

GUJARAT UNIVERSITY
B. COM. (HONS)
SEMESTER –I
EXPLORATORY STATISTICS PAPER -1 (MAJOR)
COURSE CODE: DSC-C STA 111 D
CREDIT MARK DISTRIBUTION – 04
AS PER NEP 2020 (To be effective from June 2023)

Lecture 04 Hours

Tutorial – 00

Practicum – 00

COURSE OBJECTIVES

- The objective of this course is to enable the student to understand how to collect, classify, summarize and present the data effectively.
- To enable students to understand the basic concepts of average and variability.

- **PRE – REQUISITE**
Students should have basic understanding of Data and should have a logical thinking.
- **CO – REQUISITE:**
Student need to have basic idea of data collection and sampling techniques

COURSE OUTCOMES

- Understanding the basic concept of Statistics.
- Observing the data from statistical concept angel.
- Get awareness about the fundamentals of Statistics.
- Will be able to understand the importance of basic techniques of statistics.
- Get awareness about the modern techniques of statistics by teaching learning process.

UNIT	CONTENT	WEIGHTAGE
1	Data types and Collection of Data: <ul style="list-style-type: none">➤ Introduction of Statistics➤ Collection of Data➤ Types of primary data collection➤ Sources of Secondary data collection	25%

	<ul style="list-style-type: none"> ➤ Validity of Data ➤ Classification of Data ➤ Types of Classification 	
2	Presentation of Data <ul style="list-style-type: none"> ➤ Tabulation: Different parts of Table, Type of Table _Simple and Complex (upto 3 variables) with simple examples. ➤ Charts related to Qualitative data (without Frequency): Line Charts, Bar charts, Pie charts. ➤ Charts related to Quantitative data (with frequency): Histogram, frequency polygon, Frequency Curve, Cumulative Frequency Curve. 	^{25%} 2 / 7
3	Measures of Central Tendency: <ul style="list-style-type: none"> ➤ Definition of Central Tendency ➤ Criteria for an ideal measure of Central Tendency ➤ Measurement of Central Tendency: Mean, Median, Mode-their properties, application, Limitation and examples. ➤ Combined Arithmetic Mean, Concept of Harmonic and Geometric Mean. 	25%
4	Measures of Dispersion : <ul style="list-style-type: none"> ➤ Definition of Dispersion ➤ Criteria for an ideal measure of Dispersion ➤ Different Measurement of Dispersion_ Range, Quartile Deviation, Mean Deviation, Standard deviation their properties, application, Limitation and examples ➤ Calculation of SD for ungroup and group data, Properties of SD and examples related to properties of SD, Combined SD. ➤ Concept of Coefficient of Variation and its uses. 	25%

Pedagogical Tools:

- Classroom Lectures and discussion
- Problem Solving
- Tutorial
- Group Discussion
- Seminar
- Assignments

MODE OF EVALUATION

Evaluation will be divided in two parts.

- **External:** Semester end Examination will be conducted by the Gujarat University of
50 Marks
- **Internal:** Internal Evaluation of 50 marks will be decided by the colleges / Institutes/
University departments as per the instruction given by the University time
to time.

FBLD (Flip Blended Learning Design Template)

- Any One Unit from the above syllabus can be discussed by the faculty through online mode.
- Online mode can be SWAYAM MOOC Course or any other suggested by the UGC or Gujarat University.

REFERENCE BOOKS:

1. An outline of Statistics theory: Goon, Gupta and Dasgupta
2. Business Statistics: Sancheti & Kapoor
3. Fundamental of Statistics: D. N. Elhance
4. Statistics of Management: Levin and Rubin
5. Fundamentals of Mathematical Statistics: Gupta and Kapoor
6. Statistics: David Freedman, Robert Pisani, Roger Purves
7. Naked Statistics: Stripping the Dread from the Data: Charles Wheelan
8. The Visual Display of Quantitative Information: Edward Tufte

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