# 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 (Accounting and Finance)

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 (Accounting and Finance)	Semester: II
Course: Business Statistics Academic Year: 2024-2025 Batch: 2024-2027	Code: UGBAFIIOE124

Teach	ning 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:**

- 1. To provide an overview to the students with the basic concepts involved in Statistics.
- 2. To apply the basics of Statistical skills which are imperative in Economics and Management.
- 3. To take well-informed decisions in predictable and uncertain situations.

#### **Learning Outcomes:**

After completion of the course, students would be able.

- 1. To understand the various issues involved in the collection, analysis and arriving at conclusive Decisions regarding quantitative data.
- 2. To understand and appreciate the practical relevance of various basic statistical tools in the Field of finance and economics.

#### **Pedagogy:**

- 1. Adaptive teaching methods.
- 2. To invoke Computational thinking in problem solving.
- 3. 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 Duratio n
I	<ul> <li>a. Descriptive Statistics:</li> <li>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.</li> <li>distribution, grouped frequency distribution. Quartiles, Deciles and Percentiles.</li> <li>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.</li> <li>Use of Excel solving problems</li> </ul>	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: $P(A \cap B) = P(A)$	
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