

## International Journal of Mathematics and Computer Science

### Author Index Vol. 19, 2024

<b>Hassan Rashed Yassein, Abbas Chichan Fadeel,</b> HAQTR: NTRU-Like Public Key.....	1
<b>Fuad A. Abushaheen, Fadi Alrimawi, Hani Kawariq,</b> Co-Lindelof Open Sets.....	5
<b>Pirapong Singsathid, Jeerayut Wetweerapong, Pikul Puphasuk,</b> Parameter estimation of solar PV models using self-adaptive differential evolution with dynamic mutation and pheromone strategy.....	13
<b>Abdallah Assiry,</b> Symplectic Forms and the Yang-Baxter Equation in Jacobi-Jordan algebras.....	23
<b>Baneen Najah Abbas, Hassan Rashed Yassein,</b> A High-Security Encryption Based on Hexadecnion Polynomials.....	37
<b>Satinee Lertprapai,</b> Comparison of the Mean Estimates of 2-Parameter Exponential Distribution by Multiple Criteria Decision Making Method.....	41
<b>Amaraporn Bumpendee, Sarun Wongwai, Wasana Thongkamhaeng,</b> Pseudo NQ-principally Projective Modules.....	49
<b>Kankullanat Arnuphap, Dawud Thongtha,</b> A Logistic Black-Scholes Partial Differential Equation with Stochastic Volatility, Transaction Costs and Jumps.....	57
<b>Josephine B. Nalzaro,</b> Absolute $g^* \omega\alpha$ -Continuous Function in Bigeneralized Topological Spaces.....	75
<b>Helaa Mohammed Yassien, Maha Ammar Mustafa,</b> The use of modern technology in the analysis and compression of color images.....	81
<b>Amara Chandoul, Abdallah Assiry,</b> On the $k^{th}$ metallic ratio and the Diophantine equations.....	89
<b>Sutthiwat Thongnak, Theeradach Kaewong, Wariam Chuayjan,</b> On the Exponential Diophantine equation $5^x - 3^y = z^2$ .....	99
<b>Nonthiya Makate, Patchateeya Rattanajak, Boonyarat Mongkhon,</b> Bi-Periodic k-Pell Sequence.....	103
<b>Mona Sakkijha, Shatha Hasan,</b> Hadamard Determinant Inequalities for Accretive-Dissipative Matrices.....	111
<b>Napassanan Srisarakham, Chawalit Boonpok,</b> Some properties of $S\Lambda_s$ -closed spaces.....	117
<b>Montri Thongmoon, Chawalit Boonpok,</b> On characterizations of $S\Lambda_s - T_2$ spaces.....	121
<b>Jeeranunt Khampakdee, Chawalit Boonpok,</b> On $S\Lambda_s$ -regular spaces and $S\Lambda_s$ -normal spaces.....	125
<b>Prapart Pue-on, Chawalit Boonpok,</b> On $S\Lambda_s$ -connected spaces.....	131
<b>Napassanan Srisarakham, Chawalit Boonpok,</b> Characterizations of $\delta\mathcal{S}(\Lambda, s)$ -symmetric spaces and sober $\delta\mathcal{S}(\Lambda, s) - R_0$ spaces.....	137
<b>Majd Hamid Mahmood, Fuad A. Abushaheen,</b> Three Types of Fuzzy Group Topological Spaces and a Comparison Among Them.....	143
<b>Abu Zaid Ansari, Faiza Shujat,</b> Functional identities on prime rings with Involution.....	151

<b>Ameer Dehyauldeen A. Al-Zamili, Ahmed Sabah Ahmed Aljilawi,</b> Using Alternating Direction Method of Multipliers to solve optimization problem in Statistics.....	157
<b>Dina Mahdi Abdulhussein, Laith Jasim Saud,</b> An analysis of a hybrid algorithm for face detection and emotion recognition.....	163
<b>Muzahem M. Al-Hashimi, Heyam A. A. Hayawi,</b> Nonlinear Model for Precipitation Forecasting in Northern Iraq using Machine Learning Algorithms....	171
