Course code	Course Title	Type	Marks	Credit	Lectures
UACFMIN11001 & UMNGMIN11001	BUSINESS MATHEMATICS-I	Minor	75	4	50

Objective: *The objective of this course is to familiarize the students with the basic mathematical tools and their applications to business and economic situations.*

Course Outcome: *On successful completion, the students will be able to apply various mathematical tools to make relevant business decisions.*

Contents:

Unit I: Arithmetic (Lectures 12)

    (a) Ratio and Proportion

    (b) Variation

    (c) Permutation and Combination

    (d) Arithmetic and Geometric Progression

    (e) Mathematical Reasoning- Basic Application

Unit II: Algebra (Lectures 13)

(a) Indices
(b) Surds
(c) Binomial Theorem
(d) Logarithm
(e) Theory of Quadratic Equation

Unit III: Mathematics of Finance (Lectures 13)

(a) Compounding Interest: Compounding and discounting of a sum using different types of rates.
(b) Annuities: Types of annuities, like ordinary, due, deferred, continuous, perpetual, and their future and present values using different types of rates of interest. Depreciation of Assets.
(c) Concept and Calculation of Equated Monthly Installment (EMI).

Unit IV: Coordinate Geometry (Lectures: 12)

(a) Concepts of coordinate geometry, graphs of linear equations. Distance formula. Section formula (internal division)
(b) Straight Line

Suggested Readings:

1. Budnick, P. Applied Mathematics. McGraw Hill Education.
2. R.G.D. Allen, Mathematical Analysis For Economists
3. Ayres, Frank Jr. Schaum's Outlines Series: Theory and Problems of Mathematics of Finance. McGraw Hill Education.
4. N.G. Das & J.K Das, Business Mathematics &Statistics
5. Thukral, J.K., Mathematics for Business Studies.
6. Vohra, N.D., Quantitative Techniques in Management. McGraw Hill Education.
7. Soni, R.S,. Business Mathematics. Ane Books, NewDelhi.
8. Singh J. K., Business Mathematics. Himalaya Publishing House.
9. S.K. Nag, Business Mathematics & Statistics, Kalyani Publisher.
10. S.N. Dey, Business Mathematics, Chhaya Prakashani.
11. R.K. Ghosh and S. Saha, Business Mathematics and Statistics, New Central Book Agency (P) Ltd.
12. Fundamentals of Business Mathematics and Statistics, ICMAI Study Material.
13. Sri Harsha Baidya, Business Mathematics and Statistics, Tee Dee Publications (P) Ltd.