

Track A: Calculus, Algebra, Analysis & Approximations

S. No.	Title and Author(s)
1	Bounded Linear Operators on the Bergman Space Pabitra Kumar Jena
2	On a Class of Nearly Quasi-Einstein Manifold Mohd Vasiulla
3	On Generalized Right Permutable Γ-Seminear-Rings P. Meenakshi, N. Meenakumari
4	Invariant Submanifolds in Complex Contact Metric Structure Manifolds Shankar Lal
5	Even Square Semirings and Group Semirings S. K. Pandey
6	Finite Field Vector Spaces with Prescribed Hull Dimension and Minimum Distance Ghurumuruhan Ganesan
7	Sparse Edge Constrained Eulerian Extensions Ghurumuruhan Ganesan
8	Induced Homeomorphism and Atsuji Hyperspaces Ajit Kumar Gupta, Saikat Mukherjee
9	Self-Dual and Modified Codes Over $Q8$ Group Ring Shefali Gupta, Dinesh Udar
10	On Weakly $g(x)$ –Invo Clean Rings Kanchan Jangra, Dinesh Udar
11	C^h-Recurrent Finsler Spaces Equipped with a Semi-Concurrent Vector Field S. K. Shukla, Shivalika Saxena

12	A Novel System of Generalized Variational Inclusion Problems and its Approximation Solvability Mohd. Sarfaraz, Md. Kalimuddin Ahmad
13	Continuity of Pseudo - Differential Operator on The Gelfand-Shilov Spaces of Type W Kanailal Mahato, Durgesh Pasawan
14	Pebbling and T-Pebbling Number for F_n^{-f} I. Dhivviyanandam
15	Neural Ring Homomorphisms that Preserve Mandatory Sets Required for Open Convexity Suhith K N , Neha Gupta
16	Zero Operator is Called (5, 3) –Jection Operator Naveen Kumar Baitha
17	Coefficients Estimates of Certain Univalent Functions Sushil Kumar
18	Existence of Best Proximity Points on (ψ, ϕ) Contractions in RMS Arul Ravi S
19	Homo-Generalized Jordan Homo-Semiderivations in Associative Rings Mehsin Jabel Atteya
20	Lee Distance of Repeated-root Negacyclic Codes over the Galois Ring $GR(2^a, m)$ Nilay Kumar Mondal
21	Slant Hankel Operator in Multidimensional Setting and its Properties Gopal Datt, Bhawna Bansal Gupta
22	Improved Lower Bound of Concurrence for Arbitrary Bipartite Entangled States Shruti Aggarwal

23	A New Approach for Solving Generalized Vector Quasi- Variational-Like Inequality Problem Sonia, Ratna Dev Sarma , Ankit Gupta
24	Some Results for Hypersurfaces of Constant Curvature M. Abdelmalek
25	On The Enumeration of Partial Orders on a Set Firdous Ahmad Mala
26	On The Frobenius Norms of Circulant Matrices with Ducci Sequences and Narayana and Gaussian Narayana Numbers Roji Bala, Vinod Misra
27	On Symbol-Pair Distances of Negacyclic Codes of Length $4p^s$ over Finite Fields Madhu Kant Thakur
28	Some Fixed Point Theorems in Revised Fuzzy Metric Spaces A. Muraliraj, R. Thangathmizh
29	Common Fixed Point Theorems for Faintly Compatible and Subsequently Continuous Mappings in Cone Metric Space Archana Yadav

Track B: Mathematical Modelling, Simulation & Wave Propagation

S. No.	Title and Author(s)
1	Computational Modelling and Convergence Analysis of 3-Scale Finite Difference Haar Scheme for Differential Equation Shitesh Shukla, Manoj Kumar
2	Mathematical Modelling of Pandemic COVID-19 using Homotopy Perturbation Method, Differential Transform Method and Variational Iteration Method Neelam Gupta, Neel Kanth

