Bachelor of Business Administration (B.B.A.)			Semester - I
Course Title: Business Mathematics	Course Code:		Type of Course: MDC
Credit: 04	Theory: 04 Hours	Practical: Nil	Teaching Hours: 60
Internal Marks: 50	External Marks: 50	Total Marks: 100	External Exam Time: 2 Hours

COURSE OUTCOMES:

- To sharpen mathematical abilities in making Business Decisions
- Improve logical and reasoning abilities

Pedagogy: Theory, Exercise

COURSE CONTENT Unit - 1 **Permutation and Combination** Hours: 09 Meaning and Definition of Permutations Permutations of different things Permutations of Similar things **Restricted Permutation** Meaning and Definition of Combinations Combinations of things taken some or all at a time Some Restricted Combinations Examples Unit – 2 Hours: 09 Arithmetic and Geometric Progression Arithmetic Progression (A.P.) **Definition of Arithmetic Progression** nth term and Sum of n terms of A.P. (With Proof) Geometric Progression (G.P.) **Definition of Geometric Progression** nth term and Sum of n terms of G.P. (With Proof) Examples Unit - 3 **Binomial Theorem** Hours: 09 Introduction of Binomial Theorem (Without Proof) **Characteristics of Binomial Theorem Expansion of Binomial** Position of Terms and Middle Terms **Binomial Coefficient** Examples Unit – 4 **Mathematical Induction** Hours: 09 Introductions of the Principle of Mathematical Induction Meaning of Sequence and Series Sigma Notation $\sum n$, $\sum n^2$, $\sum n^3$ (with proof) Examples



Unit – 5	Exponents and Surds	Hours: 09
	Exponents or index notation Exponent or Index Laws Zero and Negative Indices Surds Properties of Surds Multiplication and Division of Surds Examples	
Skill Develop	ment Activities: Practical Applications.	

REFERENCES

- Business Mathematics by Sancheti & Kapoor- Sultan & Chand
- Fundamental of Mathematics and Statistics by V.K. Kapoor and S. C. Gupta: Sultan & Chand
- Numerical Analysis by V. N. Vedmurthi