

2<sup>nd</sup> INTERNATIONAL CONFERENCE ON RECENT TRENDS IN MATHEMATICS

# **ICRTM - 2025**

February 7-8, 2025

## **ONLINE PAPER PRESENTATION SCHEDULE**

# DAY 1 (07.02.2025)

TIMINGS: (2:00-5:00 PM)

## Group 1

<u>Session Chair: Prof. Pragati Gautam</u> <u>Session Co-Chair: Dr. Sundar Lal</u> <u>Student Coordinators: Mr. Rachit</u> <u>Google Meet Link : https://meet.google.com/rug-awuf-hgo</u>

S.No.	Name	Paper ID	Institution	Title
1.	Bamadev Sahoo	ICRTM_B02	Siksha 'O' Anusandhan (deemed to be University), Bhubaneswar , Odisha	Exact solutions for the Schamel Burgers' Equation with force term by using the Kudryashov Expansion Method
2.	Amit Kumar	ICRTM_B03	SRM Institute of Science and Technology, NCR-Delhi Campus, Modinagar, Ghaziabad	Exploring Carbon Emission Reduction through Additive Manufacturing in EPQ Models
3.	Arnab Mapui	ICRTM_B05	Indian Institute of Technology (BHU), Varanasi	Lyapunov-like conditions for prescribed-time stability of perturbed impulsive systems

4.	Komal Tanwar	ICRTM_B07	Central University of Rajasthan	Heterogeneous population and its resilience to misinformation in vaccination uptake: A dual ODE and network approach
5.	Surbhi Sharma	ICRTM_B08	Department of Mathematics, University of Rajasthan Jaipur	Numerical Simulation for MHD Casson Fluid Flow With Heat Transfer In a Porous Medium Over a Curved Surface
6.	Komal Thakran	ICRTM_B13	K.R. Mangalam University, Gurugram,Haryana,India	Numerical study of wave induced fluctuations and their impact on the Visakhapatnam port using the hybrid element method
7.	Songita Boruah	ICRTM_B15	Assistant Professor, Department of Mathematics, DKD College, Dergaon, Golaghat, Assam	Application of Trace Theorem on numerical solution of three- parameter eigenvalue problems
8.	Sachit Kumar	ICRTM_B26	Lovely professional University Punjab	Analysis of fractional perspectives for time fractional Cold Plasma Equations
9.	Sukhen kumar	ICRTM_B34	GD Goenka University Gurgaon	Mathematical Analysis of Non - Newtonian Nanofluid Flow over Linear Stretching surface
10.	Meenu	ICRTM_B37	PDUS University, Sikar	Topic-Fractional Differential Equations Involving Generalized Class of Special Function
11.	Deepti	ICRTM_B38	Shivaji College (DU), Raja Garden, New Delhi	Analytical solutions to MHD flow model across an inclined channel with induced magnetic field and radiation absorption effect
12.	Anuj Kumar	ICRTM_B39	Shri Vankhandeshwar University Gajraula/Mahamaya Government Degree College, Sherkot	TB-mBJ-Density Functional Theory Calculations of Structure, electronic, and Magnetism in Cation-Substituted ZnMnxGe(1-x)P2

13.	Lakshmi Rani Basumatary	ICRTM_B43	Assistant Professor	Numerical Solutions of Navier-Stokes equations with slip boundary conditions using Finite Volume Scheme.
14.	Brijendra Kumar Chaurasiya	ICRTM_B52	VIT - AP University	Existence of Positive Solutions for Nonlinear Fractional Differential Equations with Integral Boundary Conditions and State-Dependent Delays.
15.	Jyoti Rajkumar Kumawat	ICRTM_B55	Veer Narmad South Gujarat University	Observe the Time Actions onto Enzyme - Substrate Reaction under the influence of Non - Competitive inhibitors via Simulation.

## <u>Group 2</u>

#### <u>Session Chair: Dr. Pankaj Kumar</u> <u>Session Co-Chair: Dr. Ram Pratap</u> <u>Student Coordinators: Ms. Khyati</u> <u>Google Meet Link : https://meet.google.com/wmx-yacw-sqi</u>

S.N o.	Name	Paper ID	Institution	Title
1.	Ambika N	ICRTM_B56	AJIET Mangalore	Recent developments in Laplace transforms for the generalized hypergeometric functions 2F2 and 3F3
2.	Alisha Banz	ICRTM_B61	SVKM's Dwarkadas J Sanghvi College of Engineering	Investigating the relationship between the Economic and Environmental Mobility Indicators for developing countries
3.	Jitendra Barik	ICRTM_B65	Siksha 'O' Anusandhan University, Bhubaneshwar	Thermal radiation effect on MHD nanofluid flow with viscous dissipation and chemical reaction