<b>Sutthiwat Thongnak, Theeradach Kaewong, Wariam Chuayjan,</b> On the Exponential Diophantine equation $11^x - 17^y = z^2$ .....	181
<b>Warud Nakthasen, Atikan Thongtot, Tanyalak Sangsriho,</b> Some characterizations of regular duo Gamma-semigroups.....	185
<b>Abderrahim El Moussaouy,</b> Modules whose $\delta$ - small epimorphisms are isomorphisms.....	191
<b>Muzahem M. Al-Hashimi, Heyam A. A. Hayawi, Mowafaq Al-Kassab,</b> A Comparative Study of Traditional Methods and Hybridization for Predicting Non-Stationary Sunspot Time Series.....	195
<b>Jairo E. Castillo H., Jorge E. Pinzon Q., Jamel Castillo M.,</b> Solution of Helmholtz's nonlinear differential equation and its application in Cosmology.....	205
<b>Ruma Kareem K. Ajeena,</b> A proposed modification of Diffie-Hellman key exchange based on integer matrices.....	211
<b>Abdulkareem Alhuraiji, Mashhour Al-Ali Bani-Ata,</b> Root elements and root subgroups in $E_6(K)$ for fields $K$ of characteristic two.....	219
<b>Fairouz Sherali,</b> A New Approach for Enhancing AES-Based Data Encryption Using ECC.....	229
<b>Supawadee Prugsapitak,</b> Corrigendum to the Egyptian fraction of the form $\frac{1}{a} + \frac{1}{b} = \frac{q-1}{pq}$ .....	237
<b>Asmiati, Wenty Okzarima, Notiragayu, La Zakaria,</b> Upper Bounds of the Locating Chromatic Numbers of Shadow Cycle Graphs.....	239
<b>Hayat Zaydi, Zohra Bakkoury,</b> Advancing Healthcare Data Management: IoT Edge-Fog-Cloud Architectures for Medical IoT Devices' Data Storage and Processing.....	249
<b>Hayat Zaydi, Zohra Bakkoury,</b> Holistic Data Processing: Designing the Intelligent Edge-to-Cloud Pathway for IoMT.....	261
<b>Julaluk Boonsol, Pongsakorn Kitpratyakul, Thawhat Changphas, Bundit Pibaljommee,</b> A Product of Tree Languages.....	279
<b>Mohanad N. Jaafar, Shaymaa Mukhlif Shraida, Reem Waleed Huisen,</b> Studying the Epidemiological Model for the Infection by Spiral Gastric Bacteria...289	
<b>Mohanad N. Jaafar, Reem Waleed Huisen, Muna Dawood Salman,</b> A Mathematical Model Explaining the Pathogenicity of the Pathogenic Strain of E.coli.....	297
<b>Abderrahim El Moussaouy, M'Hammed Ziane,</b> On T-Hopfcity of modules....	307
<b>Abderrahim El Moussaouy,</b> Hopfcity and noncosingular submodules.....	311
<b>Karim Benalia,</b> On the Controllability for the 1D-Heat Equation with Dirichlet Boundary condition, in the Presence of a Scale-Invariant Parameter.....	315
<b>Zainab Kamal Abdullah, Asma Abdulelah Abdulrahman,</b> Multi Object Detection Based on Deep Learning and Discrete Wavelet Transform.....	319
<b>Amara Chandoul, Alanod M. Sibih,</b> Generalization of Horner Division Method.	333

<b>Hawraa Yousif Daher, Jehad Ramadan Kider,</b> Some properties of convex fuzzy normed space.....	345
<b>Omayma Al-Smadi, Mohammad Al Zurayqat, Hadeel Alabraq, Shatha Hasan,</b> Analytical Solution for Time Fractional Reaction-Diffusion-Convection Model....	357
<b>Aicha Boussaha,</b> Numerical simulation of new solitons-solutions having anti-cubic and variable perturbation on the group-velocity dispersion term of nonlinear optical fiber.....	365
