

POST GRADUATE DEPARTMENT OF MATHEMATICS
CBCS SYLLABUS FOR M.Sc., MATHEMATICS
COURSE STRUCTURE

(Applicable for students admitted in June 2021 and onwards)

| SEMESTER | | | II SEMESTER | | |
|--|-----------|-----------|---|-----------|-----------|
| COURSE | H/W | C | COURSE | H/W | C |
| Groups, Rings and Fields | 5 | 4 | Topology | 5 | 4 |
| Real Analysis I | 5 | 4 | Real Analysis II | 5 | 4 |
| MATLAB | 5 | 4 | Graph Theory | 5 | 4 |
| Ordinary Differential Equation | 4 | 4 | LaTeX | 4 | 4 |
| DSE (A) Differential Geometry | 4 | 3 | DSE (A) Calculus of Variations and integral equations | 4 | 3 |
| DSE (B) Discrete Mathematics | | | DSE (B) Java programming | | |
| DSE(C) Classical Mechanics | | | DSE(C) Combinatorics | | |
| MATLAB Practical | 4 | 2 | LaTeX Practical | 4 | 2 |
| IDC-I-Discrete structure –I | 2 | 2 | SEC-(MOOC NPTEL Course) | 2 | 2 |
| Library Reading hour | 1 | | Library Reading hour | 1 | |
| TOTAL | 30 | 23 | TOTAL | 30 | 23 |
| III SEMESTER | | | IV SEMESTER | | |
| Linear Algebra | 5 | 4 | Complex Analysis | 5 | 4 |
| Measure Theory | 5 | 4 | Functional Analysis | 5 | 4 |
| Research Methodology | 5 | 4 | R –Programming | 4 | 4 |
| Optimization Technique | 4 | 4 | Project | 8+4* | 4 |
| DSE(A)Mathematical Statistics | 4 | 3 | DSE (A) Partial Differential Equation | 4 | 3 |
| DSE(B) Analytical number theory | | | DSE (B) Numerical Analysis | | |
| DSE(C)Fuzzy set theory | | | DSE(C) Representation theory of finite group | | |
| Optimization Technique in Java Programming | 4 | 2 | R-Programming practical | 4 | 2 |
| IDC-II- Discrete structure – II | 2 | 2 | | | |
| Library Reading hour | 1 | | | | |
| TOTAL | 30 | 23 | TOTAL | 30 | 21 |

TOTAL NUMBER OF COURSES = 9