SANKALCHAND PATEL UNIVERSITY
।। अथातो ज्ञानजिज्ञासा ।।

FACULTY OF MANAGEMENT STUDIES

Bachelor of Business Administration (Sem.-I)
Effective from Academic Year 2016-17

Subject Code: 1MS1010106	Subject Title: Basic Mathematics

1. Course Objectives:

This course aims at developing understanding of mathematical concepts in solving business related problems. The course serves as a good foundation for further studies in management, accounting, marketing and finance.

2. Teaching Scheme (Hours per week)

Lecture (Hrs.)	Tutorial	Practical	Credit	Evaluation Scheme (Marks)		Total
				University Assessment	Continuous Assessment	
4	-	-	4	70	30	100

3. Syllabus:

Module No.	Contents	Total Hours	Weight
1	Set Theory: Sets, Types of Sets, Subject, Power Set, Null Set, Universal Set, Equality of Two Sets, Complement of A Set, Union and Intersection of Sets, Different of Two Sets, Venn Diagram Law of Algebra of Sets, De Morgan Laws, Cartesian Product of Two Sets and Number of Elements in A Finite Set.	13	25%
2	Determinant and Matrix: Meaning of Matrix and Types of Matrices- Null Matrix, Square Matrix. Identity Matrix, Symmetric Matrix and Skew Symmetric Matrix, Transpose of A Matrix, Orthogonal Matrix, Addition, Subtraction and Multiplication of Matrices, Determinants and Their Basic Properties (Without Proof), Singular and Non Singular Matrices, Inverse of A Matrix, Ad Joint of A Matrix, Solution of Simultaneous Equations (For Two and Three Variables Only) Using Inverse of Matrix.	14	25%
3	Sequences: Introduction, Types of Sequence, Arithmetic Progression (A.P), Geometric Progression (G.P). Series : Introduction, Types of Series, Arithmetic Series (A.P) Permutation, Combinations: Fundamental Principle of Counting, Permutation as An Arrangement and Combination as Selection, Meaning Of P (N, R) And C (N, R), Simple Applications.	13	25%

4	Co-Ordinate Geometry: Co-Ordinate of Points, Slope and Intercepts of A Straight Line, Equation of A Straight Line, Different Forms of Equations of A Straight Line - (1) $Y-Y_1 / Y_1-Y_2= X-X_1 / X_1-X_2$. (2) $Y-Y_1=M(X-X_1)$. (3) $Y = Mx + C$ (4) $X/A + Y/B = 1$. General Equation of A Straight Line, Concurrent Lines, Angle Between Two Straight Lines, Distance Between Two Point's Area of A Triangle and Quadrilateral, Collinearly of Three Points.	13	25%

4. Suggested Readings

Books:

1. V. K. Kapoor: Business Mathematics,Sultan Chand & Sons, New Delhi.
2. R. G. D. Allen: Business Mathematics, Pitamber publication house, New Delhi.
3. N. D. Vohra: Quantitative Techniques in Management, Tata MacGraw –Hill Publishing Company, New Delhi.
4. Soni, Sharma and Saxena: Elements of Business Mathematics, Pitamber publication house, New Delhi.
5. J. K. Sharma: Mathematics for Management and Computer Applications, Galgotia Private Limited, New Delhi.