<b>Suton Tadee,</b> On the Diophantine Equation $\frac{1}{a} + \frac{1}{b} = \frac{m}{pq}$ .....	373
<b>Suton Tadee,</b> On the Positive Integer Solutions of $p^x + p^y = z^2$ in the Fibonacci and Lucas Numbers, where $p$ is Prime.....	377
<b>Ali H. Hakami, Moin A. Ansari, Azeem Haider,</b> On Some Graphs Based on the Ideals of KU-algebras.....	381
<b>Preeyanuch Honyam, Saranya Phongchan,</b> A Note on Regularity of Transformation Semigroups with Fixed Sets.....	395
<b>Panuwat Luangchaisri, Thawhat Changphas,</b> Prime one-sided ideals in ternary semirings.....	403
<b>Pronsuda Kongkam, Kanint Teerapaolarn,</b> A new uniform bound on Poisson approximation.....	411
<b>Aveya Charoenpol, Udom Chotwattakawanit,</b> Highest endomorphisms of a Boolean lattice.....	419
<b>Eman Rawshdeh, Heba Adel Abdelkarim, Edris Rawashdeh,</b> Eigensharp Property of Some Certain Graphs and their Complements.....	427
<b>Abu Zaid Ansari, Faiza Shujat,</b> Extension of $\varphi$ -centralizers on semiprime Rings.....	435
<b>Rosalio G. Artes Jr., Jeffrey Imer C. Salim, Regimar A. Rasid, Jerrivieh I. Edubos, Bayah J. Amiruddin,</b> Geodetic Closure Polynomial of Graphs.....	439
<b>Nongluk Viriyapong, Chokchai Viriyapong,</b> On the Diophantine equation $147^x + 741^y = z^2$ .....	445
<b>Chokchai Viriyapong, Nongluk Viriyapong,</b> On the Diophantine equation $a^x + (a+2)^y = z^2$ where $a$ is congruent to 19 modulo 28.....	449
<b>Andi Nurkifayah, Mawardi Bahri, Nasrullah Bachtiar, Amran Rahim,</b> New Fundamental Inequalities for Fractional Ambiguity Function.....	453
<b>Suton Tadee, Chantana Wannaphan,</b> On the Diophantine Equations $(p+a)^x - p^y = z^2$ and $p^x - (p+a)^y = z^2$ .....	459
<b>Panuwat Luangchaisri, Thawhat Changphas,</b> Distributive Lattices of Soft Ideals in Menger Algebras.....	467
<b>Montri Thongmoon, Chawalit Boonpok,</b> Strongly $\theta(\Lambda, p)$ -continuous functions.....	475
<b>Jeeranunt Khampakdee, Chawalit Boonpok,</b> Properties of $(\Lambda, p)$ -closed functions.....	481
<b>Napassanan Srisarakham, Chawalit Boonpok,</b> On weakly $\delta(\Lambda, p)$ -open functions.....	485
<b>Prapart Pue-on, Chawalit Boonpok,</b> $\theta(\Lambda, p)$ -continuity for functions.....	491
<b>Nipaporn Chutiman, Chawalit Boonpok,</b> Some properties of weakly $b(\Lambda, p)$ -open functions.....	497

<b>Chalongchai Klanarong, Chawalit Boonpok</b> , Characterizations of weakly $\delta(\Lambda, p)$ -closed functions.....	503
<b>Hasan Almefleh</b> , Approximating the Solution of Cell-cell Adhesion Model via the Homotopy Perturbation Method.....	509
<b>Shamri K. Arajain, Jeffrey Imer C. Salim</b> , Injective Domination Polynomial of the Dipyramidal Graphs.....	521
<b>Apisit Pakapongpun, Bunthita Chattae</b> , t-Co-cobalancing Numbers.....	527
<b>Mahdi Saleh Nayef, Balsam Majed Hamad, Zahraa Abbas Fadel</b> , Goldie Supplement Extending Modules.....	535
<b>Rehab Amer Kamel, Eman Samir Bhaya</b> , A Direct Theorem on Angular Approximation Using $k$ -Mixed Modulus of Smoothness.....	543