4.	Parvin Kumari	ICRTM_B68	Manipal University ,Jaipur	An efficient numerical method for resolving a system of singularly perturbed differential-difference equations in physiology and biology
5.	Mustapha Bouallala	ICRTM_B70	Cadi Ayyad University	Modeling and Iterative Method for a New Unilateral Contact Problem with Tresca Friction in Thermoelasticity.
6.	Priyabrata Sethy	ICRTM_B72	Centre for Data Science, Siksha 'O' Anusandhan Deemed to be University, Bhubaneswar, Odisha	"Heat Transport Optimization in a Hybrid Nano Liquid-Filled Square Chamber with a Heated Circular Obstacle Under Lorentz Force for Advanced Thermal Applications"
7.	Anshu	ICRTM_B83	Maharshi Dayanand University, Rohtak	Economic and Sensitivity Analysis through a Stochastic Model for Single-Unit System under Pro-rata Warranty
8.	Kaberi Parida	ICRTM_B84	Research scholar , SOA University	Exploring Stability and Bifurcation in a Prey Predator Model with Mutual Interference
9.	Nisha Sharma	ICRTM_B98	Amity Institute of Applied Sciences	An epidemic-economic mathematical model to assess the economic effect of epidemic diseases
10.	Pradeep	ICRTM_B104	GD Goenka University Gurugram	Consequence of melting heat and mass transfer over nanofluid past over a stretching surface using FEM
11.	Pari Sharma	ICRTM_B105	NMIMS, Mukesh Patel School of Technology Management and Engineering	Graph Theory for Robotic Tactile Maps for the Visually Impaired
12.	Sonia Aneja	ICRTM_B109	Mata Sundri College for Women, University of Delhi	To study the relativistic effect in the perturbed circular restricted three-body problem

13.	Rekha Devi	ICRTM_B110	Government College Jhandutta,District Bilaspur (H.P.)	Effects of Thermal Radiation and Mixed Convection on MHD Tri-Hybrid (Copper Oxide (CuO), Alumina (Al <sub>2</sub> O <sub>3</sub> ), and Magnetite (Fe <sub>3</sub> O <sub>4</sub> )) Nanofluid Flow towards a Stagnation Point on an Exponentially Stretching Sheet
14.	Mohd Ashraf Bhat	ICRTM_B10	IIT Ropar	A Generalized Rearrangement Theorem and Its Applications
15.	Sahil	ICRTM_B23	IIT Indore	Ramanujan sums in signal recovery and uncertainty principle inequalities

#### Session Chair: Prof. Manoj Kumar Session Co-Chair: Dr. Gurudatt Rao Student Coordinators: Ms. Varsha Google Meet Link : https://meet.google.com/jdp-ehcv-vep

S.N o.	Name	Paper ID	Institution	Title
1.	Akansha Tyagi	ICRTM_B29	University of Delhi	Fixed Point Approximation with the AT Algorithm: Convergence Analysis for Nonexpansive Mappings and Real-World Applications
2.	Durgesh Kumar	ICRTM_B31	Motilal Nehru College , University Of Delhi ,Delhi	On Cellular - Hurewicz Spaces
3.	Swapnil Verma	ICRTM_B32	Assistant Professor, Kamala Nehru College	A new type of fixed point theorem via interpolation on rectangular quasi- partial b- metric space
4.	Reena	ICRTM_B42	Amity University Manesar Haryana	Characterization of Nonuniform Wavelets in Sobolev Spaces

5.	Mamta Amol Wagh	ICRTM_B45	Deen Dayal Upadhyaya College, University Of Delhi	Analysing Biocomplex Matrices In Mathematica
6.	Satish Kumar	ICRTM_B50	PGDAV College, University of Delhi	A Topological Approach to the extended mixed vector equilibrium problem
7.	Kamal Gautam	ICRTM_B53	Shoolini University	Application of Fuzzy Multi-Criteria Decision Making in SMEs: A Systematic Approach
8.	Jayanta Das	ICRTM_B54	Raiganj University	An approach to find some new fixed point theorems in 2-normed space
9.	Neeru Sharma	ICRTM_B57	Bhaskaracharya college of Applied Sciences, University of Delhi	Extended Versions of a-weyl's theorem and generalised a-Weyl's theorem
10.	Gurpreet Kaur	ICRTM_B63	Mata Sundri College for Women	Radius Problems for Ratios of Analytic Functions
11.	B Ramani	ICRTM_B64	Assistant Professor	Topological Indices on Generalization of Abid Waheed Graphs and its Applications
12.	Jyoti Jhade	ICRTM_B66	Research Scholar, Department of Mathematics, Institute for Excellence in Higher Education, Bhopal – 462016, Madhya Pradesh.	Generalized Fixed-Point Theorem for Multi-Term Contraction in Digital Metric Spaces
13.	Shahadat Ali	ICRTM_B67	Department of Mathematics, University of Kashmir, South campus Ananthnag 192101, Jammu and Kashmir	Inequalities Concerning the Generalized Polar Derivative of a Polynomial.
14.	Kartik Garg	ICRTM_B69	University of Delhi	Riesz MRA and corresponding Reisz Wavelet on Local Field of Positive Characteristic

