Course: VEC
Practical on Descriptive Statistics

Semester: I	Credits: 2	Subject Code:BSVECPDS2301	Lectures: 60

Course Outcomes:

At the end of the course the learner will be able to:
- CO1 - Tabulate and make frequency distribution of the given data using various graphical and diagrammatic techniques
- CO2 - To compute various measures of central tendency, dispersion.
- CO3 - To calculate and interpret measures of skewness and kurtosis.
- CO4 - Analyze the relationship between two variables using scatter plot. Compute and interpret coefficient of correlation.

Unit 1: Summary Statistics I	30

- Tabulation and construction of frequency distribution.(Use of at least two data sets more than 50 observations- each for constructing frequency distribution)
- Diagrammatic and graphical representation using EXCEL and data interpretation. (problems on the basis of SET and NET examination in Paper I to be taken)
- Summary statistics for ungrouped data (Problems based on central tendency) (Also using EXCEL)
- Summary statistics for ungrouped data (Problems based on dispersion) (Also using EXCEL)
- Summary statistics for grouped frequency distribution. (Problems based on central tendency) (Also using EXCEL)
- Summary statistics for grouped frequency distribution. (Problems based on dispersion) (Also using EXCEL)

Unit 2: Summary Statistics II	30

- Summary statistics (Problem solving using moments up to order four). (Also using EXCEL)
- Summary statistics (Problem solving using skewness) (Also using EXCEL)
- Summary statistics (Problem solving using kurtosis). (Also using EXCEL)
- To draw a scatter plot using MS-EXCEL spreadsheet. To find correlation coefficient and interpret the results (Also using EXCEL)
- Assignments based on measures of central, dispersion and moments.
- Assignments based on measures of skewness, kurtosis and correlation.

Recommended Text Books:

- Gupta S. C. and Kapoor V. K. 1987, *Fundamentals of Applied Statistics (3rd Edition)* S. Chand and Sons, New Delhi.
- Sarma K.V.S. 2001 *Statistics Made Simple. Do it Yourself on P.C.* Prentice Hall

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Reference Books:

- Agarwal B. L., *Programmed Statistics*, New Age International Publishers.
- Freund J.E., *Modern Elementary Statistics*, Pearson Publication, 2005.
- George W. Snedecor, William G, Cochran, *Statistical Methods*, John Wiley & sons.
- Gupta and Kapoor, *Fundamentals of Applied Statistics(3rd Edition)*, S. Chand And Sons, New Delhi, 1987..
- Kennedy and Gentle, *An Introductory Statistics*.
- Mukhopadhyay P. *Mathematical Statistics (3rd Edition)*, Books And Allied (P), Ltd 2015.

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