

Seat No.	
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B.B.A. (Part - II) (Semester - III) Examination, April - 2015**STATISTICAL TECHNIQUES FOR BUSINESS (Paper - I)****Sub. Code : 43940****Day and Date : Tuesday, 28 - 04 - 2015****Total Marks : 40****Time : 03.00 p.m. to 05.00 p.m.**

- Instructions :**
- 1) All questions are compulsory.
 - 2) Figures to the right indicate full marks.
 - 3) Graph paper will be supplied on request.
 - 4) Use of non programmable calculator is allowed.

Q1) Attempt any two.**[14]**

- a) Define the terms: Sample and population. Explain stratified sampling method.
- b) Define mean and median. Calculate mean and median from the following data of heights in inches of a group of plants.
10, 30, 17, 21, 24, 24, 17, 16, 21, 24, 25, 24
- c) Define the terms correlation and correlation coefficient. Find coefficient of correlation between X and Y from the following data.

X	10	9	7	5	6	2
Y	3	4	10	13	23	8

Q2) Attempt any two.**[16]**

- a) Define Histogram. Draw a Histogram for the following data and locate mode from it.

Weekly wages	10-15	15-20	20-25	25-30	30-35	35-40
No. of workers	7	19	27	15	8	5

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- b) State the relationship between correlation coefficient and regression coefficients and verify them by using following data.

X	2	3	4	7	6
Y	10	7	3	1	2

- c) Explain measures of central tendency. Find the values of median and mode from the following data.

Class	10-20	20-30	30-40	40-50	50-60
Frequency	18	23	30	15	14

- d) Define Standard Deviation [S.D.]. For a group of 100 observations the mean and variance are 8 and 10.5 respectively. For 50 observations selected from these 100, the mean and variance are 10 and 4 respectively. Calculate the mean and S.D. for the other half.

Q3) Attempt any two.

[10]

- a) Interpret, if $r = +1$, $r = -1$, $r = 0$, where r is the correlation coefficient.
- b) The mean weight of 150 students in a class is 60 kgs. The mean weight of boys in the class is 70 kgs and that of girls is 55 kgs. Find the number of boys and number of girls in the class.
- c) Define M.D. about mean. Find M.D. about mean for the following data.

Values (X) : 35, 31, 29, 63, 55, 72, 37.

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