15.	Priyanka Sahni	ICRTM_B76	Maitreyi College	A note on (s, q, phi, F)-g-weak contraction and some related improved results on fixed points of such type of contractions in various generalized metric spaces
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#### <u>Session Chair: Dr. O. P. Meena</u> <u>Session Co-Chair: Dr. Mukesh Kumar</u> <u>Student Coordinators: Ms. Simran</u> <u>Google Meet Link : https://meet.google.com/vjr-jpjw-ifg</u>

S.N o.	Name	Paper ID	Institution	Title
1.	Vipul Singh	ICRTM_B78	Department of Mathematics, University of Allahabad, Prayagraj-211002, India	Radical Transversal Screen Slant Lightlike Submersions from Indefinite Sasakian Manifolds onto Lightlike Manifolds
2.	Shwetha S Shetty	ICRTM_B79	Visvesvaraya Technological University, Belgaum, India.	On Certain Definite Integrals Involving Logarithmic Powers and Generalized Hypergeometric functions
3.	Babli Yadav	ICRTM_B81	Birla Institute of Technology and Science	Riemann Mapping Theorem with Fractional Derivative
4.	Sima Roy	ICRTM_B86	Raja Rammohun Roy Mahavidyalaya	Fréchet-Urysohn spaces with respect to ideals
5.	Ria Sharma	ICRTM_B94	Baddi University of Emerging Science and Technology	Common Fixed Point Theorems for Hardy Rodger's and Zamfirescu Contraction Mappings in Parametric Metric Space

6.	Bhupesh Marotrao Mude	ICRTM_B102	Ramnarain Ruia Autonomous College,Matunga,Mumbai -19	An Interacting Dark-Sector Multi-Fluid Theory and Cosmology Approach Using Convective Variational Methods
7.	Shital Manoharrao Wabhe	ICRTM_B103	Vidya Bharati Mahavidyalaya ,Camp Amravati 444601	An Interacting Dark-Sector Multi-Fluid Theory and Cosmology Approach Using Convective Variational Methods
8.	Supriya Rajendran	ICRTM_B107	Department of Mathematics, School of Physical Science,Amrita Vishwa Vidyapeetham,Kochi.	Exploring the Detour Eccentric Sum: Theoretical Foundations and Practical Applications
9.	Mohammed Abdelmalek	ICRTM_B108	Higher school of management of Tlemcen	Some geometric results for Newton transformations
10.	Ashutosh Pandey	ICRTM_B112	Sri Venkateswara College	Polyharmonic and mixed boundary value problems on the upper half-space in Hn
11.	Sanyam Gupta	ICRTM_B36	Delhi Technological University	Finding Job Sequencing Problem Solution using Machine learning
12.	Anshu Khurana	ICRTM_B44	IP University	Integration of Explainable AI (XAI) Techniques into Energy Prediction Systems
13.	Hemlata Pande	ICRTM_B49	S.S.J. University, Pt. B. D. Pandey Campus Bageshwar	Applications of Mathematical methods to analyze the advance of research allied to artificial intelligence during the period of last quarter century
14.	Devangam Bangaru Rajesh	ICRTM_B74	VIT-AP University	Transformers in Recommender Systems: A comprehensive review
15.	Priyanka	ICRTM_B58	Chandigarh Group of Colleges, Landran	A Comprehensive Cryptography: Introducing Closure ideas and Solvability Equations

#### Session Chair: Dr. Mukund Madhav Mishra Session Co-Chair: Dr. Raksha Verma Student Coordinators: Ms. Nisha Google Meet Link : https://meet.google.com/iqk-gera-nhz

