

B.Com. (Hons.): Semester-IV

Paper BCH 4.2: BUSINESS MATHEMATICS

Date	Topics
05.01.2023 - 11.01.2023	Introduction to matrices: Definition and types; Algebra of matrices and Business Applications.
12.01.2023 - 18.01.2023	Inverse of a matrix; Solution of system of linear equations using matrix inversion method.
19.01.2023 - 25.01.2023	Solution of system of linear equations using Cramer's Rule; Leontief Input Output Model (Open Model Only).
26.01.2023 - 01.02.2023	Mathematical functions: linear, quadratic, polynomial.
02.02.2023 - 08.02.2023	Exponential, logarithmic, and logistic functions; Concepts of limit and continuity.
09.02.2023 - 15.02.2023	Concept of Marginal Analysis; Concept of Elasticity.
16.02.2023 - 22.02.2023	Applied Maxima and Minima problems; Economic Order Quantity and Monopolist's Optimum price.
23.02.2023 - 01.03.2023	Partial Differentiation: Partial derivatives up to second order; Homogeneity of functions and Euler's theorem.
02.03.2023 - 04.03.2023	Total differentials; Differentiation of implicit functions.
05.03.2023-12.03.2023	Semester break
13.03.2023 - 22.03.2023	Integration: Standard forms & methods; Definite integration and Finding areas.
23.03.2023 - 29.03.2023	Application of Integration to marginal analysis; Consumer's and Producer's Surplus.
30.03.2023 - 05.04.2023	Rates of interest: nominal, effective and their inter-relationships; Compounding and discounting of a sum.
06.04.2023 - 12.04.2023	Applications relating to Depreciation of assets; Types of annuities: ordinary, due, deferred, continuous, perpetual.
13.04.2023 - 19.04.2023	Determination of future and present values; Applications relating to Capital expenditure.
20.04.2023 - 26.04.2023	Formulation of Linear programming problems; Graphical solutions of LPPs.
27.04.2023 - 03.05.2023	Solution of LPPs by simplex method; The dual problem: Formulation and economic interpretation.