

**B. A. DEGREE END SEMESTER EXAMINATION OCT. 2020: JANUARY 2021****SEMESTER – 5: ECONOMICS (CORE COURSE)****COURSE: 15U5CRECO07, QUANTITATIVE TECHNIQUES FOR ECONOMIC ANALYSIS***(Common for Regular 2018 admission and Improvement 2017/ Supplementary 2017/2016/2015 admissions)*

Time: Three Hours

Max. Marks: 75

**PART A*****Answer all questions in one or two sentences. Each question carries 1 mark.***

1. Secondary data
2. Enumerator
3. Cluster Sampling
4. Histogram
5. Class limits
6. Index Numbers
7. Real numbers
8. Ogives
9. Diagonal matrix
10. Census Method

(1 x 10 = 10)

**PART B*****Answer any eight of the following in three or four sentences. Each question carries 2 marks.***

11. Distinguish between non-probability sampling and probability sampling
12. What is Venn diagram?
13. What are the characteristics of an ideal index number?
14. Distinguish between Ordered Pairs and Cartesian product.
15. Examine the uses of Index Numbers.
16. What are the merits and demerits of freehand curve method?
17. Difference between frequency polygon and a frequency curve
18. What are the different types of classification?
19. What are the essential qualities of a good sample?
20. What is sampling error?

(2 x 8 = 16)

**PART C*****Answer any five of the following in not more than one page. Each question carries 5 marks.***

21. Describe the role of Statistics in Economics.
22. What are the essential features of a questionnaire?

23. Explain how cyclical forecasting differs from forecasting based on trend or seasonal.
24. Explain the various sampling techniques used in statistical investigation.
25. If  $U = \{1, 2, 3, 5, 6, 7, 8\}$   $A = \{1, 2, 3\}$   $B = \{2, 5\}$   $C = \{2, 6\}$

Verify that (a)  $(A \cup B)' = A' \cap B'$

(b)  $(A \cap B)' = A' \cup B'$

26. Fit a straight line trend by the method of least squares from the following data.

Year	2000	2001	2002	2003	2004
Sales (in Rs.'000)	86	92	89	104	110

27. Calculate simple average of price relative from the following data.

Items	A	B	C	D	E
Price (1980)	1000	2000	500	200	700
Price(1986)	1600	2100	600	300	1400

(5 x 5 = 25)

#### PART D

**Answer any two of the following in not exceeding four pages. Each question carries 12 marks.**

28. Explain the various statistical tools used for Economic Analysis.
29. From the following data find Fisher's Index Number and show that the Time and Factor Reversal Test are satisfied by it.

Commodity	Base Year		Current Year	
	Price	Quantity	Price	Quantity
A	8	10	10	12
B	10	12	12	8
C	5	8	5	10
D	4	14	3	20
E	20	5	25	6

30. Draw a Histogram and frequency polygon from the following data.

Marks:	0-10	10-20	20-40	40-50	50-60	60-70	70-90	90-100
No. of Students:	4	6	14	16	14	8	16	5

31. State the importance of Consumer Price Index. Explain the construction of cost of living index numbers.

(12 x 2 = 24)