REPORT ON FIVE-DAY LECTURE SERIES ON FOUNDATIONS AND FRONTIERS OF MATHEMATICS Organized by:

Department of P.G. Studies and Research in Mathematics,

Sharnbasva University, Kalaburagi

Date: 20th – 25th June 2025

Venue: Seminar Hall, Department of Mathematics

With the divine blessings of *His Holiness Vidya Bhandari* and under the patronage of revered dignitaries from the *Sharanabasaveshwara Samsthana* and *Sharnbasveshwar Vidya Vardhaka Sangha*, the Department of P.G. Studies and Research in Mathematics at Sharnbasva University successfully organized a five-day lecture series titled "Foundations and Frontiers of Mathematics" from 20th to 25th June 2025.

Objectives:

The primary aim of this academic initiative was to bridge foundational mathematical principles with modern advancements and real-world applications, fostering academic enrichment among students and researchers.

Inauguration:

The series was inaugurated in the presence of:

- Dr. Anilkumar Bidve, Vice-Chancellor
- Dr. Trimbak V. Biradar, Convener and Dean of FST
- Other notable members of the advisory and organizing committees.

Sessions and Resource Persons:

Date	Topic	Resource Person	Session Chair
20-06-	Applications of Discrete Mathematics in Real Life	Dr. Gousia Begum, Govt. Women's Degree	Dr. Shreedevi
2025		College, Kalaburagi	Kalyan
21-06-	Quantitative Aptitude for Competitive Examination	Dr. Mahantesh S. Swamy, Govt.	Dr. Saraswathi A.
2025		Autonomous College, Kalaburagi	H
22-06-	Mathematics: The Hidden Force Behind	Dr. Samrat Payad, B.V. Bhoomaraddi	Dr. Vishwas V. R. M
2025	Human Advancement	College, Bidar	
24-06-	Mental Wellness in the Modern World:	Dr. Vaishali Kandagal, Shetty	Dr. Mangala
2025	Challenges and Strategies	Homoeopathy Medical College	Kandagal
25-06-	Graph Theory and Network Science:	Dr. Sana Aejaz, KBN University,	Mrs. Ashwini
2025	Advances and Applications	Kalaburagi	Patil
25-06-	Online Talk: Burn Injuries of Human Forearm – A Mathematical Study	Dr. Jitendra Singh, Banaras Hindu	Dr. Trimbak V.
2025		University	Biradar

Highlights:

- The series included both **offline and online** sessions, engaging faculty, students, and research scholars.
- A diverse range of topics—blending pure mathematics, applied sciences, mental health, and computational theories—were covered.
- Each lecture was followed by an interactive Q&A session, encouraging student participation.

Acknowledgments:

The organizing committee extends heartfelt thanks to:

- The honourable patrons and trustees for their continued support,
- Administrative and academic officials of the university for smooth coordination,

• And all **resource persons** for their scholarly contributions.

Conclusion:

The lecture series achieved its goal of deepening mathematical insight and awareness. The Department intends to continue such academic events annually to encourage a culture of inquiry and intellectual growth.