

## Course Titles

### CORE COURSES- (SEMESTER –I)

MM- CR -101 Advanced Abstract Algebra-I

MM –CR- 102 Real Analysis-I

MM- CR- 103 Topology

### OPTIONAL COURSES (SEMESTER –I)

MM- EA -104 Theory of Numbers-I

MM- EA -105 Matrix Algebra

MM –EA- 106 Computational Mathematics

MM- EA -107 Advanced Calculus

MM -EA -108 Probability Theory

MM- EO -109 Other Allied + Open

### CORE COURSES- (SEMESTER –II)

MM -CR -201 Discrete Mathematics

MM- CR -202 Real Analysis-II

MM- CR- 203 Complex Analysis-I

### OPTIONAL COURSES (SEMESTER –II)

MM- EA -204 Theory of Numbers-II

MM -EA- 205 Operation Research

MM –EA- 206 Fourier Analysis

MM- EA- 207 Linear Algebra

MM -EA- 208 Numerical Analysis

MM -EA- 209 Mathematical Modelling

MM- EA- 210 Integral Equations

MM- EO- 211 Other Allied + Open

## Semester III

1. Ordinary Differential Equations

## 2. Functional Analysis-II

### Optional Courses

## 3. Advanced Topics in Topology & Modern Analysis

## 4. Abstract Measure Theory

## 5. Theory of Numbers-I

## 6. Advanced Topics in Mathematical Modelling

## 7. Operations Research

## 8. Computer Programming

## 9. Advanced Topics in Linear Algebra

### Semester IV

## 1. Partial Differential Equations

## 2. Differential Geometry

### Optional Courses

## 3. Advanced Topics in Functional Analysis

## 4. Advanced Topics in the Analytic Theory of Polynomials

## 5. Theory of Numbers-II

## 6. Advanced Topics in Graph Theory

## 7. Mathematical Statistics

## 8. Wavelet Analysis

## 9. Banach Algebras and Spectral Theory

### Research Programmes Offered:

M. Phil.

Ph. D.

### Thurst Areas

## 1. Complex Analysis

## 2. Functional Analysis

## 3. Graph Theory

#### 4. Mathematical Modelling/Bio-Mathematics