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: 2½ 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	**Arithmetic and Geometric Progression**	Hours: 09
	Arithmetic Progression (A.P.) Definition of Arithmetic Progression n^{th} term and Sum of n terms of A.P. (With Proof) Geometric Progression (G.P.) Definition of Geometric Progression n^{th} 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 Development 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