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

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

Programme: B.Com (Banking and Insurance)

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

IQAC

Program: B. Com (Banking and Insurance)					Semester: II	
Course: Business Statistics **Academic Year: 2024-2025 Batch: 2024-2027**					**Code: UGBBIIIOE124**	
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 Statistics.
- To apply the basics of Statistical skills which are imperative in Economics and Management.
- To take well-informed decisions in predictable and uncertain situations.

Learning Outcomes:
After completion of the course, students would be able.
- To understand the various issues involved in the collection, analysis and arriving at conclusive Decisions regarding quantitative data.
- To understand and appreciate the practical relevance of various basic statistical tools in the Field of finance and economics.

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

Module	Module Content	Module Wise Pedagogy Used	Module Wise Duration
I	**a. Descriptive Statistics:** I) **Measures of Central Tendency:** Definition of Average, Types of Averages: Arithmetic Mean, Combined and Weighted arithmetic mean, median, and Mode for raw data, Ungrouped frequency. distribution, grouped frequency distribution. Quartiles, Deciles and Percentiles. II) **Measures of Dispersions:** Concept of dispersion. Absolute and relative measures of dispersion, Range, Quartile Deviation, Mean Deviation, Standard Deviation and corresponding coefficients. Combined Standard deviation. Use of Excel solving problems	Classroom sessions with computational thinking.	7+8
II	**Correlation and regression:** I) **Correlation**: Concept of correlation, positive and negative correlation, Karl Pearson's Coefficient of Correlation II) **Regression: meaning** of regression, two regression equations, Regression coefficients and properties III) **Probability Theory** Concept of random experiment/trial and possible outcomes; Sample Space and Discrete Sample Space; Events their types, Algebra of Events, Mutually Exclusive and Exhaustive Events, Complimentary events. i) Classical definition of Probability, Addition theorem (without proof), conditional probability.	Classroom sessions with computational thinking.	7+8

		ii) Independence of Events: P (A ∩ B) =P(A) P(B). Simple examples iii) Bayes Theorem		

Reference Books:

- Statistics for management Richard Levin, David S. Rubin, Sanjay Rastogi /Masoos Husain siddiqui. Pearson.

- *M. P. Chaudhary, Advanced Applied Mathematics*, Piyush Book Publication Pvt. Ltd. New Delhi, India, **2003**.ISBN:81-86548-64-5.

- Introduction to Probability and Statistics for Engineers and Scientists by Sheldon M. Ross

- Operations Research - An Introduction - By Hamdy A. Taha

- Introduction to Operations Research by Frederick S. Hillier, Gerald J. Lieberman and Bodhibrata Nag

QUESTION PAPER PATTERN

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.
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