

<b>Name of Faculty</b>	:	Faculty of Commerce and Management
<b>Name of Program</b>	:	Bachelor of Business Administration (B.B.A)
<b>Course Code</b>	:	1BMB01
<b>Course Title</b>	:	Basic Mathematics
<b>Type of Course</b>	:	Basic Science (BS)
<b>Year of Introduction</b>	:	2023-24

<b>Prerequisite</b>	:	-
<b>Course Objective</b>	:	Set operation, Geometrical representation
<b>Course Outcomes</b>	:	At the end of this course, students will be able to:
	CO1	Determine whether a relation is function or not also their types
	CO2	Formulate Limit, Continuity and Differentiability. Determine the existence of limit
	CO3	Understand and be able to apply basic definitions and concepts in set. Understand Relation between sets.
	CO4	Be able to find the length of a line Understand the relationship between parallel and perpendicular lines Be able to find the equation of a line that passes through a given point and is parallel or perpendicular to a given line

### Teaching and Examination Scheme

Teaching Scheme (Contact Hours)			Credits	Examination Marks				
L	T	P		SEE	CIA	SEE	CIA	Total Marks
4	0	0	0	100	50	00	00	150

*Legends: L-Lecture; T-Tutorial/Teacher Guided Theory Practice; P - Practical, C - Credit, SEE - Semester End Examination, CIA - Continuous Internal Assessment (It consists of Assignments/Seminars/Presentations/MCQ Tests, etc.)*

### Course Content

Unit No.	Topics	Teaching Hours	Weightage (%)	Mapping with COs
1	<b>Function</b> Definition of Function, Domain, Co domain, Range, Types of Functions, Application of function in commerce.	10	15%	CO1
2	<b>Limit and Continuity</b> Informal Idea of Limit, Definition, Basic Concepts, Working rules to evaluate limits. Indeterminate	15	25%	CO2

	forms, Standard rules of Limits. Continuity & Discontinuity of a function.			
3	<b>Set Theory, Permutation and Combination</b> Basic Concepts sets, Type of sets, Set Operations, Venn Diagram. Cardinality of a set, Cartesian product of two sets, Applications of set theory. Introduction to permutation and combination, Fundamental principle of counting, Simple properties and restricted combination. Applications of Permutation and Combination..	15	25%	CO3
4	<b>Co-ordinate Geometry</b> Coordinate Geometry Straight line (Two-point form) and slope of straight line Slope point form, Intercept form, General form of line Condition of parallel and perpendicular lines, Equations of Parallel lines and Perpendicular lines to the given lines Angle between two lines, Equation of circle with center and Radius. , General equation of circle.	20	35%	CO4

Suggested Distribution of Theory Marks Using Bloom's Taxonomy						
Level	Remembrance	Understanding	Application	Analyse	Evaluate	Create
<b>Weightage</b>	15	15	20	15	20	15

NOTE: This specification table shall be treated as a general guideline for the students and the teachers. The actual distribution of marks in the question paper may vary slightly from above table.

#### Reference Books

Sr. No.	Name of Reference Books
1	Shah J C & Joshi RK, Business Mathematics
2	Raghavachari M, Mathematics for Management An Introduction, Tata Mc Graw Hill
3	Singh J K, , Business Mathematics, Himalaya Publishing House.

#### List of Journals / Periodicals / Magazines / Newspapers / Web resources, etc

Sr. No.	Name of Journals / Periodicals / Magazines / Newspapers / Web resources, etc
1	<a href="https://www.nptel.ac.in">https://www.nptel.ac.in</a>
2	<a href="https://www.khanacademy.com">https://www.khanacademy.com</a>
3	<a href="https://tutorial.math.lamar.edu/classes/calci/calci.aspx">https://tutorial.math.lamar.edu/classes/calci/calci.aspx</a>