QP CODE: 22101021

22101021

Reg No : .....

Name : .....

B.A DEGREE (CBCS) REGULAR / REAPPEARANCE EXAMINATIONS, APRIL 2022

Sixth Semester

B.A Economics Model I

CORE - EC6CRT11 - QUANTITATIVE METHODS

2017 Admission Onwards

F678C6EC

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***

SECTION I

Part A

Answer any ***ten*** *questions.*

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

1. What is secondary data?
2. What is cluster sampling?
3. Give a brief account of pie- diagram.
4. What is the harmonic mean of 1, 2 and 4?
5. Define Mean deviation.
6. What is Lorenz curve ? What are its economic applications?
7. Coefficient of variation.
8. Define regression co-efficient.
9. Explain Line of best fit.
10. Define Time Series.
11. Mention two merits and demerits of semi average method.
12. Mention two merits and demerits of moving average method.

(10×2=20)

Part B

Answer any ***six*** *questions.*

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

13. What are the functions of statistics?
14. Explain Sample Survey.
15. Explain the limitations of Index Number.

16. Find the Median Wage of the following distribution:

Wages (in Rs)	20-30	30-40	40-50	50-60	60-70
No: of Labourers	3	5	20	10	5

17. Calculate Mode from the following data:

Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
No: of Students	3	5	7	10	12	15	12	6	2	8

18. Distinguish between positive and negative correlation

19. 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

20. Draw a multiple bar diagram for the data given below (sales in lakh)

Year	A	B	C
2005	122	75	50
2006	150	90	32
2007	130	81	44

21. Explain the importance of CPI.

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. Describe the various methods of probability sampling.

23. Calculate the Mean , Median and Mode for the following frequency distribution :

X	50-53	53-56	56-59	59-62	62-65	65-68	68-71	71-74	74-77
Y	3	8	14	30	36	28	16	10	5

24. Explain various methods of studying correlation

25. Calculate the price index number by
(a) Paasche's method, (b) Laspeyre's method, (c) Fisher's method and (d) Edgeworth method

Commodity	2000		2005	
	Price (Rs)	Quantity (Kgs)	Price (Rs)	Quantity (Kgs)
A	20	8	40	6
B	50	10	60	5
C	40	15	50	10
D	20	20	20	15