# SES'S L. S. RAHEJA COLLEGE OF ARTS AND COMMERCE (AUTONOMOUS)



Syllabus of Business Mathematics under NEP 2020 vertical (OE) with effect from 2024-25

**Programme:** B. Com (Financial Markets)

Department of Mathematics, Statistics and Computer

**HoD/Sr. Person of the Department:** Dr. Seema Ukidve

**Date of approval by the BoS:** 24/04/2024

**Approved by the Academic Council:** 29/04/2024

**Approved by the Governing Body:** 06/05/2024

| Program: B. Com (Financial Markets) | Semester: I |
|---|---|
| Course: : Business Mathematics<br>Academic Year:  2024-2025          Batch: 2024-2027 | Code:UGBFMIOE124 |

| Teaching Scheme | | | | Evaluation Scheme | |
|---|---|---|---|---|---|
| **Lectures** | **Practicals** | **Tutorials** | **Credits** | **Internal Continuous Assessment (ICA) (weightage)** | **Term End Examination (TEE) (weightage)** |
| 30 | Nil | Nil | 2 | 20 | 30 |

| Internal Component | | |
|---|---|---|
| **Class Test (Duration 30 Mins)** | **Presentation** | **Class Participation** |
| 10 | 5 | 5 |

**Learning Objectives:**
- To provide an overview to the students with the basic concepts involved in Mathematics.
- To apply the basics of Mathematical skills which are imperative in Economics and Management.

**Course Outcomes:**

After completion of the course, students would be able to:
- Illustrate the basic concepts of Share Market and Mutual Funds.
- Illustrate the knowledge of Maxima, Minima and applications in Economics.
- To understand the various issues involved in the collection, analysis and arriving at conclusive Decisions regarding quantitative data.

**Pedagogy:**
- Adaptive teaching methods.
- To invoke Computational thinking in problem solving.
- Classroom session with applications in MS-excel in Tutorial Lecture. 4. Students would be given project/field work better understanding of the concept

**Detailed Syllabus: (per session plan) Session Outline for Business Mathematics**
**Each lecture session would be of one hour duration (30 Sessions) (SEM -I)**

| Module | Module Content | Module Wise Pedagogy Used | Module Wise Duration |
|---|---|---|---|
| I | **Shares and Mutual Funds**<br>a. **Shares**: Concept of share, face value, market value, dividend, equity shares, Preferential shares, bonus shares, Right issue of Share, Split and Consolidation.<br><br>b. **Mutual Funds**: types of Mutual funds, Simple problems on calculation of Net income after considering entry load, dividend, change in Net Asset Value (N.A.V.) and exit load. Averaging price under the Systematic Investment Plan (S.I.P.)<br>systematic withdrawal plan (S.W.P.). | Classroom sessions with computational thinking. | 7+8 |
| II | **Interest and Annuity**<br>**Interest:** Simple interest, compound interest (nominal and effective rate of interest). Calculation involving up to four times periods.<br>**Annuity:** Annuity immediate and its present value, future value, equated monthly instalments (EMI), using reducing balance method and amortization of loans, stated annual rate and effective annual rate, perpetuity and its present value, simple problems involving up to 4 time periods<br>**Case study** | Classroom sessions with computational thinking. | 7+8 |

**Reference Books:**

- Business Mathematics D. C. Sancheti and V. K. Kapoor Sultan Chand & Sons, 2006

- Mathematics for Business Economics: J. D. Gupta, P. K. Gupta and Man Mohan, Tata Mc- Graw Hill Publishing Co. Ltd., 1987

- Schaum Series STATISTICS Murray Spiegel, Larry Stephens Mc Graw Hill Operations Research Gupta and Kapoor S. Chand & Sons Co. Statistical Methods S.G. Gupta S. Chand & Sons Co.4.

- Business Mathematics & Statistics B Aggarwal Ane Book Pvt. Limited

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**QUESTION PAPER PATTERN**

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**Details of Internal Continuous Assessment (ICA)**
**Internal Marks:** 20
- 1 Internal Test of 10 marks will be conducted.
- 1 Assignment of 10 Marks will be given.

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**Term End Examination Question Paper Pattern Total Marks: 30**

Q1 Answer any **three** out of the following Four questions (based on Module I)    5*3=15

Q2 Answer any **three** out of the following Four questions (Based on Module II)    5*3=15