SES'S L. S. RAHEJA COLLEGE OF ARTS AND COMMERCE

(AUTONOMOUS)

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

Programme: Bachelor of Arts in Multimedia and Mass Communication

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: Bachelor of Arts in Multimedia and Mass Communication				Semester: I	
Course: Statistics **Academic Year: 2024-2025** **Batch: 2024-2027**				Code:UGBAMMCIOE324	

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:
1. To introduce the technique of data collection and its presentation.
2. To emphasize the need for numerical summary measures for data analysis.

Course Outcomes:
- Possess knowledge of the various summary measures of location (averages) used for data analysis and the basis of their selection.
- Acquire the skill to select appropriate methods to present data.
- Be able to select and calculate appropriate averages to represent data sets.
- Hold the knowledge to select and calculate appropriate measures of dispersion for data sets.
- Gain the knowledge about the use of statistical tools to carry out elementary categorical data analysis.

Pedagogy: The objective of the course is to encourage students to learn and appreciate the use of the various tools of Statistics with regard to scientific management in businesses.

Hence,

- Adaptive teaching methods.
- To invoke Computational thinking in problem solving.
- Classroom session with applications in MS-excel in Lecture.
- Students would be given project/field work for better understanding of the concepts.

Module	Module Content	Module Wise Pedagogy Used	Module Wise Duration
	Detailed Syllabus: (per session plan) Session Outline for Statistics **Each lecture session would be of one hour duration (30 Sessions)**		

Module	Module Content	Module Wise Pedagogy Used	Module Wise Duration
I	**Introduction and Descriptive Statistics:** **Descriptive Statistics:** I) **Measures of Central Tendency:** De function 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. **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.	Classroom sessions with computational thinking	7+8
II	**Use of excel in solving problems.** **Data Collection and Types of Data:** Population and Sample, Types of Sampling, Scale of Measurement, Sources of Data Methods of Data Collection, Types of Data. **Case study**	Classroom sessions with computational thinking	7+8

Reference Books:
1. Goon A.M., Gupta M.K., Dasgupta B. Fundamentals of Statistics, Volume I, The World Press Private Limited, Calcutta. Fifth edition.
2. Kothari, C.R.: Research Methodology, Methods and Techniques, Wiley Eastern Limited. First Edition.
3. Shah R.J.:Descriptive Statistics, Seth Publications. Eighth edition.
4. Spiegel, M.R.: Theory and Problems of Statistics, Schaum's Publishing Series. Tata McGraw-Hill. First edition.
5. Welling, Khandeparkar, Pawar, Naralkar : Descriptive Statistics : Manan Prakashan.
6. *M. P. Chaudhary , Advanced Applied Mathematics*, Piyush Book Publication Pvt. Ltd. New Delhi, India, **2003**.ISBN:81-86548-64-5

<center>**QUESTION PAPER PATTERN**</center>

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