \end{array}$ 

 $\begin{aligned} \mathbf{P_{21}:} & \{1.38184, 1.31861, 1.39146, 1.39464, 1.39987, 0., 1.38768, 1.39314, 1.37856, 1.37371, 1.40551, 1.39188, 1.40602, 1.38797, 1.41128, 1.39022, 1.4729, 1.42029, 1.41534, 1.38838, 1.4392, 1.42584, 1.42342, 1.39436, 1.42757, 1.39481, 1.41981, 1.42785, 1.42324, 1.39479, 1.43284, 1.38633, 1.39114, 1.3989, 1.33077, 1.37242, 1.33646, 1.37764, 1.40782, 1.43966, 1.39716, 1.39261, 1.30361, 1.30959, 1.33523, 1.32272, 1.30177, 1.34357, 1.34472, 1.35452, 1.34399, 1.38225, 1.24806, 1.40835, 1.3826, 1.33745, 1.35019, 1.34495, 0. \end{aligned}$ 

 $\begin{array}{l} \mathbf{P_{22}:} \{1.38823, 1.32841, 1.39734, 1.4004, 1.40518, 0., 1.39356, 1.39877, 1.38505, 1.38039, \\ 1.4105, 1.39752, 1.41093, 1.39386, 1.41592, 1.39591, 1.4743, 1.42445, 1.4198, 1.39429, \\ 1.44244, 1.42974, 1.42741, 1.39986, 1.43137, 1.40028, 1.42399, 1.43161, 1.42725, 1.40029, \\ 1.43639, 1.39259, 1.39713, 1.4042, 1.33955, 1.37905, 1.34488, 1.38414, 1.41261, 1.44283, \\ 1.40252, 1.39825, 1.31327, 1.31935, 1.34368, 1.33181, 1.31193, 1.35164, 1.35263, 1.36207, \\ 1.35202, 1.38844, 1.25927, 1.41317, 1.38917, 1.34582, 1.35797, 1.35335, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{23}:} \{1.39424,\,1.33764,\,1.40285,\,1.40579,\,1.41019,\,0.,\,1.39912,\,1.40408,\,1.39116,\,1.38669,\\ 1.41521,\,\,1.40286,\,\,1.41557,\,\,1.39942,\,\,1.4203,\,\,1.4013,\,\,1.47563,\,\,1.42838,\,\,1.424,\,\,1.39986,\\ 1.4455,\,\,1.43342,\,\,1.43119,\,\,1.40505,\,\,1.43496,\,\,1.40546,\,\,1.42795,\,\,1.43516,\,\,1.43104,\,\,1.4055,\\ 1.43974,\,\,1.39844,\,\,1.40274,\,\,1.4092,\,\,1.34786,\,\,1.38533,\,\,1.35287,\,\,1.39027,\,\,1.41714,\,\,1.44581,\\ 1.40758,\,\,1.40358,\,\,1.32248,\,\,1.32862,\,\,1.3517,\,\,1.34043,\,\,1.32158,\,\,1.35929,\,\,1.36014,\,\,1.36921,\\ 1.35962,\,\,1.39429,\,\,1.27008,\,\,1.41771,\,\,1.39531,\,\,1.35376,\,\,1.36532,\,\,1.36126,\,0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{24}:} \{1.39988, 1.34635, 1.40803, 1.41085, 1.41491, 0., 1.40437, 1.40909, 1.39691, 1.39263, \\ 1.41965, 1.4079, 1.41996, 1.40467, 1.42444, 1.40641, 1.47689, 1.4321, 1.42797, 1.40511, \\ 1.44838, 1.43689, 1.43476, 1.40997, 1.43835, 1.41035, 1.43169, 1.43852, 1.43462, 1.41042, \\ 1.4429, 1.40393, 1.408, 1.41393, 1.35574, 1.39126, 1.36044, 1.39605, 1.42143, 1.44863, \\ 1.41237, 1.40862, 1.33127, 1.33741, 1.35931, 1.3486, 1.33074, 1.36654, 1.36726, 1.37596, \\ 1.36682, 1.39981, 1.2805, 1.422, 1.40105, 1.36128, 1.37229, 1.36871, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P}_{25}: \{1.40519,\,1.35456,\,1.41291,\,1.41561,\,1.41937,\,0.,\,1.40934,\,1.41383,\,1.40233,\,1.39824,\\ 1.42385,\,1.41267,\,1.42411,\,1.40964,\,1.42837,\,1.41124,\,1.47809,\,1.43561,\,1.43172,\,1.41007,\\ 1.45109,\,1.44017,\,1.43814,\,1.41462,\,1.44156,\,1.41499,\,1.43522,\,1.4417,\,1.43801,\,1.41507,\\ 1.44589,\,1.40908,\,1.41294,\,1.4184,\,1.3632,\,1.39687,\,1.36761,\,1.4015,\,1.42549,\,1.4513,\\ 1.4169,\,1.41338,\,1.33965,\,1.34574,\,1.36652,\,1.35635,\,1.33944,\,1.37341,\,1.37402,\,1.38236,\\ 1.37365,\,1.40502,\,1.29052,\,1.42605,\,1.40644,\,1.36842,\,1.37888,\,1.37572,\,0.\} \end{array}$ 

 $\begin{array}{l} \mathbf{P_{26}:} \{1.4102,\ 1.3623,\ 1.4175,\ 1.42009,\ 1.42358,\ 0.,\ 1.41404,\ 1.41831,\ 1.40745,\ 1.40355, \\ 1.42781,\ 1.41719,\ 1.42804,\ 1.41435,\ 1.43208,\ 1.41582,\ 1.47922,\ 1.43894,\ 1.43527,\ 1.41476, \\ 1.45365,\ 1.44328,\ 1.44133,\ 1.41902,\ 1.44459,\ 1.41937,\ 1.43857,\ 1.44471,\ 1.44121,\ 1.41948, \\ 1.44871,\ 1.41393,\ 1.41759,\ 1.42263,\ 1.37027,\ 1.40219,\ 1.37442,\ 1.40665,\ 1.42934,\ 1.45383, \\ 1.42119,\ 1.41787,\ 1.34763,\ 1.35365,\ 1.37335,\ 1.3637,\ 1.3477,\ 1.37993,\ 1.38044,\ 1.38842, \\ 1.38013,\ 1.40995,\ 1.30016,\ 1.42988,\ 1.4115,\ 1.37518,\ 1.38512,\ 1.38233,\ 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{27}:} \{1.41492,\,1.36961,\,1.42183,\,1.42432,\,1.42756,\,0.,\,1.41849,\,1.42255,\,1.41229,\,1.40856,\\ 1.43157,\,1.42147,\,1.43176,\,1.4188,\,1.43559,\,1.42015,\,1.48029,\,1.4421,\,1.43863,\,1.41919,\\ 1.45607,\,1.44622,\,1.44436,\,1.4232,\,1.44746,\,1.42353,\,1.44175,\,1.44756,\,1.44425,\,1.42364,\\ 1.45137,\,1.41849,\,1.42196,\,1.42664,\,1.37697,\,1.40723,\,1.38087,\,1.41152,\,1.43298,\,1.45621,\\ 1.42526,\,1.42213,\,1.35523,\,1.36115,\,1.37984,\,1.37068,\,1.35553,\,1.3861,\,1.38653,\,1.39416,\\ 1.38628,\,1.41461,\,1.30942,\,1.43351,\,1.41625,\,1.3816,\,1.39104,\,1.38857,\,0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{28}:} \{1.41938, 1.3765, 1.42592, 1.4283, 1.43133, 0., 1.4227, 1.42657, 1.41686, 1.41331, 1.43511, 1.42552, 1.43528, 1.42301, 1.43892, 1.42426, 1.4813, 1.44508, 1.4418, 1.42339, 1.45836, 1.449, 1.44723, 1.42715, 1.45018, 1.42747, 1.44475, 1.45026, 1.44712, 1.42759, 1.4539, 1.42279, 1.42608, 1.43043, 1.38332, 1.412, 1.38699, 1.41612, 1.43643, 1.45848, 1.42911, 1.42616, 1.36247, 1.36826, 1.38599, 1.37729, 1.36296, 1.39196, 1.39231, 1.3996, 1.3921, 1.41903, 1.3183, 1.43694, 1.42072, 1.38769, 1.39665, 1.39446, 0. \end{array}$ 

 $\begin{array}{l} \mathbf{P_{29}:} & \{1.42359, 1.38302, 1.42979, 1.43206, 1.43489, 0., 1.42669, 1.43037, 1.42118, 1.4178, \\ 1.43847, 1.42936, 1.43862, 1.42699, 1.44207, 1.42816, 1.48226, 1.44791, 1.44481, 1.42736, \\ 1.46052, 1.45164, 1.44995, 1.4309, 1.45275, 1.4312, 1.4476, 1.45282, 1.44984, 1.43133, \\ 1.45628, 1.42685, 1.42996, 1.43402, 1.38934, 1.41652, 1.39279, 1.42047, 1.43971, 1.46062, \\ 1.43276, 1.42997, 1.36936, 1.375, 1.39183, 1.38357, 1.37001, 1.39751, 1.3978, 1.40476, \\ 1.39763, 1.42321, 1.32682, 1.44019, 1.42494, 1.39346, 1.40196, 1.40002, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{30}:} \{1.42757, 1.38917, 1.43344, 1.4356, 1.43826, 0., 1.43047, 1.43396, 1.42527, 1.42205, \\ 1.44165, 1.433, 1.44178, 1.43077, 1.44505, 1.43185, 1.48317, 1.45059, 1.44766, 1.43111, \\ 1.46257, 1.45413, 1.45252, 1.43445, 1.45519, 1.43474, 1.45029, 1.45525, 1.45242, 1.43487, \\ 1.45854, 1.43067, 1.43363, 1.43742, 1.39504, 1.42081, 1.39829, 1.42459, 1.44281, 1.46265, \\ 1.43622, 1.43358, 1.37592, 1.3814, 1.39736, 1.38952, 1.3767, 1.40277, 1.40301, 1.40964, \\ 1.40287, 1.42717, 1.33497, 1.44327, 1.42891, 1.39893, 1.407, 1.40527, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{31}:} \{1.43133, 1.39498, 1.43689, 1.43896, 1.44145, 0., 1.43405, 1.43737, 1.42913, 1.42607, \\ 1.44466, 1.43645, 1.44478, 1.43435, 1.44788, 1.43535, 1.48404, 1.45313, 1.45036, 1.43467, \\ 1.46451, 1.4565, 1.45497, 1.43782, 1.4575, 1.43809, 1.45285, 1.45755, 1.45486, 1.43823, \\ 1.46068, 1.43429, 1.4371, 1.44064, 1.40045, 1.42487, 1.40351, 1.42849, 1.44575, 1.46457, \\ 1.4395, 1.43701, 1.38215, 1.38747, 1.40261, 1.39517, 1.38304, 1.40776, 1.40795, 1.41428, \\ 1.40784, 1.43092, 1.34279, 1.44619, 1.43266, 1.40412, 1.41177, 1.41023, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P}_{32}: \{1.43489, 1.40048, 1.44016, 1.44213, 1.44447, 0., 1.43745, 1.4406, 1.4328, 1.42988, 1.44752, 1.43972, 1.44762, 1.43774, 1.45056, 1.43867, 1.48486, 1.45554, 1.45292, 1.43804, 1.46634, 1.45874, 1.45728, 1.44101, 1.45969, 1.44127, 1.45527, 1.45973, 1.45717, 1.44141, 1.46271, 1.43771, 1.44037, 1.4437, 1.40557, 1.42873, 1.40846, 1.43218, 1.44853, 1.46639, 1.4426, 1.44025, 1.38808, 1.39323, 1.4076, 1.40053, 1.38906, 1.41249, 1.41265, 1.41867, 1.41256, 1.43447, 1.35026, 1.44895, 1.43619, 1.40904, 1.4163, 1.41492, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{33}:} \{1.43826, 1.40567, 1.44325, 1.44513, 1.44734, 0., 1.44067, 1.44366, 1.43627, 1.43349, \\ 1.45022, 1.44281, 1.45031, 1.44095, 1.45311, 1.44182, 1.48564, 1.45783, 1.45534, 1.44123, \\ 1.46808, 1.46086, 1.45947, 1.44404, 1.46176, 1.44428, 1.45757, 1.46179, 1.45937, 1.44443, \\ 1.46463, 1.44094, 1.44347, 1.44659, 1.41043, 1.43238, 1.41316, 1.43567, 1.45117, 1.46812, \\ 1.44555, 1.44332, 1.39372, 1.39869, 1.41232, 1.40562, 1.39477, 1.41698, 1.4171, 1.42284, \\ 1.41703, 1.43784, 1.35742, 1.45157, 1.43954, 1.41371, 1.4206, 1.41935, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{34}:} \{1.44145, 1.41059, 1.44618, 1.44797, 1.45005, 0., 1.44372, 1.44655, 1.43955, 1.43692, \\ 1.45278, 1.44575, 1.45287, 1.44399, 1.45551, 1.4448, 1.48637, 1.45999, 1.45764, 1.44426, \\ 1.46972, 1.46287, 1.46156, 1.44691, 1.46373, 1.44714, 1.45975, 1.46375, 1.46145, 1.44728, \\ 1.46645, 1.444, 1.4464, 1.44934, 1.41503, 1.43584, 1.41761, 1.43899, 1.45368, 1.46975, \\ 1.44834, 1.44623, 1.39909, 1.40387, 1.41681, 1.41044, 1.40018, 1.42124, 1.42133, 1.42679, \\ 1.42128, 1.44103, 1.36425, 1.45406, 1.44269, 1.41814, 1.42467, 1.42355, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P}_{35}: \{1.44447, 1.41524, 1.44895, 1.45066, 1.45262, 0., 1.44661, 1.4493, 1.44266, 1.44016, \\ 1.45521, 1.44854, 1.45529, 1.44687, 1.4578, 1.44763, 1.48707, 1.46204, 1.45981, 1.44712, \\ 1.47128, 1.46478, 1.46353, 1.44963, 1.46559, 1.44985, 1.46181, 1.46561, 1.46342, 1.44999, \\ 1.46818, 1.4469, 1.44918, 1.45194, 1.4194, 1.43913, 1.42183, 1.44213, 1.45606, 1.47131, \\ 1.45099, 1.44899, 1.40418, 1.40879, 1.42106, 1.41502, 1.40531, 1.42528, 1.42534, 1.43054, \\ 1.42531, 1.44405, 1.37078, 1.45641, 1.44568, 1.42234, 1.42853, 1.42752, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{36}:} \{1.44733, 1.41964, 1.45158, 1.45321, 1.45506, 0., 1.44935, 1.45191, 1.44561, 1.44324, \\ 1.45751, 1.45118, 1.45758, 1.4496, 1.45997, 1.45031, 1.48773, 1.46399, 1.46188, 1.44984, \\ 1.47276, 1.46659, 1.4654, 1.45221, 1.46736, 1.45242, 1.46377, 1.46738, 1.46529, 1.45256, \\ 1.46981, 1.44964, 1.4518, 1.45441, 1.42354, 1.44225, 1.42584, 1.4451, 1.45831, 1.47278, \\ 1.4535, 1.45161, 1.40903, 1.41345, 1.4251, 1.41936, 1.41018, 1.42911, 1.42915, 1.4341, \\ 1.42913, 1.44692, 1.37702, 1.45865, 1.4485, 1.42632, 1.43219, 1.43128, 0. \\ \end{array}$ 

 $P_{37}$ : {1.45004, 1.4238, 1.45407, 1.45562, 1.45737, 0., 1.45195, 1.45438, 1.44841, 1.44615, 1.45969, 1.45368, 1.45976, 1.4522, 1.46202, 1.45286, 1.48836, 1.46584, 1.46383, 1.45242, 1.47416, 1.4683, 1.46717, 1.45466, 1.46903, 1.45486, 1.46563, 1.46905, 1.46706, 1.455, 1.47136, 1.45224, 1.45429, 1.45675, 1.42747, 1.4452, 1.42964, 1.44792, 1.46045, 1.47417, 1.45589, 1.45409, 1.41363, 1.41788, 1.42893, 1.42348, 1.4148, 1.43274, 1.43276, 1.43747, 1.43275, 1.44965, 1.38297, 1.46077, 1.45117, 1.4301, 1.43567, 1.43484, 0.}

 $\begin{array}{l} \mathbf{P_{38}:} \{1.45261, 1.42775, 1.45643, 1.45791, 1.45956, 0., 1.45442, 1.45672, 1.45106, 1.44891, \\ 1.46176, 1.45606, 1.46182, 1.45465, 1.46397, 1.45528, 1.48896, 1.46759, 1.46569, 1.45486, \\ 1.47549, 1.46993, 1.46885, 1.45698, 1.47062, 1.45717, 1.46739, 1.47063, 1.46874, 1.45731, \\ 1.47283, 1.4547, 1.45665, 1.45896, 1.43119, 1.44801, 1.43324, 1.4506, 1.46247, 1.4755, \\ 1.45815, 1.45645, 1.41801, 1.42208, 1.43256, 1.4274, 1.41918, 1.43619, 1.43619, 1.44067, \\ 1.43619, 1.45223, 1.38866, 1.46278, 1.4537, 1.43368, 1.43896, 1.43821, 0. \\ \end{array}$ 

 $P_{39}$ : {1.45505, 1.43148, 1.45867, 1.46007, 1.46163, 0., 1.45676, 1.45894, 1.45357, 1.45154, 1.46372, 1.45831, 1.46378, 1.45698, 1.46581, 1.45757, 1.48952, 1.46925, 1.46745, 1.45718, 1.47674, 1.47147, 1.47045, 1.45918, 1.47213, 1.45937, 1.46906, 1.47214, 1.47034, 1.4595, 1.47422, 1.45703, 1.45888, 1.46107, 1.43472, 1.45067, 1.43666, 1.45313, 1.4644, 1.47675, 1.46029, 1.45868, 1.42216, 1.42606, 1.43601, 1.43111, 1.42333, 1.43946, 1.43945, 1.44371, 1.43946, 1.45467, 1.39408, 1.46468, 1.4561, 1.43708, 1.44209, 1.4414, 0.}

 $\begin{array}{l} \mathbf{P_{40}:} \{1.45736, 1.43502, 1.46079, 1.46213, 1.4636, 0., 1.45897, 1.46105, 1.45595, 1.45402, \\ 1.46558, 1.46045, 1.46563, 1.45919, 1.46757, 1.45974, 1.49006, 1.47082, 1.46912, 1.45937, \\ 1.47794, 1.47293, 1.47196, 1.46127, 1.47355, 1.46145, 1.47065, 1.47356, 1.47185, 1.46157, \\ 1.47555, 1.45924, 1.46099, 1.46306, 1.43807, 1.45319, 1.43991, 1.45554, 1.46622, 1.47794, \\ 1.46233, 1.4608, 1.42611, 1.42984, 1.43928, 1.43463, 1.42727, 1.44256, 1.44254, 1.44659, \\ 1.44255, 1.45699, 1.39925, 1.46649, 1.45837, 1.44031, 1.44505, 1.44442, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{41}:} \{1.45955,\,1.43837,\,1.4628,\,1.46407,\,1.46547,\,0.,\,1.46108,\,1.46304,\,1.45821,\,1.45638,\,\\ 1.46735,\,1.46247,\,1.46739,\,1.46128,\,1.46923,\,1.4618,\,1.49057,\,1.47232,\,1.4707,\,1.46146,\,\\ 1.47907,\,1.47432,\,1.4734,\,1.46325,\,1.47491,\,1.46342,\,1.47215,\,1.47492,\,1.47329,\,1.46354,\,\\ 1.4768,\,1.46133,\,1.463,\,1.46496,\,1.44125,\,1.45558,\,1.44299,\,1.45782,\,1.46795,\,1.47907,\,\\ 1.46425,\,1.46281,\,1.42986,\,1.43342,\,1.44239,\,1.43797,\,1.431,\,1.4455,\,1.44547,\,1.44932,\,\\ 1.44549,\,1.4592,\,1.40418,\,1.4682,\,1.46051,\,1.44337,\,1.44787,\,1.44729,\,0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{42}:} \{1.46162,\,1.44155,\,1.46471,\,1.46592,\,1.46724,\,0.,\,1.46307,\,1.46494,\,1.46036,\,1.45861,\\ 1.46902,\,\,1.4644,\,\,1.46906,\,\,1.46327,\,\,1.4708,\,\,1.46376,\,\,1.49105,\,\,1.47373,\,\,1.4722,\,\,1.46343,\\ 1.48014,\,\,1.47563,\,\,1.47476,\,\,1.46514,\,\,1.47619,\,\,1.46529,\,\,1.47358,\,\,1.4762,\,\,1.47465,\,\,1.46541,\\ 1.47799,\,\,1.46332,\,\,1.4649,\,\,1.46675,\,\,1.44426,\,\,1.45786,\,\,1.44591,\,\,1.45998,\,\,1.46959,\,\,1.48014,\\ 1.46608,\,\,1.46471,\,\,1.43343,\,\,1.43683,\,\,1.44533,\,\,1.44114,\,\,1.43455,\,\,1.44829,\,\,1.44825,\,\,1.45191,\\ 1.44828,\,\,1.46128,\,\,1.40888,\,\,1.46983,\,\,1.46255,\,\,1.44627,\,\,1.45053,\,\,1.45,\,0.\} \end{array}$ 

 $\begin{array}{l} \mathbf{P_{43}:} \{1.46359, 1.44456, 1.46652, 1.46767, 1.46892, 0., 1.46496, 1.46673, 1.46239, 1.46073, 1.47061, 1.46622, 1.47065, 1.46515, 1.4723, 1.46561, 1.49151, 1.47508, 1.47362, 1.46531, 1.48116, 1.47688, 1.47605, 1.46692, 1.47741, 1.46707, 1.47493, 1.47742, 1.47594, 1.46718, 1.47912, 1.4652, 1.4667, 1.46845, 1.44712, 1.46001, 1.44867, 1.46203, 1.47115, 1.48116, 1.46782, 1.46652, 1.43681, 1.44006, 1.44813, 1.44415, 1.43791, 1.45094, 1.4509, 1.45437, 1.45092, 1.46327, 1.41336, 1.47137, 1.46448, 1.44902, 1.45307, 1.45258, 0. \end{array}$ 

 $\begin{array}{l} \mathbf{P_{44}:} \{1.46546,\,1.44741,\,1.46823,\,1.46932,\,1.47051,\,0.,\,1.46676,\,1.46844,\,1.46432,\,1.46274,\\ 1.47211,\,1.46795,\,1.47215,\,1.46694,\,1.47372,\,1.46737,\,1.49195,\,1.47636,\,1.47498,\,1.46708,\\ 1.48212,\,1.47807,\,1.47728,\,1.46861,\,1.47857,\,1.46875,\,1.47621,\,1.47858,\,1.47716,\,1.46887,\\ 1.48019,\,1.46699,\,1.46841,\,1.47007,\,1.44983,\,1.46206,\,1.4513,\,1.46397,\,1.47262,\,1.48212,\\ 1.46947,\,\,1.46823,\,\,1.44002,\,\,1.44312,\,\,1.45078,\,\,1.447,\,\,1.44109,\,\,1.45345,\,\,1.4534,\,\,1.4567,\\ 1.45343,\,1.46515,\,1.41763,\,1.47284,\,1.46631,\,1.45163,\,1.45547,\,1.45502,\,0. \end{array} \right\}$ 

 $\begin{array}{l} \mathbf{P_{45}:} \{1.46723, 1.45012, 1.46986, 1.4709, 1.47202, 0., 1.46846, 1.47005, 1.46614, 1.46465, \\ 1.47354, 1.46959, 1.47358, 1.46863, 1.47506, 1.46904, 1.49236, 1.47757, 1.47626, 1.46877, \\ 1.48304, 1.47919, 1.47844, 1.47022, 1.47967, 1.47035, 1.47743, 1.47967, 1.47833, 1.47046, \\ 1.4812, 1.46868, 1.47003, 1.4716, 1.4524, 1.464, 1.4538, 1.46582, 1.47403, 1.48304, \\ 1.47103, 1.46986, 1.44307, 1.44603, 1.4533, 1.44971, 1.44412, 1.45584, 1.45578, 1.45892, \\ 1.45581, 1.46693, 1.42169, 1.47423, 1.46804, 1.45411, 1.45775, 1.45733, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{46}: \{1.46891, 1.45268, 1.4714, 1.47239, 1.47345, 0., 1.47008, 1.47159, 1.46788, 1.46646, \\ 1.4749, 1.47115, 1.47493, 1.47024, 1.47634, 1.47062, 1.49275, 1.47871, 1.47747, 1.47037, \\ 1.48391, 1.48025, 1.47955, 1.47174, 1.48071, 1.47187, 1.47858, 1.48071, 1.47943, 1.47197, \\ 1.48216, 1.47028, 1.47157, 1.47305, 1.45484, 1.46584, 1.45616, 1.46757, 1.47535, 1.48391, \\ 1.47251, 1.4714, 1.44597, 1.44878, 1.45568, 1.45228, 1.44698, 1.4581, 1.45804, 1.46102, \\ 1.45807, 1.46862, 1.42556, 1.47555, 1.46968, 1.45646, 1.45991, 1.45952, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{47}:} \{1.4705, 1.45511, 1.47287, 1.4738, 1.47481, 0., 1.47161, 1.47304, 1.46952, 1.46818, \\ 1.47618, 1.47262, 1.47621, 1.47176, 1.47755, 1.47213, 1.49312, 1.4798, 1.47863, 1.47189, \\ 1.48473, 1.48126, 1.48059, 1.47319, 1.4817, 1.47331, 1.47968, 1.4817, 1.48047, 1.47341, \\ 1.48308, 1.47181, 1.47303, 1.47443, 1.45716, 1.46758, 1.4584, 1.46923, 1.47662, 1.48473, \\ 1.47392, 1.47286, 1.44872, 1.4514, 1.45795, 1.45472, 1.4497, 1.46024, 1.46018, 1.46301, \\ 1.46022, 1.47023, 1.42925, 1.4768, 1.47124, 1.45869, 1.46196, 1.4616, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{48}: \{1.47201, 1.45741, 1.47426, 1.47515, 1.4761, 0., 1.47306, 1.47442, 1.47108, 1.46981, \\ 1.4774, 1.47402, 1.47743, 1.47321, 1.4787, 1.47355, 1.49347, 1.48084, 1.47972, 1.47333, \\ 1.48551, 1.48222, 1.48159, 1.47456, 1.48263, 1.47467, 1.48072, 1.48263, 1.48147, 1.47477, \\ 1.48394, 1.47325, 1.47441, 1.47574, 1.45935, 1.46924, 1.46053, 1.47081, 1.47781, 1.48551, \\ 1.47525, 1.47425, 1.45133, 1.45388, 1.4601, 1.45704, 1.45228, 1.46228, 1.46221, 1.4649, \\ 1.46225, 1.47175, 1.43276, 1.47798, 1.47272, 1.46081, 1.46391, 1.46357, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{49}:} \{1.47344, 1.4596, 1.47557, 1.47642, 1.47732, 0., 1.47444, 1.47573, 1.47256, 1.47135, \\ 1.47856, 1.47535, 1.47859, 1.47458, 1.47979, 1.47491, 1.49381, 1.48182, 1.48076, 1.47469, \\ 1.48626, 1.48313, 1.48253, 1.47586, 1.48352, 1.47597, 1.48171, 1.48352, 1.48241, 1.47606, \\ 1.48476, 1.47462, 1.47572, 1.47698, 1.46143, 1.47081, 1.46255, 1.4723, 1.47895, 1.48625, \\ 1.47652, 1.47557, 1.45381, 1.45624, 1.46214, 1.45923, 1.45473, 1.46421, 1.46414, 1.4667, \\ 1.46418, 1.47319, 1.4361, 1.47911, 1.47412, 1.46281, 1.46575, 1.46544, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P}_{50}: \{1.4748, 1.46167, 1.47682, 1.47763, 1.47849, 0., 1.47575, 1.47697, 1.47397, 1.47282, \\ 1.47965, 1.47662, 1.47968, 1.47588, 1.48082, 1.47619, 1.49412, 1.48275, 1.48174, 1.47599, \\ 1.48696, 1.484, 1.48342, 1.47709, 1.48436, 1.4772, 1.48264, 1.48437, 1.4833, 1.47729, \\ 1.48554, 1.47592, 1.47696, 1.47816, 1.46341, 1.4723, 1.46447, 1.47372, 1.48002, 1.48695, \\ 1.47772, 1.47682, 1.45616, 1.45848, 1.46407, 1.46131, 1.45705, 1.46604, 1.46597, 1.4684, \\ 1.46601, 1.47456, 1.43927, 1.48018, 1.47544, 1.46472, 1.4675, 1.46721, 0. \} \end{array}$ 

 $\begin{array}{l} \mathbf{P_{51}:} \{1.47609, 1.46364, 1.47801, 1.47877, 1.47959, 0., 1.47699, 1.47815, 1.4753, 1.47421, \\ 1.4807, 1.47781, 1.48072, 1.47712, 1.48181, 1.47741, 1.49442, 1.48363, 1.48268, 1.47721, \\ 1.48763, 1.48482, 1.48427, 1.47827, 1.48516, 1.47836, 1.48353, 1.48517, 1.48415, 1.47845, \\ 1.48628, 1.47715, 1.47814, 1.47928, 1.46528, 1.47372, 1.46629, 1.47506, 1.48105, 1.48762, \\ 1.47886, 1.47801, 1.4584, 1.4606, 1.46591, 1.46329, 1.45925, 1.46778, 1.46771, 1.47001, \\ 1.46775, 1.47586, 1.4423, 1.48119, 1.4767, 1.46652, 1.46917, 1.46889, 0. \} \end{array}$ 

 $P_{52}: \{1.47731, 1.4655, 1.47913, 1.47986, 1.48063, 0., 1.47817, 1.47927, 1.47656, 1.47553, 1.48168, 1.47895, 1.48171, 1.47829, 1.48274, 1.47856, 1.49471, 1.48447, 1.48356, 1.47838, 1.48826, 1.48559, 1.48507, 1.47938, 1.48592, 1.47947, 1.48437, 1.48592, 1.48495, 1.47955, 1.48698, 1.47832, 1.47926, 1.48034, 1.46706, 1.47506, 1.46801, 1.47634, 1.48202, 1.48825, 1.47994, 1.47913, 1.46052, 1.46261, 1.46765, 1.46517, 1.46134, 1.46943, 1.46936, 1.47155, 1.4694, 1.4771, 1.44517, 1.48215, 1.4779, 1.46824, 1.47074, 1.47049, 0. \}$ 

 $\begin{array}{l} \mathbf{P_{53}:} \{1.47847, 1.46727, 1.4802, 1.48089, 1.48162, 0., 1.47928, 1.48033, 1.47776, 1.47678, \\ 1.48262, 1.48002, 1.48264, 1.4794, 1.48362, 1.47966, 1.49498, 1.48526, 1.4844, 1.47949, \\ 1.48886, 1.48633, 1.48584, 1.48043, 1.48664, 1.48052, 1.48517, 1.48664, 1.48572, 1.4806, \\ 1.48765, 1.47943, 1.48032, 1.48134, 1.46875, 1.47634, 1.46965, 1.47755, 1.48294, 1.48885, \\ 1.48097, 1.4802, 1.46253, 1.46452, 1.46931, 1.46695, 1.46332, 1.47099, 1.47093, 1.473, \\ 1.47096, 1.47827, 1.44791, 1.48306, 1.47903, 1.46986, 1.47224, 1.472, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{54}:} \{1.47958, 1.46894, 1.48121, 1.48187, 1.48256, 0., 1.48034, 1.48134, 1.4789, 1.47797, 1.48351, 1.48105, 1.48353, 1.48045, 1.48446, 1.4807, 1.49524, 1.48601, 1.4852, 1.48054, 1.48943, 1.48703, 1.48656, 1.48143, 1.48733, 1.48152, 1.48593, 1.48733, 1.48644, 1.48159, 1.48828, 1.48048, 1.48133, 1.4823, 1.47035, 1.47755, 1.4712, 1.4787, 1.48381, 1.48942, 1.48194, 1.48121, 1.466444, 1.46634, 1.47088, 1.468644, 1.4652, 1.47247, 1.47241, 1.47438, 1.47245, 1.47938, 1.45051, 1.48393, 1.4801, 1.4714, 1.47366, 1.47343, 0. \end{array}$ 

 $\begin{array}{l} \mathbf{P_{56}:} \{1.48161,\ 1.47204,\ 1.48309,\ 1.48367,\ 1.4843,\ 0.,\ 1.4823,\ 1.4832,\ 1.481,\ 1.48017,\ 1.48515,\ 1.48294,\ 1.48517,\ 1.4824,\ 1.48601,\ 1.48262,\ 1.49571,\ 1.48741,\ 1.48668,\ 1.48248,\ 1.49048,\ 1.4832,\ 1.4832,\ 1.4879,\ 1.48328,\ 1.4859,\ 1.48336,\ 1.48733,\ 1.48859,\ 1.48778,\ 1.48343,\ 1.48945,\ 1.48243,\ 1.48319,\ 1.48406,\ 1.4733,\ 1.47978,\ 1.47407,\ 1.48082,\ 1.48542,\ 1.49048,\ 1.48374,\ 1.48308,\ 1.46798,\ 1.46969,\ 1.47378,\ 1.47176,\ 1.46867,\ 1.47522,\ 1.47516,\ 1.47693,\ 1.47519,\ 1.48144,\ 1.45534,\ 1.48553,\ 1.48209,\ 1.47426,\ 1.47628,\ 1.47609,\ 0. \\ \end{array}$ 

 $P_{57}: \{1.48255, 1.47348, 1.48395, 1.48451, 1.4851, 0., 1.48321, 1.48406, 1.48197, 1.48118, 1.48591, 1.48381, 1.48593, 1.4833, 1.48672, 1.48351, 1.49593, 1.48805, 1.48736, 1.48337, 1.49097, 1.48892, 1.48852, 1.48414, 1.48917, 1.48421, 1.48798, 1.48917, 1.4884, 1.48427, 1.48999, 1.48333, 1.48405, 1.48488, 1.47467, 1.48082, 1.4754, 1.4818, 1.48617, 1.49096, 1.48457, 1.48395, 1.46961, 1.47124, 1.47512, 1.47321, 1.47028, 1.47649, 1.47643, 1.47811, 1.47646, 1.48238, 1.45758, 1.48627, 1.48301, 1.47557, 1.4775, 1.47731, 0. \}$ 

 $\begin{array}{l} \mathbf{P_{58}:} \{1.48345, 1.47483, 1.48477, 1.4853, 1.48587, 0., 1.48407, 1.48487, 1.4829, 1.48214, \\ 1.48663, 1.48464, 1.48665, 1.48416, 1.4874, 1.48436, 1.49614, 1.48866, 1.488, 1.48422, \\ 1.49143, 1.48949, 1.48911, 1.48495, 1.48973, 1.48502, 1.48859, 1.48973, 1.48899, 1.48508, \\ 1.4905, 1.48418, 1.48487, 1.48565, 1.47597, 1.4818, 1.47666, 1.48273, 1.48688, 1.49143, \\ 1.48536, 1.48477, 1.47116, 1.47271, 1.47639, 1.47458, 1.4718, 1.47769, 1.47763, 1.47923, \\ 1.47766, 1.48328, 1.45971, 1.48697, 1.48388, 1.47682, 1.47865, 1.47847, 0. \\ \end{array}$ 

 $P_{59}: \{1.48429, 1.47612, 1.48555, 1.48605, 1.48659, 0., 1.48488, 1.48565, 1.48377, 1.48306, 1.48732, 1.48542, 1.48733, 1.48497, 1.48805, 1.48516, 1.49634, 1.48924, 1.48862, 1.48503, 1.49187, 1.49002, 1.48966, 1.48572, 1.49025, 1.48578, 1.48918, 1.49025, 1.48954, 1.48584, 1.49099, 1.48499, 1.48564, 1.48639, 1.4772, 1.48273, 1.47785, 1.48362, 1.48755, 1.49186, 1.48611, 1.48555, 1.47263, 1.4741, 1.4776, 1.47588, 1.47324, 1.47883, 1.47877, 1.48029, 1.47881, 1.48414, 1.46173, 1.48764, 1.4847, 1.47801, 1.47974, 1.47957, 0. \}$ 

 $\begin{array}{l} \mathbf{P_{60}:} \{1.4851, 1.47734, 1.48629, 1.48677, 1.48727, 0., 1.48566, 1.48638, 1.4846, 1.48392, 1.48797, 1.48617, 1.48798, 1.48574, 1.48866, 1.48591, 1.49652, 1.48979, 1.4892, 1.4858, 1.49229, 1.49053, 1.49019, 1.48645, 1.49075, 1.48651, 1.48973, 1.49075, 1.49007, 1.48657, 1.49145, 1.48576, 1.48638, 1.48708, 1.47836, 1.48361, 1.47898, 1.48445, 1.48818, 1.49228, 1.48682, 1.48629, 1.47403, 1.47543, 1.47874, 1.47711, 1.47461, 1.47991, 1.47986, 1.4813, 1.47989, 1.48495, 1.46366, 1.48827, 1.48549, 1.47913, 1.48078, 1.48062, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{61}:} \{1.48586, 1.4785, 1.48699, 1.48744, 1.48792, 0., 1.48639, 1.48708, 1.48539, 1.48474, 1.48858, 1.48688, 1.48669, 1.48647, 1.48924, 1.48663, 1.4967, 1.49032, 1.48975, 1.48652, 1.49268, 1.49102, 1.49069, 1.48714, 1.49122, 1.4872, 1.49026, 1.49122, 1.49057, 1.48725, 1.49189, 1.48649, 1.48707, 1.48774, 1.47947, 1.48445, 1.48006, 1.48525, 1.48879, 1.49268, 1.48749, 1.48699, 1.47536, 1.47668, 1.47983, 1.47828, 1.47591, 1.48094, 1.48089, 1.48226, 1.48092, 1.48572, 1.46548, 1.48887, 1.48623, 1.4802, 1.48176, 1.48161, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{62}:} \{1.48658, 1.4796, 1.48766, 1.48809, 1.48854, 0., 1.48709, 1.48774, 1.48614, 1.48552, \\ 1.48916, 1.48755, 1.48918, 1.48716, 1.48979, 1.48732, 1.49687, 1.49081, 1.49028, 1.48721, \\ 1.49305, 1.49148, 1.49117, 1.4878, 1.49167, 1.48785, 1.49075, 1.49167, 1.49105, 1.4879, \\ 1.4923, 1.48718, 1.48773, 1.48837, 1.48052, 1.48524, 1.48108, 1.486, 1.48936, 1.49305, \\ 1.48813, 1.48765, 1.47662, 1.47787, 1.48086, 1.47939, 1.47715, 1.48191, 1.48186, 1.48316, \\ 1.48189, 1.48645, 1.46722, 1.48944, 1.48693, 1.48121, 1.48269, 1.48255, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{63}:} \{1.48727, 1.48065, 1.48829, 1.4887, 1.48913, 0., 1.48775, 1.48837, 1.48684, 1.48626, \\ 1.48972, 1.48818, 1.48973, 1.48781, 1.49031, 1.48797, 1.49703, 1.49128, 1.49077, 1.48787, \\ 1.49341, 1.49191, 1.49162, 1.48842, 1.4921, 1.48847, 1.49123, 1.4921, 1.4915, 1.48852, \\ 1.49269, 1.48783, 1.48836, 1.48896, 1.48152, 1.486, 1.48205, 1.48672, 1.4899, 1.4934, \\ 1.48874, 1.48828, 1.47781, 1.479, 1.48184, 1.48044, 1.47832, 1.48284, 1.48279, 1.48402, \\ 1.48282, 1.48714, 1.46887, 1.48998, 1.4876, 1.48217, 1.48358, 1.48345, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{64}:} \{1.48792, 1.48164, 1.48889, 1.48927, 1.48968, 0., 1.48837, 1.48896, 1.48752, 1.48697, \\ 1.49024, 1.48879, 1.49026, 1.48844, 1.49081, 1.48858, 1.49718, 1.49173, 1.49125, 1.48849, \\ 1.49375, 1.49233, 1.49205, 1.48901, 1.4925, 1.48906, 1.49168, 1.4925, 1.49193, 1.48911, \\ 1.49307, 1.48845, 1.48896, 1.48953, 1.48246, 1.48671, 1.48296, 1.4874, 1.49042, 1.49374, \\ 1.48931, 1.48888, 1.47894, 1.48008, 1.48277, 1.48144, 1.47943, 1.48372, 1.48367, 1.48484, \\ 1.4837, 1.4878, 1.47044, 1.49049, 1.48824, 1.48309, 1.48442, 1.48429, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{65}:} \{1.48854, 1.48258, 1.48945, 1.48982, 1.49021, 0., 1.48897, 1.48952, 1.48816, 1.48763, \\ 1.49074, 1.48936, 1.49076, 1.48903, 1.49128, 1.48917, 1.49733, 1.49215, 1.49169, 1.48907, \\ 1.49407, 1.49272, 1.49246, 1.48958, 1.49289, 1.48962, 1.4921, 1.49289, 1.49233, 1.48967, \\ 1.49342, 1.48905, 1.48952, 1.49006, 1.48336, 1.48739, 1.48384, 1.48804, 1.49091, 1.49406, \\ 1.48986, 1.48945, 1.48002, 1.4811, 1.48365, 1.48239, 1.48048, 1.48455, 1.48455, 1.48562, \\ 1.48453, 1.48842, 1.47193, 1.49098, 1.48884, 1.48395, 1.48521, 1.4851, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{66}:} \{1.48912, 1.48347, 1.48999, 1.49034, 1.49071, 0., 1.48953, 1.49006, 1.48876, 1.48827, \\ 1.49122, 1.48991, 1.49123, 1.48959, 1.49172, 1.48972, 1.49746, 1.49255, 1.49212, 1.48963, \\ 1.49437, 1.49309, 1.49284, 1.49011, 1.49325, 1.49015, 1.49251, 1.49325, 1.49272, 1.4902, \\ 1.49376, 1.48961, 1.49006, 1.49057, 1.48421, 1.48804, 1.48466, 1.48865, 1.49138, 1.49437, \\ 1.49038, 1.48999, 1.48104, 1.48206, 1.48448, 1.48329, 1.48148, 1.48534, 1.4853, 1.48635, \\ 1.48532, 1.48902, 1.47335, 1.49144, 1.48941, 1.48477, 1.48597, 1.48586, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{67}:} \{1.48968,\,1.48431,\,1.4905,\,1.49084,\,1.49119,\,0.,\,1.49007,\,1.49057,\,1.48934,\,1.48887,\,\\ 1.49167,\,1.49042,\,1.49168,\,1.49012,\,1.49215,\,1.49025,\,1.49759,\,1.49293,\,1.49252,\,1.49016,\,\\ 1.49466,\,1.49344,\,1.49321,\,1.49061,\,1.49359,\,1.49066,\,1.49289,\,1.49359,\,1.49309,\,1.4907,\,\\ 1.49408,\,1.49014,\,1.49057,\,1.49105,\,1.48502,\,1.48865,\,1.48545,\,1.48923,\,1.49182,\,1.49465,\,\\ 1.49087,\,1.4905,\,1.48201,\,1.48298,\,1.48528,\,1.48415,\,1.48243,\,1.48609,\,1.48605,\,1.48705,\,\\ 1.48607,\,1.48958,\,1.47469,\,1.49187,\,1.48995,\,1.48555,\,1.48669,\,1.48658,\,0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{68}:} \{1.49021, 1.48511, 1.49099, 1.4913, 1.49164, 0., 1.49058, 1.49105, 1.48988, 1.48943, 1.49209, 1.49091, 1.4921, 1.49063, 1.49255, 1.49074, 1.49772, 1.49329, 1.4929, 1.49067, 1.49493, 1.49378, 1.49356, 1.49109, 1.49392, 1.49113, 1.49325, 1.49392, 1.49343, 1.49117, 1.49438, 1.49064, 1.49105, 1.49151, 1.48578, 1.48923, 1.48619, 1.48978, 1.49223, 1.49493, 1.49134, 1.49099, 1.48293, 1.48385, 1.48603, 1.48496, 1.48333, 1.4868, 1.48676, 1.48771, 1.48678, 1.49011, 1.47597, 1.49229, 1.49047, 1.48629, 1.48737, 1.48727, 0. \end{array}$ 

 $\begin{array}{l} \mathbf{P_{69}:} \{1.49071, 1.48588, 1.49145, 1.49175, 1.49207, 0., 1.49106, 1.49151, 1.4904, 1.48998, \\ 1.4925, 1.49138, 1.49251, 1.49111, 1.49293, 1.49122, 1.49783, 1.49364, 1.49327, 1.49114, \\ 1.49519, 1.4941, 1.49389, 1.49155, 1.49423, 1.49159, 1.4936, 1.49423, 1.49376, 1.49162, \\ 1.49467, 1.49112, 1.49151, 1.49195, 1.48651, 1.48978, 1.4869, 1.49031, 1.49263, 1.49519, \\ 1.49178, 1.49145, 1.4838, 1.48467, 1.48674, 1.48572, 1.48418, 1.48748, 1.48744, 1.48834, \\ 1.48746, 1.49061, 1.47719, 1.49268, 1.49095, 1.48699, 1.48801, 1.48792, 0. \\ \end{array}$ 

 $P_{70}$ : {1.49118, 1.4866, 1.49189, 1.49217, 1.49247, 0., 1.49151, 1.49194, 1.49089, 1.49049, 1.49288, 1.49182, 1.49289, 1.49156, 1.49329, 1.49167, 1.49794, 1.49396, 1.49361, 1.4916, 1.49544, 1.4944, 1.4942, 1.49198, 1.49453, 1.49202, 1.49392, 1.49453, 1.49407, 1.49205, 1.49494, 1.49157, 1.49194, 1.49236, 1.4872, 1.4903, 1.48757, 1.4908, 1.49301, 1.49543, 1.4922, 1.49189, 1.48463, 1.48546, 1.48742, 1.48645, 1.48499, 1.48812, 1.48808, 1.48894, 1.4881, 1.49109, 1.47834, 1.49306, 1.49142, 1.48766, 1.48863, 1.48854, 0.}

 $\begin{array}{l} \mathbf{P_{71}:} \{1.49163,\,1.48728,\,1.4923,\,1.49257,\,1.49286,\,0.,\,1.49195,\,1.49235,\,1.49135,\,1.49097,\,1.49324,\,1.49224,\,1.49326,\,1.49199,\,1.49363,\,1.49209,\,1.49805,\,1.49427,\,1.49394,\,1.49203,\,1.49567,\,1.49469,\,1.49449,\,1.49239,\,1.49481,\,1.49243,\,1.49424,\,1.49481,\,1.49437,\,1.49246,\,1.4952,\,\,1.492,\,\,1.49235,\,\,1.49275,\,\,1.48786,\,\,1.4908,\,\,1.4882,\,\,1.49127,\,\,1.49337,\,\,1.49566,\,1.4926,\,\,1.4923,\,\,1.48541,\,\,1.4862,\,\,1.48807,\,\,1.48715,\,\,1.48576,\,\,1.48872,\,\,1.48869,\,\,1.4895,\,\,1.48871,\,\,1.49155,\,\,1.47944,\,\,1.49341,\,\,1.49186,\,\,1.48829,\,\,1.48921,\,\,1.48912,\,0.\} \end{array}$ 

