Exam.Code:5001
Sub. Code: 10216

2125

NEP U.G. Common Skill Enhancement Course
First Semester
Statistics
STA-SEC1: Statistical Data Analysis Using MS-Excel

Time allowed: 3 Hours Max. Marks: 40

NOTE: Attempt five questions in all, including Question No. I which is compulsory and selecting two questions from each Unit. A simple non-programmable calculator is allowed.

x-x-x

1. Answer the following:-
   a) What do you mean by 'Page Orientation' in Excel?
   b) What is Excel's 'Format Painter' feature?
   c) Explain the difference between a formula and a function in Excel?
   d) What does the term 'Page Break' in Excel mean? Why are page breaks important in Excel? Can page breaks be applied both horizontally and vertically?
   e) What do you mean by frequency distribution? Name the inbuilt Excel functions which are used for the same.
   f) What do you mean by ogive?
   g) What are the properties of the regression coefficient?
   h) Write the merits of median over arithmetic mean. Also state the empirical relationship between mean, median and mode. **(8×1)**

UNIT - I

2. (a) Define 'workbook' and 'worksheet', in Excel. Write a note on the basic operations which are performed on rows and columns in a worksheet.
   (b) What do you mean by 'number formatting', and briefly describe the various types of number formatting used in Excel. **(4, 4)**

3. (a) Define sorting and filtering of data in an Excel sheet and also explain it.
   (b) (i) Describe the steps to print an Excel worksheet with proper settings.
   (ii) Explain the steps to 'Find and Replace' data in an Excel worksheet. Why is 'Find and Replace' important in Excel? **(4, 4)**

4. a) Write a note on cell formatting of cell data. Also explain conditional formatting.
   b) What do you mean by transposing, freezing and resizing rows and columns of a worksheet, and how are these performed in Excel? **(4, 4)**

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UNIT - II

5. What is meant by correlation? Explain the method of computing the product moment correlation coefficient. Compute the product moment correlation coefficient for the following data and comment on the result. Also, describe how it is computed using Excel's inbuilt function.

Experience (X)	16	12	18	4	3	10	5	12
Performance (Y)	23	22	24	17	19	20	18	21

(8)

6. What do you mean by 'dispersion'? Write a note on different absolute and relative measures of dispersion. Compute the standard deviation and coefficient of variation of household size based on the following frequency distribution of 500 households covered in a sample survey. Also give the inbuilt function for sample standard deviation and coefficient of variation in Excel.

Household Size	1	2	3	4	5	6	7	8
No. of Households	92	49	52	82	102	60	35	28

(8)

7. (a) Define skewness and kurtosis. Write different measures of skewness and kurtosis. Give the Excel's inbuilt function to compute skewness and kurtosis. Calculate the coefficient of skewness and kurtosis based on moments for the following data of haemoglobin levels in 10 children who fed on a protein supplement diet.

   Haemoglobin levels: 11.4, 12.2, 12.3, 12.1, 11.2, 12.7, 12.3, 12.0, 10.2, 13.6.

   (b) Describe the various methods of diagrammatical and graphical representation of statistical data and also explain their construction in Excel. **(5, 3)**

x-x-x