S.N o.	Name	Paper ID	Institution	Title
1.	Bhavna Mahant	ICRTM_B09	Jaypee University of Information Technology Solan (Himachal Pradesh)	A Hybrid Neutrosophic Picture Fuzzy Matrix Approach to Encryption and Decryption in the El-Gamal Cryptosystem
2.	naresh singh	ICRTM_B14	Amity University Rajasthan	Image Compression Techniques- A Comprehensive Review of Image Encryption and Decryption Methods in Spatial Domain
3.	Ankita Sharma	ICRTM_B18	Shri Jagdish Prashad Jhabarmal Tibrewala University, Jhunjhunu	Use of Vedic Mathematics to find Osculators for Prime Number
4.	Ruchi Narang	ICRTM_B24	Government College Karsog Distt. Mandi (H.P.)	DNA Code based Encryption using Bisymmetric Rhotrix and Elliptic Curve Cryptography
5.	Dr.Sarita Agarwal	ICRTM_B41	Acharya Narendra Dev College, University of Delhi	Application of Vedic Sutras-I
6.	Priyanka	ICRTM_B58	Chandigarh Group of Colleges, Landran	A Comprehensive Cryptography: Introducing Closure ideas and Solvability Equations
7.	Ajay Dabral	ICRTM_B80	Department of Mathematics, University of Delhi	Exploring Reductions Between Lattice Problems and Other Computationally Hard Problems

8.	Pratiksha sharwan	ICRTM_B87	Central University of Himachal Pradesh	A Study on Quantum Image Encryption in IoT
9.	Aakanksha Thakur	ICRTM_B88	Central University of Himachal Pradesh	A Scientometric Analysis of Quantum Error Correction in Machine Learning
10.	Manish	ICRTM_B91	Central University of Himachal Pradesh	A scientometric analysis of quantum digital signature publications from 2014 to 2024
11.	Rahul Kumar	ICRTM_B11	Department of Mathematics, Shaheed Mangal Pandey Government Girls P.G. College, Meerut, India.	Impact of greening level on an EPQ model under consideration of customer-based credit policy and preservation technology
12.	Himani Chaudhary	ICRTM_B16	Banasthali Vidyapith, Newai, Rajasthan	Integrating Quantum Network Optimization into Queueing and Scheduling Models for Cloud Computing Environments
13.	Alok Kumar	ICRTM_B17	Graphic Era Deemed to be University Dehradun Uttarakhand	EPQ model with and without carbon emission effects,two warehouse,trade credit policy and advertisement dependent demand rate
14.	Rajpal Rajbhar	ICRTM_B20	ARSD College	Investigation of Single and Multi-objective Transportation Problem
15.	Umesh Kumari	ICRTM_B21	Daulat Ram College, University of Delhi	Parametric Analysis of a Machine Repair Model with Impatient, Feedback, and a Vacationing Server

#### <u>Session Chair: Ms. Amita Aggarwal</u> <u>Session Co-Chair: Dr. K. R. Meena</u> <u>Student Coordinators: Ms. Niyati</u> <u>Google Meet Link : https://meet.google.com/rei-rmfk-hap</u>

S.N 0.	Name	Paper ID	Institution	Title
1.	Prachi Jain	ICRTM_B25	ABES Engineering College	Comparative Analysis of Grid Optimization Strategies Using Multi-Criteria Decision-Making Techniques
2.	Neha Rani	ICRTM_B27	Uttaranchal University, Dehradun	Sustainable Inventory Optimization with Price- and Credit-Sensitive Demand: Integrating Preservation Technology and Emission Control Policy
3.	Ras Bihari Soni	ICRTM_B30	Government Birla College Bhawani Mandi, Jhalawar Rajasthan	A New Approach to find Initial BFS of Transportation Problem
4.	Balveer Saini	ICRTM_B33	M. S. J. Govt. P. G. College, Bharatpur affiliated to Maharaja Surajmal Brij University, Bharatpur, Rajasthan, India	Queueing Theory in Telemedicine: A Comprehensive Review of Applications and Future Directions
5.	Arvind Kumar	ICRTM_B40	Dyal Singh College, University of Delhi 110003	Duality results for multiobjective programming problem with generalized-convexity
6.	Dr. Indarpal Singh	ICRTM_B48	Delhi College of Arts & Commerce, University of Delhi	Stochastic Inventory Modeling and Resource Optimization Strategies: A Comprehensive Study

