

16/03
QP CODE: 20100531



20100531

Reg No : 2

Name :

BA DEGREE (CBCS) EXAMINATION, MARCH 2020

Sixth Semester

B.A Economics Model I

Core course - EC6CRT11 - QUANTITATIVE METHODS

2017 Admission Onwards

93BDEF47

Instructions for 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**.

SECTION I

Time: 3 Hours

Maximum Marks :80

Part A

Answer any **ten** questions.

Each question carries **2** marks.

1. What you mean by population
2. Explain quota sampling
3. Explain frequency polygon
4. Define Median.
5. Define Mode.
6. Define Quartile deviation.
7. Correlation.
8. Spearman's Rank correlation
9. Explain Cause and effect relationship
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. Write a note on Additive and Multiplicative methods of time series.
12. Mention two merits and demerits of free hand method.

(10×2=20)

Answer any **six** questions.

Each question carries **5** marks.





13. What are the merits and demerits of secondary data
14. What are the different parts of a table
15. Represent the following table by mean of a more than ogives
- Class : 0-5 5-10 10-15 15-20 20-25 25-30 30-35
- Frequency : 2 5 12 20 16 10 5

16. Calculate the Mean for the following class data

| | | | | | | |
|----------------|-----|------|-------|-------|-------|-------|
| Class Interval | 0-8 | 8-16 | 16-24 | 24-32 | 32-40 | 40-48 |
| Frquency | 8 | 7 | 16 | 24 | 15 | 7 |

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

19. Find out the correlation co-efficient

| | | | | | |
|----|----|---|----|----|----|
| X: | 10 | 8 | 6 | 4 | 2 |
| Y: | 3 | 7 | 11 | 15 | 19 |

20. Explain the steps involved in the construction of Index Number.
21. Describe the different components 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. The yield of wheat and rice per acre for 10 districts of a state is as under:

| | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|
| District | A | B | C | D | E | F | G | H | I | J |
| Wheat | 12 | 10 | 15 | 19 | 21 | 16 | 18 | 9 | 25 | 10 |
| Rice | 22 | 29 | 12 | 23 | 18 | 15 | 12 | 34 | 18 | 12 |

Calculate for each crop (Wheat and Rice) (i) Range (ii) Q.D. (iii) Standard deviation

24. 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

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

25. Show that Fisher's "Ideal" price index number satisfies both the time-reversal test and factor reversal tests and verify this from the following table.

| Commodity | 2000 | | 2005 | |
|-----------|-------|----------|-------|----------|
| | Price | Quantity | Price | Quantity |
| A | 6 | 50 | 10 | 56 |
| B | 2 | 100 | 2 | 120 |
| C | 4 | 60 | 6 | 60 |
| D | 10 | 30 | 12 | 24 |
| E | 8 | 40 | 12 | 36 |

(2×15=30)

