

C 2501

B.C.A. (Three Year) DEGREE EXAMINATION, MARCH/APRIL 2018.

(End Semester Examination)

Second Semester

Part II

(Regular / Supplementary)

STATISTICAL METHODS AND THEIR APPLICATIONS

Time : 3 Hours

Max. Marks : 70

PART — A

Answer any FIVE of the following questions. **(5 × 4 = 20 Marks)**

1. Explain the methods of collecting primary data.
2. Distinguish between classification and Tabulation.
3. Obtain the formula for mode with the help of a graph.
4. Explain median.
5. What are the use of measure of central tendency?
6. Obtain the limits for Karl Pearson's coefficient of Skewness.
7. Define Karl Pearson coefficient of correlation.
8. Write various formulae for calculating mean deviation.

PART — B

Answer ALL the following questions. **(5 × 10 = 50 Marks)**

9. (a) Define classification and what are the various types of classification.

Or

- (b) Describe the Graphic representation of a statistical data. Also give its advantages and disadvantages.

Turn Over

10. (a) Obtain Arithmetic mean to the following frequency distribution.

C.I.	0-10	10-20	20-30	30-40	40-50	50-60
Frequency	7	11	21	27	19	12

Or

- (b) Calculate the mode of the following data.

Wages in Rs. :	0-20	20-40	40-60	60-80	80-100
Workers:	10	15	40	25	10

11. (a) Discuss the importance of standard deviation and find the standard deviation of 14, 15, 16, 17, 18, 19, 20.

Or

- (b) Compute mean deviation and its co-efficient.

x :	100-120	120-140	140-160	160-180	180-200
f :	4	6	8	10	5

12. (a) What do you understand by Skewness? How it is measured? Distinguish between positive and negative skewness with drawings.

Or

- (b) From the following calculate Bowley's coefficient of skewness from the following data.

Profit (in crores):	10-20	20-30	30-40	40-50	50-60
No. of companies :	15	20	30	10	5

13. (a) Use deviation method to calculate correlation coefficient for the following data.

X :	17	19	21	26	20	28	26	27
Y :	23	27	25	26	27	25	30	33

Or

- (b) Calculate rank correlation coefficient from the following data.

X :	75	88	75	95	70	60	80	70	50
Y :	120	134	120	115	150	140	150	142	100