

BASTAT - SN101  
[w.e.f. 2020-21 Admitted Batch]

BA/BSC I YEAR : STATISTICS SYLLABUS  
(For Non - Mathematics Combination)  
Semester - I CBCS.  
Paper-I Elementary Mathematics

Unit -1

Concept of sequences and series, fundamentals of sets and functions, types of functions, solution of simultaneous linear equations, quadratic equations.

Unit-II

Progressions: - A.P, G.P, H.P. permutations, combinations, Binomial theorem and their related problems

Unit -III

Elementary Matrices: Definition and types of matrices, addition, subtraction, scalar multiplication of Matrices.

Unit-IV

Determinant of Matrix, Transpose of a matrix, inverse and rank of 3X3 matrices only. Solution - simultaneous linear equations by matrix methods.

Unit-V

Differentiations: derivatives of algebraic and exponential functions. Maxima and Minima of a function. Integration basics. Integration by parts and by substitution.

**Text Books**

1. Differential Calculus - Santhi Narayana.
2. Outlines of Matrices - Schaum.

**Reference Books:**

1. Statistical methods - S.P. Gupta.
2. Fundamentals of Mathematical statistics - SC Gupta and V.K. Kapoor.
3. Quantitative Techniques I - Sulthan Chand Publication.

Practicals - Semester - 1

Conduct any 6 Practical

1. Solution to simultaneous Linear equations.
2. Progressions - AP, GP, HP.
3. Addition, Subtraction, Multiplication of Matrices.
4. Determinant of a Matrix.
5. Solutions of equations by matrix methods.
6. Simple differentiation.
7. Integrations.