<b>Hunar Sherzad Taher, Saroj Kumar Dash</b> , On the square of Fibonacci and Lucas numbers of the form $(2^{2^s} - 1)^x + (2^{s+1})^y$ .....	553
<b>Nihad Shareef Khalaf, Aasha Abdulkhleq Ismael, Zainab Abood Ahmed Al-Bairmani, Samer R. Yassen</b> , Estimating the Effect of Radiation of Five Types of Uranium Minerals Using the Graph Method.....	561
<b>Magi P M</b> , On the distance spectrum of cozero-divisor graph.....	573
<b>Shaymaa Mukhlif Shraida, May Mohammed Helal, Areej Salah Mohammed</b> , The Effect of Vaccination on the Monkeypox Disease by Using Holling Type II...585	
<b>Naila Bali, Adel Fridhi</b> , Learning of surface and volume formulas by Augmented Reality: experimental studies.....	595
<b>Roselaine Neves Machado, Luiz Guerreiro Lopes</b> , A higher-order family of simultaneous iterative methods with Neta's correction for polynomial complex zeros.....	605
<b>Khaled Alajmi</b> , On the commutativity probability in certain finite groups.....	613
<b>Suton Tadee</b> , The Solutions of the Diophantine Equations $p^x + p^y = z^q$ and $p^x - p^y = z^q$ .....	621
<b>Rosalio G. Artes Jr., Roxanne A. Anunciado, Radana E. Madalim, Jeffrey Imer C. Salim, Bayah J. Amiruddin-Rajik</b> , Sequential Total Network Interactions: Connectivity and Proximity Properties.....	625
<b>Apirat Siraworakun, Suton Tadee</b> , All Solutions of the Diophantine Equation $25^x - 7^y = z^2$ .....	631
<b>Waleed Al-Rawashdeh</b> , Coefficient Bounds of a class of Bi-Univalent Functions Related to Gegenbauer Polynomials.....	635
<b>Jun Francis B. Maldo, Rosalio G. Artes Jr.</b> , Applications of Chuh-Shih-Chieh's Identity in Geodetic Independence Polynomials.....	643
<b>Cerina A. Villarta, Rolito G. Eballe, Rosalio G. Artes Jr.</b> , Induced Path Polynomials of the Join and Corona of Graphs.....	649
<b>Panuwat Luangchaisri, Thawhat Changphas</b> , $r$ -Ideals of Commutative Ordered Semigroups.....	653
<b>Abdulkareem Alhuraiji, Mashhour Al-Ali Bani-Ata</b> , The Action of the Chevalley Group $E_6$ on the Singular Subspaces $V_2$ of a 27-Dimensional Module Over a Field of Characteristic 2.....	661
<b>Arief Wibowo, Julaiha Probo Anggraini, Abdul Haris Achadi</b> , Designing and Evaluating Search and Rescue Management Applications using the Rapid Application Development Approach and the Technology Acceptance Model.....	669
<b>Supaporn Saduakdee, Pattana Maliwan, Thitaporn Singthong, Supatta Sirilap, Varanoot Khemmani</b> , Counting Perfect Matchings in Chain Graphs with the Specific Colored Faces.....	677

<b>Abdelwahab El Najjar, Akram Salem,</b> $f(x), g(x)$ -clean property of rings.....	687
<b>Banen Najah Abass, Hassan Rashed Yassein,</b> Design of an Alternative to Polynomial Modified RSA Algorithm.....	693
<b>Kilaru J. Lakshminarayana, V.B.V.N. Prasad, Srinivasa Rao Ravi, A.V. Ramakrishna,</b> On a Radical of Nearrings Which is Hereditary.....	697
<b>Tanapon Poonthong, Pikul Puphasuk, Jeerayut Wetweerapong,</b> Adaptive differential evolution with archive strategy for solving partitional clustering problems.....	705
