

S.D.E.

M.B.A. Sem-I (2013 Course) : WINTER - 2018

SUBJECT : STATISTICAL TECHNIQUES

Day : Tuesday
Date : 04/12/2018

W-2018-4545

Time : 10.00 AM TO 1.00 PM
Max. Marks : 70

N. B. ;

- 1) Attempt **ANY THREE** questions from Section – I and attempt **ANY TWO** questions from Section – II.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Answers to both the sections should be written in **SEPARATE** answer books.
 - 4) Use of non-programmable calculator is **ALLOWED**.
 - 5) Graph papers will be provided if necessary.
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SECTION - I

- Q. 1** Explain briefly the various methods that we use for graphical representation of frequency distribution. (14)
- Q. 2** Discuss the strong and weak points of various Measures of Central Tendency. (14)
- Q. 3** What do you mean by Correlation? Explain the difference between Karl Pearson's Correlation Coefficient and Rank Correlation Coefficient. (14)
- Q. 4** The lines of regression of a bivariate population are: (14)
 $8x - 10y + 66 = 0$ and $40x - 18y = 214$
The variance of x is 9.
Find :
i) The mean values of x and y
ii) Correlation coefficient between x and y
iii) Standard deviation of y
- Q. 5** Write short notes on **ANY TWO** of the following: (14)
a) Baye's Theorem
b) Decision Trees
c) Need for classifying Data
d) Coefficient of Determination

P. T. O.

SECTION - II

Q. 6 “Statistics is a body of methods for making wide decisions in the face of uncertainty”. Examine. **(14)**

Q. 7 Calculate the mean deviation from the median for the following data: **(14)**

Marks less than	80	70	60	50	40	30	20	10
No. of Students	100	90	80	60	32	20	13	5

Q. 8 A Committee of four persons is to be appointed from three officers of the production department, four officers of the purchase department, two officers of the sales department and one chartered accountant. **(14)**

Find the Probability of forming the Committee in the following manner:

- i) There must be one from each category.
- ii) It should have at least one from the purchase department.
- iii) The chartered accountant must be in the committee.

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