

Programme Specific Outcome for Department of Mathematics (PG)

Name of the Programme: M.Sc. in Pure Mathematics (Under CBCS)

Year of Introduction: 2018

Programme Specific Outcome

PSO1 The M.Sc. in Pure Mathematics (Under CBCS) Syllabus is a combination of core and elective papers to develop a high and deep knowledge of all branches of pure Mathematics,

PSO2 Students will be equipped with mathematical skills and techniques which can be applied in both academic and non academic areas of work.

PSO3 Students will have placement scope in academic areas include jobs as teaching in schools, colleges, business schools, training schools etc

PSO4 Students will have placement scope in research positions in different research institutes

PSO5 Students will have placement scope in non-academic areas include jobs in sectors like bank, insurance, IT and other technological areas.

PSO6 Students develop individual and leadership qualities to work in a team. Students got motivation for higher studies, research or administrative jobs. The present course helps them to prepare for competitive exams in the country and also for abroad to pursue higher studies and research.

Course Outcome

CO of Semester I(Abstract Algebra, Real Analysis, General Topology, Differential Geometry)

CO 1 Students will be able to learn advanced mathematical analysis and this concept is necessary for higher mathematical studies and applications

CO 2 Students will learn techniques necessary for the latest trends in mathematical studies and research

CO of Semester II(Linear Algebra, Complex Analysis, Algebraic Topology, Field Extension)

CO 3 The theory of Field Extension and Algebraic Topology in pure mathematics are intended to equip the students with the techniques in understanding the abstractness of the subject which find applications in the most technologically advanced systems.

CO 4 The elective paper Advanced Complex Analysis opens the domain of research in Complex Analysis

CO of Semester III(Modules & Ring Theory, PDE Functional Analysis)

CO 5 The elective paper Modules and Ring Theory opens the domain of research in Abstract Algebra

CO 6 The students can choice one topic from CBCC A or CBCC B and this modules allow the student to enlarge their favourable subject knowledge and research work

CO of Semester IV(Computational Mathematics, Advanced Complex Analysis)

CO 7 The paper Computational Mathematics equips the students with the computational mathematics and learning to operate the mathematical methods for large or complicated problems using the C codes

CO 8 The **Dissertation** course attempts to prepare students in carrying out research independently yet scientifically in the specific discipline.

Students learn to learn and analyse theoretical concepts, practical data, exercise statistical techniques, using programming languages or software to carry out independent analysis and write research reports. This gears them up for doing Ph.D. and projects in their respective topics.