<b>Asia Aqeel Abidalzahra, Hassan Rashed Yassein,</b> Proposed Development of NTRU Encryption.....	715
<b>Richard J. Taclay,</b> On the Diophantine Equation $F_n^x + F_{n+1}^x = y^2$ .....	721
<b>Juan Carlos López Carreño, Rosalba Mendoza Suárez, Jairo Alonso Mendoza Suárez,</b> Deriving the Partial Fraction Series for the $\pi \cot(\pi x)$ Function by Applying Hypergeometric Functions Theory.....	725
<b>Khwancheewa Wattanatripop, Thodsaporn Kumduang, Thawhat Changphas,</b> The Partial Algebra of Terms with a Fixed Number of Variables under a Generalized Superposition.....	731
<b>Peter Johnson, Shayne Nochumson,</b> A Characterization of Partition-Good and Partition-Wonderful Complete Multipartite Graphs.....	739
<b>Stephanie O. Espinola,</b> Movable Restrained-Domination in the Corona of Graphs.....	751
<b>Warud Nakhasen, Sirirat Phimkota, Ketkanok Phoemkhuen, Aiyared Iampan,</b> Characterizations of fuzzy Bd-ideals in Bd-algebras.....	757
<b>Kawthar Abdulabbas Hassoon, Hassan Rashed Yassein,</b> Proposed Multi-Dimensional Algebra.....	765
<b>Kan Thotakul, Anirut Luadsong,</b> A Numerical Approximation of Conformable Maxwell-Schrodinger Equations.....	771
<b>Ahmed Mohsin Mahdi,</b> Finslerian Projective Metrics with Small Quadratic Spheres,.....	791
<b>Daya K. Nagar, Alejandro Roldan-Correa, Raul Alejandro Moran-Vasquez,</b> Matrix Variate Generalized Inverted Beta Distribution.....	797
<b>Chalongchai Klanarong, Chawalit Boonpok,</b> Characterizations of weakly $s(\Lambda, p)$ -open functions and weakly $s(\Lambda, p)$ -closed functions.....	809
<b>Monchaya Chiangpradit, Supanee Sompong, Chawalit Boonpok,</b> Properties of $(\tau_1, \tau_2)^*$ -closed sets.....	815
<b>Chokchai Viriyapong, Supanee Sompong, Chawalit Boonpok,</b> Generalized $(\tau_1, \tau_2)$ -closed sets in bitopological spaces.....	821
<b>Butsakorn Kong-ied, Supanee Sompong, Chawalit Boonpok,</b> On $(\tau_1, \tau_2) - R_1$ bitopological spaces.....	827
<b>Panuwat Luangchaisri, Thawhat Changphas,</b> The Space of Prime Ideals of an Ordered Semigroup.....	833
<b>Maryam Fahd A. Alshammari, Hazzirah Izzati Mat Hassim, Nor Haniza Sarmin, Ahmad Erfanian,</b> The Union Power Cayley Graph for Cyclic Groups and its Properties.....	841
<b>Nongluk Viriyapong, Supanee Sompong, Chawalit Boonpok,</b> $(\tau_1, \tau_2)$ -extremal disconnectedness in bitopological spaces.....	855
<b>Nipaporn Chutiman, Supanee Sompong, Chawalit Boonpok,</b> On regular generalized $(\tau_1, \tau_2)$ -closed sets.....	861

<b>Butsakorn Kong-ied, Supanee Sompong, Chawalit Boonpok,</b> On some characterizations of $(\tau_1, \tau_2)$ - $T_{1/2}$ -spaces.....	869
<b>Monchaya Chiangpradit, Supanee Sompong, Chawalit Boonpok,</b> $C - \Lambda_{(\tau_1, \tau_2)}$ -closed sets in bitopological spaces.....	875
<b>Ghusoon Idan Arb,</b> Oracle Database Performance Improvement: Using Trustworthy Automatic Database Diagnostic Monitor Technology.....	881
<b>Susila Bahri, Indah Fitrialita, Hamidah Nasution, Riri Lestari,</b> <b>Lili Fajria,</b> Analysis of the Effects of Foreign Travelers and Immigrants on Omicron Transmission in Indonesia.....	893