7.	Prof. Ritu Arora	ICRTM_B51	Keshav Mahavidyalaya, University of Delhi	Air Quality Efficiency Evaluation of New Delhi Regions using DEA approach
8.	Bharti Seth	ICRTM_B59	Vivekananda Institute of Professional Studies -Technical Campus	Air Quality Efficiency Evaluation of New Delhi Regions using DEA approach
9.	Manisha Rao	ICRTM_B60	Banasthali vidyapith	Transient solution of an M/M/2 queue with Heterogeneous Servers Subject to Catastrophes and Impatient Customers
10.	Vishakha Chaudhary	ICRTM_B62	Department of Mathematics SRM Institute of Science and Technology Delhi-NCR Campus, Ghaziabad, UP	Integrated Inventory Model for decaying items with linear demand under inflation
11.	Mukeshkumar Tribhovandas Joshi	ICRTM_B71	The Charutar Vidya Mandal University, Vallabh Vidyanagar, Anand, Gujarat	An innovative method for prediction of time series data
12.	Priyanka Yadav	ICRTM_B75	Atma Ram Sanatan Dharma College, University of Delhi	Predictive Online Convex Optimization with Online Perturbed Constraints
13.	Rohit Kumar	ICRTM_B82	Maharshi Dayanand University, Rohtak	Cost-Benefit and Sensitivity Analysis for a Two-Unit Standby System with Pre Scheduled Activation
14.	Vineet	ICRTM_B92	University of Delhi	Convergence Analysis of the CQ-Method by the Landweber Operators induced by the generalized non expansive maps
15.	Akhilesh Kumar Yadav	ICRTM_B93	Department of Mathematics, Hindu College, Moradabad	"Fuzzy Inventory Model for Deteriorating Goods with Joint Pricing, Partial Backlogging, and Time-Dependent Demand"

#### <u>Session Chair: Mr. Ajeet Singh</u> <u>Session Co-Chair: Dr. Dharmendra Kumar</u> <u>Student Coordinators: Mr. Naman</u> <u>Google Meet Link : https://meet.google.com/zjy-mdgz-jvh</u>

S.N o.	Name	Paper ID	Institution	Title
1.	Pankaj Hazarika	ICRTM_B01	Assistant Professor, Madhabdev University	A class of fuzzy microarray games and a corresponding relevance index for genes
2.	Kavitha K	ICRTM_B19	Thiruvalluvar University , Vellore, Tamil Nadu.	An Extensive Study of finite dimensional hesitant fuzzy normed linear spaces
3.	Bitu Sah	ICRTM_B22	Department of Mathematics, B.R.A. Bihar University, Muzaffarpur	Development of Traffic Light Controller Using Fuzzy Trapezoidal Function In Emergency VehicleApplication of Fuzzy Logic in Predicting Electronic and Magnetic Properties of Mn-Doped ZnSnAs2 Using First Principles Data
4.	Anjeli Garg	ICRTM_B46	Government Degree College, B.B. Nagar, Bulandshahr,UP	Application of Fuzzy Logic in Predicting Electronic and Magnetic Properties of Mn-Doped ZnSnAs2 Using First Principles Data
5.	Gaurav	ICRTM_B47	Central University of Haryana	Dynamic Collision Avoidance in Autonomous Vehicles using Type-3 Fuzzy Logic Systems and Explainable Al

6.	Neetu Dhiman	ICRTM_B73	University Institute of Technology, Himachal Pradesh University, Shimla	Comparative analysis of energy alternatives for distributed generation systems using analytical hierarchy process (AHP) and fuzzy analytical hierarchy process (FAHP)
7.	Sabiha Tabassum	ICRTM_B77	Aligarh Muslim University	〖(λ,μ)〗_q-Statistical Convergence
8.	Madhulika Mishra	ICRTM_B85	Symbiosis Statistical Institute	Constructing Log Type Estimator Using Auxiliary Variable in Stratified Random Sampling.
9.	Rashmi Rekha Devi	ICRTM_B96	Amity University, Kolkata	An Information Theoretic Approach to probe into the pattern of rainfall over northeast India
10.	Dinesh Udar	ICRTM_B100	Delhi Technological University	Strongly Unit P- Clean Rings
11.	Dinesh Udar	ICRTM_B101	Delhi Technological University	Uniquely Unit P- Clean Rings
12.	Garima Virmani	ICRTM_B106	University of Delhi	Levitin Polyak well-posedness of mixed variational inequality problem in terms of bifunction
13.	Sudesh Pundir	ICRTM_B04	Pondicherry University	Measure of entropies in the presence of interventions
14.	Manish Tomar	ICRTM_B95	Dept. Of Physics and Astronomical Sciences, Central University Of Himachal Pradesh	Material Science In Quantum Machine Learning: A Scientometric Study
15.	Rahul Kumar	ICRTM_B12	Doon University Dehradun	Inverse theorem for Bernstein-Durrmeyer type operators