



QP CODE: 23104605

Reg No : .....

Name : .....

**BBA DEGREE (CBCS) REGULAR/IMPROVEMENT/REAPPEARANCE EXAMINATIONS,  
FEBRUARY 2023  
First Semester**

Bachelor of Business Administration

**Complementary Course - BA1CMT04 - FUNDAMENTALS OF BUSINESS STATISTICS**

2017 Admission Onwards

AD08CD22

Time: 3 Hours

Max. Marks : 80

**Part A**

*Answer any **ten** questions.*

*Each question carries 2 marks.*

1. Define statistics as a plural noun.
2. What are the limitations of statistics?
3. What are the different parts of a table?
4. What is a pie diagram?
5. What are the important measures of central tendency?
6. How to find median in continuous series?
7. What do you understand by measures of dispersion?
8. Define coefficient of variation.
9. Define correlation.
10. What do you mean by regression?
11. Give two importance of time series.
12. What are the demerits of free hand method for studying trend?

(10×2=20)

**Part B**

*Answer any **six** questions.*

*Each question carries 5 marks.*

13. How does statistics help in administration?
14. Explain the importance of statistics in research.





15. What are the characteristics of classification?
16. Distinguish between less than ogive and more than ogive
17. Calculate arithmetic mean for the following data
- |           |   |    |   |   |   |   |
|-----------|---|----|---|---|---|---|
| Value     | 4 | 5  | 6 | 7 | 8 | 9 |
| Frequency | 8 | 10 | 9 | 6 | 4 | 3 |
18. Calculate the coefficient of correlation between x and y from the following data. No. of pairs of observation =15; sd of x = 3.01; sd of y = 3.03; covariance between x and y = 8.13
19. You are given the following data:  
Correlation between x and y = 0.66
- |      |    |    |
|------|----|----|
|      | x  | y  |
| Mean | 36 | 85 |
| sd   | 11 | 8  |
- (a) Find the two regression equations.  
(b) Estimate the value of x when y = 75.
20. Explain moving average method. How will you construct 3 yearly moving average method?
21. Explain the method of simple averages for obtaining indices of seasonal variations.

(6×5=30)

### Part C

Answer any **two** questions.

Each question carries **15** marks.

22. Production figures for a sugar factory are given below.

Year	Production
1970	12
1971	10
1972	14
1973	11
1974	13
1975	15
1976	16

- (a) Fit a straight line trend to the data.  
(b) Estimate the production for the years 1977 and 1979.
23. (a) Explain how mode is obtained graphically  
(b) From the following data compute mode.
- |            |           |           |           |           |           |           |           |
|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Class:     | 300 - 399 | 400 - 499 | 500 - 599 | 600 - 699 | 700 - 799 | 800 - 899 | 900 - 999 |
| Frequency: | 14        | 46        | 58        | 76        | 68        | 62        | 48        |





24. Obtain the rank correlation coefficient for the following data.

x:	68	64	75	50	64	80	75	40	55	64
y:	62	58	68	45	81	60	68	48	50	70

25. Name the factors which will decide whether primary data or secondary data are to be collected?

Describe the different methods of collecting data indicating the merits and demerits of each of them

(2×15=30)

