Seat
No.

B.B.A. (Part -II) (Semester-III) Examination, November - 2017
STATISTICAL TECHNIQUES FOR BUSINESS (Paper-I)
Sub. Code : 43940

Day and Date : Monday, 06 - 11 - 2017   Total Marks : 40
Time : 12.00 noon. to 2.00 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)   Explain the method to draw Histogram. Draw it for the following data
     and locate mode.

Daily salary	400-600	600-800	800-1000	1000-1200	1200-1400	1400-1600
No.of workers	4	10	19	12	4	1

b)   Define two regression coefficients. Write the relation between regression
     coefficients and correlation coefficient.

     Calculate karl Pearson's correlation coefficient for the following data.

X	6	2	8	4	7
Y	9	10	5	8	6

c)   Define Quartile deviation and its relative measure. Calculate quartile
     deviation and its coefficient for the data given below.

Daily wages(Rs.)	Below 50	50-70	70-90	90-110	Above 110
No of workers	14	22	28	12	8

Q2) Attempt any two. [16]

a) Define median . Write any four merits of median. Calculate median and mode for the data given below.

Age in years	0-10	10-20	20-30	30-40	40-50
No.of children	5	10	15	10	5

b) Define Standard deviation. Calculate S.D. and coefficient of variation for given frequency distribution.

x	1	2	3	4	5	6
f	5	8	10	4	3	2

c) Define Spearman's rank correlation coefficient.

Calculate rank correlation coefficient for following data.

Cost	35	38	43	30	54	68	70	92	56	43
Profit	51	37	48	62	69	73	51	73	70	92

d) What are the requirements of good measures of Dispersion. Define absolute and relative measures of dispersion. Write absolute and relative measures of range and mean deviation about mean.

Q3) Attempt any two. [10]

a) Write two equations of regression lines. For two variables X and Y, the regression equations are $10X + 3Y = 62$ and $6X + 5Y = 50$ find mean of X and Y.

b) The mean monthly salary of 77 workers in a certain factory is Rs.1560. The mean salary of 42 of them is Rs 1640. What is the mean salary of remaining 25 workers?

c) Define simple random sampling with and without replacement with example.