



23104300

QP CODE: 23104300

Reg No :

Name :

**B.A DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE
EXAMINATIONS, JANUARY 2023**

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

4C170CF2

Time: 3 Hours

Max. Marks : 80

Part A

*Answer any **ten** questions.*

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

1. What is meant by tabulation of data?
2. What is a frequency polygon?
3. What do you understand by Dispersion?
4. A data is symmetric if Pearson's coefficient of skewness is
5. When will you say a data is leptokurtic?
6. Find the third central moment of the observations with values 2, -3, 3, -1, 0, 1, -2.
7. What is the first raw moment of a data about a number A?
8. What is the important drawback of Pearson's measure of correlation?
9. If the correlation between two variables X and Y is r, the correlation between X+2 and Y is
10. When the two regression lines are perpendicular, the coefficient of correlation is
11. What is the common ratio of the geometric progression 3, -6, 12, -24,



12. The only prime number, which is even is

(10×2=20)

Part B

Answer any **six** questions.

Each question carries **5** marks.

13. What are the characteristics of statistics?
14. Define the terms: Class interval, Class limits, Class boundaries and class marks.
15. Explain the importance of finding the central tendency of a data.
16. Define measures of central tendency. Why there are different measures of it.
17. Explain the relative measures of central tendency.
18. 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
19. What is a scatter diagram? What is its importance in studying the relationship between two variables?
20. The regression equations of two variables X and Y are as follows. $2x + 3y - 8 = 0$ and $x + 2y - 5 = 0$. Obtain the arithmetic mean of X and Y. Also find the coefficient of correlation between X and Y.
21. Distinguish between variables and constants.

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **15** marks.

22. Define secondary data. State their chief sources and point out the dangers involved in their use and what precautions are necessary before using them.
23. (i) Define Mean Deviation. What are its drawbacks over standard deviation?
(ii) Calculate the mean deviation about mode of the following data.

Class	20- 29	30 - 39	40 - 49	50-59	60 - 69	70 - 79
Frequency	306	182	144	96	42	34

24. (i) What is Lorenz curve? Explain the method of constructing a Lorenz curve.
(ii) The income distribution of a group of people given below. Draw the Lorenz curve of the data.



Income group	A	B	C	D	E
Total Income	480	11920	7280	7360	4160
Income Earners	21	223	101	68	24

25. The following data gives the demand and supply at a market on 11 days.

Demand	61	72	73	73	63	84	80	66	76	74	72
Supply	40	52	59	53	61	58	56	42	58	50	50

(i) Obtain the regression lines. (ii) Find the coefficient of correlation. (iii) Find approximate quantity of purchase when demand is 89. (iv) Find the demand when supply is 49.

(2×15=30)