

Summary Report

*One Day National Seminar
Celebrating National Mathematics Day: Honoring the Contributions of Srinivasa Ramanujan
Organized by
Department of Mathematics (DST-FIST Sponsored), Central University of Jammu
(23rd December, 2024)*

Proceedings of the workshop:

Inaugural session:

The seminar which aims at unfolding the contributions of Srinivasa Ramanujan in the field of mathematics commenced with the lighting of ceremonial lamp. **Dr. Uday Pratap Singh** (Convener & Associate Dean of Academic, Central University of Jammu) presented a formal welcome address. Dr. Uday welcomed all the invited guests and distinguished speakers and shared their academic excellence in their respective fields. He expressed his gratitude to the honourable vice chancellor Prof. Sanjeev Jain, for enabling the department to host this seminar to celebrate the National Mathematics Day. Following that, the distinguished guests were presented a token of appreciation. Prof. Kamlesh Kumar (Patron & Head of the Department of Mathematics, Central University of Jammu) presented the opening remarks of the seminar. He highlighted the contributions made by great Indian mathematician Srinivasa Ramanujan. He was grateful to the worthy guests for their gracious presence on this occasion. The guest of honour Prof. Yashwant Singh (Registrar, Central University of Jammu) mentioned about the milestones achieved by the university since its establishment. The Chief Guest of the seminar Prof. Vinay Kumar (Dean, School of Basic and Applied Sciences, Central University of Jammu) discussed about the Ramanujan's number and extends thanks to the invited speakers for their gracious presence. All the worthy guests were presented mementos. The seminar was attended by the faculties, research scholars, students of M.Sc. Mathematics, Integrated B.Sc (Hons)-M.Sc. Mathematics and others.

The distinguished keynote speakers:

- **Prof. Kishor S. Trivedi** (Holds the **Fitzgerald Hudson Chair** in the Department of Electrical and Computer Engineering at **Duke University, Durham, NC, USA**) who completed his B.Tech. in the 1968 from IIT Bombay, following MS and PhD in computer science from University of Illinois, Urbana. He has given his services as a professor in many reputed international institutions. His research interests include Fault-tolerant and dependable computing, Markov chains, Modeling software packages, performance modeling, etc. He has been awarded with many prestigious awards. He has also served as Editors of many journals and chaired many conference proceedings) delivered a lecture on title **“Reliability and Availability Modeling in Practice”**.

Prof. Kishor delivered an insightful lecture on system reliability and availability, focusing on his innovative algorithm and its real-time applications. He discussed the importance of these concepts in improving system performance and operational continuity.

The session included an engaging question-and-answer segment, fostering dynamic discussions among attendees, which enhanced understanding and collaboration. Overall, it was a valuable experience for everyone involved.

- **Dr. Pankaj Kumar** (In-charge, Srinivasa Ramanujan Department of Mathematics, Central University of Himachal Pradesh, Dharamshala) who has worked as an Assistant Professor in Ramjas College, University of Delhi. His research areas include: Cryptography, Quantum Cryptography, Quantum Machine Learning, Block chain. He has also been granted one patent titled “Nano Network ECC Authentication”. He has around 44 publications in reputed national and international journals and around 19 publications in conference proceedings. He delivered a lecture on “**Vedic Mathematics: the magic of numbers**” Dr. Pankaj highlighted the importance and beauty of Vedic mathematics. He very efficiently and elaborately explained the basic operations of mathematics by using Vedic mathematics and the session was very interactive followed by question/answer session and discussions.

The Vote of thanks was presented by Miss Tanisha Gupta. All the invited guests, distinguished speakers, organizing committee members, audience were acknowledged for making this seminar a great success.

The office staffs Mrs. Shikha Gupta and Mr. Ankur Bali were also presented mementos by Prof. Kishor S. Trivedi. Also, all the scholars were given a token of appreciation by Prof. Kishor S. Trivedi.

The session culminated with the group photographs and National Anthem.