## BUSINESS MATHEMATICS <br> Vol. 1

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A. S. PRAKASHAN, MEERUT A Sinter Cancern of Pragaii Prakachans Meerut

# BUSINESS MATHEMATICS 

For B.Com. I Year (First Semester) Students of K.U. Kurukshetra


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## Syllabus

## BUSINESS MATHEMATICS-I

(BC-105)

Time 3 Hours
External Marke ent Internal Marks 20

Note : Paper setter will set nine questions in all. Question No. 1 comprising of five short types questions carrying four (4) marks each is compulsory. It covers the entire syllabus. Answer to each question should not be more than one page. Candidate is required to attempt four questions from the remaining eight quentions carrying 15 marks each.

## Logarithms,Anti-logarithms

Sequences and Series: Arithmetic \& Geometric Progressions.
Differentiation : Idea of simple derivative of different functions (excluding Trigonometrical functions); Rules of differentiation (simple standard forms).

Maxima and Minima of functions of one variable (including 2nd or 3rd order derivatives) relating to cost, revenue and profit.

Matrices and Determinants : concept of matrix, types, and algebra of matrices; properties of determinants; calculation of values of determinants up to third order, adjoint of a matrix, elementary row or column operations; Finding inverse of a matrix through adjoint and elementary row or column operations; solution of a system of linear equations having unique solution and involving not more than three variables.

Compound Interest and Annuities: different types of interest rates, concept of present value and amount of a sum; types of annuities; present value and amount of an annuity (including the case of continuous compounding); valuation of simple loans and debentures; problems relating to sinking funds.

## Contents

ALGEBRA OF MATRICES ..... 1-43
1.1 Introduction ..... 1
1.2 Basic Concept of Matrix ..... 1
1.3 Types of Matrix ..... 2
1.4 Basic Operation on Matrices ..... 10
1.5 Basic Properties of Addition of Matrices ..... 11
1.6 Negative of Matrix ..... 11
1.7 Subtraction of Matrices ..... 11
1.8 Multiplication of Matrix by a Scalar ..... 12
1.9 Multiplication of Matrices ..... 18
1.10 Some Properties on Matrix Multiplication ..... 19
1.11 Transpose of a Matrix ..... 31
1.12 Some properties of Transpose of a Matrix ..... 31
1.13 Symmetric and Skew Symmetric Matrix ..... 32
1.14 Basic Results on Symmetric and Skew Symmetric Matrix if $A$ is any Square Matrix, then ..... 32
Exercise ..... 42
2. DETERMINANTS ..... 44-71
2.1 Definition ..... 44
2.2 Minors and Cofactors ..... 46
2.3 Singular and Non-singular Matrix ..... 48
2.4 Properties of Determinants ..... 52
Exercise ..... 70
3 ADJOINT AND INVERSE OF MATRICES ..... 72-100
3.1 Adjoint of a Square Matrix ..... 72
3.2 Inverse of a Square Matrix ..... 79
3.3 Inverse of a Matrix by a using Elementary Operation ..... 95
Exercise ..... 99
SOLUTION OF SYSTEMS OF LINEAR EQUATION BY ..... 101-120 CRAMERS RULES AND MATRIX METHODS
4.1 Solution of System of Linear Equations ..... 101
4.2 Method for Solving a System of Linear Equations ..... 101
4.3 Solution of Non-homogenous System of Linear Equations Using Matrices ..... 111 Exercise 119
5. LOGARITHMS121-135
5.1 Logarithms ..... 121
5.2 Three Standard Laws of Logarithms ..... 124
5.3 Logarithmic Tables ..... 127
5.4 Use of Logarithm Tables ..... 134
Exercise ..... 135
6. SIMPLE AND COMPOUND INTEREST ..... 136-174
6.1 Introduction ..... 136
6.2 Simple interest ..... 136
6.3 Compound interest ..... 137
6.4 Determination of compound interest with general formulae ..... 137
6.5 Continuous compounding interest ..... 160
6.6 Nominal rate of interest ..... 163
6.7 Effective rate of interest ..... 164
Exercise ..... 173
7. ANNUITIES175-208
7.0 Introduction ..... 175
7.1 Definition ..... 175
7.2 Type of annuities ..... 175
7.3 Types of annuity certain ..... 176
7.4 Derivation of formula for amount of an annuity ..... 176
7.5 Present value of an annuity ..... 187
7.6 Formula for present value of an annuity is derived as ..... 187 Exercise 2088. ARITHMETIC AND GEOMETRIC PROGRESSION209-245
8.1 Sequence ..... 209
8.2 Arithmetic Progression (AP) or Arithmetic Sequence ..... 209
8.3 General Term of an A.P ..... 211
8.4 Section of terms in an A.P. ..... 215
8.5 Properties of Arithmetical Progression ..... 217
8.6 Insertion of Arithmetic means ..... 220
8.7 Application of an A.P Series ..... 226
8.8 Geometric Progression (G.P.) ..... 228
8.9 Sum of First $n$ Terms of a G.P. ..... 236
8.10 Geometric Mean ..... 242
Exercise ..... 245
9. DIFFERENTIATION ..... 246-289
9.1 Introduction ..... 246
9.2 Derivative of a Function ..... 246
9.3 Derivative of $x^{n}$ from first Principle ..... 247
9.4 Derivative of $(a x+b)^{n}$ from First Principle ..... 247
9.5 Composite Function ..... 258
9.6 Differentiation of Composite Function by Chain Rule ..... 258
9.7 Differentiation of Implicit Functions ..... 269
9.8 Differentiation of Parametric Functions ..... 280
9.9 Derivatives of Higher Order ..... 284
Exercise ..... 288
10. MAXIMA AND MINIMA290-338
10.0 Introduction ..... 290
10.1 Local maximum ..... 290
10.2 Local minimum ..... 290
10.3 Local maxima and local minima ..... 291
10.4 Critical points or stationary points ..... 292
10.5 First derivative method of finding local extremum values ..... 292
10.6 Second derivative test for finding local maxima and minima ..... 298
10.7 Higher order derivative test for finding local maxima and minima ..... 299
10.8 Absolute maxima and absolute minima ..... 304
10.9 Absolute minimum value ..... 304
10.10 Solution of practical problems ..... 311
10.11 Cost revenues and profit functions ..... 324
10.12 Demand function ..... 324
10.13 Supply function ..... 324
10.14 Profit function ..... 324
10.15 Marginal revenue, cost and profit functions ..... 324
10.16 Optimization of economic functions ..... 325
10.17 Minimisation (maximization) of total cost, marginal cost and average ..... cost
10.18 Maximization of total revenue and marginal revenue
326
326
10.19 Problems based on optimization of economic functions ..... 327
10.20 Profit function and its maximization ..... 333
Exercise ..... 337
Question Bank (Model Test Paper)
Question Paper339-346
Log Antilog Tables ..... 347-352


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