

BUSINESS MATHEMATICS-1
COURSE NO: 331

1. TOPIC NUMBER 1: ALGEBRA

Simultaneous Linear Equation (Algebraic & Graphic solutions), Quadratic Equation and its solutions, Indices and Logarithm, Simple Exponential Equation.

2. TOPIC NUMBER 2: COORDINATE GEOMETRY

Distance between Two Points, Slope of a line, Equation of a Straight Line, Slope intercept form, Equation passing through Two Points, Equation Passing through a Point and a Slope.

3. TOPIC NUMBER 3: CALCULUS

Idea of Limits, Differentiation, Rate of Change, Differentiation of the General term (ax^n). Techniques in Differentiation, Polynomial, Composite function, Product Rule, Quotient Rule. Application of derivatives, Marginal function, Elasticity of Demand and Supply, Optimization of Simple function, Point of inflexion, Maxima and Minima Problems.

4. TOPIC NUMBER 4: DETERMINANTS AND MATRIX ALGEBRA

Determinants and its properties, Saurus Rule, Crammer Rule, Introduction to Matrices, Types of Matrices, Addition, Subtraction and Multiplication of Matrices. Inverse up to (3 x 3) matrices in Solution of system of Linear Equations.

BOOKS RECOMMENDED:

1. Syed Hassan Mirza Business Mathematic for Management and Finance
2. L.W. Stafford. Business Mathematics
3. Richard Lacava. Business Statistics When & Way Irvan & Hill Inc.
4. Lavin Business Statistics. Prentice Hall Inc.
5. Nasir Ali Syed Statistics & Business Mathematics Fair Publication, Lahore
& G.H. Gill
6. Z.A. Bohra Business Statistics and Mathematics.
7. Frank. S. Budnick Applied Mathematics for Business, Economics, and the Social
Sciences, Mc-Graw Hill Inc. New York, International Ed. 1994.
8. Frank. S. Budnick Applied Mathematics for Business, Economics, and the Social
Science, Mc-Graw Hill Inc. New York, Fourth Edition.

REFERENCE BOOKS:

1. Moog.R.W.Taniss F.A(1989)
Probability & Statistical Inference Von Nostrand Reinold Co. N.Y.
2. Attiquallah M. (1988)
Basic Statistics and Computer Role, Kifayat Academy, Karachi.
3. Prof. Shere Muhammad
Introduction to Statistical Theory, Choudhary I & II, Ilmi Kitab
Khana, Lahore.
4. Hamid A. Hakim
Business Mathematics, Mayari Matbooaat, Karachi.
5. Hamid A. Hakim
Introductory Statistics for Economics & Management, Mayari
Matbooaat, Karachi.
6. S. Khursheed Alam
i) Statistics Concepts and Methods, Rehbar Publishers, Karachi 1999.
ii) Business Mathematics Rehbar. Publishers, Karachi.1999.