3	An Eco-epidemic Model with Seasonal Variability: A Non-autonomous Model Jyoti Gupta, Joydip Dhar, Poonam Sinha
4	Efficient Numerical Simulations of Computer Virus Reaction-Diffusion Epidemic Model Using B-Splines Collocation Rohit Goel, R.C. Mittal, Neha Ahlawat
5	Numerical Solution of Three-Dimensional Gyrotactic Bioconvection Flow and Heat Transfer of Nanofluid – A Biomathematical Model Nidhi, Lokendra Kumar
6	Mathematical Modelling of Fluoride Transport in Soil with Transient Flow Conditions under the Influence of Chemical Moieties Poonam Soni, Arun Kumar, Ashu Rani
7	Analysis of a Fractional Sir Model of Water Pollution using Homotopy Perturbation Method Manju Kashyap, Indu Tyagi
8	Modelling for Outbreak of Swine Flu using Fractional Derivative Gajanan S Solanke , Deepak B Pachpatte
9	Role of Delay on Two Competing Plant Populations under the Allelopathic Effect Pankaj Kumar, Dipesh
10	Mathematical Analysis of Flexoelectric Effect with Deformed Interface in Two Distinct Piezoelectric Materials Abhinav Singhal
11	Impact of Temperature Variation on Calcium Profiling in Neuronal Cell Due to Cancer: A Steady State Case Jayashree Patil, Ashwini Vaze, Leena Sharma, Amol Bachhav
12	Forecasting of Wind Speed using Time Series Methods Sarita, Ritik, Sumanta Pasari, Rakhee

13	Weakly Relativistic Effect in Propagation of Dust-Acoustic Solitary Waves in A Dusty-Plasma Samiran Das
14	Study of Calcium Profile in Neuronal Cells with respect to Temperature and Position in Presence of Influx Due to Potential Activity Jayashree Patil, Ashwini Vaze, Leena Sharma, and Amol Bachhav

Track C: Continuum Mechanics, Differential Equations & Numerical Analysis

S. No.	Title and Author(s)
1	Numerical Methods for Solving Initial Value Problems of Nonlinear Fractional Differential Equations Pratibha Verma, Manoj Kumar
2	Significance of Hall Effect on Heat and Mass Transport of Titanium Alloy-Water Based Nanofluid Flow Past a Vertical Surface with IMF Effect J. K. Singh, K. Suneetha, S. Vishwanath
3	Wavelet Based Finite Element Solution of Nonlinear Boundary Value Problems Arising in Fluid Mechanics Harinakshi Karkera
4	A Radial Basis Function Based Finite Difference Method for Time Fractional Nonlinear Mixed Diffusion and Diffusion-Wave Equation Akanksha Bhardwaj, Alpesh Kumar
5	Numerical Solution of Boundary-Layer Flow of a Past Stretching Sheet with Zero Flux Saturated by a Nanofluid Mahendra Pratap Pal, Lokendra Kumar

6	Application of $\tan \varphi(\xi)/2$-expansion method for solving the $(2 + 1)$ –dimensional Date-Jimbo-Kashiwara-Miwa equation Pallavi Verma , Lakhveer Kaur
7	Exact Solution of $(2 + 1)$ –Dimensional Cubic Klein–Gordon (CKG) Equation Kuldeep, Lakhveer Kaur
8	PDE Based Edge Detection Methods for Digital Images Khanjan Pandya, Dinesh Kumar
9	Solution of Certain Coupled Systems of Partial Differential Equations by using Reduced Differential Transform Method Jahanvi , Amit Tomar
10	Rach Adomian Decomposition Method to Solve Nonlinear Equations of Chemical Kinetic System Ritu, Yogesh Gupta
11	An Overview About Delay Differential Equations Neetu
12	Variational Iteration Method for Solving Differential Equations in Various Science and Engineering Applications Ajay Kumar Agrawal, Yogesh Gupta
13	Size-Dependent Buckling Analysis of Functionally Graded Annular Nanoplates Subjected to Thermal Loading Rahul Saini, S. Pradyumna
14	Effect of Rotation on the Onset of Rayleigh-Bénard Convection in a Micropolar Fluid Riya Baby
15	Qualitative Study on a System of Fractional Integro-Differential Equation Nimai Sarkar, Mausumi Sen , Dipankar Saha

