

B.A./ B.Sc. DEGREE  
**COURSE STRUCTURE FOR MATHEMATICS SUBJECT**  
 [Duration 6 Semesters (3 Years)]

**SEMESTER-I**

Paper No.	Paper Title	Contents Topics
BSM 1.1	Algebra-I	Mathematical Logic Elements of Set Theory Matrices
BSM 1.2	Calculus-I	Limits & Continuity Successive Differentiation Polar Coordinates Theory of Plane Curves

**SEMESTER-II**

Paper No.	Paper Title	Contents Topics
BSM 2.1	Algebra-II	Theory of Equations Sequences Infinite Series
BSM 2.2	Calculus-II	Integral Calculus Application of Integral Calculus Functions of Two & Three Variables

**SEMESTER-III**

Paper No.	Paper Title	Contents Topics
BSM 3.1	Vectors & Solid Geometry	Vectors and Solid Geometry
BSM 3.2	Real Analysis	Differentiability Reimann Integration Line & Multiple Integration

**SEMESTER-IV**

Paper No.	Paper Title	Contents Topics
BSM 4.1	Algebra-III	Abstract Algebra & Linear Algebra
BSM 4.2	Differential Equations-I	Ordinary Differential Equations

**SEMESTER-V**

Paper No.	Paper Title	Contents Topics
BSM 5.1	Vector Analysis & Laplace Transform	Vector Analysis, Fourier Series and Laplace Transforms
BSM 5.2	Differential Equations-II	Series Solution Partial Differential Equations
BSM 5.3	Optional-I	

**SEMESTER-VI**

Paper No.	Paper Title	Contents Topics
BSM 6.1	Numerical Analysis	Numerical Analysis
BSM 6.2	Complex Analysis	Complex Analysis and Improper Integrals
BSM 6.3	Optional-II	

Students have to select **ONE** of the optional papers listed below during V Semester and corresponding paper during VI Semester (depending upon the teaching staff available and infrastructure available in the college).

**Optionals for Fifth Semester:**

- BSM-5.3(a) Discrete Mathematics-I
- BSM-5.3(b) Mechanics-I
- BSM-5.3(c) Operations Research-I
- BSM-5.3(e) Graph Theory-I
- BSM-5.3(f) Mathematical Modelling-I.

**Optionals for Sixth Semester:**

- BSM-6.3(a) Discrete Mathematics-II
- BSM-6.3(b) Mechanics-II
- BSM-6.3(c) Operations Research-II
- BSM-6.3(e) Graph Theory-II
- BSM-6.3(f) Mathematical Modelling-II