BON SECOURS COLLEGE FOR WOMEN



(Autonomous)

Accredited with A++ Grade by NAAC in Cycle II Affiliated to Bharathidasan University, Tiruchirappalli UGC Recognized 2(f) and 12(B) Institution VILAR BYPASS, THANJAVUR - 613 006, TAMIL NADU

Programme: M.Sc., Mathematics

PROGRAMME OUTCOMES (POs)

On completion of the M.Sc. programme, students will be able to:

PO1: Scientific Knowledge and Expertise: Demonstrate in-depth understanding of scientific theories, principles, and methodologies within their specialized discipline and recognize its impact on societal advancement.

PO2: Experimental and Problem-Solving Skills: Apply scientific reasoning and laboratory skills to design experiments, analyse data, and develop solutions to complex scientific and technological challenges.

PO3: Research and Innovation: Engage in innovative, interdisciplinary research to address contemporary scientific issues, contributing to advancements in knowledge and technology with a focus on real-world applications.

PO4: Environmental and Ethical Awareness: Act responsibly with a commitment to environmental sustainability, ethical standards in research, and social responsibility in scientific pursuits.

PO5: Digital and Technical Proficiency: Utilize digital tools, programming, and scientific software to conduct advanced research, data analysis, and problem-solving in their field.

PO6: Lifelong Learning and Collaboration: Commit to lifelong learning, fostering teamwork and leadership skills to work effectively in diverse and collaborative scientific environments.

PROGRAMME SPECIFIC OUTCOMES (PSOs)

- **PSO 1:** Understanding of the fundamental axioms in mathematics and capability of developing ideas based on them.
- **PSO 2:** Provide knowledge of a wide range of mathematical techniques and application of mathematical methods/tools in other scientific and engineering domains.
- **PSO 3:** Develop proficiency in the analysis of complex physical problems and the use of mathematical or other appropriate techniques to solve them.
- **PSO 4:** Provide a systematic understanding of the concepts and theories of mathematics and their application in the real world to an advanced level, and enhance career prospects in a huge array of fields.
- **PSO 5:** Recognize the need to engage in lifelong learning through continuing education and research.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

PEO1: Enrich learners with in-depth disciplinary knowledge and essential skills to contribute tosocietal development and transformation.

PEO2: Enhance professional, employability, and entrepreneurial skills to achieve sustainability in adynamic global environment.

PEO3: Foster values of environmental consciousness and responsibilities, promoting the empowerment and upliftment of rural communities.