

104.BUSINESS MATHEMATICS

1. Functions: Notations, Types, Functions used in Business, Break Even Analysis, Graph of Linear Inequality, Permutation and Combination.
2. Arithmetic, Geometric and Harmonic Progressions Including Series
3. Mathematics of Finance: Simple and Compound Interest, Compound Amount at Changing Rates, Nominal and Effective Rate of Interest, Equational Value, Discount, Depreciation, Annuity, Amortisation of Loan, Perpetuity, Sinking Fund, Leasing Capital Expenditure and Bonds.
4. Matrices and Determinants: Types of Matrices, Addition, Subtraction Multiplication of Matrices. Determinants of Order two and three. Matrix Inversion, Solution of Systems of Linear Equations by Matrix Inversion as well as Pivotal Method.
5. Differentiation of Simple Cases and Standard Forms. Successive Differentiation Maxima and Minima of Functions up to Second Order Applications of Maxima and Minima in Business Problems.

Suggested Readings:

1. Arora SR & Gupta Kanta: Business Mathematics, Taxmann Publications P. Ltd., New Delhi.
2. Goel Ajay and Goel Alka: Mathematics and Statistics, Taxmann Publications P. Ltd., New Delhi.
3. Gorakh Prashad: Textbook on Differential Calculus, Pothishala Private Limited, Allahabad.
4. Gorakh Prashad: Text book on Integral Calculus, Pothishala Private Limited, Allahabad.
5. Saha S.: Business Mathematics, New Central Book Agency, Calcutta.
6. Sancheti D.C. and Kapoor V.K.: Business Mathematics, Sultan Chand & Sons, New Delhi.
7. Shanti Narayan: A Text Book of Matrices, S.Chand & Co. New Delhi.