BBA DEGREE (CBCS) EXAMINATIONS, OCTOBER 2021
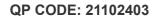
First Semester

Bachelor of Business Administration

Complementary Course - BA1CMT04 - FUNDAMENTALS OF BUSINESS STATISTICS

2017 Admission Onwards

DA6C87A4

Time: 3 Hours   Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. What do you mean by statistics?

2. Give any 2 functions of statistics.

3. What do you understand by classification of data?

4. What is meant by tabular presentation?

5. What are the features of an average?

6. Write down the formula for finding (i) simple arithmetic mean (ii) weighted mean and (iii) combined mean.

7. What are various measures of dispersion?

8. For a distribution, the coefficient of variation is 22.5% and mean is 7.5. Find the value of sd.

9. What are the properties of correlation coefficient?

10. Find r if b_{yx} = -0.2, b_{xy} = -0.7.

11. What are the two models in time series analysis?

12. What are moving averages?

(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. How does statistics help in research?

14. Explain the term "misuse of statistics".

15. Distinguish between primary and secondary data.

16. Distinguish between diagrams and graphs.

17. How will you calculate mode from a grouped frequency table?

18. For 8 observations on variables X and Y the following details are obtained.
$\Sigma X = 544, \Sigma Y = 552, \Sigma XY = 37560, \Sigma X^2 = 37028, \Sigma Y^2 = 38132$. Obtain correlation coefficient.

19. Distinguish between correlation and regression.

20. How will you construct trend by free hand method?

21. Explain seasonal variations with examples.

<div align="right">(6×5=30)</div>

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. What is a bar diagram? Explain the various types of bar diagram with example.

23. (a) What are the merits and demerits of median?
(b) The following table gives the frequency distribution of marks obtaind by 199 students in an examination. Find median mark.

Marks	0 -20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80
Frequency	21	19	60	42	24	18	15

24. Calculate Spearman's rank correlation coefficient for the following data.

x:	35	37	38	42	44	46	51	54	55	56
y:	40	32	39	42	41	31	50	52	46	55

25. 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.

<div align="right">(2×15=30)</div>