 $\begin{array}{l} \mathbf{P}_{72}: \{1.49206, 1.48793, 1.4927, 1.49295, 1.49322, 0., 1.49236, 1.49275, 1.4918, 1.49144, 1.49359, 1.49263, 1.4936, 1.4924, 1.49396, 1.4925, 1.49815, 1.49456, 1.49425, 1.49243, 1.49589, 1.49496, 1.49478, 1.49278, 1.49507, 1.49281, 1.49453, 1.49507, 1.49465, 1.49284, 1.49544, 1.49241, 1.49274, 1.49312, 1.48848, 1.49127, 1.48881, 1.49172, 1.49371, 1.49589, 1.49298, 1.49269, 1.48616, 1.48691, 1.48868, 1.4878, 1.48648, 1.4893, 1.48927, 1.49004, 1.48929, 1.49198, 1.48048, 1.49375, 1.49227, 1.48889, 1.48976, 1.48968, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{73}:} & \{1.49247, 1.48855, 1.49307, 1.49331, 1.49357, 0., 1.49275, 1.49312, 1.49222, 1.49187, \\ 1.49392, 1.49301, 1.49393, 1.49279, 1.49427, 1.49288, 1.49824, 1.49484, 1.49454, 1.49282, \\ 1.4961, 1.49522, 1.49504, 1.49315, 1.49532, 1.49318, 1.49481, 1.49532, 1.49492, 1.49321, \\ 1.49568, 1.4928, 1.49311, 1.49347, 1.48907, 1.49172, 1.48938, 1.49214, 1.49403, 1.4961, \\ 1.49334, 1.49307, 1.48686, 1.48758, 1.48925, 1.48843, 1.48718, 1.48985, 1.48981, 1.49055, \\ 1.48983, 1.49239, 1.48147, 1.49407, 1.49267, 1.48946, 1.49028, 1.49021, 0. \\ \end{array}$ 

 $P_{74}$ : {1.49285, 1.48914, 1.49342, 1.49365, 1.4939, 0., 1.49312, 1.49347, 1.49261, 1.49229, 1.49423, 1.49337, 1.49424, 1.49316, 1.49456, 1.49324, 1.49833, 1.4951, 1.49482, 1.49319, 1.4963, 1.49546, 1.4953, 1.4935, 1.49556, 1.49556, 1.49507, 1.49556, 1.49517, 1.49356, 1.4959, 1.49317, 1.49347, 1.4938, 1.48963, 1.49214, 1.48992, 1.49254, 1.49433, 1.4963, 1.49368, 1.49342, 1.48754, 1.48821, 1.4898, 1.48902, 1.48783, 1.49037, 1.49034, 1.49103, 1.49035, 1.49278, 1.49278, 1.49437, 1.49304, 1.48999, 1.49078, 1.49071, 0.}

 $\begin{array}{l} \mathbf{P}_{75}: \{1.49322, 1.48969, 1.49376, 1.49398, 1.49421, 0., 1.49347, 1.4938, 1.49299, 1.49268, \\ 1.49452, 1.49371, 1.49453, 1.49351, 1.49484, 1.49359, 1.49842, 1.49535, 1.49509, 1.49354, \\ 1.49649, 1.49569, 1.49554, 1.49383, 1.49579, 1.49386, 1.49533, 1.49579, 1.49541, 1.49389, \\ 1.49611, 1.49352, 1.4938, 1.49412, 1.49016, 1.49254, 1.49044, 1.49292, 1.49462, 1.49649, \\ 1.494, 1.49376, 1.48817, 1.48881, 1.49032, 1.48958, 1.48845, 1.49086, 1.49083, 1.49149, \\ 1.49085, 1.49315, 1.4833, 1.49466, 1.4934, 1.49051, 1.49125, 1.49118, 0. \}$ 

 $\begin{array}{l} \mathbf{P_{76}:} \{1.49356, 1.49022, 1.49408, 1.49429, 1.4945, 0., 1.49381, 1.49412, 1.49335, 1.49306, \\ 1.4948, 1.49403, 1.49481, 1.49384, 1.4951, 1.49392, 1.4985, 1.49559, 1.49534, 1.49387, \\ 1.49667, 1.49591, 1.49577, 1.49415, 1.49601, 1.49417, 1.49557, 1.49601, 1.49564, 1.4942, \\ 1.49631, 1.49385, 1.49412, 1.49442, 1.49066, 1.49292, 1.49093, 1.49329, 1.4949, 1.49666, \\ 1.49431, 1.49408, 1.48878, 1.48938, 1.49082, 1.49011, 1.48905, 1.49133, 1.4913, 1.49192, \\ 1.49131, 1.4935, 1.48414, 1.49493, 1.49374, 1.49099, 1.4917, 1.49163, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P}_{77}: \{1.49389, 1.49072, 1.49438, 1.49458, 1.49479, 0., 1.49412, 1.49442, 1.49369, 1.49341, 1.49507, 1.49433, 1.49508, 1.49416, 1.49535, 1.49423, 1.49858, 1.49582, 1.49557, 1.49418, 1.49684, 1.49612, 1.49598, 1.49445, 1.49621, 1.49647, 1.49579, 1.49621, 1.49586, 1.4945, 1.4965, 1.49416, 1.49442, 1.49471, 1.49114, 1.49328, 1.49139, 1.49363, 1.49516, 1.49683, 1.4946, 1.49438, 1.48935, 1.48993, 1.49129, 1.49062, 1.48961, 1.49177, 1.49174, 1.49234, 1.49176, 1.49383, 1.48495, 1.49519, 1.49406, 1.49145, 1.49212, 1.49206, 0. \}$ 

 $\begin{array}{l} \mathbf{P_{78}:} \{1.4942, 1.49119, 1.49467, 1.49486, 1.49505, 0., 1.49442, 1.49471, 1.49401, 1.49375, 1.49532, 1.49462, 1.49533, 1.49445, 1.49559, 1.49452, 1.49865, 1.49603, 1.4958, 1.49448, 1.497, 1.49632, 1.49619, 1.49473, 1.4964, 1.49475, 1.49601, 1.4964, 1.49606, 1.49478, 1.49667, 1.49446, 1.4947, 1.49498, 1.49159, 1.49363, 1.49183, 1.49396, 1.49541, 1.497, 1.49487, 1.49487, 1.49467, 1.48989, 1.49044, 1.49173, 1.4911, 1.49014, 1.49219, 1.49216, 1.49273, 1.49218, 1.49218, 1.49415, 1.48571, 1.49544, 1.49436, 1.49189, 1.49253, 1.49247, 0. \end{array}$ 

 $\begin{array}{l} \mathbf{P}_{79}: \{1.4945, 1.49164, 1.49494, 1.49512, 1.4953, 0., 1.49471, 1.49498, 1.49432, 1.49407, 1.49556, 1.4949, 1.49557, 1.49474, 1.49582, 1.4948, 1.49872, 1.49623, 1.49602, 1.49476, 1.49715, 1.49651, 1.49638, 1.495, 1.49659, 1.49502, 1.49621, 1.49659, 1.49626, 1.49504, 1.49684, 1.49475, 1.49497, 1.49523, 1.49202, 1.49395, 1.49225, 1.49426, 1.49564, 1.49715, 1.49514, 1.49041, 1.49093, 1.49216, 1.49155, 1.49064, 1.49259, 1.49257, 1.4931, 1.49258, 1.49445, 1.48644, 1.49567, 1.49465, 1.4923, 1.49291, 1.49285, 0. \}$ 

 $\begin{array}{l} \mathbf{P_{80}:} \{1.49478, 1.49207, 1.4952, 1.49537, 1.49554, 0., 1.49498, 1.49523, 1.49461, 1.49437, 1.49579, 1.49516, 1.4958, 1.49501, 1.49603, 1.49507, 1.49878, 1.49643, 1.49622, 1.49503, 1.4973, 1.49669, 1.49657, 1.49526, 1.49676, 1.49528, 1.49641, 1.49676, 1.49644, 1.4953, 1.49701, 1.49501, 1.49523, 1.49548, 1.49243, 1.49426, 1.49264, 1.49456, 1.49586, 1.4973, 1.49538, 1.4952, 1.4909, 1.49139, 1.49256, 1.49198, 1.49112, 1.49297, 1.49295, 1.49345, 1.49296, 1.49296, 1.49473, 1.48713, 1.49589, 1.49492, 1.4927, 1.49327, 1.49322, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{81}:} \{1.49505, 1.49248, 1.49544, 1.4956, 1.49577, 0., 1.49524, 1.49548, 1.49488, 1.49466, \\ 1.496, 1.49541, 1.49601, 1.49526, 1.49623, 1.49532, 1.49885, 1.49661, 1.49641, 1.49528, \\ 1.49744, 1.49686, 1.49674, 1.4955, 1.49693, 1.49552, 1.49659, 1.49693, 1.49662, 1.49554, \\ 1.49716, 1.49527, 1.49548, 1.49571, 1.49282, 1.49456, 1.49302, 1.49484, 1.49607, 1.49743, \\ 1.49562, 1.49544, 1.49137, 1.49183, 1.49294, 1.49239, 1.49157, 1.49333, 1.49331, 1.49379, \\ 1.49332, 1.495, 1.48778, 1.4961, 1.49518, 1.49307, 1.49361, 1.49357, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{82}:} \{1.4953, 1.49286, 1.49568, 1.49583, 1.49599, 0., 1.49548, 1.49571, 1.49515, 1.49493, \\ 1.49621, 1.49564, 1.49622, 1.4955, 1.49643, 1.49556, 1.4989, 1.49678, 1.4966, 1.49552, \\ 1.49757, 1.49702, 1.49691, 1.49573, 1.49708, 1.49575, 1.49676, 1.49708, 1.49679, 1.49577, \\ 1.4973, 1.49551, 1.49571, 1.49593, 1.49318, 1.49483, 1.49338, 1.4951, 1.49628, 1.49756, \\ 1.49584, 1.49568, 1.49181, 1.49225, 1.4933, 1.49278, 1.49201, 1.49367, 1.49365, 1.4941, \\ 1.49366, 1.49526, 1.4884, 1.4963, 1.49543, 1.49342, 1.49394, 1.49389, 0. \\ \end{array}$ 

 $P_{84}$ : {1.49577, 1.49357, 1.49611, 1.49624, 1.49639, 0., 1.49593, 1.49614, 1.49563, 1.49544, 1.49658, 1.49608, 1.49659, 1.49595, 1.49678, 1.496, 1.49901, 1.4971, 1.49694, 1.49597, 1.49781, 1.49731, 1.49722, 1.49615, 1.49738, 1.49617, 1.49709, 1.49737, 1.49709, 1.49619, 1.49757, 1.49596, 1.49613, 1.49633, 1.49386, 1.49535, 1.49404, 1.49559, 1.49665, 1.49781,

1.49626, 1.49611, 1.49262, 1.49302, 1.49397, 1.4935, 1.4928, 1.4943, 1.49428, 1.49469, 1.49429, 1.49573, 1.48955, 1.49667, 1.49588, 1.49408, 1.49454, 1.4945, 0.}

 $\begin{array}{l} \mathbf{P_{87}:} \{1.49639,\,1.49451,\,1.49667,\,1.49679,\,1.49691,\,0.,\,1.49652,\,1.4967,\,1.49627,\,1.4961,\\ 1.49708,\,1.49665,\,1.49709,\,1.49654,\,1.49725,\,1.49659,\,1.49916,\,1.49753,\,1.49738,\,1.49656,\\ 1.49813,\,1.4977,\,1.49762,\,1.49671,\,1.49776,\,1.49673,\,1.49751,\,1.49776,\,1.4975,\,1.49674,\\ 1.49793,\,1.49655,\,1.4967,\,1.49687,\,1.49485,\,1.49403,\,1.49491,\,1.49623,\,1.49713,\,1.49813,\\ 1.4968,\,1.49667,\,1.4937,\,1.49404,\,1.49485,\,1.49445,\,1.49385,\,1.49513,\,1.49511,\,1.49547,\\ 1.49512,\,1.49635,\,1.49106,\,1.49715,\,1.49648,\,1.49494,\,1.49534,\,1.4953,\,0.\} \end{array}$ 

 $\begin{array}{l} \mathbf{P_{88}:} \{1.49657, 1.49479, 1.49684, 1.49696, 1.49707, 0., 1.4967, 1.49687, 1.49646, 1.4963, 1.49723, 1.49682, 1.49724, 1.49672, 1.49739, 1.49676, 1.4992, 1.49765, 1.49752, 1.49673, 1.49823, 1.49782, 1.49774, 1.49688, 1.49787, 1.4969, 1.49764, 1.49787, 1.49762, 1.49691, 1.49803, 1.49672, 1.49687, 1.49703, 1.49502, 1.49623, 1.49517, 1.49642, 1.49728, 1.49822, 1.49697, 1.49684, 1.49402, 1.49434, 1.49511, 1.49473, 1.49417, 1.49538, 1.49536, 1.4957, 1.49537, 1.49654, 1.49152, 1.4973, 1.49666, 1.4952, 1.49558, 1.49554, 0. \end{array}$ 

 $\begin{array}{l} \mathbf{P_{90}:} \{1.49691,\,1.49531,\,1.49716,\,1.49726,\,1.49736,\,0.,\,1.49703,\,1.49718,\,1.49681,\,1.49667,\\ 1.49751,\,1.49714,\,1.49751,\,1.49705,\,1.49765,\,1.49708,\,1.49928,\,1.49789,\,1.49776,\,1.49706,\\ 1.4984,\,1.49804,\,1.49797,\,1.49719,\,1.49808,\,1.4972,\,1.49787,\,1.49808,\,1.49784,\,1.49722,\\ 1.49823,\,1.49705,\,1.49718,\,1.49732,\,1.49552,\,1.4966,\,1.49565,\,1.49678,\,1.49755,\,1.4984,\\ 1.49727,\,1.49716,\,1.49462,\,1.49491,\,1.4956,\,1.49526,\,1.49475,\,1.49584,\,1.49583,\,1.49613,\\ 1.49583,\,1.49688,\,1.49236,\,1.49757,\,1.497,\,1.49568,\,1.49602,\,1.49599,\,0. \end{array}$ 

 $P_{91}$ : {1.49707, 1.49555, 1.4973, 1.4974, 1.4975, 0., 1.49718, 1.49732, 1.49697, 1.49684, 1.49763, 1.49728, 1.49764, 1.4972, 1.49777, 1.49723, 1.49932, 1.49799, 1.49788, 1.49721, 1.49848, 1.49814, 1.49807, 1.49734, 1.49818, 1.49735, 1.49798, 1.49818, 1.49795, 1.49736, 1.49832, 1.4972, 1.49732, 1.49746, 1.49575, 1.49678, 1.49587, 1.49694, 1.49768, 1.49848,

1.49741, 1.4973, 1.49489, 1.49517, 1.49582, 1.4955, 1.49502, 1.49605, 1.49604, 1.49632, 1.49605, 1.49704, 1.49275, 1.49769, 1.49715, 1.4959, 1.49622, 1.49619, 0.}

 $\begin{array}{l} \mathbf{P}_{92}: \{1.49722, 1.49578, 1.49744, 1.49753, 1.49763, 0., 1.49733, 1.49746, 1.49713, 1.497, 1.49776, 1.49742, 1.49776, 1.49734, 1.49788, 1.49737, 1.49935, 1.4981, 1.49799, 1.49735, 1.49856, 1.49823, 1.49817, 1.49747, 1.49828, 1.49748, 1.49808, 1.49827, 1.49805, 1.49749, 1.49841, 1.49734, 1.49746, 1.49759, 1.49597, 1.49694, 1.49608, 1.4971, 1.4978, 1.49856, 1.49754, 1.49744, 1.49515, 1.49541, 1.49603, 1.49573, 1.49527, 1.49625, 1.49624, 1.49651, 1.49625, 1.49719, 1.49312, 1.49781, 1.49729, 1.49611, 1.49641, 1.49639, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{93}:} \{1.49736, 1.49599, 1.49757, 1.49766, 1.49775, 0., 1.49746, 1.49759, 1.49727, 1.49715, \\ 1.49787, 1.49755, 1.49788, 1.49748, 1.49799, 1.49751, 1.49938, 1.49819, 1.49809, 1.49749, \\ 1.49863, 1.49832, 1.49826, 1.4976, 1.49836, 1.49761, 1.49818, 1.49836, 1.49814, 1.49762, \\ 1.49849, 1.49748, 1.49759, 1.49771, 1.49617, 1.4971, 1.49628, 1.49725, 1.49791, 1.49863, \\ 1.49767, 1.49757, 1.4954, 1.49565, 1.49624, 1.49595, 1.49551, 1.49645, 1.49643, 1.49669, \\ 1.49644, 1.49734, 1.49347, 1.49792, 1.49743, 1.49631, 1.4966, 1.49657, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{94}:} \{1.4975, \ 1.4962, \ 1.4977, \ 1.49778, \ 1.49786, \ 0., \ 1.49759, \ 1.49771, \ 1.49741, \ 1.4973, \\ 1.49798, \ 1.49768, \ 1.49799, \ 1.49761, \ 1.4981, \ 1.49763, \ 1.49942, \ 1.49829, \ 1.49819, \ 1.49761, \\ 1.4987, \ 1.49841, \ 1.49835, \ 1.49772, \ 1.49845, \ 1.49773, \ 1.49828, \ 1.49845, \ 1.49823, \ 1.49774, \\ 1.49856, \ 1.49761, \ 1.49771, \ 1.49783, \ 1.49637, \ 1.49725, \ 1.49647, \ 1.49739, \ 1.49802, \ 1.4987, \\ 1.49662, \ 1.49747, \ 1.4938, \ 1.49803, \ 1.49756, \ 1.4965, \ 1.49677, \ 1.49675, \ 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{95}:} \{1.49763, 1.49639, 1.49781, 1.49789, 1.49797, 0., 1.49771, 1.49783, 1.49755, 1.49744, \\ 1.49808, 1.4978, 1.49809, 1.49773, 1.49819, 1.49776, 1.49945, 1.49837, 1.49828, 1.49774, \\ 1.49877, 1.49849, 1.49844, 1.49784, 1.49853, 1.49785, 1.49836, 1.49853, 1.49831, 1.49786, \\ 1.49864, 1.49773, 1.49783, 1.49794, 1.49655, 1.49739, 1.49665, 1.49752, 1.49812, 1.49877, \\ 1.4979, 1.49781, 1.49586, 1.49608, 1.49661, 1.49635, 1.49596, 1.4968, 1.49679, 1.49702, \\ 1.4968, 1.4976, 1.49412, 1.49813, 1.49769, 1.49668, 1.49694, 1.49691, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{96}:} \{1.49775, 1.49658, 1.49793, 1.498, 1.49808, 0., 1.49783, 1.49794, 1.49767, 1.49757, \\ 1.49818, 1.49791, 1.49819, 1.49784, 1.49829, 1.49787, 1.49947, 1.49846, 1.49837, 1.49785, \\ 1.49883, 1.49857, 1.49852, 1.49795, 1.4986, 1.49796, 1.49845, 1.4986, 1.49839, 1.49797, \\ 1.49871, 1.49785, 1.49794, 1.49805, 1.49673, 1.49752, 1.49682, 1.49765, 1.49821, 1.49883, \\ 1.49801, 1.49793, 1.49607, 1.49628, 1.49679, 1.49654, 1.49617, 1.49696, 1.49695, 1.49717, \\ 1.49696, 1.49772, 1.49442, 1.49823, 1.49781, 1.49685, 1.49709, 1.49707, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P}_{97}: \{1.49786, 1.49675, 1.49803, 1.4981, 1.49817, 0., 1.49794, 1.49805, 1.49779, 1.49769, \\ 1.49827, 1.49802, 1.49828, 1.49795, 1.49837, 1.49798, 1.4995, 1.49854, 1.49845, 1.49796, \\ 1.49889, 1.49864, 1.49859, 1.49806, 1.49867, 1.49806, 1.49853, 1.49867, 1.49847, 1.49807, \\ 1.49877, 1.49796, 1.49805, 1.49815, 1.4969, 1.49765, 1.49699, 1.49777, 1.4983, 1.49889, \\ 1.49811, 1.49803, 1.49627, 1.49647, 1.49695, 1.49672, 1.49636, 1.49712, 1.49711, 1.49732, \\ 1.49711, 1.49784, 1.4947, 1.49832, 1.49792, 1.49701, 1.49724, 1.49722, 0. \} \end{array}$ 

 $P_{98}$ : {1.49797, 1.49692, 1.49813, 1.4982, 1.49827, 0., 1.49805, 1.49815, 1.4979, 1.49781, 1.49836, 1.49812, 1.49837, 1.49806, 1.49846, 1.49808, 1.49953, 1.49861, 1.49853, 1.49807, 1.49895, 1.49871, 1.49867, 1.49816, 1.49874, 1.49816, 1.4986, 1.49874, 1.49854, 1.49817, 1.49884, 1.49886, 1.49815, 1.49824, 1.49706, 1.49777, 1.49714, 1.49788, 1.49839, 1.49895,

1.4982, 1.49813, 1.49646, 1.49665, 1.49711, 1.49688, 1.49655, 1.49727, 1.49726, 1.49745, 1.49726, 1.49795, 1.49497, 1.4984, 1.49803, 1.49716, 1.49738, 1.49736, 0.}

**P**<sub>99</sub>: {1.49807, 1.49707, 1.49823, 1.49829, 1.49836, 0., 1.49815, 1.49824, 1.49801, 1.49792, 1.49845, 1.49821, 1.49845, 1.49816, 1.49854, 1.49818, 1.49955, 1.49868, 1.49861, 1.49817, 1.499, 1.49878, 1.49873, 1.49825, 1.49881, 1.49826, 1.49867, 1.4988, 1.49861, 1.49826, 1.4989, 1.49816, 1.49824, 1.49833, 1.49721, 1.49788, 1.49729, 1.49799, 1.49847, 1.499, 1.4983, 1.49823, 1.49664, 1.49682, 1.49725, 1.49704, 1.49672, 1.49741, 1.4974, 1.49758, 1.4974, 1.49806, 1.49523, 1.49848, 1.49813, 1.49731, 1.49752, 1.4975, 0.}

 $\begin{array}{l} \mathbf{P_{102}:} \{1.49836, 1.4975, 1.49848, 1.49854, 1.49859, 0., 1.49842, 1.4985, 1.4983, 1.49823, 1.49867, 1.49847, 1.49868, 1.49843, 1.49875, 1.49845, 1.49962, 1.49887, 1.49887, 1.49881, 1.49843, 1.49915, 1.49896, 1.49892, 1.4985, 1.49898, 1.49851, 1.49887, 1.49887, 1.49898, 1.49879, 1.49852, 1.49906, 1.49843, 1.49854, 1.49857, 1.49761, 1.49819, 1.49768, 1.49828, 1.4987, 1.49915, 1.49854, 1.49849, 1.49713, 1.49729, 1.49765, 1.49747, 1.4972, 1.49778, 1.49778, 1.49778, 1.49794, 1.49778, 1.49834, 1.49592, 1.4987, 1.4984, 1.4977, 1.49788, 1.49786, 0. \\ \end{array}$ 

 $\begin{aligned} \mathbf{P_{103}:} & \{1.49844, 1.49763, 1.49856, 1.49861, 1.49867, 0., 1.4985, 1.49857, 1.49839, 1.49832, 1.49874, 1.49855, 1.49875, 1.49851, 1.49881, 1.49853, 1.49964, 1.49893, 1.49887, 1.49851, 1.49919, 1.49901, 1.49897, 1.49858, 1.49903, 1.49859, 1.49892, 1.49903, 1.49885, 1.49859, 1.4991, 1.49851, 1.49857, 1.49865, 1.49774, 1.49828, 1.4978, 1.49837, 1.49876, 1.49919, 1.49862, 1.49856, 1.49728, 1.49743, 1.49777, 1.4976, 1.49734, 1.4979, 1.49789, 1.49804, 1.49789, 1.49842, 1.49613, 1.49877, 1.49848, 1.49782, 1.49799, 1.49797, 0. \end{aligned}$ 

 $\begin{array}{l} \mathbf{P_{105}:} \{1.49859, 1.49786, 1.49871, 1.49875, 1.4988, 0., 1.49865, 1.49872, 1.49855, 1.49848, \\ 1.49887, 1.4987, 1.49887, 1.49866, 1.49866, 1.49893, 1.49867, 1.49967, 1.49904, 1.49898, 1.49866, \\ 1.49927, 1.49911, 1.49908, 1.49872, 1.49913, 1.49873, 1.49903, 1.49913, 1.49895, 1.49873, \\ 1.49919, 1.49866, 1.49872, 1.49878, 1.49796, 1.49845, 1.49802, 1.49853, 1.49889, 1.49927, \\ \end{array}$ 

1.49876, 1.49871, 1.49755, 1.49768, 1.498, 1.49784, 1.49761, 1.49811, 1.4981, 1.49824, 1.4981, 1.49858, 1.49651, 1.49889, 1.49863, 1.49803, 1.49819, 1.49817, 0.}

 $\begin{array}{l} \mathbf{P_{107}:} \{1.49873, 1.49808, 1.49883, 1.49888, 1.49892, 0., 1.49878, 1.49884, 1.49869, 1.49864, 1.49898, 1.49883, 1.49898, 1.49879, 1.49904, 1.4988, 1.4997, 1.49913, 1.49908, 1.49879, 1.49935, 1.49921, 1.49917, 1.49885, 1.49921, 1.49885, 1.49913, 1.49921, 1.49904, 1.49886, 1.49927, 1.49879, 1.49884, 1.4989, 1.49816, 1.49861, 1.49822, 1.49868, 1.499, 1.49934, 1.49888, 1.49884, 1.49779, 1.49791, 1.4982, 1.49806, 1.49785, 1.49829, 1.49829, 1.49841, 1.49829, 1.49872, 1.49686, 1.499, 1.49877, 1.49823, 1.49837, 1.49836, 0. \\ \end{array}$ 

 $\begin{aligned} \mathbf{P_{108}:} & \{1.4988, 1.49818, 1.49889, 1.49893, 1.49897, 0., 1.49884, 1.4989, 1.49876, 1.4987, 1.49903, 1.49889, 1.49904, 1.49885, 1.49909, 1.49887, 1.49972, 1.49918, 1.49913, 1.49886, 1.49938, 1.49924, 1.49921, 1.49891, 1.49925, 1.49891, 1.49917, 1.49925, 1.49909, 1.49892, 1.49931, 1.49885, 1.4989, 1.49896, 1.49826, 1.49868, 1.49831, 1.49875, 1.49905, 1.49938, 1.49894, 1.49894, 1.4989, 1.49701, 1.49802, 1.49829, 1.49816, 1.49796, 1.49838, 1.49838, 1.49838, 1.49849, 1.49838, 1.49879, 1.49702, 1.49905, 1.49883, 1.49832, 1.49845, 1.49844, 0. \end{aligned}$ 

 $\begin{aligned} \mathbf{P_{110}:} & \{1.49892, 1.49836, 1.499, 1.49904, 1.49908, 0., 1.49896, 1.49901, 1.49888, 1.49883, 1.49913, 1.49913, 1.49913, 1.49897, 1.49918, 1.49898, 1.49975, 1.49926, 1.49922, 1.49897, 1.49944, 1.49931, 1.49929, 1.49902, 1.49933, 1.49902, 1.49926, 1.49926, 1.49933, 1.49916, 1.49903, 1.49938, 1.49897, 1.49901, 1.49906, 1.49843, 1.49881, 1.49848, 1.49887, 1.49914, 1.49944, 1.49904, 1.49901, 1.49811, 1.49822, 1.49846, 1.49834, 1.49816, 1.49854, 1.49854, 1.49864, 1.49854, 1.49854, 1.49854, 1.49891, 1.49732, 1.49915, 1.49895, 1.49849, 1.49861, 1.4986, 0. \end{aligned}$ 

 $\begin{array}{l} \mathbf{P}_{112}: \{1.49903, 1.49852, 1.4991, 1.49914, 1.49917, 0., 1.49906, 1.49911, 1.49899, 1.49895, \\ 1.49921, 1.4991, 1.49922, 1.49907, 1.49926, 1.49908, 1.49977, 1.49933, 1.49929, 1.49907, \\ 1.4995, 1.49938, 1.49936, 1.49911, 1.4994, 1.49912, 1.49933, 1.4994, 1.49924, 1.49912, \\ 1.49944, 1.49907, 1.49911, 1.49916, 1.49859, 1.49893, 1.49863, 1.49898, 1.49923, 1.49949, \\ \end{array}$ 

1.49914, 1.4991, 1.4983, 1.49839, 1.49861, 1.4985, 1.49834, 1.49869, 1.49868, 1.49878, 1.49869, 1.49902, 1.49758, 1.49923, 1.49905, 1.49864, 1.49874, 1.49874, 0.}

 $\begin{aligned} \mathbf{P_{115}:} & \{1.49917, 1.49874, 1.49923, 1.49926, 1.49929, 0., 1.4992, 1.49924, 1.49914, 1.4991, 1.49933, 1.49923, 1.49933, 1.4992, 1.49937, 1.49921, 1.49981, 1.49943, 1.49944, 1.49921, 1.49957, 1.49947, 1.49945, 1.49924, 1.49948, 1.49925, 1.49943, 1.49948, 1.49933, 1.49925, 1.49952, 1.49921, 1.49924, 1.49928, 1.49879, 1.49909, 1.49883, 1.49913, 1.49934, 1.49957, 1.49926, 1.49923, 1.49855, 1.49863, 1.49881, 1.49872, 1.49859, 1.49888, 1.49888, 1.49888, 1.49896, 1.49888, 1.49916, 1.49794, 1.49935, 1.49919, 1.49884, 1.49893, 1.49892, 0. \end{aligned}$ 

 $\begin{aligned} \mathbf{P_{118}:} & \{1.49929, 1.49892, 1.49934, 1.49937, 1.49939, 0., 1.49932, 1.49935, 1.49927, 1.49923, 1.49943, 1.49943, 1.49943, 1.49932, 1.49946, 1.49933, 1.49983, 1.49951, 1.49949, 1.49932, 1.49963, 1.49955, 1.49955, 1.49935, 1.49936, 1.49956, 1.49951, 1.49956, 1.49941, 1.49936, 1.49959, 1.49932, 1.49935, 1.49938, 1.49897, 1.49922, 1.499, 1.49926, 1.49944, 1.49963, 1.49937, 1.49935, 1.49876, 1.49883, 1.49899, 1.49891, 1.49879, 1.49904, 1.49904, 1.49904, 1.49911, 1.49904, 1.49928, 1.49824, 1.49944, 1.49931, 1.49901, 1.49908, 1.49908, 0. \end{aligned}$ 

 $\begin{array}{l} \mathbf{P_{119}:} \{1.49933, 1.49898, 1.49938, 1.4994, 1.49942, 0., 1.49935, 1.49938, 1.4993, 1.49927, 1.49946, 1.49937, 1.49946, 1.49935, 1.49949, 1.49936, 1.49936, 1.49954, 1.49951, 1.49936, 1.49965, 1.49957, 1.49956, 1.49939, 1.49958, 1.49939, 1.49954, 1.49958, 1.49943, 1.49939, 1.49961, 1.49936, 1.49936, 1.49938, 1.49942, 1.49902, 1.49926, 1.49905, 1.4993, 1.49947, 1.49965, 1.49965, 1.49936, 1.49938, 1.49942, 1.49902, 1.49926, 1.49905, 1.4993, 1.49947, 1.49965, 1.49965, 1.49938, 1.49945, 1.49945, 1.49926, 1.49905, 1.49938, 1.49947, 1.49965, 1.49965, 1.49938, 1.49946,$ 

1.4994, 1.49938, 1.49882, 1.49889, 1.49904, 1.49896, 1.49885, 1.49909, 1.49909, 1.49915, 1.49909, 1.49932, 1.49833, 1.49947, 1.49934, 1.49906, 1.49913, 1.49912, 0.}

 $\begin{aligned} \mathbf{P_{120}:} & \{1.49936, 1.49903, 1.49941, 1.49943, 1.49945, 0., 1.49938, 1.49942, 1.49934, 1.49931, 1.49948, 1.49941, 1.49949, 1.49939, 1.49951, 1.4994, 1.49985, 1.49956, 1.49956, 1.49954, 1.49939, 1.49967, 1.49959, 1.49958, 1.49942, 1.4996, 1.49942, 1.49956, 1.49956, 1.49946, 1.49942, 1.49963, 1.49939, 1.49942, 1.49945, 1.49907, 1.4993, 1.4991, 1.49933, 1.49949, 1.49967, 1.49943, 1.49941, 1.49888, 1.49894, 1.49909, 1.49902, 1.4981, 1.49914, 1.49913, 1.49913, 1.4992, 1.49914, 1.49935, 1.49841, 1.4995, 1.49938, 1.4991, 1.49917, 1.49917, 0. \end{aligned}$ 

 $\begin{aligned} \mathbf{P}_{122}: & \{1.49942, 1.49912, 1.49947, 1.49949, 1.49951, 0., 1.49945, 1.49947, 1.4994, 1.49938, 1.49953, 1.49947, 1.49954, 1.49945, 1.49956, 1.49946, 1.49987, 1.49961, 1.49958, 1.49945, 1.4997, 1.49963, 1.49962, 1.49948, 1.49964, 1.49948, 1.4996, 1.49964, 1.4995, 1.49948, 1.49967, 1.49945, 1.49945, 1.49947, 1.4995, 1.49916, 1.49937, 1.49919, 1.49944, 1.49954, 1.4997, 1.49949, 1.49947, 1.499, 1.49905, 1.49918, 1.49912, 1.49902, 1.49922, 1.49922, 1.49928, 1.49922, 1.49945, 1.49955, 1.49944, 1.49919, 1.49926, 1.49925, 0. \end{aligned}$ 

 $\begin{aligned} \mathbf{P}_{125}: & \{1.49951, 1.49925, 1.49955, 1.49956, 1.49958, 0., 1.49953, 1.49955, 1.49949, 1.49947, \\ 1.4996, 1.49954, 1.49961, 1.49953, 1.49963, 1.49953, 1.49989, 1.49966, 1.49964, 1.49953, \\ 1.49975, 1.49969, 1.49968, 1.49955, 1.49969, 1.49955, 1.49966, 1.49969, 1.49955, 1.49956, \\ 1.49972, 1.49953, 1.49955, 1.49957, 1.49929, 1.49946, 1.49931, 1.49949, 1.49961, 1.49974, \\ 1.49956, 1.49955, 1.49914, 1.49919, 1.4993, 1.49924, 1.49916, 1.49934, 1.49933, 1.49938, \\ 1.49934, 1.4995, 1.49878, 1.49961, 1.49952, 1.49931, 1.49937, 1.49936, 0. \\ \end{aligned}$ 

 $\begin{array}{l} \mathbf{P_{126}:} \{1.49953, 1.49929, 1.49957, 1.49959, 1.4996, 0., 1.49955, 1.49957, 1.49952, 1.4995, 1.49962, 1.49957, 1.49963, 1.49955, 1.49964, 1.49956, 1.49989, 1.49968, 1.49966, 1.49955, 1.49976, 1.49976, 1.4997, 1.49969, 1.49958, 1.49971, 1.49958, 1.49968, 1.49971, 1.49957, 1.49958, 1.49958, 1.49958, 1.49968, 1.49971, 1.49958,$ 

1.49973, 1.49955, 1.49957, 1.4996, 1.49932, 1.49949, 1.49934, 1.49951, 1.49963, 1.49976, 1.49958, 1.49957, 1.49919, 1.49923, 1.49933, 1.49928, 1.49921, 1.49937, 1.49937, 1.49937, 1.49941, 1.49937, 1.49953, 1.49884, 1.49963, 1.49955, 1.49935, 1.4994, 1.49939, 0.}

 $\begin{array}{l} \mathbf{P_{133}:} \{1.49968, 1.49951, 1.4997, 1.49971, 1.49972, 0., 1.49969, 1.4997, 1.49967, 1.49965, 1.49974, 1.49974, 1.49974, 1.49969, 1.49975, 1.49969, 1.49969, 1.49978, 1.49978, 1.49977, 1.49969, 1.49983, 1.49979, 1.49979, 1.49971, 1.4998, 1.49971, 1.49978, 1.49978, 1.4998, 1.49966, 1.49971, 1.49971, 1.49978, 1.49978, 1.4998, 1.49971, 1.49971, 1.49971, 1.49978, 1.49978, 1.4998, 1.49971, 1.49971, 1.49971, 1.49971, 1.49971, 1.49971, 1.49973, 1.49973, 1.49971, 1.49971, 1.49973, 1.49971, 1.49971, 1.49973, 1.49971, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49973, 1.49971, 1.49973, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49973, 1.49971, 1.49973, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49973, 1.49971, 1.49973, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49971, 1.49973, 1.49973, 1.49971, 1.49973, 1.49973, 1.49971, 1.49973, 1.49933, 1.49973, 1.49933, 1.49973, 1.49933, 1.49973, 1.49933, 1.49973, 1.49933, 1.49973, 1.49933, 1.49973, 1.49933, 1.$ 

1.49981, 1.49969, 1.4997, 1.49972, 1.49953, 1.49964, 1.49954, 1.49966, 1.49974, 1.49983, 1.49971, 1.4997, 1.49944, 1.49947, 1.49954, 1.4995, 1.49945, 1.49956, 1.49956, 1.49956, 1.49956, 1.49956, 1.49957, 1.49967, 1.49975, 1.49969, 1.49955, 1.49958, 1.49958, 0.}

 $\begin{aligned} \mathbf{P_{136}:} & \{1.49972, 1.49958, 1.49974, 1.49975, 1.49976, 0., 1.49973, 1.49975, 1.49971, 1.4997, 1.49978, 1.49974, 1.49978, 1.49974, 1.49979, 1.49974, 1.49974, 1.49981, 1.49981, 1.4998, 1.49974, 1.49986, 1.49982, 1.49982, 1.49975, 1.49983, 1.49975, 1.49981, 1.49983, 1.49969, 1.49975, 1.49984, 1.49974, 1.49975, 1.49976, 1.4996, 1.4997, 1.49961, 1.49971, 1.49978, 1.49985, 1.49975, 1.49975, 1.49952, 1.49954, 1.49961, 1.49958, 1.49953, 1.49963, 1.49963, 1.49965, 1.49978, 1.49978, 1.49978, 1.49978, 1.49961, 1.49964, 1.49964, 0. \end{aligned}$ 

 $\begin{array}{l} \mathbf{P_{137}:} \{1.49974, 1.4996, 1.49976, 1.49977, 1.49978, 0., 1.49975, 1.49976, 1.49973, 1.49972, 1.49979, 1.49976, 1.49979, 1.49975, 1.4998, 1.49975, 1.49994, 1.49982, 1.49981, 1.49975, 1.49986, 1.49983, 1.49983, 1.49976, 1.49984, 1.49976, 1.49982, 1.49984, 1.4997, 1.49976, 1.49985, 1.49975, 1.49976, 1.49977, 1.49962, 1.49971, 1.49963, 1.49973, 1.49979, 1.49986, 1.49977, 1.49976, 1.49954, 1.49957, 1.49963, 1.49965, 1.49965, 1.49965, 1.49974, 1.49979, 1.49974, 1.49963, 1.49966, 0. \}$ 

 $\begin{aligned} \mathbf{P_{138}:} & \{1.49975, 1.49962, 1.49977, 1.49978, 1.49979, 0., 1.49976, 1.49977, 1.49974, 1.49973, 1.4998, 1.49977, 1.4998, 1.49976, 1.49981, 1.49976, 1.49994, 1.49983, 1.49982, 1.49976, 1.49987, 1.49984, 1.49984, 1.49977, 1.49985, 1.49977, 1.49983, 1.49985, 1.49971, 1.49978, 1.49986, 1.49976, 1.49976, 1.49978, 1.49978, 1.49964, 1.49973, 1.49965, 1.49974, 1.4998, 1.49987, 1.49978, 1.49978, 1.49977, 1.49957, 1.49959, 1.49964, 1.49962, 1.49958, 1.49966, 1.49966, 1.49966, 1.49966, 1.49966, 1.49967, 1.49988, 1.49976, 1.49976, 1.49968, 1.49968, 1.49968, 0. \end{aligned}$ 

 $\begin{array}{l} \mathbf{P_{140}:} \{1.49978, 1.49966, 1.49979, 1.4998, 1.49981, 0., 1.49978, 1.49979, 1.49977, 1.49976, \\ 1.49982, 1.49979, 1.49982, 1.49979, 1.49983, 1.49979, 1.49995, 1.49985, 1.49984, 1.49979, \\ 1.49988, 1.49986, 1.49986, 1.49985, 1.4998, 1.49986, 1.4998, 1.49985, 1.49986, 1.49973, 1.4998, \\ \end{array}$ 

1.49987, 1.49979, 1.4998, 1.49981, 1.49967, 1.49975, 1.49968, 1.49977, 1.49982, 1.49988, 1.4998, 1.49979, 1.49961, 1.49963, 1.49968, 1.49966, 1.49962, 1.4997, 1.4997, 1.49972, 1.49977, 1.49974, 1.49982, 1.49978, 1.49969, 1.49971, 1.49971, 0.}

 $\begin{aligned} \mathbf{P_{142}:} & \{1.4998, 1.49969, 1.49981, 1.49982, 1.49983, 0., 1.49981, 1.49982, 1.49979, 1.49978, 1.49984, 1.49984, 1.49984, 1.49981, 1.49985, 1.49981, 1.49995, 1.49986, 1.49986, 1.49985, 1.49981, 1.49999, 1.49987, 1.49987, 1.49982, 1.49987, 1.49982, 1.49986, 1.49986, 1.49987, 1.49974, 1.49982, 1.49988, 1.49981, 1.49982, 1.49983, 1.49971, 1.49978, 1.49972, 1.49979, 1.49974, 1.49989, 1.49982, 1.49981, 1.49965, 1.49967, 1.49971, 1.49969, 1.49966, 1.49973, 1.49973, 1.49975, 1.49973, 1.49973, 1.4995, 1.49984, 1.4998, 1.49972, 1.49974, 0. \end{aligned}$ 

 $\begin{aligned} \mathbf{P_{144}:} & \{1.49982, 1.49972, 1.49983, 1.49984, 1.49984, 0., 1.49982, 1.49983, 1.49981, 1.4998, 1.49985, 1.49983, 1.49986, 1.49986, 1.49986, 1.49983, 1.49996, 1.49988, 1.49987, 1.49983, 1.49981, 1.49988, 1.49983, 1.49983, 1.49983, 1.49983, 1.49983, 1.49984, 1.49983, 1.49983, 1.49984, 1.49984, 1.49983, 1.49983, 1.49984, 1.49974, 1.49984, 1.49974, 1.49984, 1.49984, 1.49984, 1.49984, 1.49975, 1.49975, 1.49975, 1.49975, 1.49975, 1.49976, 0. \} \end{aligned}$ 

 $\begin{array}{l} \mathbf{P_{147}:} \{1.49984, 1.49976, 1.49985, 1.49986, 1.49987, 0., 1.49985, 1.49986, 1.49984, 1.49983, 1.49987, 1.49986, 1.49986, 1.49985, 1.49988, 1.49985, 1.49985, 1.49996, 1.49989, 1.49989, 1.49985, 1.49992, 1.49999, 1.49999, 1.49986, 1.49999, 1.49986, 1.49986, 1.49989, 1.49989, 1.49986, 1.49986, 1.49986, 1.49989, 1.49986, 1.49986, 1.49986, 1.49986, 1.49989, 1.49986, 1.498$ 

1.49991, 1.49985, 1.49986, 1.49987, 1.49977, 1.49983, 1.49978, 1.49984, 1.49988, 1.49992, 1.49986, 1.49986, 1.49973, 1.49974, 1.49978, 1.49976, 1.49974, 1.49979, 1.49979, 1.49979, 1.49981, 1.49979, 1.49984, 1.49981, 1.49988, 1.49985, 1.49978, 1.4998, 1.4998, 0.}

 $\begin{aligned} \mathbf{P_{149}:} & \{1.49986, 1.49979, 1.49987, 1.49988, 1.49988, 0., 1.49987, 1.49987, 1.49986, 1.49985, 1.49989, 1.49987, 1.49989, 1.49987, 1.49987, 1.49987, 1.49997, 1.49999, 1.49999, 1.49987, 1.49993, 1.49991, 1.49991, 1.49987, 1.49991, 1.49987, 1.49987, 1.49991, 1.49987, 1.49987, 1.49987, 1.49987, 1.49987, 1.49987, 1.49987, 1.49988, 1.49988, 1.49985, 1.49988, 1.49985, 1.49988, 1.49989, 1.49987, 1.49987, 1.49987, 1.49976, 1.49977, 1.4998, 1.49979, 1.49976, 1.49981, 1.49981, 1.49981, 1.49982, 1.49986, 1.49986, 1.49986, 1.49986, 1.49986, 1.49982, 1.49982, 0. \end{aligned}$ 

 $\begin{aligned} \mathbf{P_{151}:} & \{1.49987, 1.49981, 1.49988, 1.49989, 1.49989, 0., 1.49988, 1.49988, 1.49987, 1.49986, 1.4999, 1.49988, 1.4999, 1.49988, 1.4999, 1.49988, 1.49997, 1.49991, 1.49991, 1.49988, 1.49993, 1.49992, 1.49992, 1.49989, 1.49992, 1.49989, 1.49992, 1.49991, 1.49989, 1.49993, 1.49988, 1.49988, 1.49989, 1.49982, 1.49986, 1.49982, 1.49987, 1.49999, 1.49993, 1.49988, 1.49978, 1.49979, 1.49982, 1.49981, 1.49979, 1.49983, 1.49983, 1.49987, 1.49969, 1.49999, 1.49988, 1.49984, 1.49983, 1.49987, 1.49969, 1.49999, 1.49988, 1.49982, 1.49984, 1.49984, 0. \end{aligned}$ 

 $\begin{aligned} \mathbf{P_{152}:} & \{1.49988, 1.49982, 1.49989, 1.49989, 1.4999, 0., 1.49988, 1.49989, 1.49988, 1.49988, 1.49987, 1.49999, 1.49999, 1.49991, 1.49989, 1.49991, 1.49989, 1.49997, 1.49992, 1.49991, 1.49989, 1.49993, 1.49989, 1.49992, 1.49992, 1.49992, 1.49989, 1.49989, 1.49989, 1.49989, 1.49989, 1.49989, 1.49989, 1.49989, 1.49983, 1.49987, 1.49983, 1.49983, 1.49988, 1.49984, 1.49984, 1.49984, 1.49984, 1.49984, 1.49984, 1.49984, 1.49984, 1.49984, 1.49985, 1.49984,$ 

