



**CB – 393**

**II Semester B.B.A. Examination, August/September 2023  
(CBCS) (Repeaters) (2014 – 15 and Onwards)  
BUSINESS ADMINISTRATION**

**Paper – 2.4 : Quantitative Methods for Business – II**

Time : 3 Hours

Max. Marks : 70

**Instruction :** Answers should be written only in **English**.

**SECTION – A**

Answer **any five** questions, **each** carries 2 marks.

**(5×2=10)**

1. a) State any two objectives of statistics.
- b) Define correlation.
- c) What are the uses of arithmetic mean ( $\bar{X}$ ) ?
- d) What is secondary data ?
- e) Define the term "Regression".
- f) What do you mean by a "Sample" ?
- g) What are ogive curves ?

**SECTION – B**

Answer **any three** questions, **each** carries 6 marks.

**(3×6=18)**

2. Briefly explain the types of correlation.
3. Calculate arithmetic mean of the following distribution :

Marks more than	10	20	30	40	50	60	70
No. of Students	100	87	62	48	36	20	8

P.T.O.



4. Ten students of a class obtained marks in a subject out of 100 as follows :

SI	Names	Marks
01	Babu	5
02	Bharath	10
03	Ravindra	20
04	Manu	25
05	Praveen Reddy	40
06	Chandan	42
07	Deepu	45
08	Mouli	48
09	Chethan (Dasa)	70
10	Gangadhar	80

Find standard deviation.

5. Calculate rank correlation from the following data :

Marks in GST	68	72	78	80	85	89	90	100
Marks in IT	95	92	80	70	60	50	30	40

6. Determine the mode for following.

Variable	38	40	42	44	46	48	50	52	45
Frequency	20	24	26	24	20	18	27	10	14

### SECTION – C

Answer **any three** questions from the following, **each** carries **14** marks. **(3×14=42)**

7. From the following data, calculate mode by using analysis of grouping table.

X	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70
Y	4	7	19	31	12	6



8. Which of the series is more consistent ?

CI	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70
Series A	10	18	32	40	22	18
Series B	18	22	40	32	18	10

9. Calculate Karl Pearson's coefficient of correlation between the age and weight of the children.

Age (Years)	1	2	3	4	5
Weight (kg)	3	4	6	7	12

10. The following table shows age and blood pressure of 6 persons. Obtain two regression equations and find expected blood pressure of a person whose age is 60 years.

Age (X)	52	45	36	72	65	47
Blood Pressure (Y)	90	80	85	80	78	60

11. Determine median value of the following series by graphic method and verify by formula.

Wages (Rs.)	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60
No. of Workers	4	6	10	10	25	22