16	Existence of Solution of the $p(x)$ –Laplacian Problem Involving Critical Exponent and Radon Measure Amita Soni, Debajyoti Choudhuri
17	PDE Optimal Control: Automatic Differentiation Approach Renu Saraswat, Ajit Kumar
18	SH Wave Propagation in Initially Stressed Viscoelastic Orthotropic Medium Over Orthotropic Half-Space Pato Kumari, Rupali Srivastava

Track D: Soft Computing, Fuzzy, Image Processing & Operational Research

S. No.	Title and Author(s)
1	Heart Disease Prediction using Machine Learning Techniques and Multivariate Analysis Madhuri Gupta, Vikas Kumar, Ujjwal Sharma, Utkarsh Yadav
2	A Study on Diminishing Fuzzy Sets and its Topological Properties V. Kamal Nasir, T. Vasugi, N. Jansirani
3	Artificially Intelligent Queueing Modeling Approach to Analyze and Improve Health Care Systems S. S. Mishra, Carol Hargreaves, S Ahmad Ali, Sandeep Rawat
4	Pythagorean Fuzzy Information Measure with Application to Multicriteria Decision Making Anjali Munde
5	Optimization of EOQ Model with Two Parameter Weibull Demand and Deterioration having Shortages Under Crisp and Fuzzy Environment Anu Sayal

6	Optimization of Deteriorating Inventory System for Crisp and Fuzzy Environment with Partially Backlogged Shortages in an Inflationary Environment Anu Sayal
7	Intuitionistic Fuzzy Set Based Covid-19 Risk of Infection Prediction for Smart Health Governance Mukta Goyal, Nitin K Tyagi
8	A Sequential Algorithm to Solve gH-Differentiable Interval Optimization Problems Shaveta Kumari, Saurabh Srivastava
9	Solving Matrix Games Involving the Level (g_{lower}, g^{upper}) Interval Valued Pentagonal Fuzzy Payoffs: Signed Distance Ranking Approach V. Kamal Nasir, A. Jamal Barakath
10	Third-Party Voting Problem: A Prisoners' Dilemmatic Approach in 2-Tuple Intuitionistic Fuzzy linguistic Environment Shuvasree Karmakar, Mijanur Rahaman Seikh
11	Computational Approach for Transient Behaviour of Finite Source Retrial Queueing Model with Multiple Vacations and Closed Down Indhumathi, Muthu Ganapathi Subramanian, Gopal Sekar
12	Influence Maximization in Social Networks Based on Nature Inspired Algorithm Neetu Sardana, Mansi Mehrotra, Dhanshree Tejwani, Tanvi Thakur
13	Machine Learning based Intrusion Detection System: A Review Vanshika Gupta, Pallaw Mishra
14	Prediction of E. Coli Concentration in Water Quality Modelling Using Machine Learning Parul Tiwari, Piyush Bhardwaj

15	Differential Evolution with K-medoid algorithm for Influence Maximization in Online Social Networks Shikha Mehta, Sakshi Agarwal
16	N –Policy for Finite Queueing Models with Unreliable Server and Working Vacation Aditya Pratap Singh, Amita Bhagat
17	Optimization of a Transportation Problem under Pythagorean Fuzzy Environment Divya Chhibber, Pankaj Kumar Srivastava, Dinesh C.S. Bisht
18	Integrated ANP-TOPSIS Methodology for MCGDM under Pythagorean Fuzzy Environment Yograj Singh, Dinesh C.S. Bisht
19	A Comparative Study Based on Adaptive Time Variant Models for Fuzzy Time Series Gunjan Goyal, Dinesh C.S. Bisht
20	Comparative Assessment of Bayesian Regularization and Scale Conjugate Gradient Training Algorithm of Neural Network for the Prediction of Noise Level in the Industrial zone of Lucknow Minakshi Mishra, Ratan Kumar Thakur
21	Neutrosophic Fuzzy X-Subalgebra of Near-Subtraction Semigroups J.Siva Ranjini, V. Mahalakshmi
22	Estimation of Parameters, Reliability Function and Shannon Entropy of Weighted Pareto Distribution Isha Gupta
23	Optimum Design of Cantilever beam using Lead free ceramic 0.5 Ba (Zr0. 2Ti0. 8) O3–0.5 (Ba0. 7Ca0. 3) TiO3 using Metaheuristic Optimization Techniques Swet Chandan , Alok P. S. Chauhan Jyoti Shah

