



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

DEPARTMENT OF MATHEMATICS

Programme : B.Sc., Mathematics

PROGRAMME OUTCOMES (POs)

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

PO1: *Foundational Knowledge:* Apply fundamental principles and methods across key areas of science and multidisciplinary fields.

PO2: *Problem Solving and Analysis:* Demonstrate analytical and logical skills to address scientific challenges and requirements.

PO3: *Scientific Inquiry and Critical Thinking:* Cultivate critical thinking and a scientific temper to evaluate and solve complex problems.

PO4: *Effective Communication:* Communicate scientific concepts clearly and effectively to diverse audiences.

PO5: *Ethics and Sustainable Development:* Recognize the importance of ethical responsibility and use technology judiciously to promote sustainability.

PO6: *Research and Lifelong Learning:* Uphold scientific integrity, engage in research, and commit to continuous learning amid technological advancements.

PROGRAMME SPECIFIC OUTCOMES (PSOs)

Each graduate in mathematics should be able to:

PSO 1: Demonstrate fundamental systematic knowledge of Mathematics and its application in Engineering, Science, Technology and Mathematical Sciences. It should also enhance the subject specific knowledge and help in creating jobs in various sectors.

PSO 2: Demonstrate Educational Skills in areas of Analysis, Geometry, Algebra, Mechanics, Differential Equations etc.

PSO 3: Apply knowledge, understanding and Skills to identify the difficult / unsolved problems in Mathematics and to collect the required information in possible range of

sources and try to analyze and evaluate these problems using appropriate methodologies.

PSO 4: Fulfil one's learning requirements in Mathematics, drawing from a range of contemporary research works and their applications in diverse areas of Mathematical sciences.

PSO 5: Exhibit subject-specific transferable knowledge in Mathematics relevant to job trends and employment opportunities.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

PEO 1: Apply basic knowledge of mathematics and science to comprehend real-world challenges.

PEO 2: Develop tailored problem-solving techniques using math tools for addressing complexities.

PEO 3: Establish the methodologies for core Mathematical problems.

PEO 4: Apply Computer-Based solution, Methods for addressing Large-Scale Systems.

PEO 5: Adopt a sense of professional and ethical responsibility towards the community.