GUJARAT UNIVERSITY

U.G. B. COM./B.A (HONS)
SEMESTER – 3 (SEC)
STATISTICAL ANALYSIS THROUGH EXCEL
COURSE CODE: SEC STA 236
CREDIT MARK DISTRIBUTION – 02
AS PER NEP 2020 (To be effective from June 2024)

Lecture -2Hrs
Tutorial – 1
Practical –1

COURSE OBJECTIVES

Statistical analysis through Excel is a course which provides knowledge regarding data analysis using functions of Excel. It shows beauty of statistical tools which are predefined in excel and used to sort information as well as to extract meaning for large datasets.

PRE-REQUISITE

Knowledge about various commonly used functions of statistics like Summation, Average, Standard Deviation, Range etc. is required for the course. In many institutes, Basic of Descriptive statistics is already introduced in previous semester. Basic concept of graphs is available in syllabus of 10^{th} and 12^{th} standard which can help them to know nature of data or its trend using charts on excel. These statistical tools are very much helpful for the sector which deals with metadata. Excel allows to use functions and to ask questions about data without writing complicated formulas. Data can be analyzed through normal language. Functions are very simple to understand. Topics which are covered are just essence of statistical tools for the representation of data. It touches few important points of descriptive statistics. In excel, series of numeric data can be displayed as well as different charts can be applied to same data which helps to take decision about nature of data. It makes easier to understand large quantities of data and the relationship between different series of data.

CO-REQUISITE

The learner should understand mathematical formulas and symbols. They should have knowledge simple commands of Microsoft Excel.

COURSE OUTCOMES

- This section touches few but important part of descriptive statistics; it is providing basic information relating to the statistics in Excel. Thus, the students will have proper understanding of the subject in depth.
- It helps them to learn that how excel make complex metadata easy to evaluate.
- It helps the learner to analyze data in computer using Excel which can further help them in future to fulfill their job perspective in Commerce or for further study.

Unit	Content	Weightage
1	➢ Basic Introduction to Excel Brief explanation of Central Tendency ➢ Use of Excel to find Central Tendency 1. Mean 2. Median 3. Mode ➢ Use of Excel to plot Scatter diagram Brief explanation of Correlation 1. Positive Correlation a) Perfect positive b) Partial Positive 2. Negative Correlation a) Perfect Negative b) Partial Negative 3. No Correlation Simple examples to solve	25 %
2	➢ Use of Excel for Frequency Distribution Brief explanation of frequency distribution 1. Histogram 2. Polygon 3. Less than type curve 4. More than type curve ➢ Use of Excel in Skewness Brief explanation of Skewness 1. Positive Skewness 2. Negative Skewness 3. Symmetricity Simple examples to solve	25 %

MODE OF EVALUATION

Evaluation will be divided in two parts.

➢ External: SEC will be conducted by the Gujarat University of 50% weightage

➢ Internal: Internal Evaluation of 25 marks will be decided by the colleges / Institutes/ University departments as per the instruction given by the University from 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. "Excel for Beginners" M.L. Humphrey
2. "Microsoft Excel Formulas and Functions (Office 2021 and Microsoft 365)" by Paul McFedries,
   Pearson
3. "Statistical Methods" by S.P. Gupta (published by Sultan Chand & Sons) 3. "Business Statistics" by J.K. Sharma (published by Pearson India)
4. "Excel Statistics : A Quick Guide", By Neil J. Salkind
5. "Statistical Data Analysis using MS-Excel" by B. J. Kore