# **MASTER OF SCIENCE - MATHEMATICS**

# (As Per NEP-2020)

#### SEM - I

### **Major Subject (Mandatory)**

- 1) Advanced Abstact Algebra
- 2) Topology
- 3) Linear Algebra

## **Major Elective (DSE)**

- 1) Numerical Analysis
- 2) Real Analysis
- 3) Ordinary differential Equations
- 4) Calculus of Variations
- 5) Number Theory
- 6) SCILAB Programming
- 7) Fuzzy Mathematics
- 8) Logic and Set Theory
- 9) Elementary Discrete Mathematics

### Compulsory Paper (RM)

1) Research Methodology

#### SEM - II

# **Major Subject (Mandatory)**

- 1) Field Theory
- 2) Measure Theory
- 3) Classical Mechanics

# **Major Elective (DSE)**

- 1) Differential Geometry
- 2) Operations Research
- 3) Combinatorics
- 4) Graph Theory
- 5) Coding Theory
- 6) Cryptography
- 7) Advanced Topics in Topology
- 8) Statistics and Probability
- 9) C Programming

# **Compulsory Paper (RM)**

1) OJT- On Job Training / Internship Financial Mathematics

# **MASTER OF SCIENCE - MATHEMATICS**

### SEM - III

### **Major Subject (Mandatory)**

- 1) Complex Analysis
- 2) Partical Differential Equations
- 3) Mathematical Methods

### **Major Elective (Any One)**

- 1) General Relativity
- 2) Fluid Dynamics I
- 3) Advanced Topics in Operations Research 3) Integral Equations
- 4) Commutative Algebra
- 5) Lattice Theory
- 6) Business Mathematics
- 7) MATLAB Programming

## **Compulsory Paper (RM)**

1) Research Project

### SEM - IV

### Major Subject (Mandatory)

- 1) Dynamical Systems
- 2) Functional Analysis
- 3) Mathematical Modelling

### **Major Elective (Any One)**

- 1) Comsmology
- 2) Fluid Dynamics II
- 4) Representation Theory of the Symmetric Group
- 5) Matroid Theory
- 6) Python Programming
- 7) Algebraic Number Theory

## **Compulsory Paper (RM)**

1) Research Project

टिप :- सत्र २०२४-२५ ला NEP 2020 नुसार प्रवेश प्रक्रिया होणार असल्यामुळे अभ्यासक्रमातील विषय बदलची माहिती प्रवेश घेतांना प्रवेश समितीकडुन आपणास कळविण्यात येईल.