<b>Waseem Ghazi Alshanti, Iqbal M. Batiha, Ahmad Alshanty,</b> <b>Roshdi Khalil,</b> Tensor Product of Banach Spaces and Atomic Solutions of Partial Differential Equations.....	903
<b>Malavika N., R. Venkatraman,</b> On the Exponential Diophantine Equation $3^x + 121^y = z^2$ .....	917
<b>Saber Mansour,</b> On irreducibility in $F_q[X][Y]$ .....	921
<b>Omar H. Taha, Marrwa S. Salih,</b> Weakly Pseudo Semi 2-Absorbing Submodule.....	927
<b>Riski Nur Istiqomah Dinnullah, Sobri Abusini, Rahma Fitriani, Marjono,</b> <b>Trija Fayeldi, Rauzan Sumara,</b> Fisher Information Matrix for Generalized Poisson Regression: Evaluation of the Log-Likelihood Function.....	933
<b>Aiyared Iampan, Warud Nakkhasen,</b> Prime fuzzy Bd-ideals of Bd-algebras.....	941
<b>Sudarat Nidsunkid, Kamon Budsaba, Monthira Duangsaphon,</b> The Operating-Characteristic Curve for $\bar{x}$ Control Chart when the Normality Assumption is Violated.....	949
<b>Ala Amourah, Nidal Anakira, M. J. Mohammed, Malath Jasim,</b> Jacobi polynomials and bi-univalent functions.....	957
<b>Omaima Al Bahri, Gerald Wanjala,</b> Generalized Inverses of Linear Relations...969	
<b>Javier A. Hassan, Usman S. Iyah, Nur-Aini M. Paradji, Anabel E. Gamorez,</b> <b>Eman C. Ahmad,</b> 3-Distance Domination Numbers of Some Graphs.....	981
<b>Wittaya Phaengthaisong, Jeerayut Wetweerapong, Pikul Puphasuk,</b> Adaptive differential evolution with feasibility ranking mutation and dynamic thresholding technique for constrained optimization.....	987
<b>Javier A. Hassan, Ladznar S. Laja,</b> Vertex Cover Zero Forcing Sets in Graphs...999	
<b>Somia Asklany, Salwa Othmen, Wahida Mansouri,</b> Advanced Machine Learning Swarm Intelligence Algorithms in Atmospheric Pollutants Prediction...1005	
<b>I.K. Youssef, M. Khalifa Saad, Ali Dumlu, Somia A. Asklany,</b> Sir Models with Fuzzy Initial Conditions.....	1019
<b>Zainab Abbas Kadhim ALTalal, Areej Tawfeeq Hameed,</b> $\beta$ -multiplication Fuzzy q-ideals of RG-algebra.....	1029
<b>Laila Loudiki, Mustapha Kchikech,</b> On the diameter of generalized Petersen Graphs.....	1035
<b>Panuwat Luangchaisri, Thawhat Changphas,</b> On Quasi-ideals and Bi-ideals of Hypersemigroups and Ternary Hypersemigroups.....	1043
<b>Aseel Hisham Khamas, Muna Dawood Salman, Ahmed Issa Abdul-Nabi,</b> <b>Rawa Hamed Hameed,</b> Assessing the Efficiency of Several Approaches for Estimating the Two Unknown Parameters of the Rayleigh Distribution.....	1051
<b>Supawadee Prugsapitak, Piyawan Aryapitak,</b> The unit solutions of $x + y = xy$ over quadratic number fields.....	1061

<b>Javier A. Hassan, Ladznar S. Laja, Hounam B. Copel</b> , 2-Domination Zero Forcing in Graphs.....	1065
<b>Sahab Mohsen Abboud, Hassan Rashed Yassein, Riad Khidr Alhamido</b> , Improvement of a Multi-Dimensional Public-Key OTRU Cryptosystem.....	1071
<b>Abdullah Alsoboh, Ala Amourah, Jamal Salah</b> , Bi-Univalent Functions Using Bell Distribution Associated With Meixner-Pollaczek Polynomials.....	1077
<b>Sawanya Jadpimai, Utsanee Leerawat</b> , Structure of Pseudo Near Semirings....	1093