 $\begin{array}{l} \mathbf{P_{153}:} \{1.49989, 1.49983, 1.49989, 1.4999, 1.4999, 0., 1.49989, 1.4999, 1.49988, 1.49988, 1.49988, 1.49991, 1.49989, 1.49991, 1.49989, 1.49991, 1.49989, 1.49997, 1.49992, 1.49992, 1.49989, 1.49994, 1.49993, 1.49993, 1.49993, 1.49993, 1.49993, 1.49993, 1.49993, 1.49993, 1.49993, 1.49993, 1.49993, 1.49993, 1.49993, 1.49993, 1.49994, 1.49988, 1.49988, 1.49988, 1.49988, 1.49994, 1.49994, 1.49994, 1.49994, 1.49984, 1.49983, 1.49984, 1.49985, 1.49985, 1.49985, 1.49985, 1.49986, 1.49985, 1.49991, 1.49991, 1.49989, 1.49984, 1.49984, 1.49985, 1.49985, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{153}:} \{1.49989, \ 1.49984, \ 1.4999, \ 1.4999, \ 1.49991, \ 0., \ 1.4999, \ 1.4999, \ 1.49989, \ 1.49988, \\ 1.49991, \ 1.4999, \ 1.49992, \ 1.49992, \ 1.49992, \ 1.49992, \ 1.49997, \ 1.49993, \ 1.49993, \ 1.49992, \ 1.49993, \\ 1.49994, \ 1.49993, \ 1.49993, \ 1.49993, \ 1.49993, \ 1.49993, \ 1.49993, \ 1.49993, \ 1.49993, \ 1.49993, \ 1.49994, \ 1.49993, \ 1.49993, \ 1.49994, \ 1.4994, \ 1.494, \ 1.444, \ 1.4$ 

1.49994, 1.4999, 1.4999, 1.49991, 1.49984, 1.49988, 1.49985, 1.49989, 1.49991, 1.49994, 1.4999, 1.4999, 1.49981, 1.49982, 1.49985, 1.49983, 1.49982, 1.49985, 1.49985, 1.49985, 1.49985, 1.49985, 1.49985, 1.49986, 0.}

 $\begin{array}{l} \mathbf{P_{155}:} \{1.4999, 1.49985, 1.49991, 1.49991, 1.49992, 0., 1.49991, 1.49991, 1.4999, 1.4999, 1.49992, 1.49991, 1.49993, 1.49991, 1.49993, 1.49993, 1.49993, 1.49993, 1.49993, 1.49991, 1.49995, 1.49994, 1.49994, 1.49991, 1.49994, 1.49991, 1.49994, 1.49991, 1.49994, 1.49991, 1.49994, 1.49991, 1.49991, 1.49992, 1.49986, 1.49989, 1.49986, 1.49994, 1.49991, 1.49992, 1.49995, 1.49986, 1.49986, 1.49986, 1.49986, 1.49987, 1.49987, 1.49987, 1.49987, 1.49987, 1.49987, 1.49987, 1.49987, 1.49987, 1.49987, 1.49991, 1.49992, 1.49991, 1.49986, 1.49986, 1.49987, 1.49987, 1.49987, 1.49987, 1.49987, 1.49988, 1.49986, 1.49986, 1.49987, 1.49987, 0. \\ \end{array}$ 

 $\begin{aligned} \mathbf{P_{156}:} & \{1.49991, 1.49986, 1.49991, 1.49992, 1.49992, 0., 1.49991, 1.49992, 1.49991, 1.49991, 1.49993, 1.49993, 1.49993, 1.49993, 1.49993, 1.49993, 1.49991, 1.49993, 1.49994, 1.49993, 1.49994, 1.49994, 1.49994, 1.49994, 1.49994, 1.49992, 1.49994, 1.49994, 1.49992, 1.49995, 1.49994, 1.49994, 1.49992, 1.49992, 1.49994, 1.49994, 1.49993, 1.49992, 1.49995, 1.49991, 1.49992, 1.49992, 1.49987, 1.49998, 1.49987, 1.49993, 1.49993, 1.49995, 1.49994, 1.49994, 1.49993, 1.49995, 1.49992, 1.49992, 1.49992, 1.49987, 1.49987, 1.49987, 1.49988, 0.\}$ 

 $\begin{aligned} \mathbf{P_{157}:} & \{1.49991, 1.49987, 1.49992, 1.49992, 1.49992, 0., 1.49992, 1.49992, 1.49991, 1.49991, 1.49993, 1.49993, 1.49993, 1.49992, 1.49993, 1.49992, 1.49993, 1.49994, 1.49994, 1.49992, 1.49995, 1.49994, 1.49994, 1.49992, 1.49995, 1.49994, 1.49994, 1.49992, 1.49995, 1.49994, 1.49994, 1.49992, 1.49995, 1.49995, 1.49994, 1.49992, 1.49992, 1.49995, 1.49992, 1.49992, 1.49992, 1.49992, 1.49993, 1.49998, 1.49998, 1.49993, 1.49998, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49998, 0. \} \end{aligned}$ 

 $\begin{aligned} \mathbf{P_{158}:} & \{1.49992, 1.49987, 1.49992, 1.49993, 1.49993, 0., 1.49992, 1.49992, 1.49991, 1.49991, 1.49993, 1.49992, 1.49994, 1.49992, 1.49994, 1.49992, 1.49994, 1.49994, 1.49994, 1.49992, 1.49996, 1.49995, 1.49995, 1.49992, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49992, 1.49993, 1.49995, 1.49991, 1.49988, 1.49991, 1.49988, 1.49991, 1.49993, 1.49995, 1.49992, 1.49992, 1.49986, 1.49986, 1.49988, 1.49987, 1.49986, 1.49986, 1.49989, 1.49999, 1.49989, 1.49992, 1.49992, 1.49993, 1.49992, 1.49992, 1.49993, 1.49988, 1.49988, 1.49989, 1.49989, 1.49989, 1.49989, 1.49992, 1.499992, 1.49993, 1.49992, 1.49988, 1.49989, 1.49989, 0. \} \end{aligned}$ 

 $\begin{array}{l} \mathbf{P_{160}:} \{1.49993, 1.49989, 1.49993, 1.49993, 1.49994, 0., 1.49993, 1.49993, 1.49992, 1.49992, 1.49994, 1.49994, 1.49993, 1.49994, 1.49993, 1.49993, 1.49993, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49993, 1.49995, 1.49993, 1.49995, 1.49995, 1.49993, 1.49993, 1.49995, 1.49995, 1.49995, 1.49993, 1.49995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4905$ 

1.49996, 1.49993, 1.49993, 1.49994, 1.49989, 1.49992, 1.49989, 1.49992, 1.49994, 1.49996, 1.49993, 1.49993, 1.49987, 1.49988, 1.49989, 1.49989, 1.49987, 1.49999, 1.49991, 1.49991, 1.49992, 1.49991, 1.49994, 1.49993, 1.49993, 1.4999, 1.49999, 1.49999, 0.}

 $\begin{aligned} \mathbf{P_{161}:} & \{1.49993, 1.49989, 1.49993, 1.49994, 1.49994, 0., 1.49993, 1.49993, 1.49993, 1.49992, 1.49994, 1.49993, 1.49995, 1.49993, 1.49995, 1.49995, 1.49995, 1.49995, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49994, 1.49996, 1.49996, 1.49993, 1.49994, 1.49994, 1.49999, 1.49992, 1.49999, 1.49993, 1.49994, 1.49996, 1.49994, 1.49994, 1.49999, 1.49988, 1.49998, 1.49999$ 

 $\begin{aligned} \mathbf{P}_{162} : & \{1.49993, 1.4999, 1.49994, 1.49994, 1.49994, 0., 1.49994, 1.49994, 1.49993, 1.49993, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49996, 1.49997, 1.49991, 1.49993, 1.49996, 1.49996, 1.49991, 1.49991, 1.49991, 1.49991, 1.49991, 1.49991, 1.49991, 1.49991, 1.49991, 0. \\ \end{aligned}$ 

 $\begin{aligned} \mathbf{P_{163}:} & \{1.49994, 1.4999, 1.49994, 1.49994, 1.49994, 0., 1.49994, 1.49994, 1.49993, 1.49993, 1.49995, 1.49995, 1.49995, 1.49994, 1.49995, 1.49994, 1.49996, 1.49996, 1.49995, 1.49994, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49994, 1.49996, 1.49996, 1.49996, 1.49997, 1.49996, 1.49994, 1.49994, 1.49994, 1.49991, 1.49991, 1.49991, 1.49993, 1.49995, 1.49996, 1.49991, 1.49991, 1.49991, 1.49991, 1.49991, 1.49991, 1.49992, 1.49991, 1.49992, 0. \}$ 

 $\begin{aligned} \mathbf{P_{166}:} & \{1.49995, 1.49992, 1.49995, 1.49995, 1.49995, 0., 1.49995, 1.49995, 1.49994, 1.49994, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49997, 1.49997, 1.49996, 1.49995, 1.49997, 1.49997, 1.49996, 1.49995, 1.49997, 1.49997, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49992, 1.49994, 1.49992, 1.49994, 1.49996, 1.49997, 1.49995, 1.49995, 1.49991, 1.49992, 1.49992, 1.49991, 1.49993, 1.49993, 1.49993, 1.49996, 1.49996, 1.49995, 1.49996, 1.49996, 1.49995, 1.49992, 1.49991, 1.49993, 1.49993, 1.49993, 1.49993, 1.49996, 1.49996, 1.49995, 1.49995, 1.49995, 1.49995, 1.49992, 1.49993, 1.49993, 1.49993, 1.49993, 1.49993, 1.49993, 1.49996, 1.49996, 1.49995, 1.49995, 1.49993, 1.49993, 0. \}$ 

**P**<sub>167</sub>: {1.49995, 1.49992, 1.49995, 1.49995, 1.49995, 0., 1.49995, 1.49995, 1.49995, 1.49994, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49995, 1.49996, 1.49995, 1.49995, 1.49996, 1.49995, 1.49995, 1.49996, 1.49995, 1.49996, 1.49995, 1.49996, 1.49995, 1.49996, 1.49995, 1.49996, 1.49995, 1.49996, 1.49995, 1.49996, 1.49995, 1.49996, 1.49995, 1.49996, 1.49995, 1.49996, 1.49995, 1.49996, 1.49995, 1.49996, 1.49995, 1.49996, 1.49995, 1.49996, 1.49996, 1.49995, 1.49996, 1.49995, 1.49996, 1.49995, 1.49995, 1.49996, 1.49995, 1.49996, 1.49995, 1.49996, 1.49995, 1.49996, 1.49995, 1.49996, 1.49995, 1.49996, 1.49995, 1.49996, 1.49995, 1.49996, 1.49995, 1.49996, 1.49995, 1.49995, 1.49996, 1.49995, 1.49995, 1.49996, 1.49995, 1.49995, 1.49996, 1.49995, 1.49995, 1.49995, 1.49996, 1.49995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4905, 1.4995, 1.4905, 1.4905, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4905, 1.4005, 1.4005, 1.4005, 1.4005, 1.40

1.49997, 1.49997, 1.49997, 1.49995, 1.49997, 1.49995, 1.49996, 1.49997, 1.49984, 1.49995, 1.49997, 1.49995, 1.49995, 1.49996, 1.49992, 1.49994, 1.49993, 1.49995, 1.49996, 1.49991, 1.49993, 1.49992, 1.49991, 1.49993, 1.4993, 1.4923, 1.4923, 1.4923, 1.4923, 1.4923, 1.4923, 1.4923, 1.4923, 1

 $\begin{aligned} \mathbf{P_{168}:} & \{1.49995, 1.49993, 1.49995, 1.49996, 1.49996, 0., 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49996, 1.49996, 1.49996, 1.49996, 1.49995, 1.49997, 1.49997, 1.49996, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49996, 1.49997, 1.49997, 1.49997, 1.49996, 1.49997, 1.49995, 1.49995, 1.49996, 1.49996, 1.49993, 1.49995, 1.49995, 1.49996, 1.49996, 1.49993, 1.49995, 1.49995, 1.49995, 1.49991, 1.49992, 1.49993, 1.49992, 1.49993, 1.49993, 1.49993, 1.49994, 0. \} \end{aligned}$ 

 $\begin{aligned} \mathbf{P}_{169}: & \{1.49995, 1.49993, 1.49995, 1.49996, 1.49996, 0., 1.49995, 1.49996, 1.49995, 1.49995, 1.49995, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49997, 1.49997, 1.49996, 1.49997, 1.49996, 1.49997, 1.49996, 1.49997, 1.49996, 1.49997, 1.49996, 1.49997, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49993, 1.49995, 1.49993, 1.49995, 1.49996, 1.49996, 1.49996, 1.49992, 1.49993, 1.49993, 1.49993, 1.49994, 1.49994, 1.49994, 1.49994, 1.49994, 1.49996, 1.49996, 1.49996, 1.49996, 1.49995, 1.49995, 1.49993, 1.49994, 1.49994, 0. \end{aligned}$ 

 $\begin{aligned} \mathbf{P_{170}:} & \{1.49996, 1.49994, 1.49996, 1.49996, 1.49996, 0., 1.49996, 1.49996, 1.49996, 1.49996, 1.49995, 1.49997, 1.49997, 1.49996, 1.49997, 1.49996, 1.49997, 1.49997, 1.49997, 1.49996, 1.49997, 1.49997, 1.49997, 1.49996, 1.49997, 1.49996, 1.49997, 1.49996, 1.49997, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49993, 1.49994, 1.49994, 1.49994, 1.49994, 1.49994, 1.49994, 1.49994, 1.49994, 1.49994, 1.49995, 0. \} \end{aligned}$ 

 $\begin{aligned} \mathbf{P_{171}:} & \{1.49996, 1.49994, 1.49996, 1.49996, 1.49997, 0., 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49997, 1.49996, 1.49997, 1.49996, 1.49997, 1.49996, 1.49997, 1.49997, 1.49997, 1.49996, 1.49998, 1.49998, 1.49997, 1.49997, 1.49996, 1.49996, 1.49998, 1.49996, 1.49996, 1.49996, 1.49997, 1.49996, 1.49994, 1.49996, 1.49994, 1.49996, 1.49996, 1.49997, 1.49998, 1.49994, 1.49994, 1.49994, 1.49995, 1.49995, 1.49995, 1.49995, 1.49997, 1.49997, 1.49997, 1.49996, 1.49996, 1.49997, 1.49996, 1.49996, 1.49997, 1.49996, 1.49994, 1.49994, 1.49995, 1.4995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995,$ 

 $\begin{aligned} \mathbf{P}_{172}: \{1.49996, 1.49994, 1.49996, 1.49997, 1.49997, 0., 1.49996, 1.49997, 1.49996, 1.49996, 1.49996, 1.49997, 1.49996, 1.49997, 1.49996, 1.49997, 1.49996, 1.49997, 1.49997, 1.49996, 1.49998, 1.49998, 1.49998, 1.49997, 1.49998, 1.49996, 1.49998, 1.49998, 1.49997, 1.49998, 1.49996, 1.49997, 1.49998, 1.49996, 1.49997, 1.49997, 1.49994, 1.49996, 1.49995, 1.49996, 1.49997, 1.49998, 1.49995, 1.49996, 1.49996, 1.49993, 1.49994, 1.49995, 1.49994, 1.49994, 1.49995, 0.\}$ 

**P**<sub>173</sub>: {1.49996, 1.49995, 1.49996, 1.49997, 1.49997, 0., 1.49997, 1.49997, 1.49996, 1.49996, 1.49996, 1.49997, 1.4997, 1.4997, 1.4997, 1.4997, 1.4997, 1.49997, 1.49997, 1.4997, 1.49997, 1.49997, 1.49997, 1.4997, 1.49997, 1.4997, 1.4997, 1.49997, 1.4997, 1.4997, 1.4997, 1.4997, 1.4997, 1.4997, 1.4997, 1.4997, 1.4997, 1.49997, 1.49997, 1.49997, 1.4997,

1.49998, 1.49998, 1.49998, 1.49997, 1.49998, 1.49997, 1.49998, 1.49998, 1.49998, 1.49985, 1.49997, 1.49997, 1.49997, 1.49995, 1.49996, 1.49996, 1.49996, 1.49997, 1.49997, 1.49994, 1.49995, 1.49994, 1.49994, 1.49995, 1.4995, 1.495, 1.495, 1.495, 1.495, 1.495, 1.495, 1.495, 1.495, 1.495, 1.495, 1.495, 1.495, 1.495

 $\begin{aligned} \mathbf{P_{174}:} & \{1.49997, 1.49995, 1.49997, 1.49997, 1.49997, 0., 1.49997, 1.49997, 1.49996, 1.49996, 1.49996, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49998, 1.49998, 1.49998, 1.49997, 1.49998, 1.49997, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49997, 1.49998, 1.49998, 1.49997, 1.49998, 1.49997, 1.49997, 1.49998, 1.49997, 1.49997, 1.49997, 1.49995, 1.49996, 1.49995, 1.49996, 1.49997, 1.49997, 1.49994, 1.49994, 1.49995, 1.49995, 1.49994, 1.49995, 1.49996, 1.49995, 1.49996, 0. \} \end{aligned}$ 

 $\begin{aligned} \mathbf{P}_{175}: \{1.49997, 1.49995, 1.49997, 1.49997, 1.49997, 0., 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49997, 1.49998, 1.49997, 1.49998, 1.49997, 1.49997, 1.49997, 1.49995, 1.49996, 1.49995, 1.49997, 1.49997, 1.49997, 1.49997, 1.49995, 1.49995, 1.49995, 1.49995, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49995, 1.49995, 1.49995, 1.49996,$ 

 $\begin{aligned} \mathbf{P_{176}:} & \{1.49997, 1.49995, 1.49997, 1.49997, 1.49997, 0., 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49997, 1.49998, 1.49998, 1.49997, 1.49998, 1.49997, 1.49998, 1.49997, 1.49998, 1.49997, 1.49998, 1.49997, 1.49998, 1.49997, 1.49996, 1.49997, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 0. \}$ 

 $\begin{aligned} \mathbf{P}_{177}: \{1.49997, 1.49996, 1.49997, 1.49997, 1.49997, 0., 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49998, 1.49997, 1.49998, 1.49998, 1.49997, 1.49998, 1.49997, 1.49998, 1.49997, 1.49998, 1.49997, 1.49998, 1.49997, 1.49998, 1.49997, 1.49996, 1.49996, 1.49997, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49996, 1.49997, 1.49997, 1.49998, 1.49998, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 0.\} \end{aligned}$ 

 $\begin{aligned} \mathbf{P}_{178} : & \{1.49997, 1.49996, 1.49997, 1.49998, 1.49998, 0., 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49998, 1.49997, 1.49998, 1.49997, 1.49998, 1.49996, 0. \}$ 

 $\begin{aligned} \mathbf{P_{179}:} & \{1.49997, 1.49996, 1.49997, 1.49998, 1.49998, 0., 1.49997, 1.49998, 1.49997, 1.49997, 1.49997, 1.49998, 1.49996, 1.49996, 1.49996, 1.49997, 1.49998, 1.49998, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49997, 1.49996, 1.49997, 1.49996, 1.49997, 1.49996, 1.49997, 1.49997, 0. \}$ 

**P**<sub>180</sub>: {1.49998, 1.49996, 1.49997, 1.49998, 1.49998, 0., 1.49998, 1.49998, 1.49997, 1.49997, 1.49997, 1.49998, 1.4998, 1.4998, 1.4998, 1.4998, 1.4998, 1.4998, 1.4998, 1.4998, 1.4998, 1.4998, 1.4998, 1.4998, 1.4998, 1.4998, 1.4998, 1.488, 1.488,

1.49999, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49996, 1.49996, 1.49997, 1.49996, 1.49997, 1.49998, 1.49998, 1.49998, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49997, 1.4997, 1.4997, 1.4997, 1.4997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997

 $\begin{aligned} \mathbf{P_{181}:} & \{1.49998, 1.49996, 1.49998, 1.49998, 1.49998, 0., 1.49998, 1.49997$ 

 $\begin{array}{l} \mathbf{P_{182}:} \{1.49998, 1.49997, 1.49998, 1.49998, 1.49998, 0., 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49999, 1.49999, 1.49999, 1.49998, 1.49996, 1.49996, 1.49997, 1.49997, 1.49996, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 0. \\ \end{array}$ 

 $\begin{aligned} \mathbf{P_{184}:} & \{1.49998, 1.49997, 1.49998, 1.49998, 1.49998, 0., 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49998, 1.49999, 1.49998, 1.49999, 1.49999, 1.49998, 1.49999, 1.49998, 1.49998, 1.49999, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49997, 1.4997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997,$ 

 $\begin{aligned} \mathbf{P_{185}:} & \{1.49998, 1.49997, 1.49998, 1.49998, 1.49998, 0., 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49998, 1.49999, 1.49999, 1.49998, 1.49999, 1.49998, 1.49998, 1.49999, 1.49998, 1.49998, 1.49998, 1.49997, 1.49998, 1.49998, 1.49998, 1.49998, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49998, 1.49998, 1.49998, 1.49998, 1.49999, 1.49998, 1.49999, 1.49998, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49998, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988$ 

 $\begin{aligned} \mathbf{P_{186}:} & \{1.49998, 1.49997, 1.49998, 1.49998, 1.49998, 0., 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49998, 1.49999, 1.49998, 1.49999, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49997, 1.49998, 1.49997, 1.49998, 1.49998, 1.49998, 1.49998, 1.49997, 1.49997, 1.49997, 1.49997, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49999, 1.49999, 1.49999, 1.49997, 1.49997, 1.49997, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49999, 1.49999, 1.49998, 1.49999, 1.49998, 0. \}$ 

**P**<sub>187</sub>: {1.49998, 1.49997, 1.49998, 1.49998, 1.49998, 0., 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49999, 1.49999, 1.49999, 1.49999, 1.49998, 1.5, 1.49999, 1.49999, 1.49998,

 $\begin{aligned} \mathbf{P_{188}:} & \{1.49998, 1.49998, 1.49998, 1.49999, 1.49999, 0., 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49999, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49997, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49999, 1.49999, 1.49998, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988$ 

 $\begin{aligned} \mathbf{P_{190}:} & \{1.49999, 1.49998, 1.49998, 1.49999, 1.49999, 0., 1.49999, 1.49999, 1.49998, 1.49998, 1.49998, 1.49999, 1.49998, 0. \}$ 

 $\begin{aligned} \mathbf{P_{191}:} & \{1.49999, 1.49998, 1.49998, 1.49999, 1.49999, 0., 1.49999, 1.49998, 0.\} \end{aligned}$ 

 $\begin{array}{l} \mathbf{P_{192}:} \{1.49999, 1.49998, 1.49999, 1.49999, 1.49999, 0., 1.49999, 1.49998, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.499$ 

 $\begin{array}{l} \mathbf{P_{193}:} \{1.49999, 1.49998, 1.49999, 1.49999, 1.49999, 0., 1.49999, 1.49998, 0. \}$ 

 $P_{194}$ : {1.49999, 1.49998, 1.49999, 1.49999, 1.49999, 0., 1.499999, 1.49999, 1.4

1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49987, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49998, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49988, 1.49888, 1.49888, 1.49888, 1.49888, 1.49888, 1.49888, 1.49888, 1.49888, 1.49888, 1.49888, 1.49888, 1.49888, 1.4

 $\begin{array}{l} \mathbf{P_{195}:} \{1.49999, 1.49998, 1.49999, 1.49999, 1.49999, 0., 1.49999, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49999, 0. \}$ 

 $\begin{array}{l} \mathbf{P_{196}:} \{1.49999, 1.49998, 1.49999, 1.49999, 1.49999, 0., 1.49999, 0. \}$ 

 $\begin{array}{l} \mathbf{P_{197}:} \{1.49999, 1.49998, 1.49999, 1.49999, 1.49999, 0., 1.49999, 0. \}$ 

 $\begin{aligned} \mathbf{P_{198}:} & \{1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 0., 1.49999, 0. \} \end{aligned}$ 

 $\begin{aligned} \mathbf{P_{199}:} & \{1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 0., 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.5, 1.49999, 0. \} \end{aligned}$ 

 $\begin{aligned} \mathbf{P}_{200}: \{1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 0., 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.5, 1.49999, 0.\}$ 

1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49987, 1.49999, 1.5, 1.49999

 $\begin{aligned} \mathbf{P}_{202}: \{1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 0., 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.5, 1.49999, 1.5, 1.49999, 1.5, 1.49999, 0.\}$ 

 $\begin{aligned} \mathbf{P}_{203} : \{ 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 0., 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.5, 1.49999, 1.5, 1.49999, 1.5, 1.49999, 1.5, 1.49999, 1.5, 1.49999, 0. \} \end{aligned}$ 

 $\begin{aligned} \mathbf{P_{204}:} & \{1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 0., 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.5, 1.49999, 1.5, 1.5, 1.49999, 1.5, 1.5, 1.49999, 1.5, 1.5, 1.49999, 1.5, 1.5, 1.49999, 1.5, 1.5, 1.49999, 1.5, 1.499999, 1.49999,$ 

1.49999, 1.5, 1.5, 1.49987, 1.49999, 1.5, 1.49999, 0.}

 $\begin{aligned} \mathbf{P_{210}:} & \{1.49999, 1.49999, 1.49999, 1.5, 1.49999, 0., 1.49999, 1.49999, 1.49999, 1.49999, 1.5, \\ & 1.5, 1.5, 1.49999, 1.5, 1.49999, 1.5, 1.5, 1.5, 1.49999, 1.5, 1.5, 1.5, 1.5, 1.5, 1.5, 1.49999, 1.5, 1.5, \\ & 1.49987, 1.5, 1.5, 1.49999, 1.5, 1.5, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.5, 1.49999, \\ & 1.49999, 0. \}$ 

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## Β.2Αποτελέσματα 2ου μοντέλου

## **Β.2.α Αποτελέσματα 2<sup>ου</sup> μοντέλου για υποτίμηση 15%**

Οι επιδράσεις στο επίπεδο τιμών των εμπορευμάτων της ελληνικής οικονομίας μετά από την υποτίμηση του νομίσματος κατά 15% είναι οι εξής<sup>53</sup> ανά επανάληψη:

 $\begin{array}{l} \textbf{P_1:} \{1.02163, 1.00088, 1.02104, 1.02384, 1.03327, 0., 1.02108, 1.02291, 1.01856, 1.01928, \\ 1.03776, 1.03756, 1.03872, 1.02967, 1.04711, 1.03722, 1.11004, 1.05678, 1.04977, 1.02238, \\ 1.0514, 1.04604, 1.05733, 1.03725, 1.04951, 1.04009, 1.05853, 1.06444, 1.05478, 1.03737, \\ 1.04798, 1.01433, 1.02494, 1.02759, 1.02006, 1.02692, 1.01822, 1.02414, 1.0306, 1.06755, \\ 1.03574, 1.03331, 1.01411, 1.00867, 1.01032, 1.01051, 1.00224, 1.01579, 1.01598, 1.0118, \\ 1.01409, 1.02925, 1.00316, 1.04993, 1.03477, 1.00945, 1.01565, 1.02231, 0. \\ \end{array}$ 

 $\begin{array}{l} \textbf{P_3:} \{1.06468,\ 1.0245,\ 1.07201,\ 1.06647,\ 1.07314,\ 0.,\ 1.0647,\ 1.06826,\ 1.057,\ 1.05535, \\ 1.07508,\ 1.07132,\ 1.07766,\ 1.06438,\ 1.08221,\ 1.07111,\ 1.13023,\ 1.09,\ 1.08517,\ 1.06072, \\ 1.09367,\ 1.08765,\ 1.09142,\ 1.07305,\ 1.09003,\ 1.07452,\ 1.09121,\ 1.09598,\ 1.0899,\ 1.07249, \\ 1.09134,\ 1.05759,\ 1.06661,\ 1.06999,\ 1.04317,\ 1.06535,\ 1.04829,\ 1.0597,\ 1.08096,\ 1.10404, \\ 1.07796,\ 1.07219,\ 1.04277,\ 1.03846,\ 1.03732,\ 1.0376,\ 1.01729,\ 1.04513,\ 1.04509,\ 1.04076, \\ 1.04367,\ 1.06659,\ 1.03644,\ 1.08722,\ 1.07748,\ 1.03547,\ 1.04514,\ 1.05601,\ 0. \\ \end{array}$ 

 $P_4$ : {1.07856, 1.03869, 1.08584, 1.08025, 1.08557, 0., 1.07807, 1.0808, 1.07182, 1.06928, 1.08674, 1.08217, 1.08862, 1.07605, 1.09197, 1.08162, 1.13294, 1.0989, 1.09499, 1.07473, 1.10414, 1.0981, 1.10005, 1.08408, 1.10015, 1.08516, 1.09982, 1.1039, 1.09912, 1.08343, 1.10179, 1.07307, 1.08019, 1.08256, 1.05446, 1.07771, 1.06016, 1.07325, 1.09154, 1.1112, 1.08793, 1.0836, 1.05526, 1.05206, 1.05017, 1.0504, 1.0274, 1.05694, 1.05733, 1.05409, 1.05616, 1.07881, 1.05197, 1.09643, 1.08828, 1.04744, 1.05775, 1.06884, 0.}

 $\begin{array}{l} \textbf{P_5:} \{1.08924, 1.05213, 1.09574, 1.0909, 1.09483, 0., 1.08799, 1.09029, 1.08335, 1.08041, \\ 1.0958, 1.09093, 1.09706, 1.08562, 1.09967, 1.0902, 1.13508, 1.10582, 1.10263, 1.0856, \\ 1.11166, 1.10578, 1.10675, 1.09281, 1.10757, 1.09366, 1.10658, 1.11008, 1.10622, 1.09215, \\ 1.10933, 1.08515, 1.09068, 1.09217, 1.06474, 1.08734, 1.07034, 1.08416, 1.09926, 1.11656, \\ 1.09584, 1.09253, 1.06636, 1.06388, 1.06172, 1.06191, 1.03779, 1.06735, 1.06806, 1.06584, \\ 1.0671, 1.08848, 1.06505, 1.10359, 1.09653, 1.05829, 1.06875, 1.07951, 0. \\ \end{array}$ 

 $\begin{array}{l} \textbf{P_6:} \{1.09768, 1.06425, 1.10328, 1.09932, 1.10214, 0., 1.09582, 1.09791, 1.09249, 1.08946, \\ 1.10304, 1.09819, 1.10387, 1.09364, 1.10597, 1.09741, 1.13687, 1.11144, 1.10879, 1.09424, \\ 1.11735, 1.11179, 1.11221, 1.09998, 1.11336, 1.10065, 1.11208, 1.11512, 1.11194, 1.09934, \\ 1.11512, 1.09467, 1.09898, 1.09979, 1.07396, 1.09521, 1.07921, 1.09296, 1.10549, 1.12086, \\ 1.10244, 1.09982, 1.07614, 1.07411, 1.07192, 1.07207, 1.04795, 1.07653, 1.07746, 1.07605, \\ 1.07666, 1.09636, 1.07604, 1.10942, 1.10322, 1.06805, 1.07829, 1.08842, 0. \\ \end{array}$ 

<sup>&</sup>lt;sup>53</sup> Ο δείκτης στη τιμή P μας δείχνει τον αριθμό της επανάληψης και οι τιμές μέσα στο άγκιστρο την τιμή που θα έχουν τα εμπορεύματα ανά κλάδο
**P**<sub>7</sub> : {1.10451, 1.07491, 1.1093, 1.10613, 1.10815, 0., 1.10231, 1.10425, 1.09993, 1.09698, 1.10899, 1.10433, 1.10951, 1.10047, 1.11127, 1.10358, 1.1384, 1.11613, 1.11389, 1.10131, 1.12184, 1.11667, 1.11678, 1.10601, 1.11804, 1.10657, 1.11668, 1.11934, 1.11669, 1.10541, 1.11975, 1.10233, 1.10572, 1.10605, 1.08217, 1.10184, 1.08702, 1.1002, 1.11076, 1.12445, 1.10806, 1.10593, 1.08472, 1.08298, 1.08086, 1.08098, 1.0576, 1.08465, 1.08569, 1.08488, 1.08502, 1.10295, 1.08535, 1.11431, 1.10883, 1.0768, 1.08657, 1.09591, 0.}

 $\begin{array}{l} \textbf{P8:} \{1.11018, 1.08419, 1.11429, 1.11174, 1.11321, 0., 1.10784, 1.10965, 1.10613, 1.10334, \\ 1.11398, 1.10961, 1.11431, 1.10633, 1.11581, 1.10891, 1.13973, 1.12013, 1.11821, 1.10724, \\ 1.12549, 1.12074, 1.12068, 1.11117, 1.12195, 1.11164, 1.1206, 1.12294, 1.12071, 1.11061, \\ 1.12356, 1.10859, 1.11129, 1.11133, 1.08949, 1.10752, 1.09393, 1.10627, 1.11529, 1.12749, \\ 1.11291, 1.11115, 1.09223, 1.0907, 1.0887, 1.08879, 1.0666, 1.09182, 1.09293, 1.09253, \\ 1.09235, 1.10854, 1.09329, 1.11849, 1.11362, 1.08462, 1.0938, 1.10229, 0. \\ \end{array}$ 

**P**<sub>9</sub>: {1.11497, 1.09222, 1.11852, 1.11645, 1.11754, 0., 1.11263, 1.1143, 1.11137, 1.10879, 1.11823, 1.1142, 1.11843, 1.11141, 1.11973, 1.11356, 1.14089, 1.12358, 1.12191, 1.11229, 1.12853, 1.12421, 1.12405, 1.11563, 1.12528, 1.11603, 1.12398, 1.12606, 1.12415, 1.11512, 1.12677, 1.1138, 1.11599, 1.11584, 1.09601, 1.11243, 1.10005, 1.11144, 1.11923, 1.13011, 1.11712, 1.11564, 1.09882, 1.09745, 1.09558, 1.09565, 1.0749, 1.09818, 1.09929, 1.09917, 1.09879, 1.11336, 1.1001, 1.12211, 1.11776, 1.09161, 1.10012, 1.10779, 0.}

 $\begin{array}{l} \textbf{P_{10}:} \{1.11908, 1.09918, 1.12216, 1.12045, 1.12128, 0., 1.11682, 1.11835, 1.11588, 1.11351, \\ 1.1219, 1.11821, 1.12201, 1.11584, 1.12314, 1.11763, 1.1419, 1.12659, 1.12512, 1.11664, \\ 1.13111, 1.12719, 1.12699, 1.11952, 1.12814, 1.11987, 1.12693, 1.12877, 1.12712, 1.11906, \\ 1.12951, 1.11819, 1.12, 1.11975, 1.10182, 1.11671, 1.10548, 1.1159, 1.12268, 1.13239, \\ 1.12081, 1.11955, 1.10461, 1.10336, 1.10164, 1.10169, 1.0825, 1.10382, 1.10491, 1.10497, \\ 1.10447, 1.11753, 1.10599, 1.12526, 1.12138, 1.09785, 1.10568, 1.11257, 0. \\ \end{array}$ 

**P**<sub>11</sub>: {1.12263, 1.1052, 1.12532, 1.12389, 1.12454, 0., 1.12049, 1.12189, 1.11978, 1.11762, 1.12509, 1.12174, 1.12515, 1.11971, 1.12614, 1.12122, 1.1428, 1.12921, 1.12793, 1.12043, 1.13332, 1.12978, 1.12956, 1.12294, 1.13063, 1.12323, 1.12952, 1.13115, 1.12971, 1.12252, 1.13187, 1.12195, 1.12346, 1.12316, 1.10699, 1.12045, 1.1103, 1.11978, 1.12571, 1.13437, 1.12405, 1.12296, 1.10969, 1.10856, 1.10698, 1.10702, 1.08941, 1.10883, 1.10987, 1.11005, 1.10948, 1.12119, 1.1111, 1.12802, 1.12455, 1.10343, 1.11058, 1.11675, 0.}

 $\begin{array}{l} \mathbf{P_{12}:} \{1.12572, 1.11044, 1.12809, 1.12687, 1.12739, 0., 1.12374, 1.12501, 1.12319, 1.12123, \\ 1.12788, 1.12485, 1.1279, 1.12311, 1.12878, 1.12438, 1.14359, 1.13152, 1.13038, 1.12374, \\ 1.13523, 1.13205, 1.13182, 1.12594, 1.1328, 1.1262, 1.13179, 1.13324, 1.13198, 1.12556, \\ 1.13393, 1.12519, 1.12647, 1.12615, 1.1116, 1.12374, 1.1146, 1.12317, 1.12839, 1.13611, \\ 1.12691, 1.12596, 1.11417, 1.11314, 1.1117, 1.11174, 1.09568, 1.11328, 1.11426, 1.11451, \\ 1.11392, 1.12439, 1.11556, 1.13045, 1.12735, 1.10841, 1.1149, 1.12043, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{13}:} \{1.12844, 1.115, 1.13052, 1.12948, 1.1299, 0., 1.12661, 1.12775, 1.12618, 1.12441, 1.13033, 1.1276, 1.13034, 1.1261, 1.13111, 1.12719, 1.14429, 1.13356, 1.13255, 1.12666, 1.1369, 1.13404, 1.13382, 1.12858, 1.13471, 1.12881, 1.13379, 1.13508, 1.13398, 1.12825, 1.13573, 1.12801, 1.12911, 1.12878, 1.11572, 1.12664, 1.11841, 1.12615, 1.13076, 1.13765, 1.12944, 1.12861, 1.11813, 1.11719, 1.11588, 1.11591, 1.10133, 1.11724, 1.11816, 1.11844, 1.11785, 1.12722, 1.11946, 1.1326, 1.12983, 1.11286, 1.11874, 1.12367, 0. \end{array}$ 

**P**<sub>14</sub>: {1.13082, 1.11899, 1.13267, 1.13177, 1.13211, 0., 1.12916, 1.13019, 1.12881, 1.12722, 1.1325, 1.13004, 1.13249, 1.12874, 1.13317, 1.12967, 1.14491, 1.13536, 1.13446, 1.12922, 1.13836, 1.1358, 1.13559, 1.13093, 1.13639, 1.13113, 1.13557, 1.13672, 1.13574, 1.13063, 1.13731, 1.13048, 1.13142, 1.13111, 1.11939, 1.12921, 1.12182, 1.12877, 1.13286, 1.139, 1.13168, 1.13095, 1.12163, 1.12078, 1.1196, 1.11962, 1.10643, 1.12077, 1.12162, 1.12191, 1.12135, 1.12972, 1.12288, 1.1345, 1.13202, 1.11683, 1.12214, 1.12655, 0.}

**P**<sub>15</sub> : {1.13293, 1.12248, 1.13457, 1.13378, 1.13407, 0., 1.13142, 1.13234, 1.13113, 1.12971, 1.13441, 1.1322, 1.13439, 1.13107, 1.135, 1.13187, 1.14546, 1.13696, 1.13616, 1.1315, 1.13965, 1.13735, 1.13716, 1.13301, 1.13788, 1.13318, 1.13714, 1.13816, 1.1373, 1.13274, 1.13871, 1.13265, 1.13347, 1.13317, 1.12267, 1.13148, 1.12485, 1.1311, 1.13472, 1.1402, 1.13367, 1.13303, 1.12473, 1.12396, 1.12289, 1.12291, 1.11101, 1.12392, 1.12469, 1.12498, 1.12445, 1.13193, 1.1259, 1.13619, 1.13397, 1.12038, 1.12516, 1.1291, 0.}

 $\begin{array}{l} \textbf{P_{16}:} \{1.1348, 1.12556, 1.13625, 1.13556, 1.1358, 0., 1.13342, 1.13426, 1.13319, 1.13191, \\ 1.13611, 1.13413, 1.13609, 1.13314, 1.13662, 1.13383, 1.14595, 1.13837, 1.13766, 1.13351, \\ 1.14078, 1.13873, 1.13855, 1.13485, 1.1392, 1.13501, 1.13853, 1.13945, 1.13869, 1.13461, \\ 1.13994, 1.13456, 1.13527, 1.135, 1.12559, 1.13349, 1.12755, 1.13316, 1.13637, 1.14127, \\ 1.13544, 1.13487, 1.12748, 1.12679, 1.12582, 1.12584, 1.11512, 1.12672, 1.12743, 1.12771, \\ 1.12721, 1.13389, 1.12856, 1.13769, 1.1357, 1.12354, 1.12784, 1.13136, 0. \} \end{array}$ 

**P**<sub>17</sub>: {1.13645, 1.12827, 1.13774, 1.13713, 1.13734, 0., 1.13521, 1.13596, 1.13502, 1.13387, 1.13761, 1.13584, 1.13759, 1.13497, 1.13807, 1.13558, 1.14639, 1.13963, 1.139, 1.1353, 1.14179, 1.13995, 1.13979, 1.13649, 1.14037, 1.13663, 1.13977, 1.14059, 1.13991, 1.13628, 1.14104, 1.13625, 1.13688, 1.13662, 1.12821, 1.13528, 1.12996, 1.13498, 1.13784, 1.14221, 1.13701, 1.13651, 1.12993, 1.1293, 1.12843, 1.12845, 1.11881, 1.12922, 1.12986, 1.13012, 1.12967, 1.13564, 1.13091, 1.13902, 1.13724, 1.12637, 1.13023, 1.13337, 0.}

**P**<sub>18</sub> : {1.13792, 1.13066, 1.13907, 1.13853, 1.13871, 0., 1.13681, 1.13747, 1.13664, 1.13561, 1.13895, 1.13736, 1.13893, 1.1366, 1.13935, 1.13713, 1.14678, 1.14075, 1.14019, 1.13689, 1.14268, 1.14104, 1.14089, 1.13795, 1.14141, 1.13807, 1.14088, 1.14161, 1.141, 1.13776, 1.14201, 1.13775, 1.1383, 1.13807, 1.13054, 1.13687, 1.13211, 1.13661, 1.13915, 1.14305, 1.13841, 1.13796, 1.1321, 1.13153, 1.13076, 1.13077, 1.12212, 1.13144, 1.13203, 1.13227, 1.13185, 1.13719, 1.133, 1.1402, 1.13862, 1.1289, 1.13236, 1.13517, 0.}

**P**<sub>19</sub> : {1.13922, 1.13278, 1.14025, 1.13977, 1.13993, 0., 1.13822, 1.13882, 1.13809, 1.13716, 1.14014, 1.13872, 1.14012, 1.13805, 1.1405, 1.13852, 1.14713, 1.14175, 1.14124, 1.1383, 1.14348, 1.142, 1.14187, 1.13925, 1.14234, 1.13936, 1.14186, 1.14251, 1.14197, 1.13908, 1.14287, 1.13908, 1.13956, 1.13935, 1.13262, 1.13829, 1.13403, 1.13805, 1.14032, 1.1438, 1.13966, 1.13926, 1.13403, 1.13352, 1.13283, 1.13284, 1.12508, 1.13343, 1.13396, 1.13419, 1.1338, 1.13857, 1.13484, 1.14126, 1.13984, 1.13116, 1.13426, 1.13676, 0.}

**P**<sub>20</sub> : {1.14039, 1.13466, 1.1413, 1.14088, 1.14101, 0., 1.13949, 1.14002, 1.13937, 1.13855, 1.14121, 1.13993, 1.14118, 1.13934, 1.14152, 1.13975, 1.14743, 1.14264, 1.14219, 1.13956, 1.14418, 1.14286, 1.14274, 1.1404, 1.14317, 1.1405, 1.14274, 1.14332, 1.14284, 1.14025, 1.14364, 1.14026, 1.14069, 1.1405, 1.13448, 1.13955, 1.13574, 1.13934, 1.14136, 1.14447, 1.14077, 1.14042, 1.13575, 1.13529, 1.13467, 1.13468, 1.12773, 1.13521, 1.13568, 1.13589, 1.13554, 1.1398, 1.13649, 1.1422, 1.14093, 1.13317, 1.13595, 1.13819, 0.}

**P**<sub>21</sub>: {1.14142, 1.13632, 1.14223, 1.14186, 1.14198, 0., 1.14062, 1.14109, 1.14051, 1.13978, 1.14215, 1.14101, 1.14213, 1.14049, 1.14243, 1.14085, 1.14771, 1.14343, 1.14303, 1.14068, 1.14481, 1.14363, 1.14352, 1.14143, 1.1439, 1.14152, 1.14352, 1.14403, 1.14361, 1.1413, 1.14433, 1.14131, 1.14169, 1.14152, 1.13614, 1.14067, 1.13726, 1.14049, 1.14229, 1.14506, 1.14176, 1.14145, 1.13729, 1.13687, 1.13632, 1.13632, 1.1301, 1.13679, 1.13722, 1.13741, 1.13709, 1.1409, 1.14795, 1.14303, 1.1419, 1.13497, 1.13745, 1.13945, 0.}

**P**<sub>22</sub>: {1.14234, 1.13781, 1.14307, 1.14274, 1.14284, 0., 1.14162, 1.14205, 1.14153, 1.14088, 1.14299, 1.14198, 1.14298, 1.14151, 1.14324, 1.14183, 1.14796, 1.14413, 1.14377, 1.14169, 1.14537, 1.14432, 1.14422, 1.14235, 1.14456, 1.14243, 1.14421, 1.14467, 1.1443, 1.14223, 1.14494, 1.14224, 1.14258, 1.14243, 1.13762, 1.14167, 1.13863, 1.14151, 1.14312, 1.14559, 1.14264, 1.14236, 1.13865, 1.13828, 1.13778, 1.13779, 1.13222, 1.13821, 1.13859, 1.13876, 1.13848, 1.14187, 1.13925, 1.14378, 1.14277, 1.13658, 1.1388, 1.14059, 0.}

 $\begin{array}{l} \mathbf{P_{23}:} \{1.14317, 1.13912, 1.14381, 1.14352, 1.14361, 0., 1.14252, 1.1429, 1.14244, 1.14185, \\ 1.14375, 1.14284, 1.14373, 1.14242, 1.14397, 1.14271, 1.14817, 1.14476, 1.14444, 1.14258, \\ 1.14586, 1.14493, 1.14484, 1.14317, 1.14514, 1.14324, 1.14483, 1.14525, 1.14491, 1.14307, \\ 1.14548, 1.14308, 1.14338, 1.14324, 1.13894, 1.14257, 1.13984, 1.14242, 1.14385, 1.14607, \\ 1.14343, 1.14318, 1.13987, 1.13954, 1.13909, 1.1391, 1.13412, 1.13947, 1.13981, 1.13997, \\ 1.13971, 1.14274, 1.14041, 1.14445, 1.14355, 1.13801, 1.14, 1.1416, 0. \}$ 

**P**<sub>24</sub> : {1.1439, 1.1403, 1.14448, 1.14421, 1.14429, 0., 1.14332, 1.14366, 1.14325, 1.14273, 1.14442, 1.1436, 1.1444, 1.14324, 1.14461, 1.14349, 1.14837, 1.14532, 1.14504, 1.14337, 1.14631, 1.14547, 1.14539, 1.14391, 1.14566, 1.14397, 1.14539, 1.14576, 1.14545, 1.14381, 1.14597, 1.14382, 1.14409, 1.14397, 1.14013, 1.14336, 1.14093, 1.14323, 1.14451, 1.14649, 1.14413, 1.14391, 1.14096, 1.14066, 1.14026, 1.14027, 1.13581, 1.1406, 1.1409, 1.14104, 1.14081, 1.14352, 1.14144, 1.14504, 1.14424, 1.13929, 1.14107, 1.1425, 0.}

