B. A. DEGREE END SEMESTER EXAMINATION - OCTOBER 2019

SEMESTER –5: ECONOMICS (CORE COURSE)

COURSE: **15U5CRECO07: QUANTITATIVE TECHNIQUES FOR ECONOMIC ANALYSIS**

(Common for Regular 2017 admission & Improvement 2016/ Supplementary 2016/2015 admission)

Time: Three Hours   Max. Marks: 75

PART A

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

1. Trend line
2. Features of a base year
3. Geometric progression
4. Variables
5. Histogram
6. Judgment sampling
7. Weighted index number
8. Primary data
9. Inverse of a matrix
10. Sources of secondary data   (1 x 10 = 10)

PART B

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

11. If a sample of 100 is to be taken from a population of 1000 farmers consisting of marginal, small and large farmers, which is the most appropriate sampling method and why?
12. What are the steps in the construction of Cost of Living Index Numbers?
13. Given the cost function, $C=9x^2+5x+20$, find the AC, AFC, AVC.
14. Define Cartesian product. Give an example.
15. If A = {11,13,15,17}, B= {12,14,16,18}, C= {17,18,19,20}, find A ∩ (B∪C).
16. Define the method of Least Squares.
17. Write on the merits and demerits of sampling method?
18. Which is the ideal index number and why is it so?
19. What are the components of time series?
20. Solve the following equation: 3x - y = 16, 2x + 2y =16   (2 x 8 = 16)

PART C

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

21. Estimate the trend using semi average method.

Year	1996	1997	1998	1999	2000	2001	2002
Value of Imports	1400	1500	1750	1925	1875	1950	2015

22. From the following data, construct CPI using family budget method.

Items	Prices		Percentage of Expense
	2009	2018	
A	24	35	40
B	18	22	20
C	12	20	12
D	30	45	18
E	12	16	10

23. Examine the role of statistics in economic analysis
24. From the following data construct price index of 1995 taking 1990 as base by using simple average of price relative method?

Commodity	A	B	C	D
Price in 1990	60	45	80	25
Price in 1995	75	50	70	40

25. What are the merits and demerits of index numbers as a measure of change in values of a group of related variable?
26. State the guidelines for preparing questionnaire
27. Describe the different methods of set presentation   (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 different sampling techniques used in research
29. Enumerate the various methods of data collection used in social science research
30. Construct suitable index number and test whether it satisfies the tests of consistencies:

Commodity	Price in 2008	Quantity in 2008	Price in 2016	Quantity in 2016
A	8	6	12	4
B	4	8	12	8
C	10	4	18	4
D	14	6	2	10
E	10	10	14	8

31. Construct a frequency distribution from the following data by inclusive method taking 4 as the class interval:

10	17	15	22	11	16	19	24	29	18	25	26	32
14	17	20	23	27	30	12	15	18	24	36	18	15
21	28	33	38	34	13	10	16	20	22	29	19	23
31	13	35	18	24	37	15	10	21	36	15		

Also draw ogives to locate the middle value of the given data.   (12 x 2 = 24)