

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



BOARD OF STUDIES: Mathematics, Statistics & Computer

PROGRAMME: B.COM (DIGITAL BUSINESS)

SEMESTER: II

**NOMENCLATURE OF THE COURSE: QUANTITATIVE
TECHNIQUES**

NEP Vertical: OPEN ELECTIVE

Credit: 2

(As Per Choice Based Credit System (under NEP 2020) with effect from the Academic Year 2025-26)



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|-----------------------------------|---------------------------------|
| Programme: | B.COM (DIGITAL BUSINESS) |
| Nomenclature of the Course | QUANTITATIVE TECHNIQUES |
| Total Marks | 50 |
| Semester: | II |
| Academic year | 2025 - 2026 |

LEARNING OBJECTIVES:

1. To equip students with fundamental quantitative techniques for data analysis, decision-making, and problem-solving in business and management.
2. To develop analytical skills in applying mathematical and statistical methods for real-world business and economic scenarios.

COURSE OUTCOMES:

After completion of the course, learners would be able to:

1. CO1: Apply quantitative techniques such as statistical analysis, probability, and optimization methods to solve business problems.
2. CO2: Develop decision-making abilities by interpreting numerical data and applying quantitative models in management and research.

Modules at a glance

| Sr. No | Module | No of Lectures |
|--------|--|----------------|
| 1 | Measures of Central Tendencies & Dispersion, Index Numbers | 15 |
| 2 | Elementary Financial Mathematics, Numerical Analysis | 15 |
| | Total | 30 |

| Module | Course Content | Andragogy | No of Lectures |
|--------|--|-----------|----------------|
| 1 | Measures of Central Tendencies & Dispersion, Index Numbers | | 15 |
| | <ul style="list-style-type: none"> ● Measures of Central Tendency: Mean (A.M, Weighted, Combined), Median and other positional averages (Calculation and graphical using Ogives), Mode (Calculation and Graphical using Histogram), Comparative analysis of all measures of Central Tendency. ● Measures of Dispersion: Range with CR(Co-Efficient Of Range), Quartiles & Quartile deviation with CQ (Co-Efficient Of Quartile), Mean Deviation from the mean with CMD (Co-Efficient Of Mean Deviation), Combined Mean, Standard deviation with CV (Co-Efficient Of Variation), Combined Standard Deviation. | | |

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|----------|---|--|----|
| | Index Number: Simple (Unweighted) Aggregative Method, Weighted Aggregative Method, Simple Average of Price Relatives, Weighted Average of Price Relatives, Chain base Index Numbers, Base Shifting, Cost of Living Index Number. | | |
| 2 | Elementary Financial Mathematics | | 15 |
| | <ul style="list-style-type: none"> ● Interest: Simple Interest, Interest compounded once and more than once a year. ● Annuity: Future and Present value of Immediate Annuity, Equated Monthly Instalments (EMI) using flat rate of interest and reducing balance method, Amortization of loans <p>Depreciation of Assets: Equated Monthly Installments (EMI)-using flat interest rate and reducing balance method.</p> | | |

SUGGESTED READINGS / REFERENCE BOOKS:

- Statistics of Management, Richard Levin & David S. Rubin, Prentice Hall of India, New Delhi.
- Fundamentals of Statistics, S C Gupta, Himalaya Publication House.
- Business Statistics, Bharadwaj, Excel Books, Delhi
- Business Mathematics, S.K. Singh & J.K. Singh, Brijwasi Book Distributor & Publisher
- Business Mathematics, D.C. Sancheti, V.K. Kapoor, Sultan Chand & Sons Publications, 2006.

QUESTION PAPER PATTERN

RUBRICS FOR CONTINUOUS EVALUATION

Internal Assessment (40% of 20 marks) - 8 Marks

Examination Pattern

A) Continuous Internal Evaluation (CIE):

| Sr. No. | Particular | Marks |
|----------------|---|--------------|
| 1 | 2 Presentation/Project/Assignment/Case Study of 10 marks each | 20 |

B) Semester End Examination (SEE):**Question Paper Pattern**

| Question No | Particular | Marks |
|--------------------|--|--------------|
| Q 1 | Two questions to be asked: A or B Any One to be attempted From Module-I | 15 Marks |
| Q 2 | Two questions to be asked: A or B Any One to be attempted From Module-II | 15 Marks |