

B.A./B.SC. MATHEMATICS (HONS.) PROGRAMME

- **Programme Objectives**

- **Programme Learning Outcomes**

- **Programme Structure &**

- **Programme Implementation Requirement**

- **Programme Objectives**

Students who choose Honours in Mathematics in B.A. B.Sc. Programme, will develop the ability to think critically, logically and analytically and hence use mathematical reasoning in everyday life. The programme will introduce the students to a number of interesting and useful ideas in preparations for a number of mathematics careers in education, research, government sector, business sector and industry.

The program covers the full range of mathematics. The course lays a structured foundation of Calculus, Real and Complex analysis, Algebra, Differential equations and Mathematical modelling, Number theory, Graph theory, Mechanics and C-programming. An exceptionally broad range of topics covering Pure and Applied Mathematics: Linear Algebra, Metric spaces, Statistics, Linear Programming and Applications, Mathematical Finance, and Bio-Mathematics cater to varied interests and ambitions. Also, to carry out the hand on sessions in Computer lab using various CAS software to have a deep conceptual understanding of the above tools to widen the horizon of students' self-experience.

- **Programme Learning Outcomes**

The completion of the B.A./ B.Sc. Honours Programme shall enable a student to

- i) Communicate mathematics effectively by oral, written, computational and graphic means.
- ii) Create mathematical ideas from basic axioms.
- iii) Gauge the hypothesis, theories, techniques and proofs provisionally.
- iv) Utilize mathematics to solve theoretical and applied problems by critical understanding, analysis and synthesis.
- v) Identify applications of mathematics in other disciplines and in the real world, leading to enhancement of career prospects in a plethora of fields.

vi) Appreciate the requirement of lifelong learning through continued education and research.

➤ **Programme Structure**

The B.A./ B.Sc. Honours programme in Mathematics is a three-year course divided into six-semesters. A student is required to complete 148 credits for the completion of course and the award of degree.

Semester Semester

Part – I : First Year - Semester I : 22 & Semester II: 22

Part – II : Second Year - Semester III: 28 & Semester IV: 28

Part – III : Third Year - Semester V: 24 & Semester VI: 24

➤ **Programme Implementation Requirement**

For proper implementation of the B.A./ B.Sc. Honours programme in Mathematics the following infrastructure are necessary:

- (a) Available Classrooms
- (b) Available number of teachers
- (c) Sufficient lab facilities with computers and software
- (d) Library with necessary text and reference books.