**P25 :** {1.14455, 1.14134, 1.14507, 1.14483, 1.14491, 0., 1.14404, 1.14434, 1.14398, 1.14351, 1.14502, 1.14429, 1.145, 1.14396, 1.14519, 1.14418, 1.14854, 1.14583, 1.14557, 1.14408, 1.1467, 1.14595, 1.14588, 1.14456, 1.14613, 1.14461, 1.14588, 1.14621, 1.14594, 1.14447, 1.1464, 1.14449, 1.14472, 1.14461, 1.14118, 1.14407, 1.1419, 1.14396, 1.1451, 1.14687, 1.14476, 1.14457, 1.14193, 1.14166, 1.1413, 1.14131, 1.13733, 1.1416, 1.14188, 1.142, 1.1418, 1.14422, 1.14236, 1.14557, 1.14485, 1.14044, 1.14203, 1.1433, 0.}

 $\begin{array}{l} \mathbf{P_{26}:} \{1.14514, 1.14227, 1.1456, 1.14539, 1.14545, 0., 1.14468, 1.14495, 1.14462, 1.1442, 1.14555, 1.1449, 1.14554, 1.14461, 1.14571, 1.14481, 1.1487, 1.14627, 1.14604, 1.14472, 1.14706, 1.14639, 1.14633, 1.14514, 1.14654, 1.14519, 1.14632, 1.14662, 1.14638, 1.14507, 1.14678, 1.14508, 1.14529, 1.14519, 1.14213, 1.14471, 1.14277, 1.14461, 1.14562, 1.1472, 1.14532, 1.14515, 1.14279, 1.14255, 1.14224, 1.14224, 1.13868, 1.1425, 1.14275, 1.14286, 1.14268, 1.14484, 1.14318, 1.14605, 1.14541, 1.14146, 1.14288, 1.14402, 0. \end{array}$ 

 $\begin{array}{l} \mathbf{P}_{27}: \{1.14566, 1.1431, 1.14607, 1.14588, 1.14594, 0., 1.14524, 1.14549, 1.1452, 1.14482, 1.14603, 1.14545, 1.14601, 1.14519, 1.14617, 1.14536, 1.14884, 1.14667, 1.14647, 1.14528, 1.14737, 1.14677, 1.14672, 1.14566, 1.14691, 1.14571, 1.14672, 1.14698, 1.14676, 1.14559, 1.14713, 1.1456, 1.14579, 1.1457, 1.14297, 1.14528, 1.14354, 1.14518, 1.14609, 1.1475, 1.14582, 1.14567, 1.14356, 1.14335, 1.14307, 1.14307, 1.13989, 1.1433, 1.14352, 1.14363, 1.14346, 1.14539, 1.14391, 1.14647, 1.1459, 1.14237, 1.14364, 1.14466, 0. \\ \end{array}$ 

**P**<sub>28</sub> : {1.14612, 1.14384, 1.14649, 1.14632, 1.14637, 0., 1.14575, 1.14597, 1.14571, 1.14538, 1.14645, 1.14593, 1.14644, 1.1457, 1.14658, 1.14586, 1.14896, 1.14703, 1.14685, 1.14579, 1.14765, 1.14712, 1.14707, 1.14613, 1.14724, 1.14616, 1.14707, 1.1473, 1.14711, 1.14607, 1.14744, 1.14608, 1.14624, 1.14616, 1.14372, 1.14578, 1.14423, 1.1457, 1.14651, 1.14777, 1.14627, 1.14613, 1.14425, 1.14406, 1.14381, 1.14381, 1.14097, 1.14402, 1.14422, 1.14431, 1.14416, 1.14588, 1.14456, 1.14685, 1.14634, 1.14319, 1.14432, 1.14523, 0.}

 $\begin{array}{l} \textbf{P_{29}:} \{1.14654, 1.1445, 1.14687, 1.14672, 1.14676, 0., 1.14621, 1.1464, 1.14617, 1.14587, \\ 1.14683, 1.14637, 1.14682, 1.14616, 1.14694, 1.1463, 1.14907, 1.14735, 1.14718, 1.14624, \\ 1.14791, 1.14743, 1.14738, 1.14654, 1.14754, 1.14658, 1.14738, 1.14759, 1.14742, 1.14649, \\ 1.14771, 1.1465, 1.14665, 1.14658, 1.14439, 1.14623, 1.14485, 1.14616, 1.14688, 1.14801, \\ 1.14667, 1.14654, 1.14487, 1.1447, 1.14447, 1.14447, 1.14193, 1.14466, 1.14484, 1.14492, \\ 1.14478, 1.14632, 1.14515, 1.14719, 1.14673, 1.14392, 1.14493, 1.14574, 0. \\ \end{array}$ 

 $\begin{array}{l} \textbf{P_{30}:} \{1.14691, 1.14509, 1.1472, 1.14707, 1.14711, 0., 1.14661, 1.14679, 1.14658, 1.14631, \\ 1.14717, 1.14676, 1.14716, 1.14657, 1.14727, 1.1467, 1.14917, 1.14763, 1.14748, 1.14664, \\ 1.14813, 1.1477, 1.14766, 1.14691, 1.1478, 1.14694, 1.14766, 1.14785, 1.1477, 1.14686, \\ 1.14796, 1.14687, 1.14701, 1.14694, 1.14499, 1.14664, 1.1454, 1.14657, 1.14722, 1.14822, \\ 1.14703, 1.14691, 1.14542, 1.14527, 1.14506, 1.14507, 1.1428, 1.14523, 1.14539, 1.14546, \\ 1.14534, 1.14672, 1.14567, 1.14749, 1.14708, 1.14457, 1.14547, 1.1462, 0. \\ \end{array}$ 

 $\begin{array}{l} \textbf{P_{31}:} \{1.14724, 1.14562, 1.1475, 1.14738, 1.14742, 0., 1.14698, 1.14713, 1.14695, 1.14671, \\ 1.14747, 1.1471, 1.14747, 1.14694, 1.14756, 1.14705, 1.14926, 1.14788, 1.14775, 1.147, \\ 1.14833, 1.14795, 1.14791, 1.14724, 1.14804, 1.14727, 1.14791, 1.14808, 1.14794, 1.1472, \\ 1.14817, 1.14721, 1.14733, 1.14727, 1.14553, 1.147, 1.14589, 1.14694, 1.14752, 1.14841, \\ 1.14734, 1.14724, 1.14591, 1.14577, 1.14559, 1.14559, 1.14357, 1.14574, 1.14588, 1.14595, \\ 1.14584, 1.14707, 1.14613, 1.14776, 1.14739, 1.14515, 1.14596, 1.1466, 0. \\ \end{array}$ 

 $\begin{array}{l} \textbf{P_{32}:} \{1.14753, 1.14609, 1.14777, 1.14766, 1.14769, 0., 1.1473, 1.14744, 1.14727, 1.14706, \\ 1.14774, 1.14741, 1.14774, 1.14727, 1.14782, 1.14737, 1.14934, 1.14811, 1.14799, 1.14732, \\ 1.14851, 1.14817, 1.14814, 1.14754, 1.14825, 1.14756, 1.14813, 1.14828, 1.14816, 1.1475, \\ 1.14837, 1.1475, 1.14761, 1.14756, 1.146, 1.14732, 1.14633, 1.14727, 1.14778, 1.14858, \\ 1.14763, 1.14754, 1.14635, 1.14622, 1.14606, 1.14606, 1.14425, 1.1462, 1.14632, 1.14638, \\ 1.14629, 1.14738, 1.14654, 1.148, 1.14767, 1.14567, 1.14639, 1.14697, 0. \}$ 

 $\begin{array}{l} \textbf{P_{33}:} \{1.1478, 1.14651, 1.14801, 1.14791, 1.14794, 0., 1.14759, 1.14771, 1.14757, 1.14737, \\ 1.14798, 1.14769, 1.14798, 1.14756, 1.14806, 1.14765, 1.14941, 1.14831, 1.14821, 1.14761, \\ 1.14867, 1.14836, 1.14834, 1.1478, 1.14843, 1.14782, 1.14833, 1.14847, 1.14836, 1.14777, \\ 1.14854, 1.14777, 1.14787, 1.14782, 1.14643, 1.1476, 1.14672, 1.14756, 1.14802, 1.14873, \\ 1.14788, 1.1478, 1.14674, 1.14663, 1.14648, 1.14649, 1.14487, 1.1466, 1.14672, 1.14677, \\ 1.14668, 1.14766, 1.14691, 1.14821, 1.14792, 1.14613, 1.14678, 1.14729, 0. \\ \end{array}$ 

**P<sub>34</sub>**: {1.14803, 1.14688, 1.14822, 1.14814, 1.14816, 0., 1.14785, 1.14796, 1.14783, 1.14766, 1.1482, 1.14794, 1.14819, 1.14782, 1.14826, 1.1479, 1.14947, 1.14849, 1.1484, 1.14786, 1.14881, 1.14854, 1.14851, 1.14803, 1.1486, 1.14805, 1.14851, 1.14863, 1.14853, 1.1485, 1.1487, 1.14801, 1.1481, 1.14805, 1.14681, 1.14786, 1.14707, 1.14782, 1.14823, 1.14887, 1.14811, 1.14804, 1.14709, 1.14699, 1.14686, 1.14686, 1.14542, 1.14697, 1.14707, 1.14711, 1.14704, 1.14791, 1.14724, 1.1484, 1.14814, 1.14654, 1.14712, 1.14758, 0.}

**P**<sub>35</sub> : {1.14824, 1.14721, 1.14841, 1.14833, 1.14836, 0., 1.14808, 1.14818, 1.14806, 1.14791, 1.14839, 1.14816, 1.14839, 1.14805, 1.14845, 1.14812, 1.14953, 1.14865, 1.14857, 1.14809, 1.14894, 1.1487, 1.14867, 1.14825, 1.14875, 1.14826, 1.14867, 1.14867, 1.14869, 1.14822, 1.14884, 1.14822, 1.1483, 1.14826, 1.14715, 1.14809, 1.14739, 1.14805, 1.14842, 1.14899, 1.14831, 1.14825, 1.1474, 1.14731, 1.1472, 1.1472, 1.14591, 1.14729, 1.14738, 1.14742, 1.14735, 1.14813, 1.14754, 1.14857, 1.14834, 1.14691, 1.14743, 1.14784, 0.}

 $\begin{array}{l} \textbf{P_{36}:} \{1.14843, 1.14751, 1.14858, 1.14851, 1.14853, 0., 1.14828, 1.14837, 1.14827, 1.14813, \\ 1.14856, 1.14835, 1.14856, 1.14826, 1.14861, 1.14832, 1.14958, 1.1488, 1.14872, 1.1483, \\ 1.14905, 1.14884, 1.14881, 1.14843, 1.14888, 1.14845, 1.14881, 1.14891, 1.14883, 1.14841, \\ 1.14896, 1.14841, 1.14848, 1.14845, 1.14746, 1.14829, 1.14767, 1.14826, 1.14859, 1.1491, \\ 1.14849, 1.14843, 1.14768, 1.1476, 1.1475, 1.1475, 1.14634, 1.14758, 1.14766, 1.1477, \\ 1.14764, 1.14833, 1.1478, 1.14873, 1.14852, 1.14724, 1.1477, 1.14807, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{37}:} \{1.1486, 1.14778, 1.14873, 1.14867, 1.14869, 0., 1.14847, 1.14854, 1.14845, 1.14833, 1.14872, 1.14853, 1.14871, 1.14845, 1.14876, 1.1485, 1.14963, 1.14893, 1.14896, 1.14848, 1.14915, 1.14896, 1.14894, 1.1486, 1.149, 1.14861, 1.14894, 1.14903, 1.14896, 1.14896, 1.14858, 1.14907, 1.14858, 1.14864, 1.14861, 1.14773, 1.14848, 1.14792, 1.14845, 1.14874, 1.14919, 1.14865, 1.1486, 1.14792, 1.14786, 1.14776, 1.14776, 1.14673, 1.14784, 1.14791, 1.14794, 1.14794, 1.14789, 1.14851, 1.14804, 1.14886, 1.14868, 1.14754, 1.14795, 1.14828, 0. \}$ 

**P<sub>38</sub>**: {1.14875, 1.14802, 1.14887, 1.14881, 1.14883, 0., 1.14863, 1.1487, 1.14862, 1.14851, 1.14886, 1.14869, 1.14805, 1.14861, 1.1489, 1.14866, 1.14967, 1.14904, 1.14898, 1.14864, 1.14924, 1.14907, 1.14905, 1.14875, 1.14911, 1.14876, 1.14905, 1.14913, 1.14907, 1.14873, 1.14917, 1.14873, 1.14879, 1.14876, 1.14797, 1.14864, 1.14814, 1.14861, 1.14887, 1.14928, 1.1488, 1.14875, 1.14815, 1.14808, 1.148, 1.148, 1.14708, 1.14807, 1.14813, 1.14816, 1.14812, 1.14867, 1.14825, 1.14898, 1.14882, 1.1478, 1.14817, 1.14846, 0.}

**P**<sub>39</sub> : {1.14888, 1.14823, 1.14899, 1.14894, 1.14895, 0., 1.14878, 1.14884, 1.14876, 1.14867, 1.14898, 1.14883, 1.14897, 1.14876, 1.14901, 1.14881, 1.1497, 1.14914, 1.14909, 1.14879, 1.14932, 1.14917, 1.14916, 1.14888, 1.14921, 1.14889, 1.14915, 1.14922, 1.14917, 1.14887, 1.14926, 1.14887, 1.14892, 1.14889, 1.14819, 1.14878, 1.14834, 1.14876, 1.14899, 1.14936, 1.14893, 1.14889, 1.14834, 1.14829, 1.14822, 1.14822, 1.1474, 1.14828, 1.14833, 1.14836, 1.14832, 1.14881, 1.14843, 1.14909, 1.14894, 1.14804, 1.14836, 1.14863, 0.}

 $\begin{array}{l} \textbf{P_{40}:} \{1.149, 1.14842, 1.1491, 1.14905, 1.14907, 0., 1.14891, 1.14896, 1.1489, 1.14881, \\ 1.14909, 1.14895, 1.14908, 1.14889, 1.14912, 1.14893, 1.14973, 1.14924, 1.14919, 1.14892, \\ 1.1494, 1.14926, 1.14925, 1.149, 1.14929, 1.14901, 1.14925, 1.14931, 1.14926, 1.14899, \\ 1.14934, 1.14899, 1.14903, 1.14901, 1.14838, 1.14891, 1.14852, 1.14889, 1.1491, 1.14943, \\ 1.14904, 1.149, 1.14852, 1.14847, 1.14841, 1.14841, 1.14767, 1.14846, 1.14851, 1.14854, \\ 1.1485, 1.14894, 1.1486, 1.14919, 1.14906, 1.14825, 1.14854, 1.14877, 0. \\ \end{array}$ 

**P**<sub>41</sub>: {1.14911, 1.14859, 1.14919, 1.14916, 1.14917, 0., 1.14902, 1.14907, 1.14901, 1.14894, 1.14918, 1.14907, 1.14918, 1.14901, 1.14921, 1.14905, 1.14976, 1.14932, 1.14928, 1.14903, 1.14946, 1.14934, 1.14933, 1.14911, 1.14937, 1.14912, 1.14933, 1.14938, 1.14934, 1.14914, 1.14914, 1.14912, 1.14856, 1.14903, 1.14867, 1.14901, 1.1492, 1.14949, 1.14914, 1.14911, 1.14868, 1.14864, 1.14858, 1.14858, 1.14792, 1.14863, 1.14867, 1.14869, 1.14866, 1.14905, 1.14875, 1.14875, 1.14928, 1.14916, 1.14843, 1.1487, 1.1489, 0.}

**P**<sub>42</sub> : {1.1492, 1.14874, 1.14928, 1.14925, 1.14926, 0., 1.14913, 1.14917, 1.14912, 1.14905, 1.14927, 1.14917, 1.14927, 1.14912, 1.1493, 1.14915, 1.14979, 1.14939, 1.14935, 1.14914, 1.14952, 1.14941, 1.14944, 1.1492, 1.14943, 1.14921, 1.14944, 1.14945, 1.14945, 1.14941, 1.14919, 1.14947, 1.14919, 1.14923, 1.14921, 1.14871, 1.14913, 1.14882, 1.14912, 1.14928, 1.14954, 1.14923, 1.14921, 1.14882, 1.14873, 1.14873, 1.14814, 1.14877, 1.14881, 1.14883, 1.1488, 1.14915, 1.14935, 1.14935, 1.14925, 1.1486, 1.14883, 1.14902, 0.}

**P**<sub>43</sub>: {1.14929, 1.14887, 1.14936, 1.14933, 1.14934, 0., 1.14922, 1.14926, 1.14921, 1.14915, 1.14935, 1.14925, 1.14935, 1.14921, 1.14937, 1.14924, 1.14981, 1.14946, 1.14942, 1.14923, 1.14957, 1.14947, 1.14946, 1.14929, 1.14949, 1.1493, 1.14946, 1.14951, 1.14947, 1.14928, 1.14953, 1.14928, 1.14931, 1.1493, 1.14885, 1.14923, 1.14894, 1.14921, 1.14936, 1.14959, 1.14932, 1.14929, 1.14895, 1.14887, 1.14887, 1.14887, 1.14884, 1.1489, 1.14894, 1.14896, 1.14893, 1.14925, 1.149, 1.14942, 1.14933, 1.14875, 1.14896, 1.14913, 0.}

**P**<sub>44</sub> : {1.14937, 1.14899, 1.14943, 1.1494, 1.14941, 0., 1.1493, 1.14934, 1.1493, 1.14924, 1.14942, 1.14933, 1.14942, 1.1493, 1.14944, 1.14932, 1.14983, 1.14951, 1.14948, 1.14931, 1.14962, 1.14953, 1.14952, 1.14937, 1.14955, 1.14937, 1.14952, 1.14956, 1.14956, 1.14953, 1.14936, 1.14937, 1.14937, 1.14931, 1.14906, 1.14933, 1.14943, 1.14963, 1.14939, 1.14937, 1.14906, 1.14903, 1.14899, 1.14899, 1.14852, 1.14902, 1.14905, 1.14905, 1.14907, 1.14904, 1.14933, 1.14911, 1.14948, 1.1494, 1.14888, 1.14907, 1.14922, 0.}

**P**<sub>45</sub> : {1.14943, 1.1491, 1.14949, 1.14946, 1.14947, 0., 1.14938, 1.14941, 1.14937, 1.14932, 1.14948, 1.14941, 1.14948, 1.14937, 1.1495, 1.14939, 1.14985, 1.14957, 1.14954, 1.14938, 1.14966, 1.14958, 1.14957, 1.14943, 1.1496, 1.14944, 1.14957, 1.14961, 1.14958, 1.14958, 1.14945, 1.14945, 1.14945, 1.14944, 1.14908, 1.14938, 1.14916, 1.14937, 1.14949, 1.14967, 1.14945, 1.14943, 1.14916, 1.14913, 1.14909, 1.1491, 1.14868, 1.14913, 1.14915, 1.14917, 1.14915, 1.14917, 1.14954, 1.14946, 1.14946, 1.14917, 1.14937, 0.}

**P**<sub>46</sub> : {1.14949, 1.1492, 1.14954, 1.14952, 1.14953, 0., 1.14945, 1.14947, 1.14944, 1.1494, 1.14954, 1.14954, 1.14947, 1.14954, 1.14955, 1.14946, 1.14966, 1.14961, 1.14959, 1.14959, 1.14969, 1.14962, 1.14962, 1.14949, 1.14964, 1.1495, 1.14962, 1.14965, 1.14962, 1.14964, 1.14954, 1.14955, 1.14965, 1.14965, 1.14965, 1.14967, 1.14951, 1.14951, 1.1495, 1.14918, 1.14945, 1.14925, 1.14924, 1.14954, 1.14951, 1.14952, 1.14919, 1.14919, 1.14882, 1.14922, 1.14924, 1.14926, 1.14924, 1.14959, 1.14959, 1.14952, 1.14911, 1.14926, 1.14938, 0.}

**P**<sub>47</sub> : {1.14955, 1.14928, 1.14959, 1.14957, 1.14958, 0., 1.1495, 1.14953, 1.1495, 1.14946, 1.14959, 1.14953, 1.14958, 1.1495, 1.1496, 1.14952, 1.14988, 1.14965, 1.14963, 1.14951, 1.14973, 1.14966, 1.14966, 1.14955, 1.14968, 1.14955, 1.14966, 1.14969, 1.14966, 1.14954, 1.1497, 1.14954, 1.14956, 1.14955, 1.14927, 1.14951, 1.14933, 1.14959, 1.14959, 1.14974, 1.14957, 1.14955, 1.14933, 1.14931, 1.14928, 1.14928, 1.14895, 1.14933, 1.14933, 1.14934, 1.14932, 1.14952, 1.14957, 1.14963, 1.14963, 1.14957, 1.14963, 1.14955, 1.14957, 1.14963, 1.14954, 1.14957, 1.14954, 1.14955, 1.14955, 1.14955, 1.14957, 1.14954, 1.14955, 1.14957, 1.14954, 1.14955, 1.14954, 1.14955, 1.14955, 1.14955, 1.14955, 1.14955, 1.14958, 1.14958, 1.14958, 1.14955, 1.14954, 1.14954, 1.14954, 1.14955, 1.

 $\begin{array}{l} \mathbf{P_{48}:} \{1.1496, 1.14936, 1.14963, 1.14962, 1.14962, 0., 1.14956, 1.14958, 1.14955, 1.14952, \\ 1.14963, 1.14958, 1.14963, 1.14955, 1.14964, 1.14957, 1.14989, 1.14969, 1.14967, 1.14956, \\ 1.14976, 1.1497, 1.14969, 1.1496, 1.14971, 1.1496, 1.14969, 1.14972, 1.1497, 1.14959, \\ 1.14973, 1.14959, 1.14961, 1.1496, 1.14935, 1.14956, 1.1494, 1.14955, 1.14964, 1.14977, \\ 1.14961, 1.1496, 1.1494, 1.14938, 1.14936, 1.14936, 1.14936, 1.14906, 1.14938, 1.14944, 1.14941, \\ 1.14939, 1.14957, 1.14943, 1.14967, 1.14962, 1.14929, 1.14941, 1.1495, 0. \\ \end{array}$ 

**P**<sub>49</sub> : {1.14964, 1.14943, 1.14967, 1.14966, 1.14966, 0., 1.14961, 1.14963, 1.1496, 1.14957, 1.14967, 1.14967, 1.14967, 1.1496, 1.14968, 1.14961, 1.1499, 1.14972, 1.14971, 1.14961, 1.14978, 1.14973, 1.14973, 1.14964, 1.14974, 1.14964, 1.14973, 1.14975, 1.14973, 1.14963, 1.14976, 1.14964, 1.14965, 1.14964, 1.14964, 1.14942, 1.14961, 1.14946, 1.14968, 1.14978, 1.14965, 1.14964, 1.14947, 1.14945, 1.14942, 1.14942, 1.14916, 1.14944, 1.14946, 1.14947, 1.14946, 1.14947, 1.14966, 1.14965, 1.14966, 1.14967, 1.14966, 1.14977, 1.14966, 1.14947, 1.14966, 1.14977, 1.14966, 1.14947, 1.14966, 1.14977, 1.14966, 1.14947, 1.14966, 1.14977, 1.14966, 1.14947, 1.14966, 1.14977, 1.14966, 1.14947, 1.14966, 1.14947, 1.14966, 1.14947, 1.14966, 1.14947, 1.14947, 1.14966, 1.14947, 1.14947, 1.14966, 1.14947, 1.14947, 1.14966, 1.14947, 1.14947, 1.14966, 1.14947, 1.14947, 1.14956, 0.}

 $\begin{array}{l} \textbf{P_{50}:} \{1.14968, 1.14949, 1.14971, 1.14969, 1.1497, 0., 1.14965, 1.14967, 1.14964, 1.14962, \\ 1.14971, 1.14966, 1.1497, 1.14964, 1.14972, 1.14966, 1.14991, 1.14975, 1.14974, 1.14965, \\ 1.14981, 1.14976, 1.14976, 1.14968, 1.14977, 1.14968, 1.14976, 1.14978, 1.14976, 1.14967, \\ 1.14979, 1.14967, 1.14969, 1.14968, 1.14948, 1.14965, 1.14952, 1.14964, 1.14971, 1.14981, \\ 1.14969, 1.14968, 1.14952, 1.14951, 1.14949, 1.14949, 1.14925, 1.1495, 1.14952, 1.14953, \\ 1.14951, 1.14966, 1.14955, 1.14974, 1.1497, 1.14943, 1.14953, 1.1496, 0. \\ \end{array}$ 

 $\begin{array}{l} \textbf{P_{51}:} \{1.14971, 1.14954, 1.14974, 1.14973, 1.14973, 0., 1.14968, 1.1497, 1.14968, 1.14966, 1.14974, 1.14974, 1.14974, 1.14968, 1.14975, 1.14969, 1.14992, 1.14978, 1.14977, 1.14969, 1.14983, 1.14979, 1.14978, 1.14971, 1.1498, 1.14972, 1.14978, 1.14978, 1.14979, 1.14971, 1.14981, 1.14971, 1.14972, 1.14972, 1.14953, 1.14969, 1.14957, 1.14968, 1.14974, 1.14983, 1.14972, 1.14971, 1.14957, 1.14956, 1.14954, 1.14954, 1.14954, 1.14933, 1.14956, 1.14957, 1.14958, 1.14957, 1.14969, 1.14969, 1.14969, 1.14969, 1.14969, 1.14969, 1.14960, 1.14977, 1.14973, 1.14949, 1.14958, 1.14965, 0. \\ \end{array}$ 

**P**<sub>52</sub>: {1.14974, 1.14959, 1.14977, 1.14976, 1.14976, 0., 1.14972, 1.14973, 1.14972, 1.14969, 1.14976, 1.14973, 1.14976, 1.14972, 1.14977, 1.14973, 1.14993, 1.1498, 1.14979, 1.14972, 1.14984, 1.14981, 1.14981, 1.14974, 1.14982, 1.14975, 1.14975, 1.14982, 1.14974, 1.14982, 1.14974, 1.14983, 1.14974, 1.14975, 1.14975, 1.14975, 1.14958, 1.14972, 1.14962, 1.14972, 1.14977, 1.14985, 1.14975, 1.14974, 1.14962, 1.14961, 1.14959, 1.14959, 1.14959, 1.1496, 1.14962, 1.14962, 1.14962, 1.14964, 1.14979, 1.14976, 1.14955, 1.14962, 1.14968, 0.}

 $\begin{array}{l} \textbf{P}_{53}: \{1.14977, 1.14964, 1.14979, 1.14978, 1.14979, 0., 1.14975, 1.14976, 1.14975, 1.14973, 1.14979, 1.14976, 1.14979, 1.14975, 1.1498, 1.14976, 1.14994, 1.14982, 1.14981, 1.14975, 1.14986, 1.14983, 1.14983, 1.14977, 1.14984, 1.14977, 1.14983, 1.14984, 1.14983, 1.14977, 1.14985, 1.14977, 1.14978, 1.14977, 1.14963, 1.14975, 1.14966, 1.14975, 1.14978, 1.14977, 1.14966, 1.14963, 1.14963, 1.14963, 1.14947, 1.14965, 1.14966$ 

**P**<sub>54</sub> : {1.1498, 1.14968, 1.14981, 1.14981, 1.14981, 0., 1.14978, 1.14979, 1.14977, 1.14976, 1.14981, 1.14979, 1.14981, 1.14977, 1.14982, 1.14978, 1.14995, 1.14984, 1.14983, 1.14978, 1.14988, 1.14985, 1.14985, 1.14985, 1.14985, 1.14985, 1.14986, 1.14986, 1.14985, 1.14988, 1.14987, 1.14988, 1.14979, 1.14988, 1.14988, 1.14977, 1.14977, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14989, 1.14969, 1.14967, 1.14967, 1.14967, 1.14952, 1.14968, 1.14969, 1.14978, 1.14977, 1.14975, 0.}

**P**<sub>55</sub> : {1.14982, 1.14971, 1.14983, 1.14983, 1.14983, 0., 1.1498, 1.14981, 1.1498, 1.14978, 1.14983, 1.14981, 1.14983, 1.14984, 1.14984, 1.1498, 1.14995, 1.14986, 1.14986, 1.14985, 1.1498, 1.14989, 1.14986, 1.14986, 1.14982, 1.14987, 1.14982, 1.14986, 1.14986, 1.14986, 1.14981, 1.14982, 1.14982, 1.1497, 1.1498, 1.14973, 1.14984, 1.14989, 1.14982, 1.14982, 1.14973, 1.14974, 1.14985, 1.14983, 1.14968, 1.14973, 1.14977, 0.}

**P**<sub>56</sub> : {1.14984, 1.14974, 1.14985, 1.14985, 1.14985, 0., 1.14982, 1.14983, 1.14982, 1.14981, 1.14985, 1.14983, 1.14985, 1.14985, 1.14986, 1.14983, 1.14996, 1.14987, 1.14987, 1.14982, 1.14999, 1.14988, 1.14988, 1.14984, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14989, 1.14988, 1.14988, 1.14984, 1.14974, 1.14982, 1.14976, 1.14985, 1.14991, 1.14984, 1.14976, 1.14976, 1.14975, 1.14976, 1.1497

**P**<sub>57</sub>: {1.14985, 1.14977, 1.14987, 1.14986, 1.14986, 0., 1.14984, 1.14985, 1.14984, 1.14983, 1.14987, 1.14985, 1.14987, 1.14984, 1.14987, 1.14984, 1.14996, 1.14989, 1.14988, 1.14984, 1.14991, 1.14989, 1.14989, 1.14985, 1.14985, 1.14999, 1.14986, 1.14986, 1.14989, 1.14986, 1.14986, 1.14987, 1.14987, 1.14986, 1.14987, 1.14986, 1.14978, 1.14987, 1.14987, 1.14977, 1.14978, 1.14978, 1.14978, 1.14978, 1.14978, 1.14978, 1.14978, 1.14988, 1.14986, 1.14974, 1.14979, 1.14982, 0.}

**P**<sub>58</sub> : {1.14987, 1.14979, 1.14988, 1.14988, 1.14988, 0., 1.14986, 1.14986, 1.14986, 1.14986, 1.14984, 1.14988, 1.14988, 1.14988, 1.14986, 1.14988, 1.14997, 1.1499, 1.14989, 1.14986, 1.14992, 1.1499, 1.1499, 1.14987, 1.14991, 1.14987, 1.14991, 1.14991, 1.14991, 1.14987, 1.14991, 1.14987, 1.14987, 1.14987, 1.14987, 1.14987, 1.14986, 1.14988, 1.14988, 1.14979, 1.14979, 1.1497, 1.1498, 1.14988, 1.14981, 1.

**P**<sub>59</sub>: {1.14988, 1.14982, 1.14989, 1.14989, 1.14989, 0., 1.14987, 1.14988, 1.14987, 1.14986, 1.14989, 1.14988, 1.14989, 1.14987, 1.1499, 1.14988, 1.14997, 1.14991, 1.14991, 1.14987, 1.14993, 1.14991, 1.14991, 1.14988, 1.14992, 1.14988, 1.14991, 1.14992, 1.14991, 1.14998, 1.14988, 1.14992, 1.14988, 1.14987, 1.14983, 1.14987, 1.14988, 1.14983, 1.14989, 1.14988, 1.14981, 1.14987, 1.14983, 1.14982, 1.14983, 1.14983, 1.14981, 1.14981, 1.14973, 1.14982, 1.14983, 1.14983, 1.14983, 1.14981, 1.14983, 1.14983, 1.14983, 1.14983, 1.14981, 1.14983, 1.14983, 1.14983, 1.14983, 1.14984, 1.14991, 1.14989, 1.14988, 1.14983, 1.14988, 1.14981, 1.14983, 1.14983, 1.14983, 1.14983, 1.14983, 1.14983, 1.14983, 1.14983, 1.14983, 1.14984,

 $\begin{array}{l} \textbf{P_{60}:} \{1.1499,\ 1.14984,\ 1.14991,\ 1.1499,\ 1.1499,\ 0.,\ 1.14989,\ 1.14989,\ 1.14989,\ 1.14989,\ 1.14989,\ 1.14989,\ 1.14989,\ 1.14989,\ 1.14989,\ 1.14992,\ 1.14992,\ 1.14992,\ 1.14992,\ 1.14992,\ 1.14992,\ 1.14992,\ 1.14992,\ 1.14992,\ 1.14992,\ 1.14992,\ 1.14992,\ 1.14992,\ 1.14992,\ 1.14992,\ 1.14992,\ 1.14992,\ 1.14992,\ 1.14992,\ 1.14994,\ 1.14993,\ 1.14984,\ 1.14984,\ 1.14984,\ 1.14984,\ 1.14984,\ 1.14985,\ 1.14$ 

 $\begin{array}{l} \textbf{P_{61}:} \{1.14991, 1.14985, 1.14992, 1.14991, 1.14991, 0., 1.1499, 1.1499, 1.1499, 1.1499, 1.14989, 1.14992, 1.14992, 1.14991, 1.14991, 1.14992, 1.14992, 1.14993, 1.14993, 1.14991, 1.14993, 1.14993, 1.14993, 1.14993, 1.14993, 1.14993, 1.14991, 1.14993, 1.14991, 1.14993, 1.14991, 1.14993, 1.14991, 1.14991, 1.14991, 1.14991, 1.14985, 1.14993, 1.14994, 1.14992, 1.14992, 1.14991, 1.14985, 1.14985, 1.14978, 1.14986, 1.14986, 1.14986, 1.14985, 1.14985, 1.14978, 1.14986, 1.$ 

 $\begin{array}{l} \textbf{P_{62}:} \{1.14992, 1.14987, 1.14992, 1.14992, 1.14992, 0., 1.14991, 1.14991, 1.14991, 1.14991, 1.14991, 1.14992, 1.14992, 1.14992, 1.14991, 1.14993, 1.14991, 1.14993, 1.14994, 1.14993, 1.14991, 1.14995, 1.14994, 1.14994, 1.14992, 1.14994, 1.14992, 1.14994, 1.14994, 1.14992, 1.14995, 1.14992, 1.14992, 1.14992, 1.14992, 1.14991, 1.14993, 1.14992, 1.14992, 1.14992, 1.14992, 1.14993, 1.14995, 1.14992, 1.14992, 1.14988, 1.14987, 1.14987, 1.14988, 1.14988, 1.14988, 1.14988, 1.14988, 1.14993, 1.14992, 1.14992, 1.14992, 1.14985, 1.14988, 1.14987, 1.14988, 1.14988, 1.14993, 1.14992, 1.14985, 1.14988, 1.14998, 1.14993, 1.14992, 1.14992, 1.14988, 1.14998, 1.14998, 1.14998, 1.14998, 1.14993, 1.14992, 1.14988, 1.14988, 1.14988, 1.14998, 1.14992, 1.14988, 1.14992, 1.14988, 1.14998, 1.14998, 1.14998, 1.14992, 1.14988, 1.14992, 1.14988, 1.14988, 1.14988, 1.14993, 1.14992, 1.14988, 1.14988, 1.14998, 1.14998, 1.14992, 1.14988, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14993, 1.14992, 1.14988, 1.14988, 1.14998, 1.14988, 1.14998, 1.14988, 1.14998, 1.14988, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14988, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14988$ 

 $\begin{array}{l} \textbf{P_{63}:} \{1.14993, 1.14988, 1.14993, 1.14993, 1.14993, 0., 1.14992, 1.14992, 1.14992, 1.14992, 1.14991, 1.14993, 1.14993, 1.14993, 1.14993, 1.14993, 1.14994, 1.14994, 1.14994, 1.14992, 1.14996, 1.14995, 1.14994, 1.14993, 1.14995, 1.14995, 1.14994, 1.14993, 1.14995, 1.14993, 1.14993, 1.14993, 1.14993, 1.14993, 1.14993, 1.14993, 1.14993, 1.14993, 1.14993, 1.14993, 1.14988, 1.14988, 1.14988, 1.14983, 1.14989, 1.14989, 1.14989, 1.14988, 1.14988, 1.14983, 1.14989, 1.14989, 1.14989, 1.14989, 1.14989, 1.14993, 1.14993, 1.14988, 1.14988, 1.14988, 1.14989, 1.14989, 1.14989, 1.14989, 1.14989, 1.14989, 1.14993, 1.14989, 1.14989, 1.14989, 1.14991, 0.\}$ 

 $\begin{array}{l} \mathbf{P_{64}:} \{1.14993, 1.1499, 1.14994, 1.14994, 1.14994, 0., 1.14993, 1.14993, 1.14993, 1.14992, \\ 1.14994, 1.14993, 1.14994, 1.14993, 1.14994, 1.14993, 1.14993, 1.14995, 1.14995, 1.14995, 1.14995, \\ 1.14996, 1.14995, 1.14995, 1.14993, 1.14995, 1.14993, 1.14993, 1.14995, 1.14995, 1.14995, 1.14993, \\ 1.14996, 1.14993, 1.14994, 1.14993, 1.14989, 1.14993, 1.14993, 1.14993, 1.14994, 1.14996, \\ 1.14994, 1.14993, 1.1499, 1.1499, 1.14989, 1.14989, 1.14985, 1.14995, 1.1499, 1.1499, 1.1499, \\ 1.14994, 1.14993, 1.14991, 1.14995, 1.14994, 1.14988, 1.14991, 1.14992, 0. \}$ 

 $\begin{array}{l} \mathbf{P_{65}:} \{1.14994, 1.14991, 1.14995, 1.14994, 1.14994, 0., 1.14994, 1.14994, 1.14993, 1.14993, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14994, 1.14996, 1.14994, 1.14994, 1.14994, 1.14994, 1.14991$ 

**P**<sub>66</sub> : {1.14995, 1.14992, 1.14995, 1.14995, 1.14995, 0., 1.14994, 1.14995, 1.14994, 1.14994, 1.14994, 1.14995, 1.14995, 1.14995, 1.14995, 1.14994, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14997, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14997, 1.14995, 1.14995, 1.14995, 1.14992, 1.1492

**P**<sub>67</sub>: {1.14995, 1.14993, 1.14996, 1.14996, 1.14996, 0., 1.14995, 1.14995, 1.14995, 1.14994, 1.14996, 1.14995, 1.14996, 1.14995, 1.14996, 1.14995, 1.14996, 1.14995, 1.14996, 1.14997, 1.14996, 1.14996, 1.14997, 1.14996, 1.14995, 1.14997, 1.14996, 1.14995, 1.14997, 1.14996, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14993, 1.14993, 1.14993, 1.14993, 1.14993, 1.14996, 1.14996, 1.14996, 1.14992, 1.14992, 1.14993, 1.14993, 1.14993, 1.14993, 1.14996, 1.14996, 1.14996, 1.14996, 1.14992, 1.14993, 1.14993, 1.14993, 1.14993, 1.14996, 1.14996, 1.14996, 1.14992, 1.14993, 1.14994, 0.}

**P**<sub>68</sub> : {1.14996, 1.14993, 1.14996, 1.14996, 1.14996, 0., 1.14995, 1.14996, 1.14995, 1.14995, 1.14995, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14996, 1.14997, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14994, 1.14994, 1.14993, 1.14993, 1.14994, 1.1494

**P**<sub>69</sub> : {1.14996, 1.14994, 1.14997, 1.14996, 1.14996, 0., 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14996, 1.14998, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14994, 1.1494

**P**<sub>70</sub> : {1.14997, 1.14995, 1.14997, 1.14997, 1.14997, 0., 1.14996, 1.14997, 1.14996, 1.14996, 1.14996, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14998, 1.14997, 1.14997, 1.14997, 1.14998, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14998, 1.14997, 1.14997, 1.14997, 1.14995, 1.14995, 1.14996, 1.14995, 1.14997, 1.14997, 1.14995, 1.1495

 $\begin{array}{l} \mathbf{P_{71}:} \{1.14997, 1.14995, 1.14997, 1.14997, 1.14997, 0., 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14997, 1.14998, 1.14997, 1.14998, 1.14997, 1.14998, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14995, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14997, 1.14997, 1.14996, 1.14997, 1.14997, 1.14995, 1.14995, 1.14995, 1.14996, 1.14996, 1.14996, 1.14996, 1.14997, 1.14997, 1.14995, 1.14995, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14997, 1.14996, 1.14997, 1.14997, 1.14995, 1.14995, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14996, 1.14997, 1.14997, 1.14996, 1.1496$ 

**P**<sub>72</sub>: {1.14997, 1.14996, 1.14998, 1.14997, 1.14997, 0., 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14997, 1.14998, 1.14997, 1.14998, 1.14997, 1.14998, 1.14997, 1.14998, 1.14997, 1.14998, 1.14997, 1.14998, 1.14997, 1.14996, 1.14997, 0.}

**P**<sub>73</sub> : {1.14998, 1.14996, 1.14998, 1.14998, 1.14998, 0., 1.14997, 1.14998, 1.14997, 1.14997, 1.14997, 1.14998, 1.14996, 1.14997, 0.}

**P**<sub>74</sub> : {1.14998, 1.14997, 1.14998, 1.14998, 1.14998, 0., 1.14998, 1.14998, 1.14998, 1.14997, 1.14998, 1.14997, 1.1498

**P**<sub>75</sub> : {1.14998, 1.14997, 1.14998, 1.14998, 1.14998, 0., 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14998, 1.14999, 1.14998, 1.14998, 1.14997, 1.14998, 1.14997, 1.14998, 1.14997, 1.14998, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14998, 0.}

**P**<sub>76</sub> : {1.14998, 1.14997, 1.14998, 1.14998, 1.14998, 0., 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14998, 1.14999, 1.14998, 1.14997, 1.14998, 1.14997, 1.14998, 1.14997, 1.14998, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14998, 1.14997, 1.14998, 1.14997, 1.14998, 1.14999, 1.14998, 1.14999, 1.14999, 1.14999, 1.14999, 1.14997, 1.14997, 1.14997, 1.14997, 1.14997, 1.14998, 1.14997, 1.14998, 1.14999, 1.14998, 1.14999, 1.14999, 1.14998, 1.14997, 1.14998, 1.14998, 1.14998, 1.14999, 1.14998, 1.14999, 1.14998, 1.14999, 1.14998, 1.14999, 1.14998, 1.14999, 1.14998, 1.14999, 1.14998, 1.14999, 1.14998, 1.14999, 1.14998, 1.14999, 1.14998, 1.14999, 1.14998, 1.14997, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14999, 1.14998, 1.14999, 1.14998, 1.14999, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14999, 1.14998, 1.14999, 1.14998, 1.1498

**P**<sub>77</sub> : {1.14998, 1.14998, 1.14999, 1.14999, 1.14999, 0., 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14998, 1.1498

**P**<sub>78</sub> : {1.14999, 1.14998, 1.14999, 1.14999, 1.14999, 0., 1.14999, 1.14999, 1.14998, 1.14998, 1.14998, 1.14999, 1.14998, 1.14988, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.1498

**P**<sub>79</sub>: {1.14999, 1.14998, 1.14999, 1.14999, 1.14999, 0., 1.14999, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14998, 1.14999, 0.}

**P**<sub>80</sub>: {1.14999, 1.14998, 1.14999, 1.14999, 1.14999, 0., 1.14999, 1.14998, 1.14999, 0.}

 $\begin{array}{l} \textbf{P_{81}:} \{1.14999, 1.14998, 1.14999, 1.14999, 1.14999, 0., 1.14999, 1.1499$ 

**P**<sub>82</sub>: {1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 0., 1.14999

**P**<sub>83</sub>: {1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 0., 1.14999

 $\begin{array}{l} \textbf{P_{84}:} \{1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 0., 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.15, 1.14999, 1.14999, 1.14999, 1.15, 1.14999, 1.15, 1.14999, 1.15, 1.14999, 1.15, 1.14999, 1.15, 1.14999, 1.15, 1.14999, 1.15, 1.14999, 1.15, 1.14999, 1.1499$ 

 $\begin{array}{l} \mathbf{P_{85}:} \{1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 0., 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.15, 1.15, 1.15, 1.14999, 1.15, 1.15, 1.14999, 1.15, 1.15, 1.15, 1.14999, 1.15, 1.14999, 1.15, 1.15, 1.14999, 1.15, 1.14999, 0. \}$ 

**P**<sub>86</sub> : {1.14999, 1.14999, 1.15, 1.14999, 1.14999, 0., 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.14999, 1.15, 1.15, 1.15, 1.15, 1.15, 1.15, 1.15, 1.15, 1.15, 1.14999, 1.15, 1.14999, 1.15, 1.14999, 1.15, 1.15, 1.15, 1.14999, 1.1499

**P**<sub>87</sub>: {1.15, 1.14999, 1.15, 1.15, 1.15, 0., 1.14999, 1.14999, 1.14999, 1.14999, 1.15, 1.14999, 1.15, 1.16, 1.16, 1.17, 1.17, 1.18, 1.19, 1.14999

 $\begin{array}{l} \mathbf{P_{88}:} \{1.15,\,1.14999,\,1.15,\,1.15,\,1.15,\,0.,\,1.15,\,1.14999,\,1.1499,\,1.1499,\,1.1499,\,1.1499,\,1.14$ 

 $\begin{array}{l} \textbf{P_{89}:} \{1.15, 1.14999, 1.15, 1.15, 1.15, 0., 1.15, 1.16, 1.14999, 1.14999, 1.15, 1.1$ 

**P**<sub>90</sub>: {1.15, 1.14999, 1.15, 1.15, 1.15, 0., 1.15, 1.16, 1.14999, 1.14

**P**<sub>91</sub>: {1.15, 1.15, 1.15, 1.15, 1.15, 0., 1.15

1.15, 1.15, 1.14999, 1.15, 1

**P**<sub>92</sub>: {1.15, 1.15, 1.15, 1.15, 1.15, 0., 1.15

**P**<sub>93</sub>: {1.15, 1.15, 1.15, 1.15, 1.15, 0., 1.15

**P**<sub>94</sub>: {1.15, 1.15, 1.15, 1.15, 1.15, 0., 1.15

**P**<sub>95</sub> : {1.15, 1.15, 1.15, 1.15, 1.15, 0., 1.15, 1.1

#### **Β.2.** βΑποτελέσματα 2<sup>ου</sup> μοντέλου για υποτίμηση 50%

Οι επιδράσεις στο επίπεδο τιμών των εμπορευμάτων στην ελληνική οικονομία μετά από υποτίμησης του νομίσματος κατά 50% είναι οι εξής<sup>54</sup>:

