



21102038

QP CODE: 21102038

Reg No : .....

Name : .....

**B.A DEGREE (CBCS) EXAMINATION, AUGUST 2021**

**Third Semester**

**COMPLEMENTARY COURSE - ST3CMT51 - QUANTITATIVE TECHNIQUES FOR  
ECONOMIC ANALYSIS I**

Common to B.A Economics Model II Foreign Trade, B.A Economics Model II Insurance & B.A  
History Model II Forestry and Environmental History

2017 Admission Onwards

28EEDE58

Time: 3 Hours

Max. Marks : 80

**Part A**

*Answer any **ten** questions.*

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

1. Define Caption.
2. Define cluster sampling.
3. Write one application of measure of central tendency in Economics.
4. If all observations of a data are same, its standard deviation will be .....
5. When will you say a data is leptokurtic?
6. The second central moment of a data is also known as its .....
7. Lorenz curve is a measure of .....
8. What is the important drawback of Pearson's measure of correlation?
9. If there are only two pairs of observations, the correlation between them is .....
10. Rank Correlation is used when the data is ..... in nature.
11. Define parameter.
12. Find the sum of the first 10 terms of the AP 1, 3, 5, 7...

(10×2=20)

**Part B**

*Answer any **six** questions.*

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



13. Explain various methods of classification of Statistical data.

14. Draw a histogram from the following data.

<b>Class</b>	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60
<b>Frequency</b>	5	20	32	40	20	5

15. What are the important properties of Arithmetic mean?

16. Daily wages of 12 workers are given below. Find the coefficient of variation of wages?  
Wages (in Rs): 480 600 740 550 600 620 400 550 650 800 700 550

17. Calculate Bowle's coefficient of skewness from the following data.

<b>Class</b>	110- 115	115 - 120	120 - 125	125 - 130	130 - 135	135 - 140	140 - 145
<b>Frequency</b>	6	12	23	45	31	20	12

18. What are raw moments. Find the first two raw moments about 3 of the observations 21, 25, 12, 19, 13.

19. Fit a straight line of the form  $y = ax + b$  to the following data.

<b>X</b>	3	7	10	15	21	34	45	56
<b>Y</b>	45	39	31	25	20	18	12	5

20. What is the relation between regression coefficients and correlation coefficients.

21. Write the following numbers in fractional form

(i) 2.2323232323..... (ii) 0.99999999..... (iii) 7.8213

(6×5=30)

### Part C

Answer any **two** questions.

Each question carries **15** marks.

22. (i) Define Quartile deviation of a data.

(ii) Calculate the Quartile Deviation of the following distribution of weights

<b>Weights(in lbs)</b>	10 - 12	12 - 14	14 - 16	16 - 18	18 - 20	20 - 22	22 - 24
<b>No. of boxes</b>	2	9	20	25	24	15	5

23. What the requirements of a good measure of central tendency? Examine different measures of central tendency in light of these requirements.

24. Define primary data. State the various methods of collecting primary data and discuss their relative merits.



25. The weights of a calf taken at weekly intervals are given below. Fit a straight line using the method of least squares and calculate the average rate of growth per week.

Age	1	2	3	4	5	6	7	8	9	10
Weight	52.5	58.7	65.0	70.2	75.4	81.1	87.2	95.5	102.2	108.4

(2×15=30)