<b>K. Manikandan, R. Venkatraman</b> , On the Exponential Diophantine Equation $8^x + 161^y = z^2$ .....	1101
<b>Javier A. Hassan, Anabel E. Gamorez, Eman C. Ahmad, Jamil J. Hamja</b> , Certified Hop Domination in Graphs.....	1105
<b>Patipat Chumket, Siripong Sirisuk</b> , Counting Free Linear Codes with a Given Number of Standard Basis Vectors over Finite Commutative Rings.....	1111
<b>Zahraa Lateef Hadi, Asmhan Flieh Hassan</b> , The Non-Adjacency Compatible Vertices Topology on Digraphs.....	1117
<b>S. Muthuvel, R. Venkatraman</b> , An Exponential Diophantine Equation $x^2 + 3^a 97^b = y^n$ .....	1125
<b>P. Smith, P. Wang</b> , Using New Metrics to find a good Examination Schedule... 1129	
<b>Akeel Ramadan Mehdi, Anwar Rahm Obaid</b> , Definability of the class of SAS-flat modules.....	1137
<b>William S. Gayo Jr., Venus D. Siong</b> , Unsolvability of Two Diophantine Equations of the Form $p^a + (p - 1)^b = c^2$ .....	1143
<b>Zahraa S.M. Alhaidary, Khatam AD. Zaghfir, Raghad Al-Lami, Areej M. Abdulaim, Anwar Khaleel Faraj</b> , On Centrally-Extended Multiplicative (generalized)- $(\alpha, \beta)$ -Reverse Derivations in Semiprime Rings.....	1147
<b>Richard J. Taclay</b> , Sum and Difference of Powers of Two Fibonacci Numbers...1155	
<b>Enkeleda Zajmi Kotonaj, Elisabeta Peti, Vera Hoxha</b> , Two concepts of compactness that characterize the collection of Borel sets of $\mathbf{R}$ .....	1159
<b>Csaba Biró</b> , Analysis of D-Wave topologies with classical graph metrics.....	1171
<b>Hadeel Hadi Abo-Alsood, Mohammed Hassan Hamza, Sukaina Abdullah Al-Bairmani, Hassan Rashed Yassein</b> , Development of Public Key Cryptosystem RSA via Multidimensional Algebra.....	1177
<b>Somnuk Srisawat, Wanna Sriprad</b> , Some identities of $(s,t)$ -Pell and $(s,t)$ -Pell-Lucas polynomials by matrix methods.....	1183
<b>Lorenzo J. Martinez H., David Gutierrez Duque</b> , Missing Data Estimation Based on Iterated Penalized Linear Regressions Algorithms.....	1189
<b>Mohamed Illafe, Feras Yousef, Maisarah Haji Mohamed, Shamsani Supramaniam</b> , Fundamental Properties of a Class of Analytic Functions Defined by a Generalized Multiplier Transformation Operator.....	1203
<b>Huda Kareem Nasser, Samira Faisal Abushilah</b> , Densities Estimation for Bivariate Circular Data Under Jones-Pewsey Circular Kernel.....	1213
<b>Anwar Khaleel Faraj, Areej M. Abdulaim, Shatha A. Salman, Mohammed Qasim Hamid</b> , The Commutativity of Quotient Rings with Homoderivations....	1223
<b>Amelia L. Arriesgado, Jeffrey Imer C. Salim</b> , Distance Independence Polynomial of Graphs.....	1231
<b>Abdulmtalb Hussen, Moamar M. Alamari</b> , Bounds on Coefficients for a Subclass of Bi-Univalent Functions with Lucas-Balancing Polynomials and Ruscheweyh Derivative Operator.....	1237
<b>Ronica M. de Leon</b> , Sensitivity analysis of dengue model with vector control....	1251

<b>Shaleema A. Arriola, Benjier H. Arriola, Regimar A. Rasid, Jamaluddin S. Sala,</b>	
Independence and Star Polynomials: Interrelations in Biclique Polynomials.....	1261
<b>Juan Carlos López Carreño, Rosalba Mendoza Suárez, Jairo Alonso Mendoza</b>	
