24001014

B.A DEGREE (CBCS) REGULAR / REAPPEARANCE EXAMINATIONS, MARCH 2024

Sixth Semester

B.A Economics Model I

CORE COURSE - EC6CRT11 - QUANTITATIVE METHODS

2017 Admission Onwards

53072518

Time: 3 Hours   Max. Marks : 80

Instructions to Private candidates only: This question paper contains two sections. Answer SECTION I questions in the answer-book provided. SECTION II, Internal Examination questions must be answered in the question paper itself. Follow the detailed instructions given under SECTION II

Part A

*Answer any **ten** questions.*

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

1. Define sample design.

2. Distinguish between classification and tabulation.

3. Explain frequency curve.

4. Mention any two demerits of Arithmetic Mean.

5. Find the geometric mean of 4 and 3.

6. Define Quartile deviation.

7. Correlation coefficient.

8. Explain Simple and Multiple Correlation.

9. What is regression?

10. Find the Index number using a simple aggregative method.

Commodity	Base Price	Current Price
Rice	35	42
Wheat	30	35
Pulse	40	38
Fish	107	120

11. Consumer Price Index Number.

12. Mention two merits and demerits of free hand method.

(10×2=20)

Part B

*Answer any **six** questions.*

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

13. What are the different types of charts and diagrams used for presenting data?

14. Draw a histogram from the following table:

Class:	0-20	20-40	40-60	60-80	80-100
Frequency:	5	20	32	16	4

15. Represent the following table by mean of a frequency polygon.

Class :	0-9	10- 19	20-29	30-39	40-49	50-59
Frequency:	4	12	30	18	8	3

16. Calculate Median from the following data:

Marks	0-10	10-30	30-60	60-80	80-90
No: of students	5	15	30	8	2

17. Calculate range and Q.D. of the following observations: 20, 25, 29, 30, 35, 39, 41, 48, 51, 60 and 70

18. Estimate Spearman's correlation coefficient:

X:	87	81	84	59	70	70	92	72	70	90
Y:	47	45	57	42	48	37	54	45	40	52

19. Briefly discuss the utility of regression in the field of economics.

20. Explain the importance of CPI.

21. Explain the uses of time series.

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. What is primary data. Explain the methods of collecting primary data.

23. Marks obtained by 10 students in a semester examination in Statistics are 70, 65, 68, 70, 75, 73, 80 , 70, 83, 86. Find a) Arithmetic mean b) Mode c) Median d) Range

From the following demand schedule write down the regression equations. Also (a) estimate
demand when price is Rs. 20 and (b) estimate price when demand is 40 kg.

24.

Price (in Rs.)	12	13	14	15	16	17	18	19
Demand (in kg)	38	36	36	33	33	32	30	28

Fit a linear trend to the following data by the least-squares method.

25.

Year	1990	1992	1994	1996	1998
Production ('000 units)	18	21	23	27	16

(2×15=30)