 $\begin{array}{l} \textbf{P_1:} \{1.07211, 1.00294, 1.07014, 1.07948, 1.1109, 0., 1.07027, 1.07635, 1.06186, 1.06425, \\ 1.12587, 1.1252, 1.12908, 1.09888, 1.15705, 1.12406, 1.36681, 1.18928, 1.1659, 1.07461, \\ 1.17134, 1.15347, 1.19111, 1.12415, 1.16503, 1.13363, 1.19511, 1.21482, 1.1826, 1.12457, \\ 1.15992, 1.04778, 1.08313, 1.09198, 1.06685, 1.08972, 1.06075, 1.08046, 1.102, 1.22517, \\ 1.11914, 1.11105, 1.04703, 1.02891, 1.03439, 1.03504, 1.00746, 1.05264, 1.05327, 1.03932, \\ 1.04697, 1.0975, 1.01055, 1.16643, 1.1159, 1.03149, 1.05216, 1.07437, 0. \\ \end{array}$ 

 $\begin{array}{l} \textbf{P_2:} \{1.15422,\ 1.03656,\ 1.17167,\ 1.16059,\ 1.18569,\ 0.,\ 1.15275,\ 1.1672,\ 1.1278,\ 1.12706,\\ 1.19866,\ 1.19153,\ 1.20824,\ 1.16564,\ 1.22964,\ 1.19169,\ 1.41946,\ 1.25927,\ 1.23907,\ 1.14307,\\ 1.25972,\ 1.24045,\ 1.26397,\ 1.19495,\ 1.25018,\ 1.20195,\ 1.26484,\ 1.28314,\ 1.25639,\ 1.19396,\\ 1.25166,\ 1.126,\ 1.16212,\ 1.17599,\ 1.1047,\ 1.16188,\ 1.11417,\ 1.14502,\ 1.21194,\ 1.30892,\\ 1.21098,\ 1.18814,\ 1.09656,\ 1.07766,\ 1.07848,\ 1.07968,\ 1.0279,\ 1.10547,\ 1.10418,\ 1.08733,\\ 1.09847,\ 1.16875,\ 1.06297,\ 1.24678,\ 1.20567,\ 1.07502,\ 1.10313,\ 1.13507,\ 0.\} \end{array}$ 

 $\begin{array}{l} \textbf{P_3:} \{1.2156,\,1.08167,\,1.24004,\,1.22157,\,1.24378,\,0.,\,1.21568,\,1.22753,\,1.19001,\,1.18451,\,1.25026,\,1.23772,\,1.25886,\,1.2146,\,1.27402,\,1.23703,\,1.43411,\,1.30001,\,1.28388,\,1.20241,\,1.31222,\,1.29217,\,1.30474,\,1.2435,\,1.30011,\,1.2484,\,1.30402,\,1.31993,\,1.29967,\,1.24164,\,1.30448,\,1.19195,\,1.22203,\,1.23331,\,1.1439,\,1.21784,\,1.16096,\,1.199,\,1.26986,\,1.3468,\,1.25986,\,1.24063,\,1.14258,\,1.1282,\,1.1244,\,1.12534,\,1.05763,\,1.15042,\,1.15028,\,1.13586,\,1.14556,\,1.22198,\,1.12147,\,1.29072,\,1.25828,\,1.11824,\,1.15047,\,1.1867,\,0.\} \end{array}$ 

**P4**: {1.26186, 1.12898, 1.28614, 1.26751, 1.28524, 0., 1.26023, 1.26935, 1.23939, 1.23093, 1.28915, 1.27388, 1.29539, 1.2535, 1.30657, 1.27206, 1.44312, 1.32965, 1.31664, 1.24908, 1.34714, 1.32698, 1.33351, 1.28026, 1.33382, 1.28388, 1.33273, 1.34633, 1.33039, 1.27809, 1.33929, 1.24358, 1.2673, 1.27521, 1.18153, 1.25904, 1.20053, 1.24418, 1.30512, 1.37067, 1.2931, 1.27868, 1.18419, 1.17352, 1.16723, 1.168, 1.09132, 1.18979, 1.19109, 1.1803, 1.18718, 1.2627, 1.17322, 1.32145, 1.29426, 1.15814, 1.1925, 1.22945, 0.}

 $\begin{array}{l} \textbf{P5:} \{1.29747, 1.17378, 1.31914, 1.30301, 1.3161, 0., 1.29328, 1.30096, 1.27782, 1.26803, 1.31934, 1.3031, 1.32355, 1.28541, 1.33223, 1.30067, 1.45025, 1.35274, 1.3421, 1.28532, 1.37219, 1.3526, 1.35584, 1.30938, 1.35858, 1.31219, 1.35526, 1.36694, 1.35406, 1.30718, 1.36444, 1.28382, 1.30226, 1.30722, 1.21581, 1.29112, 1.23446, 1.28053, 1.33086, 1.38852, 1.31946, 1.30842, 1.2212, 1.21293, 1.20573, 1.20637, 1.12595, 1.22449, 1.22687, 1.21946, 1.22365, 1.29493, 1.21683, 1.34531, 1.32177, 1.19431, 1.22915, 1.26504, 0. \end{array}$ 

 $\begin{array}{l} \textbf{P_6:} \{1.32558, 1.21417, 1.34427, 1.33108, 1.34047, 0., 1.31941, 1.32636, 1.30831, 1.29821, \\ 1.34348, 1.3273, 1.34622, 1.31215, 1.35325, 1.32471, 1.45622, 1.37146, 1.36262, 1.31413, \\ 1.39116, 1.37262, 1.37402, 1.33327, 1.37785, 1.33552, 1.37359, 1.38372, 1.37315, 1.33114, \\ 1.38373, 1.31558, 1.32994, 1.33264, 1.24652, 1.31737, 1.26405, 1.30986, 1.35165, 1.40288, \\ 1.34146, 1.33273, 1.2538, 1.24704, 1.23972, 1.24024, 1.15982, 1.25511, 1.25819, 1.25348, \\ 1.25553, 1.32122, 1.25348, 1.36475, 1.34407, 1.22685, 1.26095, 1.29473, 0. \\ \end{array}$ 

<sup>&</sup>lt;sup>54</sup> Ο δείκτης στη τιμή P μας δείχνει τον αριθμό της επανάληψης και οι τιμές μέσα στο άγκιστρο την τιμή που θα έχουν τα εμπορεύματα ανά κλάδο

**P7**: {1.34837, 1.24971, 1.36435, 1.35376, 1.3605, 0., 1.34104, 1.34751, 1.33311, 1.32327, 1.3633, 1.34778, 1.36505, 1.33489, 1.37091, 1.34526, 1.46133, 1.38711, 1.37963, 1.33771, 1.40613, 1.38889, 1.38926, 1.35336, 1.39348, 1.35522, 1.38892, 1.39779, 1.38898, 1.35136, 1.39916, 1.34109, 1.35239, 1.35352, 1.27392, 1.33948, 1.29008, 1.33399, 1.36919, 1.41483, 1.36019, 1.35312, 1.28239, 1.27661, 1.26954, 1.26993, 1.19198, 1.28216, 1.28564, 1.28292, 1.28341, 1.34316, 1.2845, 1.38104, 1.36276, 1.25599, 1.28858, 1.3197, 0.}

 $P_8$ : {1.36728, 1.28063, 1.38098, 1.37246, 1.37738, 0., 1.35948, 1.3655, 1.35376, 1.34446, 1.37993, 1.36538, 1.38102, 1.35444, 1.38602, 1.36304, 1.46575, 1.40044, 1.39402, 1.35747, 1.41831, 1.40247, 1.40227, 1.37056, 1.40652, 1.37212, 1.40199, 1.4098, 1.40236, 1.36871, 1.41187, 1.36196, 1.37098, 1.37109, 1.29831, 1.35841, 1.3131, 1.35423, 1.38429, 1.42498, 1.37635, 1.37049, 1.30744, 1.30235, 1.29567, 1.29597, 1.222, 1.30608, 1.30975, 1.30842, 1.30784, 1.36181, 1.31096, 1.39497, 1.37872, 1.28206, 1.31266, 1.34097, 0.}

**P9**: {1.38325, 1.30741, 1.39507, 1.38815, 1.39181, 0., 1.37544, 1.38101, 1.37125, 1.36262, 1.3941, 1.38067, 1.39476, 1.37138, 1.39908, 1.37853, 1.46962, 1.41194, 1.40637, 1.3743, 1.42845, 1.41402, 1.41351, 1.38544, 1.4176, 1.38677, 1.41328, 1.42019, 1.41383, 1.38375, 1.42257, 1.37932, 1.38664, 1.38613, 1.32004, 1.37478, 1.33349, 1.37147, 1.39743, 1.43371, 1.3904, 1.38546, 1.32941, 1.32483, 1.3186, 1.31883, 1.24968, 1.32727, 1.33098, 1.33058, 1.32931, 1.37785, 1.33368, 1.40702, 1.39254, 1.30536, 1.33374, 1.35929, 0.}

 $\begin{array}{l} \textbf{P_{10}:} \{1.39693,\,1.33059,\,1.4072,\,1.40149,\,1.40428,\,0.,\,1.38939,\,1.3945,\,1.38626,\,1.37835,\,1.40633,\,1.39404,\,1.40671,\,1.38613,\,1.41048,\,1.39211,\,1.47301,\,1.42195,\,1.41708,\,1.38882,\,1.43704,\,1.42396,\,1.42329,\,1.39841,\,1.42713,\,1.39956,\,1.42311,\,1.42924,\,1.42374,\,1.39688,\,1.4317,\,1.39398,\,1.40001,\,1.39915,\,1.33939,\,1.38903,\,1.3516,\,1.38633,\,1.40893,\,1.44128,\,1.40269,\,1.39848,\,1.34868,\,1.34453,\,1.33879,\,1.33896,\,1.27501,\,1.34607,\,1.34969,\,1.34991,\,1.34824,\,1.39178,\,1.35331,\,1.41752,\,1.4046,\,1.32617,\,1.35226,\,1.37522,\,0. \\ \end{array}$ 

 $\begin{array}{l} \textbf{P_{11}:} \{1.40876, 1.35067, 1.41774, 1.41297, 1.41513, 0., 1.40165, 1.40631, 1.39927, 1.39207, 1.41696, 1.40579, 1.41716, 1.39903, 1.42046, 1.40406, 1.476, 1.43071, 1.42642, 1.40144, 1.4444, 1.4326, 1.43186, 1.40978, 1.43542, 1.41078, 1.43172, 1.43716, 1.43238, 1.4084, 1.43958, 1.40651, 1.41155, 1.41052, 1.35663, 1.40151, 1.36768, 1.39925, 1.41905, 1.4479, 1.4135, 1.40987, 1.36564, 1.36186, 1.35659, 1.35673, 1.29805, 1.36276, 1.36624, 1.36683, 1.36495, 1.40395, 1.37035, 1.42673, 1.41518, 1.34476, 1.36859, 1.38916, 0. \end{array}$ 

 $\begin{array}{l} \textbf{P_{12}:} \{1.41908, 1.36812, 1.42696, 1.42291, 1.42463, 0., 1.41247, 1.41669, 1.41062, 1.4041, 1.42626, 1.41615, 1.42635, 1.41035, 1.42925, 1.41462, 1.47863, 1.43841, 1.43461, 1.41248, 1.45077, 1.44016, 1.43941, 1.41979, 1.44266, 1.42066, 1.43929, 1.44413, 1.43995, 1.41854, 1.44644, 1.41732, 1.42158, 1.42049, 1.37201, 1.41247, 1.38198, 1.41055, 1.42797, 1.4537, 1.42303, 1.41988, 1.38058, 1.37714, 1.37234, 1.37245, 1.31892, 1.3776, 1.38088, 1.3817, 1.37974, 1.41464, 1.3852, 1.43484, 1.42451, 1.36136, 1.38301, 1.40142, 0. \end{array}$ 

 $\begin{array}{l} \textbf{P_{13}:} \{1.42812, 1.38333, 1.43507, 1.4316, 1.43299, 0., 1.42204, 1.42585, 1.42058, 1.4147, 1.43444, 1.42532, 1.43445, 1.42032, 1.43702, 1.42395, 1.48097, 1.4452, 1.44183, 1.42219, 1.45633, 1.44679, 1.44607, 1.42862, 1.44903, 1.42938, 1.44597, 1.45028, 1.44661, 1.4275, 1.45244, 1.42671, 1.43036, 1.42927, 1.38573, 1.42214, 1.39471, 1.42049, 1.43586, 1.45882, 1.43146, 1.42871, 1.39377, 1.39064, 1.38628, 1.38638, 1.33777, 1.39081, 1.39387, 1.39479, 1.39285, 1.42406, 1.3982, 1.442, 1.43276, 1.37619, 1.39579, 1.41225, 0. \end{array}$ 

**P**<sub>14</sub>: {1.43608, 1.39662, 1.44223, 1.43922, 1.44036, 0., 1.43052, 1.43396, 1.42936, 1.42406, 1.44165, 1.43345, 1.44162, 1.42912, 1.4439, 1.43223, 1.48304, 1.4512, 1.44821, 1.43075, 1.4612, 1.45265, 1.45196, 1.43643, 1.45464, 1.4371, 1.45189, 1.45572, 1.45248, 1.43543, 1.45771, 1.43493, 1.43808, 1.43702, 1.39797, 1.43069, 1.40605, 1.42924, 1.44285, 1.46334, 1.43893, 1.43651, 1.40544, 1.4026, 1.39865, 1.39873, 1.35476, 1.40257, 1.4054, 1.40636, 1.40448, 1.43239, 1.40961, 1.44834, 1.44008, 1.38943, 1.40712, 1.42183, 0.}

 $\begin{array}{l} \mathbf{P_{15}:} \{1.4431, 1.40827, 1.44855, 1.44593, 1.44688, 0., 1.43805, 1.44114, 1.43711, 1.43235, 1.44803, 1.44067, 1.44798, 1.4369, 1.44999, 1.43958, 1.48488, 1.45652, 1.45386, 1.43832, 1.46549, 1.45783, 1.45719, 1.44335, 1.45961, 1.44395, 1.45713, 1.46055, 1.45768, 1.44247, 1.46236, 1.44216, 1.44489, 1.44389, 1.40889, 1.43825, 1.41616, 1.43699, 1.44906, 1.46734, 1.44556, 1.44343, 1.41578, 1.4132, 1.40964, 1.40971, 1.37003, 1.41305, 1.41564, 1.4166, 1.41483, 1.43976, 1.41966, 1.45396, 1.44657, 1.40125, 1.41719, 1.43032, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{16}:} \{1.44932, 1.41852, 1.45416, 1.45186, 1.45267, 0., 1.44475, 1.44752, 1.44397, 1.4397, 1.45369, 1.44709, 1.45362, 1.44379, 1.45541, 1.44611, 1.48651, 1.46125, 1.45888, 1.44504, 1.46928, 1.46242, 1.46183, 1.4495, 1.46401, 1.45003, 1.46178, 1.46483, 1.46229, 1.44871, 1.46648, 1.44853, 1.45091, 1.44999, 1.41865, 1.44497, 1.42516, 1.44386, 1.45457, 1.47089, 1.45145, 1.44957, 1.42495, 1.42262, 1.41941, 1.41947, 1.38374, 1.42239, 1.42476, 1.42569, 1.42403, 1.44631, 1.42853, 1.45895, 1.45234, 1.41181, 1.42614, 1.43787, 0. \\ \end{array}$ 

**P**<sub>17</sub> : {1.45483, 1.42755, 1.45913, 1.45711, 1.4578, 0., 1.45071, 1.45319, 1.45006, 1.44624, 1.45871, 1.45279, 1.45864, 1.44991, 1.46023, 1.45193, 1.48797, 1.46544, 1.46333, 1.451, 1.47263, 1.4665, 1.46595, 1.45496, 1.46791, 1.45543, 1.46591, 1.46863, 1.46638, 1.45426, 1.47013, 1.45416, 1.45625, 1.45541, 1.42735, 1.45093, 1.43319, 1.44995, 1.45948, 1.47404, 1.45669, 1.45503, 1.43309, 1.43099, 1.42811, 1.42816, 1.39604, 1.43072, 1.43287, 1.43375, 1.43222, 1.45212, 1.43637, 1.46339, 1.45748, 1.42124, 1.4341, 1.44458, 0.}

 $\begin{array}{l} \textbf{P_{18}:} \{1.45973, 1.43553, 1.46356, 1.46177, 1.46236, 0., 1.45602, 1.45824, 1.45547, 1.45205, \\ 1.46318, 1.45788, 1.4631, 1.45534, 1.46452, 1.45711, 1.48926, 1.46917, 1.46729, 1.4563, \\ 1.47561, 1.47012, 1.46963, 1.45982, 1.47138, 1.46024, 1.46959, 1.47202, 1.47001, 1.4592, \\ 1.47337, 1.45915, 1.46099, 1.46022, 1.43512, 1.45623, 1.44036, 1.45537, 1.46384, 1.47685, \\ 1.46136, 1.45988, 1.44033, 1.43844, 1.43585, 1.43589, 1.40706, 1.43815, 1.4401, 1.44092, \\ 1.43951, 1.45729, 1.44332, 1.46734, 1.46206, 1.42967, 1.4412, 1.45056, 0. \\ \end{array}$ 

 $\begin{array}{l} \textbf{P_{19}:} \{1.46408, 1.4426, 1.46749, 1.46591, 1.46642, 0., 1.46075, 1.46274, 1.46028, 1.45722, 1.46715, 1.46241, 1.46708, 1.46017, 1.46833, 1.46172, 1.49042, 1.47249, 1.47081, 1.46101, 1.47825, 1.47334, 1.4729, 1.46415, 1.47447, 1.46452, 1.47287, 1.47503, 1.47325, 1.46359, 1.47625, 1.46359, 1.46521, 1.46451, 1.44206, 1.46095, 1.44675, 1.46018, 1.46773, 1.47935, 1.46552, 1.4642, 1.44677, 1.44507, 1.44275, 1.44279, 1.41693, 1.44478, 1.44654, 1.44729, 1.44601, 1.4619, 1.44948, 1.47086, 1.46614, 1.43719, 1.44752, 1.45588, 0. \\ \end{array}$ 

**P20**: {1.46796, 1.44886, 1.471, 1.46959, 1.47004, 0., 1.46496, 1.46674, 1.46457, 1.46182, 1.47069, 1.46645, 1.47062, 1.46446, 1.47174, 1.46583, 1.49145, 1.47545, 1.47395, 1.46521, 1.4806, 1.47621, 1.47581, 1.46801, 1.47722, 1.46834, 1.47579, 1.47772, 1.47613, 1.46751, 1.47881, 1.46752, 1.46896, 1.46833, 1.44826, 1.46516, 1.45246, 1.46447, 1.4712, 1.48157, 1.46922, 1.46805, 1.45251, 1.45098, 1.4489, 1.44893, 1.42577, 1.45069, 1.45228, 1.45297, 1.45181, 1.466, 1.45496, 1.47399, 1.46977, 1.4439, 1.45316, 1.46062, 0.}

 $\begin{array}{l} \textbf{P_{21}:} \{1.47141, 1.45441, 1.47412, 1.47287, 1.47326, 0., 1.46872, 1.47032, 1.46838, 1.46593, 1.47384, 1.47005, 1.47377, 1.46829, 1.47477, 1.4695, 1.49237, 1.47809, 1.47675, 1.46895, 1.48269, 1.47877, 1.47841, 1.47145, 1.47967, 1.47174, 1.47839, 1.48011, 1.4787, 1.4711, 1.48109, 1.47103, 1.4723, 1.47173, 1.45379, 1.4689, 1.45755, 1.46829, 1.47429, 1.48355, 1.47253, 1.47149, 1.45762, 1.45625, 1.45439, 1.45441, 1.43367, 1.45597, 1.4574, 1.45803, 1.45698, 1.46965, 1.45983, 1.47678, 1.47301, 1.4499, 1.45818, 1.46485, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{22}:} \{1.47448, 1.45935, 1.4769, 1.47579, 1.47613, 0., 1.47208, 1.4735, 1.47178, 1.46958, \\ 1.47665, 1.47326, 1.47659, 1.4717, 1.47748, 1.47277, 1.49318, 1.48044, 1.47925, 1.47228, \\ 1.48455, 1.48105, 1.48073, 1.47451, 1.48185, 1.47477, 1.48071, 1.48225, 1.48099, 1.47411, \\ 1.48313, 1.47415, 1.47528, 1.47477, 1.45874, 1.47224, 1.46209, 1.4717, 1.47705, 1.48532, \\ 1.47547, 1.47455, 1.46217, 1.46094, 1.45928, 1.4593, 1.44074, 1.46069, 1.46197, 1.46254, \\ 1.46159, 1.47291, 1.46416, 1.47927, 1.47591, 1.45526, 1.46267, 1.46862, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{23}:} \{1.47722, 1.46375, 1.47938, 1.47839, 1.47869, 0., 1.47507, 1.47634, 1.47481, 1.47285, \\ 1.47915, 1.47612, 1.4791, 1.47474, 1.47989, 1.47569, 1.49391, 1.48254, 1.48148, 1.47526, \\ 1.48621, 1.48308, 1.48279, 1.47724, 1.4838, 1.47748, 1.48278, 1.48415, 1.48303, 1.47689, \\ 1.48494, 1.47693, 1.47793, 1.47747, 1.46315, 1.47522, 1.46615, 1.47474, 1.47951, 1.48689, \\ 1.4781, 1.47728, 1.46623, 1.46513, 1.46364, 1.46367, 1.44706, 1.4649, 1.46604, 1.46656, \\ 1.46571, 1.47582, 1.46802, 1.4815, 1.47849, 1.46004, 1.46667, 1.47198, 0. \\ \end{array}$ 

**P24**: {1.47967, 1.46765, 1.48159, 1.48071, 1.48098, 0., 1.47774, 1.47888, 1.47751, 1.47576, 1.48139, 1.47868, 1.48134, 1.47745, 1.48205, 1.47829, 1.49457, 1.48441, 1.48346, 1.47791, 1.48769, 1.4849, 1.48464, 1.47968, 1.48554, 1.47989, 1.48462, 1.48585, 1.48485, 1.47937, 1.48655, 1.47941, 1.4803, 1.47989, 1.46709, 1.47788, 1.46977, 1.47745, 1.48171, 1.4883, 1.48045, 1.47971, 1.46985, 1.46887, 1.46754, 1.46756, 1.45271, 1.46865, 1.46968, 1.47015, 1.46938, 1.47841, 1.47146, 1.48348, 1.48079, 1.46432, 1.47024, 1.47499, 0.}

 $\begin{array}{l} \mathbf{P}_{25}: \{1.48185, 1.47114, 1.48356, 1.48278, 1.48302, 0., 1.48012, 1.48114, 1.47992, 1.47836, 1.48338, 1.48096, 1.48334, 1.47987, 1.48397, 1.48062, 1.49515, 1.48608, 1.48523, 1.48028, 1.48901, 1.48652, 1.48628, 1.48186, 1.48709, 1.48205, 1.48627, 1.48737, 1.48647, 1.48158, 1.488, 1.48162, 1.48241, 1.48204, 1.47061, 1.48025, 1.47301, 1.47987, 1.48367, 1.48955, 1.48254, 1.48188, 1.47309, 1.47221, 1.47102, 1.47103, 1.45775, 1.47201, 1.47293, 1.47335, 1.47266, 1.48072, 1.47453, 1.48525, 1.48285, 1.46813, 1.47343, 1.47766, 0.\}$ 

 $\begin{array}{l} \mathbf{P}_{26}: \{1.48379, 1.47424, 1.48532, 1.48462, 1.48484, 0., 1.48225, 1.48316, 1.48207, 1.48067, \\ 1.48516, 1.483, 1.48512, 1.48203, 1.48569, 1.48269, 1.49567, 1.48757, 1.48681, 1.48239, \\ 1.49019, 1.48796, 1.48775, 1.4838, 1.48847, 1.48397, 1.48774, 1.48872, 1.48792, 1.48355, \\ 1.48928, 1.48359, 1.4843, 1.48397, 1.47375, 1.48236, 1.47589, 1.48202, 1.48541, 1.49067, \\ 1.48441, 1.48382, 1.47597, 1.47518, 1.47412, 1.47413, 1.46227, 1.475, 1.47582, 1.4762, \\ 1.47559, 1.48279, 1.47726, 1.48683, 1.48468, 1.47154, 1.47627, 1.48006, 0. \} \end{array}$ 

**P27 :** {1.48553, 1.47701, 1.4869, 1.48627, 1.48646, 0., 1.48415, 1.48496, 1.48399, 1.48274, 1.48675, 1.48482, 1.48671, 1.48395, 1.48722, 1.48454, 1.49613, 1.4889, 1.48823, 1.48428, 1.49124, 1.48925, 1.48906, 1.48554, 1.48971, 1.48568, 1.48905, 1.48993, 1.48921, 1.48531, 1.49043, 1.48535, 1.48598, 1.48568, 1.47656, 1.48425, 1.47847, 1.48395, 1.48698, 1.49167, 1.48608, 1.48556, 1.47854, 1.47784, 1.47689, 1.4769, 1.4663, 1.47767, 1.47841, 1.47875, 1.4782, 1.48463, 1.4797, 1.48824, 1.48632, 1.47458, 1.47881, 1.48219, 0.}

 $\begin{array}{l} \mathbf{P_{28}:} \{1.48708, 1.47947, 1.4883, 1.48774, 1.48791, 0., 1.48585, 1.48657, 1.48571, 1.48459, 1.48817, 1.48645, 1.48814, 1.48567, 1.48859, 1.4862, 1.49655, 1.49009, 1.48949, 1.48596, 1.49218, 1.4904, 1.49023, 1.48709, 1.49081, 1.48722, 1.49022, 1.49101, 1.49037, 1.48688, 1.49146, 1.48692, 1.48748, 1.48722, 1.47906, 1.48594, 1.48077, 1.48567, 1.48837, 1.49256, 1.48757, 1.4871, 1.48084, 1.48021, 1.47936, 1.47937, 1.4699, 1.48006, 1.48072, 1.48103, 1.48053, 1.48627, 1.48188, 1.4895, 1.48779, 1.4773, 1.48108, 1.4841, 0. \end{array}$ 

 $\begin{array}{l} \mathbf{P_{29}:} \{1.48846, 1.48168, 1.48955, 1.48905, 1.4892, 0., 1.48736, 1.48801, 1.48724, 1.48624, \\ 1.48944, 1.4879, 1.48941, 1.48721, 1.48981, 1.48767, 1.49692, 1.49115, 1.49061, 1.48746, \\ 1.49302, 1.49143, 1.49128, 1.48847, 1.49179, 1.48858, 1.49127, 1.49197, 1.4914, 1.48829, \\ 1.49237, 1.48832, 1.48882, 1.48858, 1.4813, 1.48744, 1.48283, 1.4872, 1.48961, 1.49336, \\ 1.4889, 1.48848, 1.48289, 1.48233, 1.48157, 1.48158, 1.47311, 1.48219, 1.48278, 1.48306, \\ 1.48261, 1.48774, 1.48382, 1.49062, 1.48909, 1.47973, 1.4831, 1.4858, 0. \\ \end{array}$ 

 $\begin{array}{l} \textbf{P_{30}:} \{1.4897, 1.48364, 1.49067, 1.49023, 1.49036, 0., 1.48871, 1.48929, 1.4886, 1.48771, 1.49057, 1.48919, 1.49054, 1.48858, 1.4909, 1.48899, 1.49725, 1.4921, 1.49162, 1.4888, 1.49377, 1.49235, 1.49221, 1.4897, 1.49267, 1.48981, 1.4922, 1.49283, 1.49232, 1.48954, 1.49319, 1.48957, 1.49002, 1.4898, 1.4833, 1.48879, 1.48467, 1.48857, 1.49072, 1.49407, 1.49009, 1.48971, 1.48472, 1.48422, 1.48354, 1.48355, 1.47599, 1.4841, 1.48463, 1.48487, 1.48447, 1.48905, 1.48555, 1.49162, 1.49026, 1.4819, 1.48491, 1.48732, 0. \\ \end{array}$ 

 $\begin{array}{l} \textbf{P_{31}:} \{1.4908, 1.48539, 1.49167, 1.49127, 1.49139, 0., 1.48992, 1.49044, 1.48982, 1.48903, 1.49158, 1.49035, 1.49155, 1.4898, 1.49187, 1.49017, 1.49754, 1.49294, 1.49251, 1.49, 1.49443, 1.49316, 1.49304, 1.4908, 1.49345, 1.4909, 1.49304, 1.49359, 1.49314, 1.49066, 1.49392, 1.49068, 1.49109, 1.4909, 1.48509, 1.48999, 1.48631, 1.48979, 1.49172, 1.4947, 1.49115, 1.49081, 1.48636, 1.48591, 1.4853, 1.48531, 1.47855, 1.4858, 1.48627, 1.48649, 1.48614, 1.49023, 1.4871, 1.49252, 1.4913, 1.48383, 1.48652, 1.48867, 0. \end{array}$ 

**P**<sub>32</sub> : {1.49178, 1.48696, 1.49256, 1.49221, 1.49231, 0., 1.491, 1.49146, 1.49091, 1.4902, 1.49248, 1.49138, 1.49245, 1.49089, 1.49274, 1.49122, 1.4978, 1.4937, 1.49331, 1.49107, 1.49503, 1.4939, 1.49379, 1.49179, 1.49415, 1.49187, 1.49378, 1.49428, 1.49387, 1.49166, 1.49457, 1.49168, 1.49204, 1.49187, 1.48668, 1.49106, 1.48777, 1.49088, 1.4926, 1.49527, 1.49209, 1.4918, 1.48782, 1.48741, 1.48687, 1.48688, 1.48084, 1.48732, 1.48774, 1.48793, 1.48762, 1.49127, 1.48848, 1.49332, 1.49223, 1.48556, 1.48796, 1.48989, 0.}

 $\begin{array}{l} \textbf{P_{33}:} \{1.49266, 1.48835, 1.49335, 1.49304, 1.49313, 0., 1.49196, 1.49237, 1.49188, 1.49125, 1.49328, 1.4923, 1.49326, 1.49186, 1.49352, 1.49216, 1.49804, 1.49437, 1.49403, 1.49203, 1.49556, 1.49455, 1.49445, 1.49267, 1.49478, 1.49274, 1.49445, 1.49489, 1.49453, 1.49255, 1.49515, 1.49257, 1.49289, 1.49274, 1.48811, 1.49201, 1.48908, 1.49186, 1.49339, 1.49578, 1.49294, 1.49267, 1.48912, 1.48876, 1.48828, 1.48828, 1.48289, 1.48867, 1.48805, 1.48905, 1.48922, 1.48894, 1.4922, 1.48971, 1.49403, 1.49306, 1.4871, 1.48925, 1.49097, 0. \end{array}$ 

**P**<sub>34</sub> : {1.49345, 1.4896, 1.49407, 1.49378, 1.49387, 0., 1.49282, 1.49319, 1.49275, 1.49218, 1.494, 1.49312, 1.49398, 1.49273, 1.49421, 1.493, 1.49825, 1.49497, 1.49467, 1.49288, 1.49604, 1.49513, 1.49505, 1.49345, 1.49534, 1.49352, 1.49504, 1.49544, 1.49511, 1.49335, 1.49567, 1.49337, 1.49365, 1.49352, 1.48938, 1.49287, 1.49025, 1.49273, 1.4941, 1.49623, 1.49369, 1.49346, 1.49028, 1.48996, 1.48953, 1.48954, 1.48472, 1.48989, 1.49022, 1.49038, 1.49012, 1.49304, 1.49081, 1.49467, 1.4938, 1.48848, 1.4904, 1.49193, 0.}

**P**<sub>35</sub> : {1.49415, 1.49071, 1.4947, 1.49445, 1.49452, 0., 1.49359, 1.49392, 1.49353, 1.49302, 1.49464, 1.49386, 1.49463, 1.49351, 1.49483, 1.49375, 1.49844, 1.49551, 1.49524, 1.49364, 1.49646, 1.49565, 1.49558, 1.49415, 1.49584, 1.49421, 1.49557, 1.49593, 1.49564, 1.49406, 1.49613, 1.49408, 1.49433, 1.49421, 1.49051, 1.49363, 1.49129, 1.49351, 1.49473, 1.49663, 1.49437, 1.49416, 1.49132, 1.49104, 1.49065, 1.49066, 1.48635, 1.49097, 1.49127, 1.49141, 1.49118, 1.49378, 1.4918, 1.49524, 1.49447, 1.48971, 1.49143, 1.4928, 0.}

 $\begin{array}{l} \textbf{P_{36}:} \{1.49477, 1.49171, 1.49527, 1.49504, 1.49511, 0., 1.49427, 1.49457, 1.49422, 1.49377, 1.49521, 1.49452, 1.4952, 1.49421, 1.49538, 1.49442, 1.4986, 1.49599, 1.49575, 1.49432, 1.49684, 1.49612, 1.49605, 1.49478, 1.49628, 1.49483, 1.49605, 1.49636, 1.4961, 1.49469, 1.49654, 1.49471, 1.49494, 1.49483, 1.49153, 1.49431, 1.49222, 1.4942, 1.49529, 1.49699, 1.49497, 1.49478, 1.49225, 1.492, 1.49165, 1.49166, 1.48781, 1.49193, 1.4922, 1.49233, 1.49212, 1.49445, 1.49267, 1.49575, 1.49506, 1.49081, 1.49234, 1.49357, 0. \end{array}$ 

**P**<sub>37</sub>: {1.49533, 1.49259, 1.49577, 1.49557, 1.49563, 0., 1.49489, 1.49515, 1.49484, 1.49443, 1.49573, 1.4951, 1.49571, 1.49483, 1.49588, 1.49501, 1.49875, 1.49642, 1.4962, 1.49493, 1.49718, 1.49653, 1.49647, 1.49533, 1.49668, 1.49538, 1.49647, 1.49675, 1.49652, 1.49526, 1.49691, 1.49528, 1.49548, 1.49538, 1.49243, 1.49492, 1.49305, 1.49482, 1.4958, 1.49731, 1.49551, 1.49534, 1.49308, 1.49285, 1.49254, 1.49255, 1.48912, 1.4928, 1.49303, 1.49315, 1.49297, 1.49504, 1.49346, 1.49621, 1.49559, 1.4918, 1.49316, 1.49425, 0.}

 $\begin{array}{l} \textbf{P_{38}:} \{1.49583, 1.49339, 1.49623, 1.49605, 1.4961, 0., 1.49543, 1.49567, 1.49539, 1.49503, 1.49618, 1.49563, 1.49617, 1.49538, 1.49632, 1.49555, 1.49889, 1.4968, 1.49661, 1.49547, 1.49748, 1.4969, 1.49685, 1.49583, 1.49703, 1.49588, 1.49685, 1.4971, 1.49689, 1.49577, 1.49724, 1.49578, 1.49596, 1.49588, 1.49324, 1.49546, 1.4938, 1.49538, 1.49625, 1.4976, 1.49599, 1.49584, 1.49382, 1.49362, 1.49334, 1.49334, 1.49028, 1.49357, 1.49378, 1.49388, 1.49372, 1.49557, 1.49416, 1.49661, 1.49606, 1.49267, 1.49389, 1.49487, 0. \end{array}$ 

**P**<sub>39</sub>: {1.49628, 1.49409, 1.49663, 1.49647, 1.49652, 0., 1.49592, 1.49613, 1.49588, 1.49556, 1.49659, 1.49609, 1.49658, 1.49587, 1.49671, 1.49602, 1.499, 1.49715, 1.49697, 1.49595, 1.49775, 1.49723, 1.49719, 1.49628, 1.49735, 1.49632, 1.49718, 1.49741, 1.49722, 1.49622, 1.49754, 1.49623, 1.49639, 1.49632, 1.49397, 1.49595, 1.49446, 1.49587, 1.49665, 1.49786, 1.49642, 1.49628, 1.49448, 1.4943, 1.49405, 1.49406, 1.49132, 1.49425, 1.49444, 1.49453, 1.49439, 1.49605, 1.49478, 1.49697, 1.49648, 1.49346, 1.49356, 1.49542, 0.}

**P**<sub>40</sub> : {1.49668, 1.49472, 1.49699, 1.49685, 1.49689, 0., 1.49636, 1.49654, 1.49632, 1.49603, 1.49696, 1.49651, 1.49695, 1.49631, 1.49706, 1.49645, 1.49911, 1.49745, 1.49729, 1.49639, 1.49799, 1.49753, 1.49749, 1.49668, 1.49763, 1.49671, 1.49748, 1.49769, 1.49752, 1.49663, 1.4978, 1.49663, 1.49678, 1.49671, 1.49461, 1.49638, 1.49505, 1.49631, 1.49701, 1.49809, 1.4968, 1.49668, 1.49507, 1.49491, 1.49469, 1.49469, 1.49225, 1.49487, 1.49504, 1.49512, 1.49499, 1.49647, 1.49534, 1.4973, 1.49686, 1.49416, 1.49513, 1.49511, 0.}

**P**<sub>41</sub>: {1.49703, 1.49529, 1.49731, 1.49718, 1.49722, 0., 1.49675, 1.49691, 1.49672, 1.49646, 1.49728, 1.49688, 1.49727, 1.49671, 1.49738, 1.49683, 1.49921, 1.49772, 1.49758, 1.49677, 1.4982, 1.49779, 1.49776, 1.49703, 1.49789, 1.49706, 1.49775, 1.49793, 1.49779, 1.49699, 1.49804, 1.49699, 1.49712, 1.49706, 1.49519, 1.49677, 1.49558, 1.49671, 1.49733, 1.49829, 1.49714, 1.49704, 1.4956, 1.49545, 1.49526, 1.49526, 1.49308, 1.49542, 1.49557, 1.49564, 1.49553, 1.49685, 1.49584, 1.49759, 1.49719, 1.49478, 1.49565, 1.49635, 0.}

**P**<sub>42</sub> : {1.49735, 1.49579, 1.4976, 1.49748, 1.49752, 0., 1.49709, 1.49724, 1.49707, 1.49684, 1.49757, 1.49722, 1.49757, 1.49706, 1.49766, 1.49717, 1.49929, 1.49797, 1.49784, 1.49712, 1.4984, 1.49803, 1.498, 1.49735, 1.49811, 1.49738, 1.49799, 1.49815, 1.49802, 1.49731, 1.49825, 1.49732, 1.49743, 1.49738, 1.4957, 1.49711, 1.49605, 1.49706, 1.49761, 1.49847, 1.49745, 1.49735, 1.49607, 1.49594, 1.49576, 1.49577, 1.49382, 1.49591, 1.49604, 1.49611, 1.496, 1.49718, 1.49628, 1.49784, 1.49749, 1.49534, 1.49612, 1.49674, 0.}

 $\begin{array}{l} \textbf{P_{43}:} \{1.49763, 1.49624, 1.49786, 1.49775, 1.49778, 0., 1.49741, 1.49754, 1.49738, 1.49718, 1.49783, 1.49783, 1.49783, 1.49737, 1.49791, 1.49747, 1.49937, 1.49818, 1.49807, 1.49743, 1.49857, 1.49824, 1.49821, 1.49763, 1.49832, 1.49766, 1.49821, 1.49835, 1.49823, 1.4976, 1.49843, 1.4976, 1.49771, 1.49766, 1.49616, 1.49742, 1.49648, 1.49737, 1.49787, 1.49864, 1.49772, 1.49764, 1.49649, 1.49637, 1.49622, 1.49622, 1.49648, 1.49634, 1.49647, 1.49652, 1.49643, 1.49748, 1.49668, 1.49807, 1.49776, 1.49584, 1.49653, 1.49708, 0. \\ \end{array}$ 

**P**<sub>44</sub> : {1.49789, 1.49664, 1.49808, 1.49799, 1.49802, 0., 1.49768, 1.4978, 1.49766, 1.49748, 1.49806, 1.49778, 1.49806, 1.49766, 1.49813, 1.49774, 1.49943, 1.49838, 1.49828, 1.4977, 1.49872, 1.49843, 1.49844, 1.49789, 1.4985, 1.49791, 1.49844, 1.49853, 1.49842, 1.49785, 1.4986, 1.49786, 1.49795, 1.49791, 1.49657, 1.4977, 1.49685, 1.49765, 1.4981, 1.49878, 1.49797, 1.49789, 1.49686, 1.49676, 1.49662, 1.49662, 1.49507, 1.49674, 1.49684, 1.49689, 1.49681, 1.49775, 1.49704, 1.49828, 1.498, 1.49628, 1.4969, 1.4974, 0.}

**P**<sub>45</sub> : {1.49811, 1.497, 1.49829, 1.49821, 1.49823, 0., 1.49793, 1.49804, 1.49791, 1.49775, 1.49827, 1.49802, 1.49827, 1.49791, 1.49833, 1.49798, 1.49949, 1.49855, 1.49846, 1.49795, 1.49886, 1.49886, 1.49867, 1.49811, 1.49866, 1.49813, 1.49857, 1.49869, 1.49859, 1.49808, 1.49875, 1.49809, 1.49817, 1.49813, 1.49694, 1.49794, 1.49719, 1.4979, 1.4983, 1.49891, 1.49818, 1.49811, 1.4972, 1.49711, 1.49698, 1.49698, 1.4956, 1.49708, 1.49708, 1.49718, 1.49723, 1.49715, 1.49719, 1.49735, 1.49846, 1.49821, 1.49668, 1.49723, 1.49767, 0.}

**P**<sub>46</sub> : {1.49831, 1.49732, 1.49847, 1.4984, 1.49842, 0., 1.49815, 1.49825, 1.49813, 1.49799, 1.49846, 1.49823, 1.49845, 1.49813, 1.49851, 1.4982, 1.49955, 1.49871, 1.49863, 1.49817, 1.49898, 1.49875, 1.49872, 1.49831, 1.4988, 1.49833, 1.49872, 1.49883, 1.49874, 1.49829, 1.49888, 1.49829, 1.49837, 1.49833, 1.49727, 1.49816, 1.49749, 1.49813, 1.49848, 1.49903, 1.49838, 1.49832, 1.4975, 1.49742, 1.49731, 1.49731, 1.49607, 1.4974, 1.49748, 1.49752, 1.49746, 1.49746, 1.49764, 1.49863, 1.49841, 1.49703, 1.49753, 1.49792, 0.}

**P**<sub>47</sub> : {1.49849, 1.49761, 1.49864, 1.49857, 1.49859, 0., 1.49835, 1.49843, 1.49833, 1.4982, 1.49862, 1.49842, 1.49862, 1.49833, 1.49867, 1.49839, 1.4996, 1.49884, 1.49877, 1.49836, 1.49909, 1.49888, 1.49886, 1.49849, 1.49893, 1.49851, 1.49886, 1.49895, 1.49888, 1.49847, 1.499, 1.49848, 1.49854, 1.49851, 1.49756, 1.49836, 1.49776, 1.49833, 1.49864, 1.49913, 1.49855, 1.4985, 1.49777, 1.49769, 1.49759, 1.49759, 1.49649, 1.49767, 1.49775, 1.49779, 1.49773, 1.4984, 1.49789, 1.49878, 1.49858, 1.49735, 1.49779, 1.49815, 0.}

**P**<sub>48</sub> : {1.49865, 1.49787, 1.49878, 1.49872, 1.49874, 0., 1.49853, 1.4986, 1.49851, 1.4984, 1.49877, 1.49859, 1.49876, 1.49851, 1.49881, 1.49856, 1.49964, 1.49897, 1.49891, 1.49854, 1.49919, 1.499, 1.49898, 1.49866, 1.49904, 1.49867, 1.49898, 1.49906, 1.499, 1.49863, 1.49911, 1.49864, 1.4987, 1.49867, 1.49782, 1.49854, 1.498, 1.49851, 1.49879, 1.49923,

1.49871, 1.49866, 1.49801, 1.49794, 1.49785, 1.49785, 1.49686, 1.49792, 1.49799, 1.49802, 1.49797, 1.49857, 1.49811, 1.49891, 1.49873, 1.49764, 1.49803, 1.49834, 0.}

**P**<sub>49</sub> : {1.4988, 1.49809, 1.49891, 1.49886, 1.49888, 0., 1.49868, 1.49875, 1.49867, 1.49857, 1.4989, 1.4989, 1.4989, 1.49867, 1.49894, 1.49872, 1.49968, 1.49908, 1.49902, 1.49869, 1.49927, 1.49911, 1.49909, 1.4988, 1.49915, 1.49881, 1.49909, 1.49916, 1.4991, 1.49878, 1.49921, 1.49878, 1.49884, 1.49881, 1.49805, 1.49869, 1.49821, 1.49867, 1.49892, 1.49931, 1.49884, 1.49884, 1.49816, 1.49808, 1.49808, 1.4972, 1.49815, 1.49815, 1.49824, 1.49819, 1.49872, 1.49872, 1.49832, 1.49902, 1.49886, 1.49789, 1.49824, 1.49852, 0.}

**P**<sub>50</sub> : {1.49893, 1.4983, 1.49903, 1.49898, 1.499, 0., 1.49882, 1.49888, 1.49881, 1.49872, 1.49902, 1.49887, 1.49901, 1.49881, 1.49905, 1.49885, 1.49971, 1.49918, 1.49913, 1.49883, 1.49935, 1.49922, 1.49919, 1.49893, 1.49924, 1.49894, 1.49919, 1.49925, 1.4992, 1.49891, 1.49896, 1.49894, 1.49826, 1.49883, 1.4984, 1.49881, 1.49903, 1.49938, 1.49897, 1.49893, 1.49841, 1.49836, 1.49829, 1.49829, 1.4975, 1.49834, 1.49844, 1.49842, 1.49838, 1.49886, 1.4985, 1.49913, 1.49899, 1.49811, 1.49843, 1.49868, 0.}

 $\begin{array}{l} \textbf{P_{51}:} \{1.49904, 1.49848, 1.49913, 1.49909, 1.4991, 0., 1.49895, 1.499, 1.49894, 1.49886, 1.49912, 1.49899, 1.49912, 1.49894, 1.49915, 1.49898, 1.49974, 1.49927, 1.49922, 1.49896, 1.49942, 1.49929, 1.49928, 1.49904, 1.49932, 1.49905, 1.49927, 1.49933, 1.49929, 1.49903, 1.49903, 1.49907, 1.49905, 1.49845, 1.49896, 1.49857, 1.49894, 1.49914, 1.49945, 1.49908, 1.49904, 1.49858, 1.49853, 1.49847, 1.49847, 1.49777, 1.49852, 1.49857, 1.49857, 1.49859, 1.49856, 1.49856, 1.49866, 1.49922, 1.49909, 1.49832, 1.49866, 1.49882, 0. \\ \end{array}$ 

 $\begin{array}{l} \textbf{P}_{52}: \{1.49914, 1.49864, 1.49922, 1.49919, 1.4992, 0., 1.49906, 1.49911, 1.49905, 1.49898, 1.49922, 1.4991, 1.49921, 1.49905, 1.49924, 1.49909, 1.49977, 1.49934, 1.4993, 1.49907, 1.49948, 1.49936, 1.49935, 1.49914, 1.49939, 1.49915, 1.49935, 1.4994, 1.49936, 1.49936, 1.49917, 1.49915, 1.499361, 1.49907, 1.49873, 1.49905, 1.49923, 1.49951, 1.49918, 1.49918, 1.49915, 1.49873, 1.49869, 1.49863, 1.49863, 1.498, 1.49868, 1.49872, 1.49874, 1.49871, 1.49909, 1.4988, 1.4993, 1.49919, 1.4985, 1.49875, 1.49875, 0. \}$ 

