

Seat  
No.

Set A

**B.Com. (Part -II) (Semester - III) (CBCS) Examination**  
**March /April – 2024**



**College Name : Kamala College, Kolhapur**

**Subject Name : Business Statistics Paper-I**

**Subject Code: 73510**

**Total Marks: 50**

**Day and Date: Saturday, 20/04/2024**

**Period: 02 Hours**

**Time : 10.30 a.m. To 12.30 p.m.**

**Pages: 02**

**Instructions:**

1. Attempt any FIVE questions.
2. Use of a simple calculator is allowed.
3. Figures to the right indicate full marks.
4. Each question carries 10 marks.

Q1) Attempt any two of the following: [10]

- a) Explain Discrete and Continuous random variables.
- b) State empirical relation between mean, median, and mode. Use it to estimate the mode of the distribution whose mean is 46.5 and the median is 45.
- c) For certain data if the difference between upper and lower quartiles is 5.5 and the sum of them is 25 then find QD and Coefficient of QD.

Q2) Define Mean, Median, and Mode. Calculate the same for the following data.  
Sale: 12,25,30,15,15,20,13 [10]

Q3) What are the requirements of a good measure of dispersion? Calculate the Coefficient of Quartile deviation and Coefficient of Range for the following data

Daily wages (Rs.)	100-200	200-300	300-400	400-500	500-600	600-700
No. of workers	4	6	20	10	5	5

Q4) State absolute and relative measures of dispersion. Calculate the Range and standard deviation and their relative measures for the following data. [10]

X:	1	2	3	4	5	6	7	8	9
Freq:	8	10	11	16	20	25	15	9	6

Q5) Define Spearman's rank and Karl Pearson's correlation coefficient. Calculate Spearman's rank correlation coefficient (R) between the two kinds of assessment of graduate student's performance in a college and interpret. [10]

Name	A	B	C	D	E	F	G	H	I
Internal Marks (X)	51	68	73	46	50	65	47	38	60
External Marks (Y)	49	72	74	44	58	66	50	30	35

Q6) State the relation between regression coefficients and correlation coefficients Obtain equation of regression lines for following [10]

X	2	4	6	8	10
Y	5	7	9	8	11

Q7) Attempt any two of the following: [10]

a) Draw a pie diagram to represent the following data.

Classes	B.Com-I	B.Com-II	B.Com-III
No. of students	70	65	45

b) Explain SRSWR and SRSWOR.

c) Explain scatter diagram



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