NIRMA UNIVERSITY
Institute of Commerce
Bachelor of Commerce (Hons.)
[B.Com. (Hons.)]

Semester – I

L	T	P	C
3	1	-	4

Course Code	GE1
Course Title	**BUSINESS MATHEMATICS**

Course Learning Outcomes (CLO):
At the end of the course, students should be able to:
1. understand basic mathematical concepts and techniques.
2. apply basic mathematical concepts and techniques for solving business problems.

Syllabus	Teaching Hours
Unit I: Basic Arithmetic • Simple Interest • Compound Interest • Discounting • Arithmetic Progression & Geometric Progression	10
Unit II: Set Theory and Applications • Introduction to set theory • Functions and mapping • Relations	7
Unit III: Permutations and Combination • Introduction to permutations and combination • Meaning of Permutation and combination • Applications of Permutation and combination	8
Unit IV: Matrices and Determinants • Types of matrices • Algebra of matrices and determinants • Inverse of a matrix • Solving system of equations using inverse method and Cramer's Rule • Business applications	10

Unit V: Linear Programming
    •   Formulation of Linear Programming Problems
    •   Graphical Solution to two variable Linear Programming Problems
    •   Solver application using MS Excel
	10

Suggested Readings:

1 JK, S. (2014). *Business Mathematics: Theory and Application.* Delhi: Ane Books Pvt. Ltd.

2 K, T. (2017). *Business Mathematics.* New Delhi: Pearson Publications.

3 KL, S. (2010). *Business Mathematics.* New Delhi: Himalaya Publishing House.

4 Padmalochan, H. (2016). *A Textbook of Business Mathematics.* New Delhi: Sultan Chand Publishing .

5 Sancheti D C, K. V. (2017). *Business Mathematics.* Delhi: Sultan Chand Publication.

w.e.f. Academic Year 2017-18 and onwards