 $\begin{array}{l} \mathbf{P_{53}:} \{1.49924, 1.49879, 1.49931, 1.49927, 1.49928, 0., 1.49916, 1.49921, 1.49915, 1.49909, \\ 1.4993, 1.4992, 1.4993, 1.49915, 1.49932, 1.49918, 1.4998, 1.49941, 1.49938, 1.49917, \\ 1.49954, 1.49943, 1.49942, 1.49924, 1.49946, 1.49924, 1.49942, 1.49947, 1.49943, 1.49922, \\ 1.49949, 1.49923, 1.49926, 1.49924, 1.49876, 1.49917, 1.49886, 1.49915, 1.49931, 1.49956, \\ 1.49926, 1.49924, 1.49887, 1.49883, 1.49878, 1.49878, 1.49822, 1.49882, 1.49886, 1.49888, \\ 1.49885, 1.49919, 1.49893, 1.49938, 1.49928, 1.49866, 1.49888, 1.49906, 0. \\ \end{array}$ 

**P**<sub>54</sub>: {1.49932, 1.49892, 1.49938, 1.49935, 1.49936, 0., 1.49925, 1.49929, 1.49924, 1.49919, 1.49938, 1.49928, 1.49937, 1.49924, 1.4994, 1.49927, 1.49982, 1.49948, 1.49944, 1.49926, 1.49959, 1.49949, 1.49948, 1.49932, 1.49951, 1.49932, 1.49948, 1.49952, 1.49949, 1.49931, 1.49932, 1.49931, 1.49932, 1.49934, 1.49932, 1.49891, 1.49926, 1.49898, 1.49924, 1.49939, 1.49961, 1.49934, 1.49932, 1.49895, 1.49891, 1.49891, 1.49841, 1.49895, 1.49898, 1.499, 1.49897, 1.49927, 1.49904, 1.49945, 1.49935, 1.4988, 1.499, 1.49916, 0.}

**P**<sub>55</sub> : {1.49939, 1.49903, 1.49945, 1.49942, 1.49943, 0., 1.49933, 1.49937, 1.49933, 1.49927, 1.49944, 1.49936, 1.49944, 1.49932, 1.49946, 1.49935, 1.49984, 1.49953, 1.49953, 1.49954, 1.49934, 1.49963, 1.49955, 1.49954, 1.49939, 1.49957, 1.4994, 1.49954, 1.49958, 1.49955, 1.49938, 1.4996, 1.49938, 1.49941, 1.4994, 1.49901, 1.49934, 1.49909, 1.49932, 1.49945, 1.49965,

1.49941, 1.49939, 1.4991, 1.49907, 1.49903, 1.49903, 1.49858, 1.49906, 1.49909, 1.4991, 1.49908, 1.49935, 1.49915, 1.4995, 1.49942, 1.49893, 1.49911, 1.49925, 0.}

**P**<sub>57</sub> : {1.49951, 1.49923, 1.49956, 1.49954, 1.49955, 0., 1.49947, 1.49949, 1.49946, 1.49942, 1.49955, 1.49949, 1.49955, 1.49946, 1.49957, 1.49948, 1.49987, 1.49963, 1.49963, 1.49947, 1.49964, 1.49963, 1.49951, 1.49965, 1.49952, 1.49963, 1.49966, 1.49964, 1.49951, 1.49968, 1.49951, 1.49953, 1.49952, 1.49952, 1.49947, 1.49928, 1.49946, 1.49956, 1.49972, 1.49953, 1.49951, 1.49928, 1.49926, 1.49922, 1.49922, 1.49887, 1.49925, 1.49927, 1.49929, 1.49927, 1.49948, 1.49932, 1.4996, 1.49954, 1.49915, 1.49929, 1.4994, 0.}

**P**<sub>58</sub> : {1.49957, 1.49931, 1.49961, 1.49959, 1.49959, 0., 1.49952, 1.49955, 1.49952, 1.49948, 1.4996, 1.49954, 1.4996, 1.49952, 1.49962, 1.49954, 1.49988, 1.49967, 1.49965, 1.49953, 1.49974, 1.49968, 1.49967, 1.49957, 1.49969, 1.49957, 1.49967, 1.49971, 1.49968, 1.49958, 1.49957, 1.4993, 1.49953, 1.49953, 1.49952, 1.49961, 1.49975, 1.49958, 1.49957, 1.49936, 1.49931, 1.49931, 1.49899, 1.49933, 1.49935, 1.49935, 1.49954, 1.49959, 1.49959, 1.49924, 1.49936, 1.49947, 0.}

**P**<sub>59</sub> : {1.49961, 1.49938, 1.49965, 1.49963, 1.49964, 0., 1.49958, 1.4996, 1.49957, 1.49954, 1.49964, 1.49959, 1.49959, 1.49957, 1.49966, 1.49959, 1.4999, 1.4997, 1.49968, 1.49958, 1.49977, 1.49971, 1.49971, 1.49961, 1.49972, 1.49962, 1.49971, 1.49973, 1.49971, 1.49961, 1.49974, 1.49961, 1.49962, 1.49937, 1.49958, 1.49942, 1.49957, 1.49965, 1.49978, 1.49963, 1.49961, 1.49961, 1.49943, 1.49941, 1.49938, 1.49938, 1.4991, 1.4994, 1.49942, 1.49943, 1.49943, 1.49944, 1.49963, 1.49959, 1.49959, 1.49968, 1.49963, 1.49963, 1.49943, 1.49959, 1.49968, 1.49963, 1.49932, 1.49943, 1.49952, 0.}

**P**<sub>60</sub> : {1.49965, 1.49945, 1.49969, 1.49967, 1.49968, 0., 1.49962, 1.49964, 1.49962, 1.49959, 1.49968, 1.49964, 1.49968, 1.49962, 1.49969, 1.49963, 1.49963, 1.49973, 1.49973, 1.49972, 1.49962, 1.49979, 1.49974, 1.49974, 1.49965, 1.49975, 1.49966, 1.49974, 1.49976, 1.49974, 1.49965, 1.49966, 1.49944, 1.49962, 1.49948, 1.49962, 1.49969, 1.49967, 1.49965, 1.49965, 1.49947, 1.49945, 1.49945, 1.49945, 1.49919, 1.49947, 1.49948, 1.49948, 1.49963, 1.49951, 1.49972, 1.49967, 1.49939, 1.49949, 1.49957, 0.}

 $\begin{array}{l} \textbf{P_{61}:} \{1.49969, 1.49951, 1.49972, 1.49971, 1.49971, 0., 1.49966, 1.49968, 1.49966, 1.49963, 1.49972, 1.49968, 1.49972, 1.49966, 1.49973, 1.49967, 1.49992, 1.49976, 1.49975, 1.49966, 1.49981, 1.49977, 1.49977, 1.49969, 1.49978, 1.49969, 1.49977, 1.49977, 1.49969, 1.49978, 1.49969, 1.49977, 1.49969, 1.49972, 1.49969, 1.49954, 1.49966, 1.49954, 1.49966, 1.49972, 1.49982, 1.4997, 1.49969, 1.49954, 1.49953, 1.49951, 1.49951, 1.49928, 1.49952, 1.49954, 1.49955, 1.49955, 1.49955, 1.49955, 1.49956, 1.49957, 1.49957, 1.49975, 1.49971, 1.49946, 1.49955, 1.49962, 0. \end{array}$ 

 $\begin{array}{l} \textbf{P_{62}:} \{1.49972,\,1.49956,\,1.49975,\,1.49974,\,1.49974,\,0.,\,1.4997,\,1.49971,\,1.49969,\,1.49967,\,1.49975,\,1.49975,\,1.49975,\,1.49969,\,1.49976,\,1.49976,\,1.49973,\,1.49979,\,1.49978,\,1.49978,\,1.49973,\,1.49973,\,1.49973,\,1.49979,\,1.49979,\,1.49972,\,1.49972,\,1.49982,\,1.49972,\,1.49972,\,1.49973,\,1.49973,\,1.49975,\,1.49959,\,1.49969,\,1.49975,\,1.49984,\,1.49974,\,1.49944,\,1.49974,\,1.49974,\,1.49944,\,1.49974$ 

1.49973, 1.49972, 1.49959, 1.49958, 1.49956, 1.49956, 1.49936, 1.49957, 1.49959, 1.49959, 1.49958, 1.49971, 1.49961, 1.49978, 1.49974, 1.49951, 1.4996, 1.49966, 0.}

 $\begin{array}{l} \mathbf{P_{63}:} \{1.49975, 1.49961, 1.49978, 1.49977, 1.49977, 0., 1.49973, 1.49974, 1.49973, 1.49971, 1.49977, 1.49977, 1.49973, 1.49973, 1.49974, 1.49993, 1.49981, 1.49983, 1.49973, 1.49985, 1.49982, 1.49981, 1.49975, 1.49982, 1.49976, 1.49976, 1.49981, 1.49983, 1.49982, 1.49975, 1.49984, 1.49975, 1.49976, 1.49976, 1.4996, 1.49973, 1.49963, 1.49973, 1.49978, 1.49986, 1.49976, 1.49975, 1.49963, 1.49963, 1.49961, 1.49961, 1.49963, 1.49962, 1.49963, 1.49964, 1.49964, 1.49976, 0. \}$ 

 $\begin{array}{l} \textbf{P_{64}:} \{1.49978, 1.49965, 1.4998, 1.49979, 1.49979, 0., 1.49976, 1.49977, 1.49976, 1.49974, 1.4998, 1.49977, 1.4998, 1.49976, 1.49981, 1.49976, 1.49994, 1.49983, 1.49982, 1.49976, 1.49987, 1.49984, 1.49983, 1.49978, 1.49978, 1.49978, 1.49983, 1.49985, 1.49984, 1.49978, 1.49978, 1.49978, 1.49978, 1.49976, 1.49985, 1.49976, 1.49988, 1.49978, 1.49978, 1.49978, 1.49976, 1.49967, 1.49967, 1.49967, 1.49966, 1.49965, 1.49965, 1.49965, 1.49949, 1.49966, 1.49967, 1.49968, 1.49967, 1.49968, 1.49979, 1.49979, 1.49982, 1.49979, 1.49961, 1.49968, 1.49973, 0. \\ \end{array}$ 

 $\begin{array}{l} \textbf{P_{65}:} \{1.4998, 1.49969, 1.49982, 1.49981, 1.49982, 0., 1.49978, 1.4998, 1.49978, 1.49977, 1.49982, 1.49979, 1.49982, 1.49978, 1.49983, 1.49979, 1.49995, 1.49985, 1.49984, 1.49979, 1.49988, 1.49985, 1.49985, 1.49985, 1.49986, 1.49986, 1.49981, 1.49985, 1.49986, 1.49985, 1.49985, 1.49987, 1.49981, 1.49981, 1.49968, 1.49979, 1.49971, 1.49978, 1.49982, 1.49989, 1.49981, 1.49981, 1.49969, 1.49969, 1.49954, 1.49971, 1.49971, 1.49971, 1.49971, 1.49971, 1.49971, 1.49971, 1.49971, 1.49971, 1.49971, 1.49971, 1.49971, 1.49981, 1.49981, 1.49981, 1.49965, 1.49971, 1.49976, 0. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_{66}:} \{1.49982, 1.49972, 1.49984, 1.49983, 1.49984, 0., 1.49981, 1.49982, 1.49981, 1.49979, \\ 1.49984, 1.49982, 1.49984, 1.49981, 1.49984, 1.49981, 1.49995, 1.49987, 1.49986, 1.49981, \\ 1.49989, 1.49987, 1.49987, 1.49982, 1.49987, 1.49987, 1.49983, 1.49987, 1.49988, 1.49987, 1.49982, \\ 1.49988, 1.49982, 1.49983, 1.49983, 1.49972, 1.49981, 1.49974, 1.49981, 1.49984, 1.4999, \\ 1.49983, 1.49982, 1.49974, 1.49973, 1.49972, 1.49972, 1.49959, 1.49973, 1.49974, 1.49974, \\ 1.49974, 1.49974, 1.49975, 1.49986, 1.49983, 1.49969, 1.49974, 1.49978, 0. \\ \end{array}$ 

 $\begin{array}{l} \textbf{P_{67}:} \{1.49984, 1.49975, 1.49986, 1.49985, 1.49985, 0., 1.49983, 1.49984, 1.49983, 1.49981, 1.49986, 1.49986, 1.49986, 1.49986, 1.49986, 1.49986, 1.49986, 1.49988, 1.49986, 1.49988, 1.49986, 1.49988, 1.49977, 1.49988, 1.49987, 1.49976, 1.49975, 1.49975, 1.49975, 1.49963, 1.49976, 1.49977, 1.49977, 1.49977, 1.49977, 1.49976, 1.49977, 1.49985, 1.49985, 1.49972, 1.49977, 1.49981, 0. \}$ 

 $\begin{array}{l} \mathbf{P_{68}:} \{1.49986, 1.49978, 1.49987, 1.49987, 1.49987, 0., 1.49985, 1.49985, 1.49984, 1.49983, 1.49987, 1.49985, 1.49987, 1.49987, 1.49984, 1.49988, 1.49985, 1.49996, 1.49989, 1.49989, 1.49985, 1.49992, 1.49999, 1.49989, 1.49986, 1.49999, 1.49986, 1.49986, 1.49999, 1.49986, 1.49986, 1.499991, 1.49986, 1.49986, 1.49986, 1.49977, 1.49985, 1.49979, 1.49984, 1.49987, 1.49987, 1.49987, 1.49986, 1.49979, 1.49978, 1.49978, 1.49978, 1.49967, 1.49978, 1.49979, 1.499$ 

**P**<sub>69</sub> : {1.49987, 1.4998, 1.49989, 1.49988, 1.49988, 0., 1.49986, 1.49987, 1.49986, 1.49985, 1.49989, 1.49989, 1.49989, 1.49987, 1.49987, 1.49997, 1.49991, 1.49999, 1.49986, 1.49992, 1.49991, 1.49991, 1.49987, 1.49991, 1.49988, 1.49988, 1.49988, 1.49986, 1.49987, 1.49987, 1.49987, 1.49987, 1.49988, 1.49988, 1.49988, 1.49988, 1.49988, 1.49986, 1.49981, 1.49986, 1.49989, 1.49993, 1.49993, 1.49987, 1.49988, 1.49988, 1.49988, 1.49988, 1.49986, 1.49986, 1.49986, 1.49989, 1.49993, 1.49987, 1.49988, 1.49988, 1.49988, 1.49986, 1.49986, 1.49986, 1.499898, 1.499986, 1.49988, 1.49986, 1.49986, 1.49986, 1.49988, 1.49988, 1.49988, 1.49986, 1.49986, 1.49986, 1.49986, 1.499893, 1.49983, 1.49986, 1.49986, 1.49986, 1.49986, 1.49988, 1.49983, 1.49988, 1.49986, 1.49986, 1.49986, 1.49986, 1.49988, 1.49983, 1.49983, 1.49986, 1.49986, 1.49986, 1.49986, 1.49986, 1.49983, 1.49983, 1.49986, 1.49986, 1.49986, 1.49986, 1.49986, 1.49983, 1.49983, 1.49983, 1.49986, 1.49986, 1.49986, 1.49986, 1.49986, 1.49986, 1.49986, 1.49986, 1.49988, 1.49986, 1.49988, 1.49986, 1.4986, 1.49886, 1.49886, 1.49886, 1.49886, 1.49886, 1.49886, 1.498

1.49988, 1.49988, 1.49981, 1.49981, 1.4998, 1.4998, 1.49971, 1.49981, 1.49981, 1.49982, 1.49981, 1.49987, 1.49982, 1.49999, 1.49988, 1.49978, 1.49982, 1.49985, 0.}

**P**<sub>70</sub> : {1.49989, 1.49982, 1.4999, 1.49989, 1.49999, 0., 1.49988, 1.49988, 1.49988, 1.49988, 1.49987, 1.49999, 1.49988, 1.49999, 1.49988, 1.49997, 1.49991, 1.49991, 1.49988, 1.49993, 1.49992, 1.49992, 1.49989, 1.49992, 1.49989, 1.49992, 1.49992, 1.49989, 1.49993, 1.49989, 1.49989, 1.49989, 1.49982, 1.49988, 1.49983, 1.49988, 1.49989, 1.49989, 1.49984, 1.49982, 1.49984

**P**<sub>71</sub> : {1.4999, 1.49984, 1.49991, 1.49991, 1.49991, 0., 1.49989, 1.4999, 1.49989, 1.49988, 1.49991, 1.49991, 1.49991, 1.49989, 1.49991, 1.49989, 1.49997, 1.49992, 1.49992, 1.49989, 1.49994, 1.49993, 1.49993, 1.49999, 1.49993, 1.49993, 1.49993, 1.49993, 1.49993, 1.49993, 1.49993, 1.49993, 1.49994, 1.49993, 1.49999, 1.49999, 1.49984, 1.49989, 1.49985, 1.49989, 1.49991, 1.49994, 1.49984, 1.49984, 1.49984, 1.49977, 1.49985, 1.49985, 1.49985, 1.49985, 1.49985, 1.49985, 1.49985, 1.49985, 1.49984, 1.49984, 1.49984, 1.49985, 1.49985, 1.49985, 1.49985, 1.49985, 1.49985, 1.49985, 1.49985, 1.49984, 1.49984, 1.49984, 1.49985,

 $\begin{array}{l} \mathbf{P}_{72}: \{1.49991, 1.49986, 1.49992, 1.49992, 1.49992, 0., 1.4999, 1.49991, 1.4999, 1.49989, 1.49992, 1.49991, 1.49992, 1.49992, 1.49992, 1.49993, 1.49993, 1.49993, 1.49993, 1.49991, 1.49994, 1.49991, 1.49993, 1.49993, 1.49991, 1.49994, 1.49991, 1.49993, 1.49991, 1.49991, 1.49994, 1.49991, 1.49991, 1.49991, 1.49991, 1.49991, 1.49986, 1.49991, 1.49987, 1.49992, 1.49995, 1.49991, 1.49991, 1.49986, 1.49986, 1.49986, 1.49986, 1.49979, 1.49986, 1.49987, 1.49987, 1.49987, 1.49987, 1.49987, 1.49987, 1.49988, 1.49993, 1.49992, 1.49984, 1.49987, 1.49986, 1.49987, 1.49987, 1.49987, 1.49987, 1.49987, 1.49986, 1.49986, 1.49986, 1.49987, 1.49987, 1.49987, 1.49987, 1.49987, 1.49987, 1.49987, 1.49987, 1.49987, 1.49988, 1.49992, 1.49984, 1.49987,$ 

 $\begin{array}{l} \mathbf{P_{73}:} \{1.49992, 1.49987, 1.49993, 1.49992, 1.49993, 0., 1.49991, 1.49992, 1.49991, 1.49991, 1.49991, 1.49993, 1.49993, 1.49993, 1.49993, 1.49993, 1.49994, 1.49994, 1.49994, 1.49991, 1.49995, 1.49994, 1.49994, 1.49992, 1.49994, 1.49994, 1.49994, 1.49992, 1.49995, 1.49992, 1.49992, 1.49992, 1.49994, 1.49992, 1.49991, 1.49994, 1.49993, 1.49992, 1.49992, 1.49992, 1.49992, 1.49988, 1.49988, 1.49987, 1.49987, 1.49981, 1.49988, 1.4998$ 

**P**<sub>74</sub>: {1.49993, 1.49989, 1.49994, 1.49993, 1.49993, 0., 1.49992, 1.49993, 1.49992, 1.49992, 1.49992, 1.49993, 1.49993, 1.49993, 1.49992, 1.49994, 1.49992, 1.49998, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49993, 1.49993, 1.49993, 1.49993, 1.49993, 1.49993, 1.49988, 1.49992, 1.49989, 1.49989, 1.49994, 1.49996, 1.49993, 1.49993, 1.49993, 1.49989, 1.49989, 1.49989, 1.49989, 1.49989, 1.49989, 1.49989, 1.49998, 1.49999, 1.49999, 1.49999, 1.49994, 1.49993, 1.49987, 1.49991, 0.}

**P**75 : {1.49994, 1.4999, 1.49994, 1.49994, 1.49994, 0., 1.49993, 1.49993, 1.49993, 1.49992, 1.49994, 1.49993, 1.49994, 1.49993, 1.49994, 1.49993, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49994, 1.49995, 1.49994, 1.49995, 1.49994, 1.49996, 1.49994, 1.49994, 1.49994, 1.49994, 1.49993, 1.49991, 1.49994, 1.49994, 1.49994, 1.49994, 1.49994, 1.49994, 1.49994, 1.49995, 1.49994, 1.49995, 1.49994, 1.49995, 1.49994, 1.49991, 1.49994, 1.49994, 1.49994, 1.49995, 1.49994,

**P**<sub>76</sub> : {1.49994, 1.49991, 1.49995, 1.49995, 1.49995, 0., 1.49994, 1.49994, 1.49994, 1.49993, 1.49995, 1.49995, 1.49995, 1.49994, 1.49995, 1.49994, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49997, 1.49996, 1.49996, 1.49994, 1.49996, 1.49997, 1.49996, 1.49996, 1.49997, 1.4997, 1.4997, 1.4997, 1.4997, 1.4997, 1.4997, 1.4997, 1.4997, 1.4997, 1.4997

1.49995, 1.49994, 1.49992, 1.49991, 1.49991, 1.49991, 1.49987, 1.49991, 1.49992, 1.49992, 1.49992, 1.49995, 1.49995, 1.49995, 1.49992, 1.49993, 0.}

**P**<sub>77</sub>: {1.49995, 1.49992, 1.49995, 1.49995, 1.49995, 0., 1.49994, 1.49995, 1.49994, 1.49994, 1.49994, 1.49995, 1.49995, 1.49995, 1.49995, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49997, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49992, 1.49992, 1.49992, 1.49992, 1.49992, 1.49992, 1.49992, 1.49992, 1.49992, 1.49992, 1.49993, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49996, 1.49995, 1.49995, 1.49992, 1.49992, 1.49992, 1.49992, 1.49992, 1.49992, 1.49993, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49992, 1.49992, 1.49992, 1.49992, 1.49992, 1.49992, 1.49994, 0.}

**P**<sub>78</sub> : {1.49995, 1.49993, 1.49996, 1.49996, 1.49996, 0., 1.49995, 1.49995, 1.49995, 1.49995, 1.49995, 1.49996, 1.49996, 1.49996, 1.49995, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49996, 1.49996, 1.49993, 1.49995, 1.49995, 1.49996, 1.49993, 1.49995, 1.49993, 1.49996, 1.49993, 1.49994, 0.}

**P**79 : {1.49996, 1.49994, 1.49996, 1.49996, 1.49996, 0., 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49996, 1.49997, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49994, 1.49994, 1.49994, 1.49994, 1.49994, 1.49994, 1.49994, 1.49994, 1.49994, 1.49994, 1.49994, 1.49994, 1.49994, 1.49995, 0.}

**P**<sub>81</sub>: {1.49997, 1.49995, 1.49997, 1.49997, 1.49997, 0., 1.49996, 1.49997, 1.49996, 1.49996, 1.49996, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49998, 1.49997, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49997, 1.49998, 1.49998, 1.49997, 1.49998, 1.49998, 1.49997, 1.49998, 1.49997, 1.49997, 1.49995, 1.49995, 1.49996, 1.49995, 1.49996, 1.49997, 1.49997, 1.49995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995, 1.4995

**P**<sub>83</sub>: {1.49997, 1.49996, 1.49998, 1.49998, 1.49998, 0., 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49998, 1.49997, 1.49998, 1.49997, 1.49998, 1.49998, 1.49999, 1.4999,

1.49998, 1.49997, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49996, 1.49998, 1.49998, 1.49995, 1.49996, 1.49997, 0.}

**P**<sub>84</sub>: {1.49998, 1.49996, 1.49998, 1.49998, 1.49998, 0., 1.49997, 1.49998, 1.49997, 1.49997, 1.49997, 1.49998, 1.49996, 1.49996, 1.49996, 1.49995, 1.49996, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49996, 1.49996, 1.49996, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49998, 1.49998, 1.49998, 1.49996, 1.49996, 1.49997, 1.49997, 0.}

**P**<sub>85</sub> : {1.49998, 1.49997, 1.49998, 1.49998, 1.49998, 0., 1.49998, 1.49997, 1.49998, 1.4998, 1.4998,

**P**<sub>86</sub> : {1.49998, 1.49997, 1.49998, 1.49998, 1.49998, 0., 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49998, 1.49999, 1.49998, 1.49999, 1.49998, 1.49998, 1.49997, 1.49998, 1.49997, 1.49998, 1.49998, 1.49998, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49997, 1.49998, 0.}

**P**<sub>87</sub>: {1.49998, 1.49997, 1.49999, 1.49998, 1.49998, 0., 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49998, 1.49999, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49997, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49997, 1.49997, 1.49997, 1.49996, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49999, 1.49998, 1.49999, 1.49998, 1.49997, 1.49997, 1.49997, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49999, 1.49998, 1.49997, 1.49998, 1.49998, 0.}

**P**<sub>88</sub> : {1.49999, 1.49998, 1.49999, 1.49999, 1.49999, 0., 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49999, 1.49998, 1.49988, 1.4998

**P**<sub>89</sub>: {1.49999, 1.49998, 1.49999, 1.49999, 1.49999, 0., 1.49999, 1.49998, 1.49988

**P**<sub>90</sub>: {1.49999, 1.49998, 1.49999, 1.49999, 1.49999, 0., 1.49999, 1.4999, 1.4999,

1.49999, 1.49999, 1.49999, 1.49999, 1.49998, 1.49999, 1.49998, 1.49999, 1.49999, 1.49999, 1.49999, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49999, 0.}

**P91 :** {1.49999, 1.49998, 1.49999, 1.49999, 1.49999, 0., 1.49999, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49998, 1.49999, 0.}

**P**<sub>92</sub>: {1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 0., 1.49999, 0.}

**P**<sub>93</sub>: {1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 0., 1.49999, 0.}

**P**<sub>94</sub> : {1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 0., 1.49999, 0.}

**P95 :** {1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 0., 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.5, 1.49999, 1.5, 1.49999, 1.5, 1.49999, 1.5, 1.49999, 1.5, 1.49999, 1.5, 1.49999, 1.5, 1.49999, 1.5, 1.49999, 1.5, 1.49999, 1.5, 1.49999, 1.5, 1.49999, 0.}

 1.49999, 1.5, 1.5, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.49999, 1.5, 1.5, 1.49999, 1.49999, 0.}

## Β.3Αποτελέσματα 3ου μοντέλου

#### **Β.3.α Αποτελέσματα 3<sup>ου</sup> μοντέλου για υποτίμηση 15%**

Οι επιδράσεις στο πληθωρισμό της Ελλάδας μετά από υποτίμησης του νομίσματος κατά 15% είναι οι εξής<sup>55</sup>:

 $\begin{array}{l} \textbf{P_1:} \{1.00918, 1.00045, 1.00819, 1.01103, 1.01708, 0., 1.01095, 1.01292, 1.01239, 1.012, \\ 1.02722, 1.02172, 1.02638, 1.0245, 1.03605, 1.02212, 1.10003, 1.0423, 1.03334, 1.01471, \\ 1.04584, 1.03422, 1.03662, 1.02152, 1.03585, 1.022, 1.03632, 1.04478, 1.0355, 1.02068, \\ 1.03966, 1.00721, 1.01079, 1.01726, 1.00681, 1.01047, 1.00635, 1.01171, 1.01952, 1.04201, \\ 1.01731, 1.01636, 1.00431, 1.00249, 1.00663, 1.00419, 1.00136, 1.0078, 1.00927, 1.00799, \\ 1.00781, 1.01367, 1.00046, 1.01992, 1.00871, 1.00696, 1.00814, 1.00564, 1. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_2:} \{1.01487, 1.00328, 1.01504, 1.01731, 1.02232, 0., 1.01785, 1.02213, 1.01884, 1.01736, \\ 1.03382, 1.0262, 1.03404, 1.03402, 1.04388, 1.02779, 1.10696, 1.04937, 1.04023, 1.02203, \\ 1.06227, 1.04648, 1.04321, 1.02632, 1.04639, 1.02641, 1.0417, 1.0508, 1.04267, 1.02662, \\ 1.05523, 1.0138, 1.01459, 1.02646, 1.00847, 1.01482, 1.00886, 1.01625, 1.03196, 1.05011, \\ 1.02493, 1.02191, 1.00569, 1.00432, 1.01045, 1.00663, 1.00295, 1.01155, 1.01302, 1.01175, \\ 1.01192, 1.01643, 1.00156, 1.02396, 1.01216, 1.01179, 1.0114, 1.00737, 1. \\ \end{array}$ 

 $\begin{array}{l} \textbf{P_3:} \{1.01646, 1.00442, 1.01626, 1.01918, 1.02444, 0., 1.01979, 1.02424, 1.02183, 1.0197, 1.03629, 1.02772, 1.03624, 1.03751, 1.04616, 1.02954, 1.10786, 1.05145, 1.04236, 1.02515, 1.06815, 1.05075, 1.0454, 1.02803, 1.05001, 1.02799, 1.04327, 1.05265, 1.04515, 1.02875, 1.06041, 1.01565, 1.01552, 1.02948, 1.00937, 1.01633, 1.00983, 1.01803, 1.03365, 1.05169, 1.02626, 1.02347, 1.0061, 1.00506, 1.01222, 1.00767, 1.00375, 1.0129, 1.01447, 1.01331, 1.01348, 1.01736, 1.00202, 1.02489, 1.01287, 1.01385, 1.01273, 1.0081, 1. \end{array}$ 

 $\begin{array}{l} \textbf{P4:} \{1.01692,\ 1.0048,\ 1.01655,\ 1.01971,\ 1.02491,\ 0.,\ 1.02022,\ 1.02477,\ 1.02281,\ 1.02046, \\ 1.03712,\ 1.02825,\ 1.03694,\ 1.03874,\ 1.04689,\ 1.03011,\ 1.10809,\ 1.05213,\ 1.04306,\ 1.02614, \\ 1.07017,\ 1.05225,\ 1.04616,\ 1.02861,\ 1.05128,\ 1.02853,\ 1.04381,\ 1.05329,\ 1.04601,\ 1.02951, \\ 1.06218,\ 1.01616,\ 1.0158,\ 1.03054,\ 1.00969,\ 1.01669,\ 1.01011,\ 1.01869,\ 1.03409,\ 1.05213, \\ 1.02665,\ 1.02388,\ 1.00623,\ 1.00531,\ 1.01288,\ 1.00805,\ 1.004,\ 1.01336,\ 1.01499,\ 1.01384, \\ 1.01403,\ 1.01764,\ 1.00217,\ 1.02519,\ 1.01309,\ 1.01459,\ 1.0132,\ 1.00833,\ 1. \\ \end{array}$ 

 $\begin{array}{l} \textbf{P5:} \{1.01705, 1.00492, 1.01663, 1.01986, 1.02505, 0., 1.02035, 1.02493, 1.02311, 1.02069, \\ 1.03738, 1.02842, 1.03716, 1.03914, 1.04711, 1.03029, 1.10816, 1.05234, 1.04327, 1.02642, \\ 1.07084, 1.05275, 1.04642, 1.0288, 1.05171, 1.0287, 1.04397, 1.0535, 1.04629, 1.02976, \\ 1.06277, 1.0163, 1.01588, 1.03087, 1.00979, 1.0168, 1.01019, 1.0189, 1.03422, 1.05226, \\ 1.02678, 1.02402, 1.00627, 1.00539, 1.01311, 1.00819, 1.00409, 1.01352, 1.01516, 1.01402, \\ 1.01422, 1.01774, 1.00222, 1.02528, 1.01315, 1.01483, 1.01336, 1.00841, 1. \\ \end{array}$ 

 $P_6$ : {1.01709, 1.00496, 1.01666, 1.01991, 1.02509, 0., 1.02039, 1.02497, 1.0232, 1.02077, 1.03746, 1.02847, 1.03723, 1.03927, 1.04718, 1.03035, 1.10818, 1.0524, 1.04334, 1.02651, 1.07106, 1.05291, 1.0465, 1.02886, 1.05185, 1.02876, 1.04402, 1.05357, 1.04639, 1.02984,

<sup>&</sup>lt;sup>55</sup> Ο δείκτης στη τιμή P μας δείχνει τον αριθμό της επανάληψης και οι τιμές μέσα στο άγκιστρο την τιμή που θα έχουν τα εμπορεύματα ανά κλάδο

1.06296, 1.01634, 1.01591, 1.03098, 1.00982, 1.01684, 1.01022, 1.01896, 1.03427, 1.0523, 1.02682, 1.02406, 1.00628, 1.00542, 1.01319, 1.00823, 1.00412, 1.01356, 1.01521, 1.01408, 1.01428, 1.01777, 1.00224, 1.02531, 1.01317, 1.01491, 1.01342, 1.00844, 1.}

 $\begin{array}{l} \mathbf{P}_7: \{1.01711, 1.00497, 1.01666, 1.01993, 1.02511, 0., 1.0204, 1.02499, 1.02323, 1.02079, \\ 1.03749, 1.02849, 1.03725, 1.03931, 1.0472, 1.03036, 1.10819, 1.05243, 1.04336, 1.02654, \\ 1.07113, 1.05297, 1.04653, 1.02888, 1.05189, 1.02878, 1.04404, 1.05359, 1.04642, 1.02987, \\ 1.06302, 1.01636, 1.01592, 1.03102, 1.00983, 1.01685, 1.01023, 1.01898, 1.03428, 1.05231, \\ 1.02683, 1.02407, 1.00628, 1.00543, 1.01322, 1.00824, 1.00413, 1.01358, 1.01523, 1.0141, \\ 1.0143, 1.01777, 1.00225, 1.02532, 1.01318, 1.01494, 1.01344, 1.00845, 1. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_8:} \{1.01711, 1.00497, 1.01667, 1.01993, 1.02511, 0., 1.02041, 1.02499, 1.02324, 1.0208, \\ 1.0375, 1.02849, 1.03725, 1.03933, 1.04721, 1.03037, 1.10819, 1.05243, 1.04337, 1.02655, \\ 1.07115, 1.05299, 1.04654, 1.02888, 1.05191, 1.02878, 1.04405, 1.05359, 1.04643, 1.02988, \\ 1.06304, 1.01636, 1.01592, 1.03103, 1.00983, 1.01685, 1.01023, 1.01899, 1.03428, 1.05232, \\ 1.02684, 1.02407, 1.00628, 1.00543, 1.01323, 1.00825, 1.00413, 1.01358, 1.01524, 1.01411, \\ 1.01431, 1.01778, 1.00225, 1.02532, 1.01318, 1.01495, 1.01344, 1.00845, 1. \end{array}$ 

**P9**: {1.01711, 1.00497, 1.01667, 1.01994, 1.02511, 0., 1.02041, 1.025, 1.02324, 1.0208, 1.0375, 1.02849, 1.03726, 1.03933, 1.04721, 1.03037, 1.10819, 1.05243, 1.04337, 1.02655, 1.07116, 1.05299, 1.04654, 1.02889, 1.05191, 1.02878, 1.04405, 1.0536, 1.04643, 1.02988, 1.06305, 1.01636, 1.01592, 1.03103, 1.00984, 1.01685, 1.01023, 1.01899, 1.03429, 1.05232, 1.02684, 1.02407, 1.00628, 1.00543, 1.01323, 1.00825, 1.00413, 1.01359, 1.01524, 1.01411, 1.01431, 1.01778, 1.00225, 1.02532, 1.01318, 1.01495, 1.01344, 1.00845, 1.}

 $\begin{array}{l} \textbf{P_{10}:} \{1.01711, 1.00498, 1.01667, 1.01994, 1.02511, 0., 1.02041, 1.025, 1.02324, 1.0208, \\ 1.0375, 1.02849, 1.03726, 1.03933, 1.04721, 1.03037, 1.10819, 1.05243, 1.04337, 1.02655, \\ 1.07116, 1.05299, 1.04654, 1.02889, 1.05191, 1.02878, 1.04405, 1.0536, 1.04643, 1.02988, \\ 1.06305, 1.01636, 1.01592, 1.03103, 1.00984, 1.01685, 1.01023, 1.01899, 1.03429, 1.05232, \\ 1.02684, 1.02408, 1.00628, 1.00543, 1.01323, 1.00825, 1.00413, 1.01359, 1.01524, 1.01411, \\ 1.01431, 1.01778, 1.00225, 1.02532, 1.01318, 1.01495, 1.01344, 1.00845, 1. \\ \end{array}$ 

 $\begin{array}{l} \textbf{P_{11}:} \{1.01711, 1.00498, 1.01667, 1.01994, 1.02511, 0., 1.02041, 1.025, 1.02324, 1.0208, 1.0375, 1.02849, 1.03726, 1.03933, 1.04721, 1.03037, 1.10819, 1.05244, 1.04337, 1.02655, 1.07116, 1.05299, 1.04654, 1.02889, 1.05191, 1.02878, 1.04405, 1.0536, 1.04643, 1.02988, 1.06305, 1.01636, 1.01592, 1.03103, 1.00984, 1.01685, 1.01023, 1.01899, 1.03429, 1.05232, 1.02684, 1.02408, 1.00628, 1.00543, 1.01323, 1.00825, 1.00413, 1.01359, 1.01524, 1.01411, 1.01431, 1.01778, 1.00225, 1.02532, 1.01318, 1.01495, 1.01344, 1.00845, 1. \end{array}$ 

 $\begin{array}{l} \mathbf{P_{12}:} \{1.01711,\ 1.00498,\ 1.01667,\ 1.01994,\ 1.02511,\ 0.,\ 1.02041,\ 1.025,\ 1.02324,\ 1.0208,\\ 1.0375,\ 1.02849,\ 1.03726,\ 1.03933,\ 1.04721,\ 1.03037,\ 1.10819,\ 1.05244,\ 1.04337,\ 1.02655,\\ 1.07116,\ 1.05299,\ 1.04654,\ 1.02889,\ 1.05191,\ 1.02878,\ 1.04405,\ 1.0536,\ 1.04643,\ 1.02988,\\ 1.06305,\ 1.01636,\ 1.01592,\ 1.03103,\ 1.00984,\ 1.01685,\ 1.01023,\ 1.01899,\ 1.03429,\ 1.05232,\\ 1.02684,\ 1.02408,\ 1.00628,\ 1.00543,\ 1.01323,\ 1.00825,\ 1.00413,\ 1.01359,\ 1.01524,\ 1.01411,\\ 1.01431,\ 1.01778,\ 1.00225,\ 1.02532,\ 1.01318,\ 1.01495,\ 1.01344,\ 1.00845,\ 1. \end{array}$ 

 $P_{13}$ : {1.01711, 1.00498, 1.01667, 1.01994, 1.02511, 0., 1.02041, 1.025, 1.02324, 1.0208, 1.0375, 1.02849, 1.03726, 1.03933, 1.04721, 1.03037, 1.10819, 1.05244, 1.04337, 1.02655, 1.07116, 1.05299, 1.04654, 1.02889, 1.05191, 1.02878, 1.04405, 1.0536, 1.04643, 1.02988, 1.06305, 1.01636, 1.01592, 1.03103, 1.00984, 1.01685, 1.01023, 1.01899, 1.03429, 1.05232,

1.02684, 1.02408, 1.00628, 1.00543, 1.01323, 1.00825, 1.00413, 1.01359, 1.01524, 1.01411, 1.01431, 1.01778, 1.00225, 1.02532, 1.01318, 1.01495, 1.01344, 1.00845, 1.}

 $\begin{array}{l} \mathbf{P_{14}:} \{1.01711, 1.00498, 1.01667, 1.01994, 1.02511, 0., 1.02041, 1.025, 1.02324, 1.0208, \\ 1.0375, 1.02849, 1.03726, 1.03933, 1.04721, 1.03037, 1.10819, 1.05244, 1.04337, 1.02655, \\ 1.07116, 1.05299, 1.04654, 1.02889, 1.05191, 1.02878, 1.04405, 1.0536, 1.04643, 1.02988, \\ 1.06305, 1.01636, 1.01592, 1.03103, 1.00984, 1.01685, 1.01023, 1.01899, 1.03429, 1.05232, \\ 1.02684, 1.02408, 1.00628, 1.00543, 1.01323, 1.00825, 1.00413, 1.01359, 1.01524, 1.01411, \\ 1.01431, 1.01778, 1.00225, 1.02532, 1.01318, 1.01495, 1.01344, 1.00845, 1. \end{array}$ 

**P**<sub>15</sub> : {1.01711, 1.00498, 1.01667, 1.01994, 1.02511, 0., 1.02041, 1.025, 1.02324, 1.0208, 1.0375, 1.02849, 1.03726, 1.03933, 1.04721, 1.03037, 1.10819, 1.05244, 1.04337, 1.02655, 1.07116, 1.05299, 1.04654, 1.02889, 1.05191, 1.02878, 1.04405, 1.0536, 1.04643, 1.02988, 1.06305, 1.01636, 1.01592, 1.03103, 1.00984, 1.01685, 1.01023, 1.01899, 1.03429, 1.05232, 1.02684, 1.02408, 1.00628, 1.00543, 1.01323, 1.00825, 1.00413, 1.01359, 1.01524, 1.01411, 1.01431, 1.01778, 1.00225, 1.02532, 1.01318, 1.01495, 1.01344, 1.00845, 1.}

 $\begin{array}{l} \textbf{P_{16}:} \{1.01711, 1.00498, 1.01667, 1.01994, 1.02511, 0., 1.02041, 1.025, 1.02324, 1.0208, 1.0375, 1.02849, 1.03726, 1.03933, 1.04721, 1.03037, 1.10819, 1.05244, 1.04337, 1.02655, 1.07116, 1.05299, 1.04654, 1.02889, 1.05191, 1.02878, 1.04405, 1.0536, 1.04643, 1.02988, 1.06305, 1.01636, 1.01592, 1.03103, 1.00984, 1.01685, 1.01023, 1.01899, 1.03429, 1.05232, 1.02684, 1.02408, 1.00628, 1.00543, 1.01323, 1.00825, 1.00413, 1.01359, 1.01524, 1.01411, 1.01431, 1.01778, 1.00225, 1.02532, 1.01318, 1.01495, 1.01344, 1.00845, 1. \end{array}$ 

 $\begin{array}{l} \mathbf{P_{17}:} \{1.01711, 1.00498, 1.01667, 1.01994, 1.02511, 0., 1.02041, 1.025, 1.02324, 1.0208, 1.0375, 1.02849, 1.03726, 1.03933, 1.04721, 1.03037, 1.10819, 1.05244, 1.04337, 1.02655, 1.07116, 1.05299, 1.04654, 1.02889, 1.05191, 1.02878, 1.04405, 1.0536, 1.04643, 1.02988, 1.06305, 1.01636, 1.01592, 1.03103, 1.00984, 1.01685, 1.01023, 1.01899, 1.03429, 1.05232, 1.02684, 1.02408, 1.00628, 1.00543, 1.01323, 1.00825, 1.00413, 1.01359, 1.01524, 1.01411, 1.01431, 1.01778, 1.00225, 1.02532, 1.01318, 1.01495, 1.01344, 1.00845, 1. \end{array}$ 

 $\begin{array}{l} \mathbf{P_{18}:} \{1.01711, 1.00498, 1.01667, 1.01994, 1.02511, 0., 1.02041, 1.025, 1.02324, 1.0208, \\ 1.0375, 1.02849, 1.03726, 1.03933, 1.04721, 1.03037, 1.10819, 1.05244, 1.04337, 1.02655, \\ 1.07116, 1.05299, 1.04654, 1.02889, 1.05191, 1.02878, 1.04405, 1.0536, 1.04643, 1.02988, \\ 1.06305, 1.01636, 1.01592, 1.03103, 1.00984, 1.01685, 1.01023, 1.01899, 1.03429, 1.05232, \\ 1.02684, 1.02408, 1.00628, 1.00543, 1.01323, 1.00825, 1.00413, 1.01359, 1.01524, 1.01411, \\ 1.01431, 1.01778, 1.00225, 1.02532, 1.01318, 1.01495, 1.01344, 1.00845, 1. \end{array}$ 

 $\begin{array}{l} \textbf{P_{19}:} \{1.01711, 1.00498, 1.01667, 1.01994, 1.02511, 0., 1.02041, 1.025, 1.02324, 1.0208, 1.0375, 1.02849, 1.03726, 1.03933, 1.04721, 1.03037, 1.10819, 1.05244, 1.04337, 1.02655, 1.07116, 1.05299, 1.04654, 1.02889, 1.05191, 1.02878, 1.04405, 1.0536, 1.04643, 1.02988, 1.06305, 1.01636, 1.01592, 1.03103, 1.00984, 1.01685, 1.01023, 1.01899, 1.03429, 1.05232, 1.02684, 1.02408, 1.00628, 1.00543, 1.01323, 1.00825, 1.00413, 1.01359, 1.01524, 1.01411, 1.01431, 1.01778, 1.00225, 1.02532, 1.01318, 1.01495, 1.01344, 1.00845, 1. \end{array}$ 

**P**<sub>20</sub> : {1.01711, 1.00498, 1.01667, 1.01994, 1.02511, 0., 1.02041, 1.025, 1.02324, 1.0208, 1.0375, 1.02849, 1.03726, 1.03933, 1.04721, 1.03037, 1.10819, 1.05244, 1.04337, 1.02655, 1.07116, 1.05299, 1.04654, 1.02889, 1.05191, 1.02878, 1.04405, 1.0536, 1.04643, 1.02988, 1.06305, 1.01636, 1.01592, 1.03103, 1.00984, 1.01685, 1.01023, 1.01899, 1.03429, 1.05232,

#### **Β.3.** βΑποτελέσματα 3<sup>ου</sup> μοντέλου για υποτίμηση 50%

 $\begin{array}{l} \textbf{P_1:} \{1.03061, 1.0015, 1.02729, 1.03676, 1.05692, 0., 1.03651, 1.04307, 1.04129, 1.03999, \\ 1.09074, 1.07241, 1.08793, 1.08165, 1.12015, 1.07374, 1.33344, 1.14101, 1.11112, 1.04902, \\ 1.15279, 1.11407, 1.12205, 1.07173, 1.1195, 1.07333, 1.12107, 1.14928, 1.11845, 1.06892, \\ 1.13222, 1.02405, 1.03596, 1.05754, 1.02271, 1.0349, 1.02117, 1.03903, 1.06507, 1.14002, \\ 1.05769, 1.05455, 1.01438, 1.00829, 1.02209, 1.01397, 1.00455, 1.026, 1.03089, 1.02663, \\ 1.02605, 1.04557, 1.00152, 1.06639, 1.02903, 1.0232, 1.02713, 1.0188, 1. \\ \end{array}$ 