Suárez, Evaluation of certain integrals in the Book of Gradshteyn and Ryzhik....	1265
<b>Jamaluddin S. Sala, Recson G. Canton, Abdurajan B. Lintasan, Regimar A.</b>	
Rasid, Rosario G. Artes Jr., Uncertainty Principle in Reproducing Kernel	
Hilbert Spaces.....	1273
<b>Philip Lester P. Benjamin, <math>\mu_{mn}S_p</math>-Open Sets in Bigeneralized Topological</b>	
Spaces.....	1281
<b>Jeeranunt Khampakdee, Supanee Sompong, Chawalit Boonpok,</b> Almost	
$(\tau_1, \tau_2)$ -continuous multifunctions.....	1287
<b>Napassanan Srisarakham, Supanee Sompong, Chawalit Boonpok,</b> $(\tau_1, \tau_2)$ -	
continuity for multifunctions.....	1293
<b>Chalongchai Klanarong, Supanee Sompong, Chawalit Boonpok,</b> $(\tau_1, \tau_2)$ -	
continuity and $(\tau_1, \tau_2)$ $\theta$ -closed sets.....	1299
<b>Prapart Pue-on, Supanee Sompong, Chawalit Boonpok,</b> Upper and lower	
$(\tau_1, \tau_2)$ continuous multifunctions.....	1305
<b>Sirojiddin Masharipov, Bakhodir Kholboev, Dmitriy Kim,</b> A class of Lotka-	
Volterra operators and its application (action in the $S^3$ simplex).....	1311
<b>Monchaya Chiangpradit, Supanee Sompong, Chawalit Boonpok,</b> On	
characterizations of $(\tau_1, \tau_2)$ -normal spaces.....	1315
<b>Butsakorn Kong-iед, Supanee Sompong, Chawalit Boonpok,</b> $(\tau_1, \tau_2)$ -	
continuity and weak $(\tau_1, \tau_2)$ -continuity.....	1321
<b>Monchaya Chiangpradit, Supanee Sompong, Chawalit Boonpok,</b> On	
characterizations of $(\tau_1, \tau_2)$ -regular spaces.....	1329
<b>Butsakorn Kong-iед, Supanee Sompong, Chawalit Boonpok,</b> $(\tau_1, \tau_2)$ $\theta$ -	
closed sets and weak $(\tau_1, \tau_2)$ -continuity.....	1335
<b>Awatif R. Al-Dubaicy, Nada S. Karam, Shahbaa M. Yousif,</b> Reliability	
Bayesian estimation for generalized pareto two stress-strength models.....	1343
<b>Nipaporn Chutiman, Supanee Sompong, Chawalit Boonpok,</b> On almost	
$(\tau_1, \tau_2)$ -normal spaces.....	1355
<b>Nipaporn Chutiman, Supanee Sompong, Chawalit Boonpok,</b> On almost	
$(\tau_1, \tau_2)$ -regular spaces.....	1363
<b>Montri Thongmoon, Supanee Sompong, Chawalit Boonpok,</b> $(\tau_1, \tau_2)$ -	
continuous multifunctions and $\tau_1\tau_2 - \delta$ -open sets.....	1369
<b>Muh Nur, Al Azhary Masta, Mawardi Bahri, Firman, Anna Islamiyatı,</b>	
On the 2-normed Orlicz space.....	1377
<b>Noaman Abduljabbar Ramadhan, Maha Ammar Mustafa,</b> The Impact of	
the Number of Training Categories on the CNN Performance.....	1389
<b>Eugene Jun Tong Leong, Wen Chean Teh,</b> Very Short Note on Burning	
Trees with Sufficiently Long Arms.....	1401
<b>Affiati Oktaviarina, Henny Pramoedyo, Suci Astutik, Rahma Fitriani,</b> A	
Novel Approach to Evaluate Rice Prices using Bayesian GSTARI (1,1,1) Model.	1407

<b>Rebekal Haribabu, Sharmila Mary Arul</b> , Domination Equitable Coloring of graphs.....	1417
<b>Sharmila Mary Arul, Diana Grace Thomas, Swati Kharub</b> , Power Dominator Equitable Coloring of Graphs.....	1421
<b>Indhumathi Veeraragavan, Sharmila Mary Arul</b> , Dominator Sum Coloring Algorithm for Comb-Double Comb Graph.....	1427