

B. Com. – III

Group 'M': Mathematics & Computer

Paper No. XXI-A: Mathematics for Business

1. Functions, Limit, Continuity and Discontinuity, Differentiation of Algebraic and Transcendental Functions. Differentiation from First Principle, Successive Differentiation, Leibnitz's Theorem, Expansion of Functions, Maclaurin's and Taylor's Theorem, Partial Differentiation, Euler's Theorem, Maxima and Minima, Indeterminate Forms.
2. Integral, Reduction Formulae, Integration of Rational, Irrational and Transcendental Functions. Definite Integral. Business Functions Including Cost, Revenue, Demand, Supply and Production Functions. Elasticity of Demand and Supply. Consumer's and Producer's Surplus.
3. Probability and Expected Value. Theorem, Binomial, Poisson and Normal Distribution.
4. Matrices, Inverse and Rank of a Matrix. Determinants, Solution of Linear Equations by Matrix and Determinant Method. Input and Output Analysis.
5. Linear Programming: Graphic and Simplex Methods.