 $\begin{array}{l} \mathbf{P_2:} \{1.04958, 1.01093, 1.05015, 1.05771, 1.07439, 0., 1.05951, 1.07378, 1.0628, 1.05786, \\ 1.11275, 1.08735, 1.11347, 1.11338, 1.14626, 1.09265, 1.35653, 1.16457, 1.13411, 1.07343, \\ 1.20757, 1.15494, 1.14402, 1.08773, 1.15463, 1.08803, 1.13901, 1.16932, 1.14236, 1.08872, \\ 1.1841, 1.046, 1.04863, 1.08821, 1.02823, 1.0494, 1.02955, 1.05416, 1.10653, 1.16704, \\ 1.08309, 1.07302, 1.01897, 1.01442, 1.03483, 1.02211, 1.00985, 1.0385, 1.0434, 1.03917, \\ 1.03973, 1.05478, 1.00519, 1.07987, 1.04055, 1.0393, 1.038, 1.02457, 1. \\ \end{array}$ 

 $\begin{array}{l} \textbf{P_3:} \{1.05486, 1.01473, 1.0542, 1.06392, 1.08145, 0., 1.06597, 1.08081, 1.07277, 1.06566, \\ 1.12095, 1.09239, 1.12078, 1.12504, 1.15387, 1.09847, 1.35953, 1.1715, 1.1412, 1.08385, \\ 1.22717, 1.16918, 1.15133, 1.09343, 1.1667, 1.09331, 1.14424, 1.17551, 1.15061, 1.09585, \\ 1.20137, 1.05216, 1.05173, 1.09827, 1.03124, 1.05442, 1.03275, 1.06009, 1.11218, 1.1723, \\ 1.08753, 1.07823, 1.02032, 1.01688, 1.04072, 1.02557, 1.01248, 1.043, 1.04824, 1.04436, \\ 1.04494, 1.05786, 1.00672, 1.08297, 1.04292, 1.04617, 1.04242, 1.02698, 1. \\ \end{array}$ 

 $\begin{array}{l} \textbf{P4:} \{1.05639, 1.01601, 1.05517, 1.06568, 1.08303, 0., 1.06741, 1.08256, 1.07604, 1.06819, \\ 1.12372, 1.09416, 1.12311, 1.12912, 1.15629, 1.10036, 1.36031, 1.17376, 1.14352, 1.08712, \\ 1.23389, 1.17415, 1.15388, 1.09537, 1.17094, 1.09511, 1.14602, 1.17765, 1.15346, 1.09838, \\ 1.20725, 1.05385, 1.05266, 1.10178, 1.03229, 1.05564, 1.03369, 1.0623, 1.11363, 1.17375, \\ 1.08884, 1.07962, 1.02075, 1.0177, 1.04293, 1.02684, 1.01335, 1.04455, 1.04996, 1.04614, \\ 1.04678, 1.05881, 1.00724, 1.08397, 1.04362, 1.04862, 1.04401, 1.02777, 1. \\ \end{array}$ 

 $\begin{array}{l} \textbf{P_5:} \{1.05684, 1.01641, 1.05544, 1.06622, 1.0835, 0., 1.06783, 1.08308, 1.07703, 1.06897, \\ 1.12459, 1.09472, 1.12385, 1.13047, 1.15704, 1.10096, 1.36054, 1.17446, 1.14424, 1.08808, \\ 1.23613, 1.17583, 1.15473, 1.09599, 1.17236, 1.09568, 1.14658, 1.17833, 1.15441, 1.09921, \\ 1.20922, 1.05434, 1.05295, 1.10291, 1.03263, 1.056, 1.03398, 1.06299, 1.11408, 1.17419, \\ 1.08927, 1.08005, 1.02089, 1.01798, 1.04371, 1.02729, 1.01364, 1.04505, 1.05053, 1.04674, \\ 1.0474, 1.05912, 1.00741, 1.08427, 1.04384, 1.04944, 1.04455, 1.02804, 1. \\ \end{array}$ 

**P**<sub>6</sub> : {1.05698, 1.01653, 1.05552, 1.06638, 1.08364, 0., 1.06797, 1.08325, 1.07733, 1.06922, 1.12487, 1.0949, 1.12408, 1.1309, 1.15727, 1.10115, 1.36061, 1.17468, 1.14446, 1.08837, 1.23686, 1.17638, 1.155, 1.09619, 1.17282, 1.09586, 1.14675, 1.17855, 1.15473, 1.09948, 1.20986, 1.05448, 1.05304, 1.10327, 1.03274, 1.05612, 1.03407, 1.0632, 1.11422, 1.17434,

1.0894, 1.08019, 1.02093, 1.01807, 1.04397, 1.02744, 1.01373, 1.04521, 1.05072, 1.04694, 1.0476, 1.05922, 1.00747, 1.08436, 1.04391, 1.04971, 1.04473, 1.02813, 1.}

 $\begin{array}{l} \mathbf{P_7:} \{1.05702,\ 1.01657,\ 1.05555,\ 1.06643,\ 1.08369,\ 0.,\ 1.06801,\ 1.0833,\ 1.07743,\ 1.0693,\ 1.12496,\ 1.09495,\ 1.12415,\ 1.13104,\ 1.15735,\ 1.10122,\ 1.36063,\ 1.17475,\ 1.14453,\ 1.08846,\ 1.2371,\ 1.17656,\ 1.1551,\ 1.09626,\ 1.17297,\ 1.09592,\ 1.1468,\ 1.17862,\ 1.15483,\ 1.09957,\ 1.21007,\ 1.05453,\ 1.05306,\ 1.10339,\ 1.03277,\ 1.05616,\ 1.0341,\ 1.06327,\ 1.11427,\ 1.17438,\ 1.08944,\ 1.08023,\ 1.02094,\ 1.0181,\ 1.04406,\ 1.02748,\ 1.01376,\ 1.04527,\ 1.05078,\ 1.047,\ 1.04767,\ 1.05925,\ 1.00749,\ 1.08439,\ 1.04393,\ 1.0498,\ 1.04478,\ 1.02815,\ 1. \end{array}$ 

 $\begin{array}{l} \mathbf{P_8:} \{1.05703, 1.01658, 1.05556, 1.06644, 1.0837, 0., 1.06803, 1.08331, 1.07746, 1.06932, \\ 1.12499, 1.09497, 1.12418, 1.13108, 1.15737, 1.10123, 1.36064, 1.17477, 1.14456, 1.08849, \\ 1.23718, 1.17662, 1.15512, 1.09628, 1.17302, 1.09594, 1.14682, 1.17865, 1.15486, 1.09959, \\ 1.21014, 1.05454, 1.05307, 1.10342, 1.03278, 1.05617, 1.03411, 1.06329, 1.11428, 1.17439, \\ 1.08946, 1.08024, 1.02095, 1.01811, 1.04408, 1.0275, 1.01377, 1.04528, 1.0508, 1.04702, \\ 1.04769, 1.05926, 1.00749, 1.0844, 1.04394, 1.04983, 1.0448, 1.02816, 1. \\ \end{array}$ 

**P9 :** {1.05704, 1.01658, 1.05556, 1.06645, 1.08371, 0., 1.06803, 1.08332, 1.07747, 1.06933, 1.125, 1.09498, 1.12418, 1.1311, 1.15738, 1.10124, 1.36064, 1.17478, 1.14457, 1.0885, 1.2372, 1.17664, 1.15513, 1.09629, 1.17303, 1.09595, 1.14682, 1.17865, 1.15487, 1.0996, 1.21016, 1.05454, 1.05308, 1.10343, 1.03279, 1.05617, 1.03411, 1.06329, 1.11429, 1.1744, 1.08946, 1.08025, 1.02095, 1.01811, 1.04409, 1.0275, 1.01378, 1.04529, 1.0508, 1.04703, 1.0477, 1.05926, 1.00749, 1.08441, 1.04394, 1.04984, 1.04481, 1.02816, 1.}

 $\begin{array}{l} \textbf{P_{10}:} \{1.05704, 1.01658, 1.05556, 1.06645, 1.08371, 0., 1.06803, 1.08332, 1.07747, 1.06934, \\ 1.125, 1.09498, 1.12419, 1.1311, 1.15738, 1.10124, 1.36064, 1.17478, 1.14457, 1.0885, \\ 1.23721, 1.17664, 1.15514, 1.09629, 1.17304, 1.09595, 1.14683, 1.17866, 1.15488, 1.09961, \\ 1.21017, 1.05455, 1.05308, 1.10344, 1.03279, 1.05617, 1.03412, 1.0633, 1.11429, 1.1744, \\ 1.08946, 1.08025, 1.02095, 1.01811, 1.0441, 1.0275, 1.01378, 1.04529, 1.0508, 1.04703, \\ 1.0477, 1.05926, 1.0075, 1.08441, 1.04394, 1.04984, 1.04481, 1.02817, 1. \end{array}$ 

 $\begin{array}{l} \mathbf{P_{11}:} \{1.05704,\,1.01658,\,1.05556,\,1.06645,\,1.08371,\,0.,\,1.06803,\,1.08332,\,1.07747,\,1.06934,\\ 1.125,\,\,1.09498,\,\,1.12419,\,\,1.1311,\,\,1.15738,\,\,1.10124,\,\,1.36064,\,\,1.17478,\,\,1.14457,\,\,1.0885,\\ 1.23721,\,\,1.17664,\,1.15514,\,1.09629,\,1.17304,\,1.09595,\,1.14683,\,1.17866,\,1.15488,\,1.09961,\\ 1.21017,\,\,1.05455,\,\,1.05308,\,\,1.10344,\,\,1.03279,\,\,1.05617,\,\,1.03412,\,\,1.0633,\,\,1.11429,\,\,1.1744,\\ 1.08946,\,\,1.08025,\,\,1.02095,\,\,1.01811,\,\,1.0441,\,\,1.02751,\,\,1.01378,\,\,1.04529,\,\,1.0508,\,\,1.04703,\\ 1.0477,\,1.05926,\,1.0075,\,1.08441,\,1.04394,\,1.04984,\,1.04481,\,1.02817,\,1. \end{array}$ 

 $\begin{array}{l} \mathbf{P_{12}:} \{1.05704,\,1.01658,\,1.05556,\,1.06645,\,1.08371,\,0.,\,1.06803,\,1.08332,\,1.07747,\,1.06934,\\ 1.125,\,\,1.09498,\,\,1.12419,\,\,1.1311,\,\,1.15738,\,\,1.10124,\,\,1.36064,\,\,1.17478,\,\,1.14457,\,\,1.0885,\\ 1.23721,\,\,1.17665,\,1.15514,\,1.09629,\,1.17304,\,1.09595,\,1.14683,\,1.17866,\,1.15488,\,1.09961,\\ 1.21017,\,\,1.05455,\,\,1.05308,\,\,1.10344,\,\,1.03279,\,\,1.05617,\,\,1.03412,\,\,1.0633,\,\,1.11429,\,\,1.1744,\\ 1.08946,\,\,1.08025,\,\,1.02095,\,\,1.01811,\,\,1.0441,\,\,1.02751,\,\,1.01378,\,\,1.04529,\,\,1.0508,\,\,1.04703,\\ 1.0477,\,1.05926,\,1.0075,\,1.08441,\,1.04394,\,1.04984,\,1.04481,\,1.02817,\,1. \end{array}$ 

**P**<sub>13</sub>: {1.05704, 1.01658, 1.05556, 1.06645, 1.08371, 0., 1.06803, 1.08332, 1.07747, 1.06934, 1.125, 1.09498, 1.12419, 1.1311, 1.15738, 1.10124, 1.36064, 1.17478, 1.14457, 1.0885, 1.23721, 1.17665, 1.15514, 1.09629, 1.17304, 1.09595, 1.14683, 1.17866, 1.15488, 1.09961, 1.21017, 1.05455, 1.05308, 1.10344, 1.03279, 1.05617, 1.03412, 1.0633, 1.11429, 1.1744,

1.08946, 1.08025, 1.02095, 1.01811, 1.0441, 1.02751, 1.01378, 1.04529, 1.0508, 1.04703, 1.0477, 1.05926, 1.0075, 1.08441, 1.04394, 1.04984, 1.04481, 1.02817, 1.}

 $\begin{array}{l} \mathbf{P_{14}:} \{1.05704, 1.01658, 1.05556, 1.06645, 1.08371, 0., 1.06803, 1.08332, 1.07747, 1.06934, \\ 1.125, 1.09498, 1.12419, 1.1311, 1.15738, 1.10124, 1.36064, 1.17478, 1.14457, 1.0885, \\ 1.23721, 1.17665, 1.15514, 1.09629, 1.17304, 1.09595, 1.14683, 1.17866, 1.15488, 1.09961, \\ 1.21017, 1.05455, 1.05308, 1.10344, 1.03279, 1.05617, 1.03412, 1.0633, 1.11429, 1.1744, \\ 1.08946, 1.08025, 1.02095, 1.01811, 1.0441, 1.02751, 1.01378, 1.04529, 1.0508, 1.04703, \\ 1.0477, 1.05926, 1.0075, 1.08441, 1.04394, 1.04984, 1.04481, 1.02817, 1. \end{array}$ 

**P**<sub>15</sub>: {1.05704, 1.01658, 1.05556, 1.06645, 1.08371, 0., 1.06803, 1.08332, 1.07747, 1.06934, 1.125, 1.09498, 1.12419, 1.1311, 1.15738, 1.10124, 1.36064, 1.17478, 1.14457, 1.0885, 1.23721, 1.17665, 1.15514, 1.09629, 1.17304, 1.09595, 1.14683, 1.17866, 1.15488, 1.09961, 1.21017, 1.05455, 1.05308, 1.10344, 1.03279, 1.05617, 1.03412, 1.0633, 1.11429, 1.1744, 1.08946, 1.08025, 1.02095, 1.01811, 1.0441, 1.02751, 1.01378, 1.04529, 1.0508, 1.04703, 1.0477, 1.05926, 1.0075, 1.08441, 1.04394, 1.04984, 1.04481, 1.02817, 1.}

 $\begin{array}{l} \textbf{P_{16}:} \{1.05704, 1.01658, 1.05556, 1.06645, 1.08371, 0., 1.06803, 1.08332, 1.07747, 1.06934, \\ 1.125, 1.09498, 1.12419, 1.1311, 1.15738, 1.10124, 1.36064, 1.17478, 1.14457, 1.0885, \\ 1.23721, 1.17665, 1.15514, 1.09629, 1.17304, 1.09595, 1.14683, 1.17866, 1.15488, 1.09961, \\ 1.21017, 1.05455, 1.05308, 1.10344, 1.03279, 1.05617, 1.03412, 1.0633, 1.11429, 1.1744, \\ 1.08946, 1.08025, 1.02095, 1.01811, 1.0441, 1.02751, 1.01378, 1.04529, 1.0508, 1.04703, \\ 1.0477, 1.05926, 1.0075, 1.08441, 1.04394, 1.04984, 1.04481, 1.02817, 1. \end{array}$ 

**P**<sub>17</sub>: {1.05704, 1.01658, 1.05556, 1.06645, 1.08371, 0., 1.06803, 1.08332, 1.07747, 1.06934, 1.125, 1.09498, 1.12419, 1.1311, 1.15738, 1.10124, 1.36064, 1.17478, 1.14457, 1.0885, 1.23721, 1.17665, 1.15514, 1.09629, 1.17304, 1.09595, 1.14683, 1.17866, 1.15488, 1.09961, 1.21017, 1.05455, 1.05308, 1.10344, 1.03279, 1.05617, 1.03412, 1.0633, 1.11429, 1.1744, 1.08946, 1.08025, 1.02095, 1.01811, 1.0441, 1.02751, 1.01378, 1.04529, 1.0508, 1.04703, 1.0477, 1.05926, 1.0075, 1.08441, 1.04394, 1.04984, 1.04481, 1.02817, 1.}

 $\begin{array}{l} \mathbf{P_{18}:} \{1.05704, 1.01658, 1.05556, 1.06645, 1.08371, 0., 1.06803, 1.08332, 1.07747, 1.06934, \\ 1.125, 1.09498, 1.12419, 1.1311, 1.15738, 1.10124, 1.36064, 1.17478, 1.14457, 1.0885, \\ 1.23721, 1.17665, 1.15514, 1.09629, 1.17304, 1.09595, 1.14683, 1.17866, 1.15488, 1.09961, \\ 1.21017, 1.05455, 1.05308, 1.10344, 1.03279, 1.05617, 1.03412, 1.0633, 1.11429, 1.1744, \\ 1.08946, 1.08025, 1.02095, 1.01811, 1.0441, 1.02751, 1.01378, 1.04529, 1.0508, 1.04703, \\ 1.0477, 1.05926, 1.0075, 1.08441, 1.04394, 1.04984, 1.04481, 1.02817, 1. \end{array}$ 

**P**<sub>19</sub>: {1.05704, 1.01658, 1.05556, 1.06645, 1.08371, 0., 1.06803, 1.08332, 1.07747, 1.06934, 1.125, 1.09498, 1.12419, 1.1311, 1.15738, 1.10124, 1.36064, 1.17478, 1.14457, 1.0885, 1.23721, 1.17665, 1.15514, 1.09629, 1.17304, 1.09595, 1.14683, 1.17866, 1.15488, 1.09961, 1.21017, 1.05455, 1.05308, 1.10344, 1.03279, 1.05617, 1.03412, 1.0633, 1.11429, 1.1744, 1.08946, 1.08025, 1.02095, 1.01811, 1.0441, 1.02751, 1.01378, 1.04529, 1.0508, 1.04703, 1.0477, 1.05926, 1.0075, 1.08441, 1.04394, 1.04984, 1.04481, 1.02817, 1.}

**P20**: {1.05704, 1.01658, 1.05556, 1.06645, 1.08371, 0., 1.06803, 1.08332, 1.07747, 1.06934, 1.125, 1.09498, 1.12419, 1.1311, 1.15738, 1.10124, 1.36064, 1.17478, 1.14457, 1.0885, 1.23721, 1.17665, 1.15514, 1.09629, 1.17304, 1.09595, 1.14683, 1.17866, 1.15488, 1.09961, 1.21017, 1.05455, 1.05308, 1.10344, 1.03279, 1.05617, 1.03412, 1.0633, 1.11429, 1.1744,

1.08946, 1.08025, 1.02095, 1.01811, 1.0441, 1.02751, 1.01378, 1.04529, 1.0508, 1.04703, 1.0477, 1.05926, 1.0075, 1.08441, 1.04394, 1.04984, 1.04481, 1.02817, 1.}

# Παράρτημα Γ

### Γ.1 Μήτρας αθροίσματος εγχώριας παραγωγής M1 και προστιθέμενης αξίας Κ

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 $\frac{1^{\eta} \gamma \rho \alpha \mu \mu \acute{n}}{1000} \{0.751849, 0.0479968, 0.00178314, 0, 0, 0, 0, 0, 0.242143, 0.154528, 0.0454443, 0.00231927, 1.44139 \times 10^{-6}, 0.000110278, 0.00487196, 3.81138 \times 10^{-6}, 4.70491 \times 10^{-6}, 0.000136019, 0.0143041, 0.0000153493, 1.70581 \times 10^{-6}, 0.0000584937, 0.000709849, 0, 5.55614 \times 10^{-7}, 0, 0.0000249068, 9.31595 \times 10^{-7}, 0.0000860373, 0.00712094, 0, 1.78166 \times 10^{-7}, 0, 2.52851 \times 10^{-10}, 0, 0.00362042, 0.0000405241, 0.0170201, 0.000994978, 0.00125698, 0, 0.000225488, 0.000032537, 0, 0.0000475993, 0, 0.0012346, 0.00677324, 0, 0, 3.21796 \times 10^{-7}, 0, 0.0000430505, 0.000102371, 0, 0.00110853, 0.000145587, 0.000654146, 0\},$ 

 $\begin{array}{l} \underline{2^{\eta} \gamma \rho \alpha \mu \mu \acute{n}} \left\{ 0,0.821102,0,0.00225409,0.000656274,0,0.000763113,0.000593696,0.00 \\ 0864871,0.0000640987,0.000111645,0.000493719,0.000158074,0.0582043,0.000322324,0.0 \\ 00519594,7.87492 \times 10^{-7},0.00109403,0.000171659,0.000143867,0.000215232, \\ 0.000241797,0.0000802846,0.000053278,0.0000283087,0.0000297935,0.0000808958,0.000 \\ 0279743,0.000117457,0.000860579,0.000676657,1.03104 \times 10^{-6},0,1.12583 \times 10^{-6} \\ 6,5.53174 \times 10^{-8},0.0000698941,1.21173 \times 10^{-6},0.000493253,0.0000198301,0,0,0.00004 \\ 8366,8.15998 \times 10^{-7},0,0,0,0.0000282258,0.000137414,0,0,0.0000829951,0,0.0199044, \\ 1.05582 \times 10^{-8},0,0.00013624,4.42678 \times 10^{-6},5.98175 \times 10^{-6},0. \end{array} \right\}$ 

 $\begin{array}{l} \underline{3^{\eta} \gamma \rho \alpha \mu \mu \acute{n}} \left\{0,0,0.767053,0,0,0,0,0,0,000720648,0,0.0000100064,0,4.52091\times 10^{-9},0.00\\ 002471,0.0000119979,5.44569\times 10^{-9},0,2.56219\times 10^{-6},0.0000673299,1.78768\times 10^{-7},1.3\\ 1063\times 10^{-7},7.81953\times 10^{-6},4.64736\times 10^{-6},0,1.48637\times 10^{-7},0,6.21022\times 10^{-6},2.49219\times 10^{-7},\\ 0.0000169048,0.00187533,0,0,0,6.69084\times 10^{-12},0,0.0000134382,8.20118\times 10^{-6},0.0032\\ 877,3.66879\times 10^{-6},0.000246974,0,0.0000378947,6.29955\times 10^{-6},0,9.35018\times 10^{-6},0,0.00\\ 00203341,0.0000560838,0,0,8.34342\times 10^{-9},0,0,3.73481\times 10^{-6},0,0.0000531242,0.00002\\ 80399,0.0000398698,0 \right\}$ 

 $\begin{array}{l} \underline{4^{\eta} \ \gamma \rho \alpha \mu \mu \acute{\eta}} \left\{0,0,0,0.625559,0,0,0,0,0.000115405,0,5.95099 \times 10^{-7},0,0,4.95312 \times 10^{-7},1.85205 \times 10^{-6},0,4.05305 \times 10^{-6},5.07463 \times 10^{-6},0.0000591297,0.000963926,0.0041171,0.000223227,0.0000312448,0,0,0,0,5.68028 \times 10^{-7},0,0.000285223,0.114764,0,1.53731 \times 10^{-6},0,6.88541 \times 10^{-6},0,0,4.4903 \times 10^{-6},0,0,0.0000101299,0,0,0,0,0.000467287,0.00457597,0,0,1.09201 \times 10^{-9},0,0,0,0,0,3.01696 \times 10^{-7},0,0\right\},$ 

 $\frac{8^{n} \gamma \rho \alpha \mu \mu \dot{\eta}}{9,3.36304 \times 10^{-7},0.0000327264,0.00010747,0,0,0,0,0,0.582054,0.000225745,0,0.000020527}{9,3.36304 \times 10^{-7},0.0000327264,0.000171823,0.000875129,3.03681 \times 10^{-6},1.04654 \times 10^{-6}}{,0.00526183,0.00114282,0.104709,0.000280661,0.000199818,0.000934281,0,0.0000232189,1.93643 \times 10^{-8},0.0000153287,0.0000137811,1.17169 \times 10^{-8},4.02549 \times 10^{-6},0.001$ 06027,3.9894 × 10<sup>-6</sup>,0,0.0210084,2.43483 × 10<sup>-8</sup>,0.000240792,1.13194 × 10<sup>-6</sup>,0.0005640 6,0.000128013,0,0,0.000369976,9.33134 × 10<sup>-7</sup>,0,0,0,0.000161178,0.000902798,0,0,5. 49812 × 10<sup>-10</sup>,0,1.31862 × 10<sup>-7</sup>,0,0,0,4.52659 × 10<sup>-6</sup>,6.84043 × 10<sup>-6</sup>,0,}

 $\frac{11^{\eta} \gamma \rho \alpha \mu \mu \acute{n}}{32,0.000499072,0.00518471,0.451316,0.0644311,0.0124737,0.000277537,0.00179356,0.000}{158378,6.49469 \times 10^{-6},0.00146436,0.00238993,0.000440064,0.00029395,0.00}{459326,0.00015146,0.0000397457,0.0000726767,0.0000866215,0.00011215,0.0000645453,0.000108491,0.0114438,0.000040678,1.09441 \times 10^{-6},7.74189 \times 10^{-7},0.00001688$
56,0.000285066,0.00217665,0.00799857,0.0040293,0.0000614411,0.000205583,0,0.000163 923,7.38216×10<sup>-6</sup>,0,7.78287×10<sup>-6</sup>,0,0.00029282,0.000458982,5.6382×10<sup>-6</sup>,3.2 4442×10<sup>-7</sup>,0.000142638,0,0.0000132301,0.0000433325,1.50435×10<sup>-7</sup>,0.0000512824, 0.000253759,0.000106469,0},

 $\frac{12^{\eta} \gamma \rho \alpha \mu \mu \acute{n}}{9} \{2.87704 \times 10^{-8}, 0, 7.84762 \times 10^{-6}, 0, 0, 0, 0, 0, 6.38761 \times 10^{-7}, 8.12125 \times 10^{-7}, 0.00 \\ 0168037, 0.535575, 0, 5.15204 \times 10^{-6}, 0, 0.0000443113, 1.98755 \times 10^{-8}, 1.56701 \times 10^{-7}, 0, 0, 3. \\ 70574 \times 10^{-6}, 0, 6.3585 \times 10^{-7}, 4.78142 \times 10^{-6}, 0, 8.97945 \times 10^{-6}, 3.77789 \times 10^{-6}, 0, 0.000017083 \\ 3, 6.10281 \times 10^{-9}, 5.2825 \times 10^{-6}, 0.0000511212, 0.00246023, 9.94092 \times 10^{-7}, 0.000041558, 0. \\ 000284578, 0.000135483, 0.000481097, 0.0000112658, 0.00023819, 0.000456581, 0.000067122 \\ 8, 1.7936 \times 10^{-6}, 0.000059246, 9.07021 \times 10^{-6}, 3.75389 \times 10^{-6}, 0.0000314744, 0.0000 \\ 916048, 0.0000154144, 0.0000546205, 0.000328205, 0.000798915, 0.0000873772, 0.000357086 \\ , 0.00920161, 0.0000713177, 0.000498173, 0.000109237, 0 \},$ 

 $\frac{13^{\eta} \ \gamma \rho \alpha \mu \mu \acute{n}}{2} \{ 0.0000342006, 0.0000129054, 0, 0, 0, 0, 0, 9.23982 \times 10^{-7}, 0, 9.08857 \times 10^{-6}, 0.00125951, 0.491543, 8.93126 \times 10^{-6}, 4.37838 \times 10^{-6}, 0.000246768, 5.39064 \times 10^{-9}, 0.00003 \\ 20378, 7.0738 \times 10^{-7}, 8.49718 \times 10^{-9}, 3.86402 \times 10^{-8}, 2.39834 \times 10^{-7}, 5.17571 \times 10^{-6}, 0, 2.29148 \times 10^{-9}, 2.81922 \times 10^{-10}, 0.0000287628, 0.00010943, 1.81708 \times 10^{-6}, 0.0000289845, 2.16076 \times 10^{-10}, 3.74865 \times 10^{-6}, 0, 8.96396 \times 10^{-10}, 6.19348 \times 10^{-6}, 0.0000226363, 2.25803 \times 10^{-6}, 5.68894 \times 10^{-9}, 5.86456 \times 10^{-6}, 0.0000265471, 0, 0.0000126937, 9.25197 \times 10^{-8}, 0, 1.00924 \times 10^{-6}, 0, 6.62406 \times 10^{-6}, 0.0000372595, 7.44464 \times 10^{-7}, 5.23115 \times 10^{-6}, 0.0000743, 0.0000322867, 0 \},$ 

 $\frac{14^{\eta} \gamma \rho \alpha \mu \mu \acute{\eta}}{(0,0,0.00248155,0,0,0,0.000109042,0.000596532,0.00392726,0.0049610)}{(7,0.00146067,0.000399023,0.000634785,0.421806,0.00112919,0.00018221,0.0000497631,0.0071397,0.00160061,0.00103865,0.000133858,0.00122214,0.00152745,0.0000446012,0.0013352,0.0000937716,0.00178802,0.000436711,0.000393449,0.0932504,0.0000311344,0.000192276,0,0.00207063,7.16181\times10^{-7},0.000392637,0.0000861559,0.0104482,0.000114418,0.000117595,0.0000259308,0.000580082,0.0000285095,1.19668\times10^{-7},0.0000263604,9.09752\times10^{-7},0.000181524,0.000846289,0.0000141118,7.18502\times10^{-6},0.000766942,0,0,8.1958\times10^{-6},8.19256\times10^{-8},1.21815\times10^{-6},0.000538888,0.00615371,0\},$ 

 $\frac{15^{\eta} \gamma \rho \alpha \mu \mu \dot{\eta}}{0.000410855, 0.0000152371, 0.00124633, 0.00143871, 0.000418878, 0, 0.000487195, 0.000574473, 0.0023136, 0.0119735, 0.000629576, 0.000500345, 0.00256074, 0.00393917, 0.432969, 0.0568789, 0.00211002, 0.00408442, 0.00242856, 0.00104095, 0.000566929, 0.000347771, 0.000274675, 0.000207915, 0.000605595, 0.000286402, 0.000327047, 0.0000546818, 0.000159089, 0.000309767, 0.00075867, 0.000270251, 3.9786 \times 10^{-6}$ 6, 0.0000516296, 0.00131802, 0.00534799, 0.00249746, 0.00658527, 0.000519839, 0.000397108, 0.000803366, 0.00197692, 0.000786632, 8.56795 \times 10^{-6}, 0.00227136, 0.00132063, 0.000355419, 0.00109, 0.0110538, 0.000264072, 0.00256773, 0.000227878, 4.2509 × 10^{-9}, 0.0000244649, 1.49079 × 10<sup>-7</sup>, 0.00073469, 0.00032891, 0.000197135, 0 },  $\frac{16^{\eta} \gamma \rho \alpha \mu \mu \acute{\eta}}{(6.72117 \times 10^{-6}, 2.49353 \times 10^{-6}, 0, 0.00215161, 0.000626436, 0, 0.000728417, 0.000566703, 0.00109271, 0.00354036, 0.000658693, 0.000667213, 0.000926315, 0.000888521, 0.000918441, 0.492105, 0.0000706363, 0.00360384, 0.000693545, 0.00127515, 0.000444864, 0. 000421317, 0.000204223, 0.000139055, 0.000142116, 0.000116845, 0.000253167, 0.000052404 6, 0.000345029, 0.000222479, 0.000974351, 0.000172724, 0.0000329817, 0.00148036, 0.000059 1119, 0.000873863, 0.000358683, 0.00236454, 0.000866332, 0.00195743, 0.00311848, 0.000361 084, 0.000136845, 0.00391106, 0.00324335, 0.00313536, 0.000116199, 0.00884982, 0.0293384, 0.0273154, 0.0152344, 0.00332614, 0.00317977, 0.000755023, 1.79745 \times 10^{-6} 6, 0.0265892, 0.00884746, 0.00025294, 0 \},$ 

 $\frac{17^{\eta}}{\gamma\rho\alpha\mu\mu\dot{\eta}} \{0.0288899, 0.0109879, 0.0490683, 0.0315049, 0.0134243, 0, 0.0365384, 0.0595658, 0.00619858, 0.00422026, 0.00319093, 0.00123645, 0.022144, 0.0154719, 0.00781165, 0.00778559, 0.198087, 0.00459604, 0.0061631, 0.0182219, 0.0166041, 0.009492, 0.00653756, 0.00297634, 0.00493255, 0.0033769, 0.00387186, 0.0020865, 0.00711841, 0.00373695, 0.0228749, 0.0400483, 0.0200958, 0.0201881, 0.000630885, 0.0116553, 0.00513783, 0.00708867, 0.0971068, 0.0410395, 0.0508519, 0.0238443, 0.00508311, 0.00333739, 0.00244668, 0.00353057, 0.00083255, 0.00946631, 0.00183996, 0.00262091, 0.00727824, 0.00418974, 0.000461776, 0.0135122, 0.019139, 0.00844415, 0.00295777, 0.000597655, 0\},$ 

 $\frac{19^{\eta} \gamma \rho \alpha \mu \mu \acute{n}}{70472,0.00431378,0.00523842,0.00444553,0.00368695,0.00141295,0.0111612,0.00628148,0.00726657,0.00396037,0.0000446557,0.00483955,0.427159,0.00123383,0.000714705,0.00428601,0.00612446,0.0104343,0.00906726,0.00524282,0.00559897,0.00153177,0.000656107,0.00851983,0.00170636,0.000120568,0.000164862,0.0124715,0.000807635,0.00697246,0.00503933,0.00160131,0.00258203,0.000632572,0.00149084,0.00089262,0.000281828,2.5814\times10^{-7},0.0000284482,0.0007723,0.0003495,0.$ 

 $00296348, 0.000378104, 0.000144762, 0.00041325, 0, 0.0000450757, 0.000123589, 0.00001324\\47, 0.0000190692, 0.000248815, 0.00565518, 0\},$ 

 ${}^{10}, 0.000184428, 0.00108063, 0, 0.0000501662, 0.0000864132, 0, 0.000020284, 0.000206332, 7.73626 \times 10^{-6}, 0.0000224488, 0.00112322, 0.000162635, 0\},$ 

 $\frac{23^{\eta}}{9} γραμμή \{0.000920221, 0.00034724, 0, 0.00428098, 0.0151258, 0, 0.00459097, 0.0054, 0.000377621, 0.000506621, 0.000756872, 0.000387695, 0.000401879, 0.00187813, 0.00071, 0.00154499, 0.0000520177, 0.000621944, 0.00102273, 0.00269935, 0.000971087, 0.00123, 307, 0.459576, 0.0000319025, 0.000662608, 0.000337315, 0.000192727, 0.00108971, 0.0025580, 9, 0.000406793, 0.00143976, 0.00160221, 0.00700188, 0.00096938, 0.0000578886, 0.000103139, 8.66252 \times 10^{-6}, 0.000307972, 0.000318268, 0.00018366$ 

 $2,0.00102688,0.000409112,0.0000823492,8.98447\times10^{-7},8.97134\times10^{-6},2.9617\times10^{-11},0$ .000120543,0.000697318,0.0000246104,8.04161\times10^{-6},0.00027828,0.00829484,7.514 87\times10^{-6},5.1975\times10^{-6},0.00207953,0.000353763,0.0000512822,0.0000668162,0\},

 $\begin{aligned} 4,0.00154847,0.0000738016,0.000782898,0.00153119,0.00369494,0.00129943,0.00132317,\\ 0.00696046,0.000836166,0.393463,0.00122621,0.000653619,0.00201598,0.00186751,0.000\\ 699879,0.0210129,0.00253235,0.0111734,0.0184678,1.38727\times10^-\\ {}^6,0.000122807,0.000100195,0.000874957,0.00166282,0.000607475,0.00619523,0.0\\ 0163398,0.000254466,2.77615\times10^{-6},0.0000330105,7.59263\times10^{-8},0.0000553088,0.00\\ 0491166,0.00177299,0.0000903983,0.000254684,0,0.0000708677,0.000106038,3.32491\times10^-\\ {}^7,0.000042381,0.00279945,0.0000560979,0 \}, \end{aligned}$ 

 $\frac{26^{\eta} \gamma \rho \alpha \mu \mu \acute{\eta}}{6} \{8.7391 \times 10^{-9}, 0, 0, 0, 0, 0, 0, 0, 4.69488 \times 10^{-8}, 0, 2.48317 \times 10^{-6}, 0, 0, 1.96319 \times 10^{-6}, 0, 0, 0000421325, 0, 2.43588 \times 10^{-6}, 6.24523 \times 10^{-6}, 2.63082 \times 10^{-6}, 6.07595 \times 10^{-7}, 0.0000423772, 0.000564307, 0.0246186, 0.00104088, 0.566877, 0.000149955, 0.000034044, 1.33699 \times 10^{-6}, 0.000148809, 0.0000313507, 0.0000183935, 0.0000105934, 0.000797435, 0, 0.000121657, 0.00153243, 0.000030551, 0.0000626361, 0.0000187598, 0.0000292441, 0.0000883035, 0.00378426, 0.0000418701, 1.14602 \times 10^{-6}, 2.49891 \times 10^{-8}, 0.0000483098, 0.0000131291, 0.00069881, 0.0000509617, 0.000873552, 0, 3.49006 \times 10^{-9}, 4.31833 \times 10^{-6}, 1.47991 \times 10^{-7}, 9.73073 \times 10^{-7}, 0.000792441, 8.70804 \times 10^{-6}, 0\},$ 

 $\frac{30^{\eta} \gamma \rho \alpha \mu \mu \acute{n}}{7,0.0000856626,0.000162757,0.0000939169,0.000445434,0.00261275,0.000521989,0.00032}{852,0.000208874,0.0007477,9.52493 \times 10^{-7},0.000177705,0.000219767,0.0001}{18914,0.000328531,0.000615614,0.000138099,0.0000906498,0.0000402862,0.0000823946,0.000169046,0.000104785,0.000281892,0.519414,0.0100285,0.0000525609,5.12259 \times 10^{-6},0.000310757,0.0000171445,0.000685581,0.000491027,0.00187177,0.0000303255,0.00119227,0.000559392,0.00148535,0.0000201491,0.000422552,0.0000510053,0.000187204,0.000123862,0.00143835,0.000648416,0.000116722,0.000179542,0.000487143,2.50416 \times 10^{-6},0.00146696,0.00144461,0.0000452572,0\}$ 

 $\frac{33^{\eta}}{\gamma\rho\alpha\mu\mu\acute{\eta}} \{0.0087476, 0.00332544, 0, 0.0090216, 0.00262662, 0, 0.00305422, 0.002376 \\16, 0.000500888, 0.000179581, 0.000289041, 0.000486132, 0.000433056, 0.000146156, 0.00040 \\4888, 0.00264728, 1.77205 \times 10^{-6}, 0.000344558, 0.000335753, 0.000231281, 0.00 \\0601341, 0.000541729, 0.000213943, 0.000156678, 0.0000744604, 0.0000989982, 0.000212607 \\, 0.0000774783, 0.000552259, 0.000187689, 0.00219787, 2.17274 \times 10^{-6}, 0.75547 \\3, 0.000521316, 0.000537606, 0.000393359, 0.000272474, 0.000145547, 0.000647663, 0.003281 \\81, 0.000791129, 0.0293688, 0.000309161, 0.00434377, 0.000461229, 0.000278649, 0.00025135 \\, 0.000444213, 2.39005 \times 10^{-6}, 0.000397507, 0.000790535, 0.0219148, 0.0 \\00816822, 0.0022493, 0.0112817, 0.00318576, 0.00127001, 0.000873843, 0 \},$ 

 $33762, 0.0687046, 0.00140676, 0.000510931, 0.0147546, 0.0108989, 0.0167598, 0.0024788, 0.00678151, 0.0000632726, 0.0464912, 0.0174381, 0.000283117, 0\},$ 

 $\frac{36^{\eta}}{\gamma\rho\alpha\mu\mu\dot{\eta}} \{0.0423082, 0.033954, 0.036619, 0.0185273, 0.0157375, 0, 0.0163988, 0.025853, 0.0780975, 0.0513823, 0.0587595, 0.0615373, 0.0625329, 0.0849865, 0.066118, 0.0397874, 0.0309221, 0.0816724, 0.0618066, 0.0481657, 0.0251446, 0.0337047, 0.0324937, 0.0557897, 0.0530622, 0.0564733, 0.0705082, 0.0670968, 0.0248042, 0.0593432, 0.0461798, 0.0142858, 0.0183487, 0.0533343, 0.0103418, 0.670437, 0.0119838, 0.050308, 0.0218825, 0.01536, 0.0193696, 0.00966771, 0.00785113, 0.00255441, 0.00320043, 0.00282294, 0.00214091, 0.0137251, 0.0197839, 0.0121875, 0.0119796, 0.0166769, 0.00824602, 0.0393349, 0.0193312, 0.0153424, 0.011351, 0.00530882, 0],$ 

 $\frac{37^{\eta}}{9} γραμμή \{0.0310276, 0.0249009, 0.0268553, 0.0135757, 0.0115117, 0, 0.0119441, 0.01165415, 0.0572744, 0.0376822, 0.0430925, 0.0451296, 0.0458598, 0.0623266, 0.048489, 0.0293565, 0.0226773, 0.0598961, 0.0453271, 0.0353233, 0.0184403, 0.024718, 0.0238299, 0.0409145, 0.0389143, 0.0414158, 0.0517086, 0.0492068, 0.018191, 0.0435205, 0.033761, 0.0104768, 0.0134564, 0.0391169, 0.00758439, 0.0116143, 0.72173, 0.0368944, 0.016048, 0.011269, 0.0142051, 0.0079234, 0.0057578, 0.00187333, 0.00234727, 0.00207026, 0.00159843, 0.0102884, 0.0146479, 0.00911132, 0.0090508, 0.0154703, 0.00604769, 0.0288524, 0.0141769, 0.0112581, 0.00832634, 0.00402555, 0\},$ 

 $\frac{38^{\eta}}{\gamma\rho\alpha\mu\mu\acute{\eta}} \{3.63092\times10^{-8}, 0.000017905, 0, 0.0000341829, 0.000784529, 0, 0.00010595 \\9, 0.0000979182, 0.000460622, 0.000855669, 0.000762568, 0.00144801, 0.000929893, 0.000546 \\548, 0.000631738, 0.000694995, 0.0000919469, 0.00110208, 0.000792247, 0.000642855, 0.0005 \\16011, 0.0011319, 0.000983814, 0.00254571, 0.000750841, 0.00242486, 0.000531773, 0.000463 \\96, 0.00194603, 0.000594079, 0.000570151, 0.000107258, 0.0000760857, 0.000030357, 1.11978 \\\times10^{-6}, 0.000298447, 0.000185189, 0.578159, 0.0005926$ 

 $\begin{aligned} 26,0.0117357,0.0357455,0.0268472,0.0000426731,0.000356008,0.0232783,0.0268522,0.000\\ 132578,0.00281076,0.00363401,0.00851474,0.00946663,0.00173852,0.0000124426,0.00059\\ 4948,3.9422\times10^{-6},0.0150412,0.00552648,0.0596722,0 \end{aligned} \right\},$ 

 $\frac{39^{\eta}}{\gamma\rho\alpha\mu\mu\acute{\eta}} \{0.00253777, 0.00100604, 0.00361218, 0.00471576, 0.0885141, 0, 0.071849, 0.0302074, 0.00177492, 0.00279081, 0.00301366, 0.00476115, 0.00287412, 0.0029391, 0.00204432, 0.00304458, 0.000284993, 0.00689915, 0.00253118, 0.00212628, 0.00245708, 0.00368521, 0.00318232, 0.00884657, 0.00228594, 0.00944738, 0.00252326, 0.00146963, 0.00357019, 0.001146963, 0.002126530, 0.00212652326, 0.00146963, 0.00212653, 0.00212628, 0.00212628, 0.00212628, 0.00212628, 0.00212628, 0.00212628, 0.00212628, 0.00212628, 0.00212628, 0.00212628, 0.00212628, 0.00212628, 0.00212628, 0.00228, 0.00212628, 0.002$ 

83697,0.0082735,0.00169074,1.01716×10<sup>-6</sup>,0.00344055,0.004 21491,0.048472,0.0220032,0.0000130611,0.524235,0.00350115,0.000280017,0.0221083,0.0 000746812,0.00310278,0.000375311,0.00123801,0.00170778,0.00813617,0.00111964,0.008 32422,0.00213426,0.00344095,0.000555195,0.000890408,0.0000331778,0.00649479,0.0024 3193,0.0115237,0},

 $011699, 0.604587, 0.00227595, 0.000158439, 0.00291432, 9.21942 \times 10^{-6}, 0.0000957091, 0.00129082, 0.00226409, 0.00073546, 0.000345544, 0.1.493 \times 10^{-9}, 0.0019676, 5.10165 \times 10^{-7}, 6.28489 \times 10^{-7}, 0.000572102, 0.0000273573, 0\},$ 

 $\frac{44^{\eta}}{\gamma\rho\alpha\mu\mu\acute{\eta}} \{0.0229269, 0.0224798, 0.0180203, 0.0167046, 0.0164257, 0, 0.0262058, 0.0184203, 0.0159038, 0.0144962, 0.0165871, 0.0154531, 0.0161636, 0.0171594, 0.0166253, 0.0222876, 0.0166855, 0.0163904, 0.0161907, 0.0161922, 0.0170883, 0.0185509, 0.0141445, 0.0169279, 0.0161388, 0.0174393, 0.0160867, 0.00943409, 0.0151204, 0.0124811, 0.0175925, 0.0214283, 0.00731498, 0.0102649, 0.0286018, 0.0409924, 0.0367343, 0.0118233, 0.01763, 0.00227542, 0.019758, 0.0163419, 0.0156006, 0.810464, 0.0246545, 0.0327704, 0.0156727, 0.0165571, 0.0126526, 0.0212621, 0.0342407, 0.0247062, 0.0036092, 0.00687767, 0.00221526, 0.0367892, 0.0203564, 0.0156952, 0\},$ 

 $\frac{46^{\eta} \gamma \rho \alpha \mu \mu \acute{n}}{(0.0000800743, 0.0000300871, 0, 0, 0, 0, 0, 0, 9.57464 \times 10^{-6}, 9.46769 \times 10^{-6}, 0, 0, 0.000130912, 0, 0.0000600622, 0, 5.44438 \times 10^{-9}, 2.31707 \times 10^{-7}, 1.84429 \times 10^{-6}, 0, 0, 0.0000 \\ 432145, 0, 7.44088 \times 10^{-6}, 0.0000557415, 0, 0.000104788, 0.0000440424, 0, 0.0000507921 \\ , 7.11461 \times 10^{-8}, 0.0000616057, 0.0000206976, 3.30979 \times 10^{-7}, 0.00088591, 0.0042126, 0.0 \\ 0247956, 0.00241906, 0.000303912, 0.0000406806, 0.000709463, 0.00130635, 0.00010045, 0.00 \\ 0635402, 0.000162952, 0.147681, 0.710635, 0.000495444, 0.00017005, 5.41025 \times 10^{-6} \\ , 4.2175 \times 10^{-6}, 0.00388409, 0, 0, 3.73391 \times 10^{-6}, 2.73987 \times 10^{-8}, 0.0145826, 0.000260801 \\ , 0.0001138, 0 \},$ 

