

Seat No.	
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Set A
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**B.Com. (Part -II) (Semester - III) (CBCS) Examination**  
**Oct. /Nov. – 2023**

**College Name : Kamala College, Kolhapur**

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

**Subject Code : 73510**

**Total Marks: 50**

**Day and Date : Saturday, 02/12/2023**

**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) Difference between Primary data and Secondary data.
- b) State empirical relation between mean, median, and mode. Use it to estimate the mode of the distribution whose mean is 26.8 and the median is 27.6.
- c) For a certain data Range is 10 and the coefficient of Range is 0.20 find the smallest and largest value.

Q2) Define Mean, Median, and Mode. Calculate the same for the following data. [10]

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

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  
Sale: 12,25,30,15,15,20,13 [10]





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]

Roll No.	1	2	3	4	5	6	7	8	9
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	BCA-I	BCA-II	BCA-III
No. of students	70	65	45

b) Explain SRSWR and SRSWOR.

c) Interpret,  $r=+1$ ,  $r=-1$ ,  $r=0$ , where  $r$  is the correlation coefficient.



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