Reg No


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## BBA DEGREE (CBCS) EXAMINATION, DECEMBER 2018

First Semester
Bachelor of Business Administration
Complementary Course - BA1CMT04 - FUNDAMENTALS OF BUSINESS STATISTICS
2017 Admission (Reappearance)
735AD212
Maximum Marks: 80
Time: 3 Hours

## Part A

Answer any ten questions.
Each question carries 2 marks.

1. Define statistics.
2. Give any 4 characteristics of statistics.
3. What is primary data.
4. Give any two uses of diagram.
5. Give any two uses of average.
6. Following are the monthly income of eight families in a locality. $700,100,500,750,130,250,80,422$, find out arithmetic mean of their income.
7. The following values shows the age of eight students. Find median age

| Age: | 18 | 16 | 14 | 11 | 13 | 10 | 9 | 20 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

8. Calculate mode of the series $10,12,14,12,15,15,16,12,8,17$.
9. State some merits of rank correlation.
10. Find $b_{y x}$, if $3 x+2 y+4=0$ is the regression line of $y$ on $x$.
11. What do you mean by components of time series?
12. Explain semi average method.
$(10 \times 2=20)$

## Part B

Answer any six questions.
Each question carries 5 marks.
13. Explain the importance of statistics in business management.
14. Write a short note on misuse of statistics.
15. Distinguish between tabulation and classification.
16. Which are the commonly used frequency graphs? explain any two of them.
17. Distinguish between absolute and relative measures of dispersion.
18. What are the limits within which the correlation coefficient can vary? What are your inferences when $r=+1,-1$, and 0 .
19. Explain independent and dependent variable with example.
20. Explain trend. What are the various methods of studying trend?
21. Explain the method of simple averages for obtaining indices of seasonal variations.

## Part C

Answer any two questions.
Each question carries 15 marks.
22. Describe the classification methods based on attributes and class interval.
23. From the prices of the shares $A$ and $B$ given below, state which share has stable price.

| A | 20 | 22 | 17 | 23 | 26 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| B | 10 | 20 | 18 | 12 | 15 |

24. Find the coefficient of correlation from the following data.

| $\mathrm{x}:$ | 10.5 | 10.9 | 10.2 | 10.1 | 10.9 | 9.9 | 9.8 | 9.6 | 9.3 | 9.2 |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{y}:$ | 10.1 | 10.3 | 10 | 9.8 | 9.5 | 9.6 | 10.4 | 9.2 | 9.7 | 9.4 |

25. The following are the annual profits in thousands of rupees in an industrial concern. Use the method of least squares to fit a straight line trend and also estimate the profit in 1980

| Year | Profits |
| :---: | :---: |
| 1992 | 65 |
| 1993 | 77 |
| 1994 | 80 |
| 1995 | 70 |
| 1996 | 89 |
| 1997 | 95 |
| 1998 | 109 |
| 1999 | 102 |
| 2000 | 105 |