24	An Efficient Optimization Approach for Coherent Multi-Item Multi-Objective Decision-Making Intuitionistic Fuzzy Inventory Problem in Production Management Debasmita Sarkar , Pankaj Kumar Srivastava
25	Eigenvalue Criterion for Quantum Teleportation Protocol Anuma Garg
26	Fuzzy Topology Induced by Binary Fuzzy Relation Priti and Alka Tripathi

Track E: Miscellaneous

S. No.	Title and Author(s)
1	Cryptography using Multiple Factoriangular Numbers Swati Bisht
2	(73, 37, 16) QR Code Over Ternary Field P. Shakila Banu, T. Suganthi
3	Autonomous Driving Assistance System Aaryan Verma, Neetu Sardana
4	Virus Patches Detection by Yolov2 Amrita Singh, Ajit Kumar, Naga Suresh Veerapu
5	Domain Wall Motion in Bilayer Piezoelectric-Magnetostrictive Nanostructures Under the Combined Action of Rashba Field and Spin-Hall Effect Chiranjeev Kumar Shahu, Shruti Dubey
6	Category Based Malicious IOS Apps Detection By Identifying Significant Permissions Using Borda Count Kumud Alok, Arpita Jadhav Bhatt

7	Performance Evaluation of Lightweight Cryptography for Internet-of-Medical-Things Sangeeta Mittal, Shardha Porwal
8	Swarm Intelligence in Telecommunications: Opportunities & Future Aspects Sakshi Gujral, Ankita Verma
9	Analysis of Novel Routing Protocols for Vehicular Ad-Hoc Networks Avinash Vijayarangan
10	Detecting Steganographic Activity and Cryptanalysis in Digital Evidence using Autopsy and Stegspy Tools Avinash Vijayarangan, Maanicka Ganapathy, R. Kavitha
11	Some covering maps on surfaces Marbarisha M. Kharkongor, Debashis Bhowmik, Dipendu Maity
12	The Pebbling on Shadow Graph of Cycles S. Kither Iammal
13	On Perfect Secure Domination Number of Graphs Usha
14	Inverse Double Roman Domination in Graphs Wilma Laveena D Souza, V. Chaitra
15	On F - Edge Domination in Graphs Gizelle Rodrigues
16	On the Nourishing Number of Certain Graph Powers U. M. Prajapati, K .I. Vyas
17	T- Pebbling in Windmill Graph S. Dinoli
18	Subtract Divisor Cordial Labeling in the Context of Graph Operations on Grotzch U. M. Prajapati, P. A. Patel

19	Prime Labeling of the Mirror Graph and 4-Shadow Graph of Splitting Star Graph V. Annamma , Hameeda Begum N
20	Geometric Mean Cordial Labeling of Helm Graph V Annamma, Jawahar Nisha M I
21	Connected Domination in Double Vertex Graphs Roopa Prabhu , K. Manjula
22	Classification Witness Operator for the Classification of Different Subclasses of Three Qubit Ghz Class Anu Kumari, Satyabrata Adhikari
23	Convergence Analysis of Tikhonov Regularization with Oversmoothing Penalty for Nonlinear Statistical Inverse Learning Problems Abhishake Rastogi
24	New Weighted Measures of Diversity Priyanka Nagar, Pankaj Kumar Srivastava, Amit Srivastava
25	Analysis of A Butter Churner and Continuous Butter Making used in a Milk Plant Sharma Upasana, Drishti