BBA DEGREE (CBCS)EXAMINATION, DECEMBER 2018

First Semester

Bachelor of Business Administration

Complementary Course - BA1CMT04 - FUNDAMENTALS OF BUSINESS STATISTICS

2018 Admission only

94187FA2

Maximum Marks: 80   **Time: 3 Hours**

Part A

Answer any **ten** questions.

Each question carries **2** marks.

1. Define statistics as a singular noun.

2. What is the role of statistics in business management?

3. What is a questionnaire?

4. Give any two requisites of an ideal classification.

5. Write any two properties of average.

6. Why median is called a positional average?

7. If N = 10, $\bar{x}$ = 12, Σx^2 = 1530. Find, sd and variance.

8. The coefficient of variation of a distribution is 60%. and its sd is 12. Find out its mean.

9. What do you mean by coefficient of correlation?

10. What are the limitations of regression?

11. List out the components of time series.

12. What is irregular variation?

(10×2=20)

Part B

Answer any **six** questions.

Each question carries **5** marks.

13. How does statistics help in administration?

14. Discuss briefly the limitations of statistics.

15. What are the different parts of a table.

16. What are the features of diagram.

17. The mean marks in statistics of 100 students in a certain class is 72. The mean mark of 70 boys in the class was 75. Find the mean mark of girls in the class.

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. From the following data, estimate the yield of crops when the rainfall is 22cms.

	Yield	Rain fall
Mean	508.4	26.7
sd	36.8	4.7

20. Define trend. what are the uses of studying trend.

21. Explain the least square principle for fitting a trend line.

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **15** marks.

22. a) What are pie diagrams? Explain their uses and limitations.

b) Draw a pie diagram to the following data.

accident due to falling object- 8,falls - 4, machinary- 6, fire- 7, traffic- 5, cuts and bruises- 10

23. Calculate mode for the following data.

Marks above:	0	10	20	30	40	50	60	70	80	90
No. Of students:	80	77	72	65	55	43	28	16	10	8

24. Ten competitors in a beauty contest are ranked by three judjes in the following order. Use rank correlation coefficient to dicuss which pair of judges has the nearest approach to beauty.

First judge	1	5	4	8	9	6	10	7	3	2
Second judge	4	8	7	6	5	9	10	3	2	1
Third judge	6	7	8	1	5	10	9	2	3	4

25. Plot the following data on a graph paper. Calculate 5 yearly moving average and show the trend value on the same paper.

Year	Values	Year	Values
1994	80	2002	57
1995	81	2003	70
1996	85	2004	64
1997	79	2005	78
1998	86	2006	56
1999	94	2007	65
2000	90	2008	49
2001	108		

(2×15=30)