 $\begin{array}{l} \underline{47^{\eta} \ \gamma \rho \alpha \mu \mu \acute{\eta}} \left\{ 4.3616 \times 10^{-7}, 0, 0.000479261, 0.00538428, 0.00271689, 0, 0.0297727, 0.025 \\ 2978, 0.00496731, 0.0189648, 0.0192045, 0.0333522, 0.0194577, 0.0259818, 0.0305279, 0.03456 \\ 65, 0.0109561, 0.00602762, 0.0189702, 0.0152296, 0.00415081, 0.0221539, 0.0205363, 0.009435 \\ 4, 0.0121938, 0.0102276, 0.00975131, 0.0045971, 0.00428797, 0.0247207, 0.00447207, 0.004014 \\ 74, 0.00455654, 0.0138992, 0.0958611, 0.00426394, 0.0609491, 0.0117227, 0.00900795, 0.00284 \\ 236, 0.0168066, 0.0193739, 0.0145762, 0.00967716, 0.0474435, 0.0362283, 0.884735, 0.0759663 \\ , 0.0500332, 0.0149019, 0.0483169, 0.0112615, 0.000919019, 0.010711, 0.0162453, 0.193084, 0.0 \\ 352996, 0.021886, 0 \right\},$ 

 $\frac{51^{\eta} \gamma \rho \alpha \mu \mu \acute{n}}{205,0.0315455,0.0242964,0.0951617,0.0271871,0.0319454,0.0269519,0.0261484,0.0401024}{,0.0682711,0.0255876,0.0382016,0.0133965,0.0248423,0.0214013,0.041649,0.0698538,0.0753881,0.0231083,0.0739683,0.0190923,0.0690405,0.0974385,0.0142634,0.019505,0.00325285,0.000896852,0.0395872,0.0403262,0.020931,0.0183661,0.0120686,0.0492118,0.0136762,0.0151806,0.0224654,0.00725066,0.0701071,0.117478,0.0643954,0.00274858,0.0728493,0.111011,0.114599,0.656156,0.0215711,0.00192329,0.0120459,0.000127267,0.129344,0.0503049,0.00366591,0 \},$ 

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## Γ.2 Μήτρα (εγχώριας παραγωγής M2 + B + F)\*(R)

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 $\begin{array}{l} \underline{1^{\eta} \ \gamma \rho \alpha \mu \mu \acute{\eta}} \\ \{0.415504, 0.0938376, 0.0045838, 0., 0., 0., 0., 0.362834, 0.248284, 0.06303 \\ 77, 0.00401001, 2.11612 \times 10^{-6}, 0.000133551, 0.00636794, 6.41214 \times 10^{-6}, 5.17577 \times 10^{-6}, 0.00182575, 0.0213546, 0.0000233611, 1.91287 \times 10^{-6}, 0.0000787003, 0.0011115, 0., 7.673 \ 0.3 \times 10^{-7}, 0., 0.0000401369, 1.34059 \times 10^{-6}, 0.000132555, 0.0128701, 0., 3.54027 \times 10^{-7}, 0., 4.04227 \times 10^{-7} \end{array}$ 

 $\begin{array}{l} \underline{2^{n}\gamma\rho\alpha\mu\mu\acute{n}} & \{0.,0.650241,0.,0.00487389,0.00127853, 0.,0.00146864,0.00105251,0.001\\ 29595,0.000102989,0.000154868,0.000853638,0.000232068,0.0704875,0.000421297,0.0008\\ 74147,8.66304\times10^{-7},0.00146849,0.000256271,0.000218961,0.000241358,0.0\\ 00325325,0.000125712,0.0000922104,0.0000390943,0.0000542917,0.000130362,0.0000402\\ 558,0.000180963,0.00155538,0.000818432,2.04873\times10^{-6},0.,1.79982\times10^{-6},1.6\ 2854\times10^{-7},0.000179683,3.4776\times10^{-6},0.0010168,0.0000310826,0.,0.,0.0000984675,2.\ 66971\times10^{-6},0.,0.,0.000149661,0.,0.138241,2.64661\ \times10^{-8},0.,0.000184898,8.51198\times10^{-6},0.0000236644,0.\}, \end{array}$ 

 $\frac{3^{\eta} \gamma \rho \alpha \mu \mu \dot{\eta}}{0.0.0.401179,0.0.0.0.0.0.0.00107984,0.00000138802,0.6.63715 \times 10^{-9}}{0.0000299247,0.000015682,9.16164 \times 10^{-9},0.3.43917 \times 10^{-6},0.000100517,2.72079 \times 10^{-7},1.46973 \times 10^{-7},0.0000105208,7.27696 \times 10^{-6},0.2.05267 \times 10^{-7},0.0000100077,3.58634 \times 10^{-7},0.0000260447,0.0033894,0.0.0.1.106965 \times 10^{-11},0.0000345467,0.0000235371,0.00677731,5.75066 \times 10^{-6},0.000397162,0.0000771493,0.0000206103,0.0.0000145595,0.0.0000333693,0.000113564,0.0.1.50453 \times 10^{-8},0.0.9.36198 \times 10^{-6},0.0000720975,0.0000539161,0.000157729,0. \},$ 

 $\frac{8^{\eta} \gamma \rho \alpha \mu \mu \dot{\eta}}{80.000670838,0.000210112,0.,0.,0.,0.,0.,0.25906,0.000338263,0.,0.00002}{8475,5.81467 \times 10^{-7},0.0000480456,0.000208083,0.00114385,5.10903 \times 10^{-6},1.15128 \times 10^{-6},0.00706284,0.00170612,0.159364,0.000314729,0.000268845,0.00146292,0.,0.000}{0320654,3.5287 \times 10^{-8},0.0000247019,0.0000198314,1.80517 \times 10^{-8},7.27554 \times 10^{-6},0.001}{28242,7.92716 \times 10^{-6},0.,0.0335855,7.16814 \times 10^{-8},0.000619024,3.24862 \times 10^{-6},0.001162}{76,0.000200654,0.,0.,0.000753229,3.05295 \times 10^{-6},0.,0.000264501,0.00182807,0.,0.9.91447 \times 10^{-10},0.9.15818 \times 10^{-7},0.,0.,0.8.70391 \times 10^{-6},0.0000270615,0.\},$ 

 $\frac{11^{\eta} \ \gamma \rho \alpha \mu \mu \acute{\eta}}{(0.000512996, 0.000160492, 0.023188, 0., 0., 0., 8.34574 \times 10^{-8}, 0.000119564, 0.000747824, 0.00833039, 0.238898, 0.111401, 0.0183126, 0.000336107, 0.00234429, 0.000266, 45, 7.14468 \times 10^{-6}, 0.00196558, 0.00356793, 0.000669763, 0.000329632, 0.00617, 999, 0.00023716, 0.0000687896, 0.000100366, 0.000157847, 0.000180727, 0.0000928827, 0.000, 167149, 0.0206831, 0.0000492009, 2.17465 \times 10^{-6}, 1.78958 \times 10^{-6}, 0.0000269945, 0, 0.000839231, 0.00559569, 0.0229556, 0.00830607, 0.0000963062, 0.0003306, 0., 0.000333729, 0. 0000241523, 0., 0.0000121189, 0., 0.000480534, 0.000929391, 9.72313 \times 10^{-6}, 4.7, 9086 \times 10^{-7}, 0.000257213, 0., 0.0000918865, 0.000108621, 6.00624 \times 10^{-7}, 0.0000695979, 0, 0.000487938, 0.000421202, 0. \},$ 

 $\frac{12^{\eta} \gamma \rho \alpha \mu \mu \acute{\eta}}{0.000233091,0.197011,0.,6.23932 \times 10^{-6},0.,0.0000745479,2.18646 \times 10^{-7},1.30486 \times 10^{-6},0.000233091,0.197011,0.,6.23932 \times 10^{-6},0.,0.0000745479,2.18646 \times 10^{-8},2.10335 \times 10^{-7},0.,0.,4.15557 \times 10^{-6},0.,9.95629 \times 10^{-7},8.2754 \times 10^{-6},0.,0.0000163629,6.08801 \times 10^{-6},0.,0.0000263197,1.103 \times 10^{-8},6.3893 \times 10^{-6},0.000101581,0.00568694,1.58923 \times 10^{-6},0.00012$ 2346,0.000731588,0.00038883,0.00099174,0.0000176586,0.000383035,0.000942867,0.0001 36654,5.86815 \times 10^{-6},0.000206627,0.0000141235,9.41258 \times 10^{-6},0.0000516511 ,0.00018549,0.0000265824,0.000806552,0.000591834,0.00170947,0.000606857,0.0008951,0.0367382,0.000967887,0.000957906,0.000432154,0.}  $\frac{13^{\eta} \ \gamma \rho \alpha \mu \mu \acute{n}}{(0.000805565, 0.0000252311, 0., 0., 0., 0., 0., 0., 1.38452 \times 10^{-6}, 0., 0.0000126 \\ 071, 0.00217768, 0.253536, 0.0000108161, 5.7228 \times 10^{-6}, 0.000415155, 5.93013 \times 10^{-9}, 0.0 \\ 000430036, 1.05605 \times 10^{-6}, 1.29324 \times 10^{-8}, 4.33306 \times 10^{-8}, 3.22684 \times 10^{-7}, 8.10425 \times 10^{-6}, 0., \\ 3.16453 \times 10^{-9}, 5.13737 \times 10^{-10}, 0.0000463507, 0.000157474, 2.79951 \times 10^{-6}, 0.0000523855 \\ ,2.61348 \times 10^{-10}, 7.44877 \times 10^{-6}, 0., 1.43305 \times 10^{-9}, 0.0000182336, 0.000058193, 6.48046 \times 10^{-6}, \\ 6, 1.17273 \times 10^{-8}, 9.19243 \times 10^{-6}, 0.0000426905, 0., 0.0000258429, 3.02698 \times 10^{-7}, 0., 1.57152 \times 10^{-6}, \\ 0.00013945, 9.03153 \times 10^{-8}, 0.0000143552, 0.000142867, 0.00012773, 0. ],$ 

 $\frac{15^{\eta} \gamma \rho \alpha \mu \mu \acute{n}}{0.000967731, 0.000297897, 0.00320385, 0.00311084, 0.000816045, 0., 0}{0.00937624, 0.00101843, 0.00346676, 0.0192381, 0.000873309, 0.000865094, 0.00375941, 0.00477048, 0.258857, 0.0956912, 0.00232119, 0.00548242, 0.0036256, 0.00158429, 0.000635747, 0.000467907, 0.000430092, 0.000359847, 0.000836328, 0.0005219, 0.00052703, 0.0000786887, 0.000245103, 0.000559861, 0.000917629, 0.0000537003, 9.19674 \times 10^{-6}$ 6,0.000082539,0.00388024,0.0137485,0.0071676,0.013575,0.000814823,0.0006 38592,0.001659,0.00402479,0.00257364,0.0000298816,0.00353681,0.00331138,0.00058326 2,0.00220712,0.0190624,0.000389942,0.00463026,0.000487601,2.95236 \times 10^{-8} 8,0.0000613257,5.95207 × 10<sup>-7</sup>,0.000997083,0.00063244,0.000779886,0.},

 $\frac{16^{\eta} \gamma \rho \alpha \mu \mu \acute{n}}{90000158311,4.87505 \times 10^{-6},0.,0.00465229,0.0012204,0.,0.00140187,0.} \\ 00100466,0.00163734,0.00568837,0.0009137,0.00115361,0.00135992,0.00107603,0.001200 \\ 46,0.145534,0.0000777055,0.00483735,0.00103539,0.00194073,0.000498865,0.000566861, \\ 0.000319778,0.000240669,0.000196262,0.000212922,0.000407975,0.0000754118,0.000531 \\ 576,0.0004021,0.0011785,0.000343213,0.000076239,0.00236661,0.000174025,0.00224651, \\ 0.00102941,0.0048743,0.00135794,0.00314776,0.00643986,0.000735126,0.000447718,0.01 \\ 36402,0.00505032,0.00786165,0.000190688,0.0179199,0.0505943,0.0403353,0.0274715,0.0 \\ 0711706,0.0220843,0.0018926,7.17647 \times 10^{-6},0.0360855,0.0170122,0.00100066,0. \\ \right\}$ 

 $\frac{17^{\eta} \gamma \rho \alpha \mu \mu \acute{\eta}}{0.0680475, 0.0214821, 0.126136, 0.0681211, 0.0261527, 0., 0.0703195, 0.1}{05599, 0.00928814, 0.00678079, 0.00442627, 0.00213782, 0.0325096, 0.018737, 0.0102103, 0.0130982, 0.117832, 0.00616915, 0.0092009, 0.0277331, 0.0186197, 0.012771, 0.0102367, 0.00515126, 0.00681185, 0.0061536, 0.00623944, 0.00300253, 0.0109671, 0.00675403, 0.0276677, 0.0795783, 0.0464526, 0.0322742, 0.00185732, 0.0299633, 0.0147454, 0.0146127, 0.15221, 0.0659959, 0.012771, 0.012201, 0.0059959, 0.012773, 0.012771, 0.012201, 0.0059959, 0.012773, 0.012771, 0.012201, 0.0059959, 0.012773, 0.012771, 0.012201, 0.0059959, 0.012773, 0.012771, 0.012201, 0.0059959, 0.012773, 0.012771, 0.012201, 0.0059959, 0.012773, 0.012771, 0.012201, 0.0059959, 0.012773, 0.0147454, 0.0146127, 0.15221, 0.0059959, 0.012773, 0.012771, 0.012201, 0.0059959, 0.0147454, 0.0146127, 0.15221, 0.0059959, 0.012773, 0.012771, 0.012201, 0.0059959, 0.012773, 0.012720, 0.012771, 0.012201, 0.0059959, 0.01272000, 0.01272000, 0.01272000, 0.0127200, 0.0127200, 0.0127200, 0.0147454, 0.0146127, 0.012200, 0.0127200, 0.0127200, 0.0127200, 0.0127200, 0.0127200, 0.0127200, 0.0147454, 0.0146127, 0.01259, 0.0127200, 0.012700, 0.0127200, 0.012700, 0.012700, 0.012700, 0.012700, 0.012700, 0.012700, 0.012700, 0.012700, 0.012700, 0.012700, 0.012700, 0.012700, 0.012700, 0.012700, 0.012700, 0.012700, 0.012700, 0.0127000, 0.012700, 0.012700, 0.012700, 0.012700, 0.012700, 0.012700,$ 

 $0.105012, 0.0485443, 0.0166305, 0.0116395, 0.00380981, 0.00885262, 0.00136622, 0.0191683, 0.00317303, 0.00387017, 0.0131245, 0.00896494, 0.00320716, 0.0338709, 0.0764141, 0.01146, 0.00568731, 0.00236439, 0.\},$ 

 $\frac{19^{\eta} \gamma \rho \alpha \mu \mu \acute{\eta}}{1000267134,0.00083601,0.00003731,0.0108755,0.00285289,0.,0.00328}{079,0.00764751,0.0078494,0.00714273,0.00511432,0.00244299,0.0163858,0.0076071,0.009}{49784,0.0066628,0.0000491248,0.00649601,0.144804,0.00187786,0.000801461,0.00576661},0.00958983,0.0180591,0.0125219,0.0095538,0.00902264,0.00220426,0.00101084,0.015398}{4,0.00206387,0.000239575,0.000381087,0.0199379,0.00237767,0.0179247,0.0144627,0.0033096,0.00404722,0.00101724,0.00307868,0.00181727,0.0000922061,9.0029×10<sup>-7</sup>,0.0000442976,0.000193648,0.000573548,0.00600072,0.000652044,0.000213763,0.000745192,0.,0.000313062,0.000309797,0.0000528803,0.0000258798,0.000478431,0.0223725,0.}$ 

 $\frac{22^{\eta} \gamma \rho \alpha \mu \mu \acute{\eta}}{9000648977,0.0164393,0.,0.00450748,0.00118242,0.,0.00135823,0.00}{9973387,0.0128702,0.0167331,0.0150159,0.0039418,0.00937083,0.0045689,0.00584129,0.00898163,0.000113949,0.0145401,0.0154696,0.00463482,0.00443531,0.157483,0.0135832,0.0157034,0.0196084,0.00518696,0.00308407,0.00340141,0.0209945,0.0114398,0.00407621,$ 

 $0.0016896, 0.00418948, 0.0976545, 0.000661246, 0.00133099, 0.000408633, 0.0067745, 0.0011\\5351, 0.00483804, 0.00019026, 0.000920908, 0.000169017, 1.37915 \times 10^{-6}, 0.000178755, 0.0000329107, 0.000438897, 0.00199697, 0.00195178, 0.0000704868, 0.00654353, 0.00207142, 0.109153, 0.000264818, 0.0455933, 0.00128359, 0.001156\\11, 0.00189922, 0. \},$ 

 $\frac{23^{\eta}}{9} γραμμή \{0.00216749, 0.000678881, 0., 0.0092565, 0.0294677, 0., 0.00883549, 0.0095746, 0.000565838, 0.000813999, 0.00104989, 0.000670323, 0.000589997, 0.00227448, 0.000928689, 0.00259924, 0.0000572236, 0.000834821, 0.00152684, 0.00410833, 0.00108896, 0.00165904, 0.153791, 0.0000552148, 0.000915062, 0.000614678, 0.000310577, 0.00156813, 0.00394117, 0.000735223, 0.00174141, 0.00318367, 0.0161852, 0.00154972, 0.000170424, 0.000265147, 0.000248611, 0.000634857, 0.000498869, 0.000295347, 0.00212057, 0.000832905, 0.000269423, 3.13343 × 10<sup>-6</sup>, 0.0000139696, 7.42621 × 10<sup>-11</sup>, 0$ 

 $.000197818, 0.00141199, 0.0000424408, 0.0000118746, 0.000501809, 0.0177488, 0.000052192\\8, 0.0000130285, 0.00830272, 0.000480108, 0.0000986073, 0.000264332, 0. \},$ 

 $\frac{25^{\eta} \gamma \rho \alpha \mu \mu \acute{\eta}}{(1.29562 \times 10^{-9}, 0., 0., 0.00487092, 0.00127775, 0., 0.00146774, 0.00105187, 0.000704536, 0.00115505, 0.00143717, 0.00095085, 0.000836988, 0.000970247, 0.00127391, 0.00260509, 0.0000811875, 0.00105087, 0.00228591, 0.00562358, 0.00145716, 0.00178026, 0.0108989, 0.00144719, 0.162372, 0.00223448, 0.0010533, 0.00290106, 0.00287722, 0.00126494, 0.0254156, 0.00503192, 0.0258278, 0.029524, 4.0841 \times 10^{-6}, 0.0003157$ 09, 0.000287555, 0.00180365, 0.00260639, 0.000976885, 0.0127935, 0.0033266, 0.00083254, 9.68212 \times 10^{-6}, 0.0000514016, 1.90379 \times 10^{-7}, 0.0000907648, 0.000994559, 0.003057 54, 0.000133486, 0.000459258, 0., 0.000492194, 0.000265802, 1.3275 × 10^{-6}, 0.0000575173, 0.0053829, 0.000221929, 0. },

 $\begin{array}{l} \underline{26^{\eta} \ \gamma \rho \alpha \mu \mu \acute{n}} \left\{ 2.05841 \times 10^{-8}, 0., 0., 0., 0., 0., 0., 7.03495 \times 10^{-8}, 0., 3.44451 \times 10^{-6}, 0., 0., 2.377 \\ 49 \times 10^{-6}, 0., 0.0000708822, 0., 3.26962 \times 10^{-6}, 9.32351 \times 10^{-6}, 4.00403 \times 10^{-6}, 6.81349 \times 10^{-7}, 0 \\ .0000570163, 0.000883606, 0.0426084, 0.00143745, 0.210734, 0.000241649, 0.0000489904, 2.0 \\ 5985 \times 10^{-6}, 0.000268952, 0.0000379193, 0.0000365489, 0.0000244872, 0.00127 \\ 484, 0., 0.000312755, 0.00439801, 0.0000629784, 0.0000981793, 0.0000301677, 0.0000603908, \\ 0.000179776, 0.012381, 0.000146026, 1.7845 \times 10^{-6}, 6.2658 \times 10^{-8}, 0.0000792789, 0 \end{array} \right)$ 

 $.00026585, 0.0012051, 0.0000752525, 0.00157523, 0., 2.42394 \times 10^{-8}, 0.0000108247, 5.90866 \times 10^{-7}, 1.3206 \times 10^{-6}, 0.00152374, 0.00003445, 0. \},$ 

 $\frac{27^{\eta} \gamma \rho \alpha \mu \mu \acute{\eta}}{^{7}, 1.40504 \times 10^{-7}, 0.000124468, 0., 1.4527 \times 10^{-6}, 0.000015816, 1.9966 \times 10^{-6}, 6.50901 \times 10^{-7}, 0.0000228884, 0.000554161, 5.6939 \times 10^{-7}, 0.0000661245, 0.000248249, 0.144629, 0.0000381882, 0.00166586, 0.0000144362, 0.0000641095, 0.0000340784, 0.0000250602, 0.000 137722, 3.23131 \times 10^{-7}, 0.0000314078, 2.68943 \times 10^{-6}, 0.0000811774, 0.00002130 74, 0.000050087, 0.00322, 0.000295986, 0.0000775344, 9.07798 \times 10^{-7}, 2.42871 \times 10^{-6}, 6.6 4948 \times 10^{-10}, 0.0000326624, 0.0000484616, 0.0000564543, 0.00173247, 0.000325018, 0.0 0231415, 0.0000169991, 0.0252767, 1.64867 \times 10^{-6}, 0.0000211351, 0.000427445, 0.0000 124022, 0. \}$ 

 $\frac{30^{\eta} \, \gamma \rho \alpha \mu \mu \acute{n}}{6} \{2.0842 \times 10^{-7}, 0.0000157688, 0., 0.000703239, 0.000184475, 0., 0.00021190, 0.000151863, 0.00024388, 0.000150898, 0.000617879, 0.00451743, 0.00076633, 0.00039785, 0.00027301, 0.0012579, 1.04782 \times 10^{-6}, 0.00023853, 0.000328091, 0.000180983, 0.000368411, 0.000828276, 0.000216239, 0.000156891, 0.0000556352, 0.000150145, 0.000272, 416, 0.000150789, 0.000434302, 0.131405, 0.0121296, 0.000104442, 0.0000118411, 0.0004968, 0.0000504732, 0.00176248, 0.00140923, 0.00385849, 0.00048052, 0.000417338, 0.000626241, 0.00242732, 0.00183017, 0.00518032, 0.000313748, 0.00105952, 0.000837025, 0.000379068, 0.000213601, 0.00212394, 0.00116926, 0.000249753, 0.00124697, 0.00122111, 9.99809 \times 10^{-6}, 0.00199088, 0.00277776, 0.00179042, 0.\}$ 

 $\frac{32^{\eta}}{\gamma\rho\alpha\mu\mu\acute{\eta}} \{0.0212117, 0.00669072, 0.000432099, 0.253885, 0.124851, 0., 0.033062, 0.0888937, 0.0266547, 0.0143188, 0.0669213, 0.0282209, 0.0275428, 0.0322932, 0.0560935, 0.043553, 0.00862453, 0.0258873, 0.0696502, 0.101874, 0.0940084, 0.0334093, 0.0197034, 0.02027580, 0.0238371, 0.0217777, 0.022679, 0.0106064, 0.0374801, 0.0172734, 0.0585709, 0.433312, 0.0975801, 0.00348449, 0.113684, 0.0464377, 0.0298532, 0.058319, 0.0138299, 0.00451384, 0.0131126, 0.0378487, 0.0298371, 0.0156797, 0.00264963, 0.00754631, 0.00339715, 0.0294233, 0.0176877, 0.0172808, 0.0160471, 0.0125907, 0.00655996, 0.0188302, 0.0617042, 0.00995396, 0.0224154, 0.0245408, 0.\}$ 

 $\begin{array}{l} \underline{33^{\eta}} \ \gamma\rho\alpha\mu\mu\dot{\eta} \ \{0.0206041, 0.0065015, 0., 0.0195068, 0.00511709, 0., 0.00587795, 0.00421\\ \underline{248}, 0.000750546, 0.000288537, 0.000400941, 0.00084052, 0.000635768, 0.000177001, 0.00052\\ 9213, 0.00445369, 1.94939 \times 10^{-6}, 0.000462492, 0.000501247, 0.000352003, 0.00\\ 0674336, 0.000728867, 0.000334997, 0.000271169, 0.00010283, 0.000180401, 0.000342613, 0.0\\ 00111494, 0.000850847, 0.000339223, 0.00265837, 4.31736 \times 10^{-6}, 0.434763, 0.0\\ 00833415, 0.00158271, 0.00101124, 0.000781987, 0.000300033, 0.00101518, 0.00527749, 0.001\\ 63373, 0.0597914, 0.00101149, 0.0151493, 0.000718193, 0.000698687, 0.000412479, 0.0008994\\ 82, 4.12166 \times 10^{-6}, 0.000586979, 0.00142553, 0.046892, 0.00567304, 0.00\\ 563827, 0.0450431, 0.00432355, 0.00244201, 0.00345702, 0. \}, \end{array}$ 

 $\frac{34^{\eta}}{\gamma\rho\alpha\mu\mu\dot{\eta}} \{0.00216943, 0.00176926, 0., 0.0863313, 0.00698325, 0., 0.0349914, 0.0321, 0.00682303, 0.00979144, 0.00849386, 0.00623136, 0.0556437, 0.0449156, 0.0103702, 0.013974, 0.00242431, 0.0103876, 0.00997747, 0.0152445, 0.010316, 0.00598326, 0.00143177, 0.0011, 0.005997, 0.00196069, 0.00146638, 0.00095635, 0.00341193, 0.00448737, 0.00698043, 0.0151712, 0.00655997, 0.0105612, 0.118932, 0.000908377, 0.0122053, 0.00851269, 0.0106673, 0.000311334, 0.00483489, 0.00927059, 0.0149311, 0.00444851, 0.0169386, 0.0559219, 0.0335396, 0.112748, 0.00284854, 0.000881105, 0.0217874, 0.0196535, 0.0358616, 0.0172159, 0.0169991, 0.0002526, 0.00284854, 0.03553, 0.003112004, 0.\}$ 

 $\frac{36^{\eta} \gamma \rho \alpha \mu \mu \acute{\eta}}{458897, 0.117024, 0.082557, 0.0815076, 0.106398, 0.0918044, 0.102922, 0.0864201, 0.0669369, 0.0340167, 0.109627, 0.0922712, 0.0733066, 0.0281969, 0.0453479, 0.0508795, 0.0965574, 0.076669369, 0.0340167, 0.109627, 0.0922712, 0.0733066, 0.0281969, 0.0453479, 0.0508795, 0.0965574, 0.076669369, 0.0340167, 0.0508795, 0.0965574, 0.076669369, 0.0281969, 0.0453479, 0.0508795, 0.0965574, 0.076669369, 0.0281969, 0.0453479, 0.0508795, 0.0965574, 0.076669369, 0.0281969, 0.0453479, 0.0508795, 0.0965574, 0.076669369, 0.0281969, 0.0453479, 0.0508795, 0.0965574, 0.076669369, 0.0281969, 0.0453479, 0.0508795, 0.0965574, 0.076669369, 0.0281969, 0.0453479, 0.0508795, 0.0965574, 0.076669369, 0.0281969, 0.0453479, 0.0508795, 0.0965574, 0.076669369, 0.0281969, 0.0453479, 0.0508795, 0.0965574, 0.076669369, 0.0281969, 0.0453479, 0.0508795, 0.0965574, 0.076669369, 0.0281969, 0.0453479, 0.0508795, 0.0965574, 0.076669369, 0.0281969, 0.0453479, 0.0508795, 0.0965574, 0.076669369, 0.0281969, 0.0453479, 0.0508795, 0.0965574, 0.076669369, 0.0281969, 0.0453479, 0.0508795, 0.0965574, 0.076669369, 0.0281969, 0.0453479, 0.0508795, 0.0965574, 0.076669369, 0.0281969, 0.0453479, 0.0508795, 0.0965574, 0.076669369, 0.0281969, 0.0453479, 0.0508795, 0.0965574, 0.07669369, 0.0281969,$ 

32789,0.102909,0.113623,0.0965544,0.0382151,0.107255,0.0558555,0.0283867,0.0424141, 0.0852642,0.0304463,0.152764,0.034393,0.103706,0.0342998,0.0247005,0.0399995,0.0196 823,0.0256866,0.00890878,0.00498349,0.00707829,0.00351334,0.0277919,0.0341175,0.017 9966,0.0216022,0.0356841,0.0572707,0.0986,0.0771814,0.0208219,0.0218261,0.0210023,0. },

 $\frac{37^{n}}{9} γραμμή \{0.0730825, 0.0486831, 0.069035, 0.029354, 0.0224267, 0., 0.0229869, 0.0293249, 0.0858216, 0.0605448, 0.0597753, 0.0780289, 0.0673266, 0.0754798, 0.0633779, 0.0493883, 0.0249468, 0.0803971, 0.067669, 0.0537609, 0.0206787, 0.0332568, 0.0373135, 0.0708123, 0.0537406, 0.0754706, 0.0833275, 0.0708101, 0.0280263, 0.0786574, 0.0408347, 0.0208179, 0.0311052, 0.0625353, 0.0223284, 0.0298578, 0.201378, 0.0760547, 0.0251544, 0.0181218, 0.0293344, 0.0144392, 0.0188379, 0.00653343, 0.003655, 0.005191, 0.00262311, 0.020833, 0.0252605, 0.0134542, 0.0163208, 0.0331025, 0.0420028, 0.0723236, 0.0566026, 0.0152789, 0.0160102, 0.0159255, 0.0331025, 0.0420028, 0.0723236, 0.0566026, 0.0152789, 0.0160102, 0.0159255, 0.0331025, 0.0420028, 0.0723236, 0.0566026, 0.0152789, 0.0160102, 0.0159255, 0.0331025, 0.0420028, 0.0723236, 0.0566026, 0.0152789, 0.0160102, 0.0159255, 0.0331025, 0.0420028, 0.0723236, 0.0566026, 0.0152789, 0.0160102, 0.0159255, 0.0331025, 0.0420028, 0.0723236, 0.0566026, 0.0152789, 0.0160102, 0.0159255, 0.0331025, 0.0420028, 0.0723236, 0.0566026, 0.0152789, 0.0160102, 0.0159255, 0.0331025, 0.0420028, 0.0723236, 0.0566026, 0.0152789, 0.0160102, 0.0159255, 0.0331025, 0.0420028, 0.0723236, 0.0566026, 0.0152789, 0.0160102, 0.0159255, 0.0331025, 0.0420028, 0.0723236, 0.0566026, 0.0152789, 0.0160102, 0.0159255, 0.0331025, 0.0420028, 0.0723236, 0.0566026, 0.0152789, 0.0160102, 0.0159255, 0.0331025, 0.0420028, 0.0723236, 0.0566026, 0.0152789, 0.0160102, 0.0159255, 0.0331025, 0.0420028, 0.0723236, 0.0566026, 0.0152789, 0.0160102, 0.0159255, 0.0331025, 0.0420028, 0.0723236, 0.0566026, 0.0152789, 0.0160102, 0.0159255, 0.0331025, 0.0420028, 0.0723236, 0.0566026, 0.0152789, 0.0160102, 0.0159255, 0.0331025, 0.0420028, 0.0723236, 0.0566026, 0.0152789, 0.0160102, 0.0159255, 0.0331025, 0.0420028, 0.0723236, 0.0566026, 0.0152789, 0.0160102, 0.0159255, 0.0331025, 0.0420028, 0.0723236, 0.0566026, 0.0152789, 0.0160102, 0.0159255, 0.0152789, 0.0160102, 0.0159255, 0.0152789, 0.01525, 0.0152585, 0.0152585, 0.0152585, 0$ 

 $\frac{38^{\eta} \gamma \rho \alpha \mu \mu \acute{n}}{9} \{8.5523 \times 10^{-8}, 0.0000350056, 0., 0.0000739115, 0.00152839, 0., 0.00020392 2, 0.000173591, 0.00069021, 0.00137482, 0.00105779, 0.00250361, 0.00136517, 0.000661889, 0. 00082572, 0.00116923, 0.000101149, 0.00147929, 0.00118275, 0.000978405, 0.000578648, 0.00 152291, 0.00154048, 0.00440597, 0.00103691, 0.00441874, 0.000856943, 0.000667653, 0.00299 818, 0.00107372, 0.00068961, 0.000213126, 0.000175876, 0.0000485309, 3.29665 \times 10^{-6}, 0.000767243, 0.000531485, 0.130411, 0.000928914, 0.0188723, 0.0738167, 0.0546578, 0.000139614, 0.00124162, 0.0362474, 0.0673297, 0.000217568, 0.005691 49, 0.00626688, 0.0125733, 0.0170707, 0.00371997, 0.0000864173, 0.00149135, 0.0000157396, 0.0204132, 0.0106265, 0.23607, 0. \}$ 

 $\frac{39^{\eta}}{9} \gamma \rho \alpha \mu \mu \acute{\eta} \{0.00597749, 0.00196688, 0.00928557, 0.0101966, 0.17244, 0., 0.138278, 0.053552, 0.00265959, 0.00448406, 0.00418037, 0.008232, 0.00421949, 0.00355936, 0.00267205, 0.0051221, 0.000313514, 0.00926057, 0.0037788, 0.00323613, 0.00275534, 0.00495826, 0.00498295, 0.0153111, 0.00315688, 0.0172156, 0.00406618, 0.00211484, 0.00550047, 0.00332007, 0.010007, 0.00335959, 2.35121 \times 10^{-6}$ , 0.00550033, 0.0124087, 0.1246 11, 0.0631483, 0.0000269242, 0.25426, 0.00563021, 0.000578253, 0.0450099, 0.000244336, 0.0108213, 0.000584409, 0.0031042, 0.00280256, 0.0164749, 0.00193083, 0.012292, 0.0038486, 0.00736274, 0.00385597, 0.0023197, 0.000132465, 0.0088144, 0.0046762, 0.0455892, 0. \}

 $\frac{40^{\eta} \ \gamma \rho \alpha \mu \mu \acute{\eta}}{(8.89111 \times 10^{-7}, 0., 0.0113499, 0., 0., 0., 0., 0.0000126022, 0.0000171996, 0. 0.0000255923, 0., 0.000082242, 0., 0.0000654116, 2.88204 \times 10^{-7}, 2.76448 \times 10^{-6}, 0., 0.0, 0.000547706, 0., 0.0000131086, 0.00010908, 0., 0.000215618, 0.0000802476, 0., 0.00233404, 1.453 \\ 89 \times 10^{-7}, 0.0000941074, 0.0000146106, 2.71796 \times 10^{-7}, 0.0000515963, 0.0003542 \\ 57, 0.00704167, 0.0043357, 0.0000153121, 0.017629, 0.121971, 0., 0.00979374, 0.000253054, 8.0 \\ 8871 \times 10^{-9}, 0.00141307, 0.0000335529, 0.000170782, 0.000910513, 0.00021407 \\ 4, 0.00657366, 0.00164409, 0.00151284, 0.0000392646, 0.000218478, 6.69321 \times 10^{-6}, 3.0 \\ 3295 \times 10^{-6}, 0.00102944, 9.3414 \times 10^{-6}, 0. \},$ 

 $\frac{41^{\eta} \gamma \rho \alpha \mu \mu \acute{\eta}}{(6.02107 \times 10^{-7}, 0., 0., 0., 0., 0., 0., 0.000641822, 0.00127379, 0.000972261, 0.00231624, 0.00125479, 0.00065679, 0.000758954, 0.00192919, 0.0000931399, 0.00136131, 0.00108712, 0.000899295, 0.000564106, 0.00139977, 0.00142364, 0.00411394, 0.00095307, 0.0041884, 0.000834898, 0.000613668, 0.0016455, 0.000986986, 0.000669509, 0.000765988, 8.0518 \times 10^{-6}, 0.000243572, 0.0000934772, 0.00485163, 0.00307269, 0.00$ 

 $0378976, 0.00028719, 0.00167945, 0.160395, 0.022506, 0.00398018, 0.00290421, 0.000279453, 0.00199181, 0.000298921, 0.00297863, 0.00341071, 0.00161729, 0.00890247, 0.0232774, 0.0000302735, 0.0000206577, 2.36732 \times 10^{-6}, 0.00547312, 0.00235514, 0.00074273, 0.\},$ 

 $\label{eq:261377,0.00390445,0.00108602,0.000623102,0.,1.03693\times10^{-8},0.00493215,2.03688\times10^{-6},8.52952\times10^{-7},0.00110006,0.000108229,0.\},$ 

 $\frac{43^{\eta}}{\gamma\rho\alpha\mu\mu\acute{\eta}} \{0.0000594972, 0.0000153239, 0.00504592, 0.00027326, 0.00530813, 0., 0.00281161, 0.00682899, 0.00378112, 0.00240072, 0.00619315, 0.0120082, 0.00833446, 0.00658023, 0.00593707, 0.0310272, 0.000325708, 0.00570401, 0.00717702, 0.00674346, 0.00208452, 0.00744022, 0.00743019, 0.0181041, 0.00513988, 0.0135279, 0.010854, 0.00253006, 0.00451313, 0.00913574, 0.00460635, 0.0154227, 0.00400513, 0.00716265, 0.0244199, 0.0842971, 0.0691035, 0.0210719, 0.0100146, 0.01316, 0.0292196, 0.0422819, 0.634007, 0.0964999, 0.062889, 0.0934815, 0.00286427, 0.0543736, 0.0993474, 0.0214279, 0.0717361, 0.0255835, 0.0030611, 0.00667402, 0.000104605, 0.0210809, 0.0249151, 0.00578627, 0. \}$ 

 $\begin{array}{l} \underline{44^{\eta}\ \gamma\rho\alpha\mu\mu\acute{\eta}} \\ \{0.0540022, 0.0439497, 0.0463235, 0.0361193, 0.0319999, 0., 0.050434, 0.0 \\ 326557, 0.0238308, 0.0232914, 0.0230086, 0.0267183, 0.0237298, 0.0207807, 0.0217303, 0.0374 \\ 959, 0.0183553, 0.0220004, 0.0241711, 0.024644, 0.0191626, 0.0249593, 0.0221478, 0.0292978, \\ 0.0222877, 0.031779, 0.0259235, 0.0135759, 0.0232955, 0.0225578, 0.0212786, 0.0425793, 0.01 \\ 6909, 0.0164102, 0.0842035, 0.105383, 0.105426, 0.0243728, 0.0276343, 0.00365911, 0.0407351 \\ , 0.0332703, 0.0510408, 0.338973, 0.0383902, 0.082169, 0.0257197, 0.0335263, 0.0218196, 0.031 \\ 3967, 0.0617444, 0.0528648, 0.0250668, 0.0172401, 0.00884461, 0.0499284, 0.039142, 0.062091 \\ 8, 0. \}, \end{array}$ 

 $\frac{45^{\eta}}{\gamma\rho\alpha\mu\mu\acute{\eta}} \{0.00111906, 0.000350288, 0.00379735, 0.000111797, 0.0281928, 0.0.00327667, 0.00349428, 0.0021607, 0.0048146, 0.00599731, 0.00389983, 0.00276739, 0.00320365, 0.00371689, 0.0048836, 0.00118173, 0.00302738, 0.00453737, 0.00359757, 0.00177624, 0.00272418, 0.00308594, 0.00164671, 0.0027251, 0.00268668, 0.00198437, 0.0010314, 0.00541023, 0.00407514, 0.00133805, 0.0000357309, 0.0000828817, 0.00269644, 0.000865568, 0.0056241, 0.00475333, 0.000583684, 0.0155237, 0.0242492, 0.0071158, 0.00446444, 0.000355276, 0.00694104, 0.0059102, 0.00583684, 0.0155237, 0.0242492, 0.0071158, 0.004464444, 0.000355276, 0.00694104, 0.0059102, 0.00583684, 0.0155237, 0.0242492, 0.0071158, 0.004464444, 0.000355276, 0.00694104, 0.0059102, 0.00583684, 0.0155237, 0.0242492, 0.0071158, 0.004464444, 0.000355276, 0.00694104, 0.0059102, 0.00583684, 0.0059102, 0.0059102, 0.00591102, 0.0059102, 0.0059102, 0.00591102, 0.0059102, 0.00591102, 0.0059102, 0.0059102, 0.00591102, 0.0059102, 0.00591102, 0.0059102, 0.00591102, 0.0059102, 0.0059102, 0.00591102, 0.00591102, 0.0059102, 0.00591102,$ 

 $176165, 0.00483758, 0.000296179, 0.004902, 0.000224136, 0.000735953, 0.00123097, 0.00106256, 0.00110267, 0.0000903816, 6.78882 \times 10^{-6}, 0.00109794, 0.00138936, 0.000137663, 0. \},$ 

 $\frac{46^{\eta} \ \gamma \rho \alpha \mu \mu \acute{\eta}}{(0.000188608, 0.0000588225, 0., 0., 0., 0., 0., 0.0000143469, 0.000015212)} \\ 0., 0.0000226346, 0., 0.0000727374, 0., 9.15943 \times 10^{-9}, 2.54896 \times 10^{-7}, 2.47555 \times 10^{-6}, 0., 0., 0.0000484602, 0., 0.0000116511, 0.000096474, 0., 0.000190952, 0.0000709736, 0., 0.000078253 \\ 8, 1.28587 \times 10^{-7}, 0.0000745135, 0.0000411273, 7.65074 \times 10^{-7}, 0.00141628, 0.012 \\ 4019, 0.00637441, 0.0069426, 0.000626489, 0.000063765, 0.00114089, 0.0026977, 0.000204505 \\ 0.00207885, 0.00056831, 0.229959, 0.274441, 0.000813051, 0.000344334, 9.33003 \times 10^{-6}, 6.22777 \times 10^{-6}, 0.00700398, 0., 0., 9.35974 \times 10^{-6}, 1.09391 \times 10^{-7}, 0.0197908, 0.000 \\ 501478, 0.000450206, 0. \},$ 

 $\frac{47^{\eta}}{\gamma\rho\alpha\mu\mu\dot{\eta}} \{1.02733\times10^{-6}, 0., 0.001232, 0.0116421, 0.00529295, 0., 0.0572986, 0.04484\\ 83, 0.00744316, 0.0304711, 0.0266393, 0.0576658, 0.0285658, 0.0314649, 0.0399017, 0.0581535\\, 0.0120525, 0.00809073, 0.0283207, 0.023179, 0.00465467, 0.0298069, 0.0321563, 0.0163302, 0.0168396, 0.0186374, 0.0157141, 0.00661537, 0.00660634, 0.0446794, 0.00540907, 0.00797752,\\ 0.0105327, 0.022203, 0.282214, 0.0109617, 0.174921, 0.0241654, 0.0141195, 0.00457081, 0.0347068, 0.0394431, 0.0476892, 0.0337501, 0.0738758, 0.0908394, 0.810844, 0.153824, 0.0862827, 0.0220049, 0.0871274, 0.0240967, 0.00638282, 0.0268491, 0.0648606, 0.262044, 0.0678755, 0.0865833, 0.\},$ 

 $\frac{49^{\eta}}{\gamma \rho \alpha \mu \mu \acute{\eta}} \{0.,0.,0.,0.,0.,0.,0.,0.000550116,0.00139211,0.000254615,0.0000926836,0.000669402,0.00158984,0.000664141,0.000381592,0.000858418,0.00490604,0.0000999317, 0.000253215,0.000350266,0.0015176,0.000367939,0.000701904,0.00116888,0.00058213,0.000804536,0.000140285,0.000527272,0.000216716,0.000739568,0.000868205,0.000244416, 0.00262847,0.00168408,0.000272197,7.08406×10<sup>-7</sup>,0.000051 1625,0.000343113,0.000026592,0.00600305,0.00831743,0.00192443,0.00303798,0.0123848, 0.0262599,0.0157002,0.0616876,0.000131104,0.0127049,0.281924,0.0117453,0.0243736,0.00595183,0.00670712,0.0102813,0.0000517072,0.0019587,0.044093,0.000852901,0.\},$ 

 $\frac{51^{\eta} \gamma \rho \alpha \mu \mu \acute{\eta}}{(0.00474541, 0.00148436, 0.00725839, 0.00521724, 0.011489, 0., 0.045266, 0.0559243, 0.0364065, 0.152898, 0.0377123, 0.0552335, 0.0395681, 0.0316667, 0.0524162, 0.114857, 0.0281484, 0.0512771, 0.0199997, 0.0378092, 0.0239991, 0.0560366, 0.109379, 0.130477, 0.0319125, 0.13479, 0.0307669, 0.0993513, 0.15012, 0.0257792, 0.0235918, 0.00646359, 0.00207312, 0.0632871, 0.11872, 0.0538091, 0.0527101, 0.0248783, 0.0771373, 0.0219928, 0.031349, 0.045737, 0.0237221, 0.244506, 0.182929, 0.161466, 0.00451056, 0.147512, 0.191439, 0.169222, 0.379964, 0.0461564, 0.0133577, 0.0301953, 0.000508125, 0.175538, 0.0967283, 0.0145028, 0. \},$ 

 $\begin{array}{l} \underline{53^{\eta}\ \gamma\rho\alpha\mu\mu\acute{n}} \{3.36829\times10^{-10}, 0., 0., 0., 0., 0., 0., 1.15117\times10^{-9}, 0., 0., 0., 0., 0., 0.0001239\\ 92, 0., 6.5328\times10^{-10}, 0., 0., 4.14244\times10^{-10}, 0., 1.22845\times10^{-9}, 0., 0., 5.40354\times10^{-9}, 0., 0., 0.000\\ 0169798, 0., 2.11353\times10^{-10}, 0.0000176184, 0.000164772, 2.11694\times10^{-6}, 0.0000448123, 3\\ .05673\times10^{-6}, 0.0000671438, 1.04018\times10^{-7}, 3.74978\times10^{-7}, 0.000258929, 0., 0.000015107\\ 9, 8.42617\times10^{-6}, 0.00248189, 9.49168\times10^{-6}, 0.000874991, 0.0000289635, 0.0000311051\\ , 0.012024, 0.00189885, 0.00218368, 0.0027137, 0.361273, 0.00719565, 3.24614\times10^{-6}, 0.\\ 0000483565, 0.000783182, 0.000123456, 0. \}, \end{array}$ 

 $\frac{56^{\eta} \gamma \rho \alpha \mu \mu \acute{n}}{3,0.00221977,0.00249283,0.00305167,0.002428,0.00199947,0.00212464,0.00591042,0.00}{044584,0.00228705,0.00260513,0.00232616,0.000758238,0.00247733,0.002691,0.00269623}{,0.00204688,0.00270339,0.00248941,0.00141684,0.00124284,0.00285749,0.00225416,0.001}{79978,0.000856883,9.84501\times10^{-7},5.23728\times10^{-6},0.000176675,3.30696\times10^{-6},7.27921\times10^{-8},0.000155381,0.0000709969,0.,0.000192111,5.03384\times10^{-7},0.,3.13999\times10^{-6},0.000155381,0.00265069,0.00133437,0.00127575,0.00515797,0\\ .,0.,0.000100024,0.0000125161,0.177399,0.000629874,0.000172359,0. \},$ 

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