TB145380B **Reg. No.....**

Name.....

B. A. DEGREE (C.B.C.S.S.) EXAMINATION, APRIL 2017
Supplementary – 2014 Admission
SEMESTER V - CORE COURSE (ECONOMICS)
ECO5QTA - QUANTITATIVE TECHNIQUES FOR ECONOMIC ANALYSIS

Time: Three Hours **Maximum Marks: 80**

PART A

I. Answer all the following questions in one sentence. Each question carries 1 mark.

1. Sequences
2. Whole Sale Price Index number
3. Disjoint Set
4. Sampling Error
5. Constants
6. Classification
7. N.S.S.O
8. Census Method
9. Trend
10. Ideal Index number

(10×1=10)

PART B

II. Answer any eight of the following. Each question carries 2 marks.

11. What are the uses of Index numbers?
12. Discuss the role of Statistics in Economics.
13. What are the different types of Progression?
14. Distinguish between Primary Data and Secondary Data.
15. Describe the different stages in a Statistical enquiry.
16. Represent $\mathbf{A}^c$ and $\mathbf{A} \cap \mathbf{B}$ by means of Venn diagram.
17. Calculate Paasche's Index number using the data given below:

Year	Price		Quantity	
	Base Year(P_0)	Current Year(P_1)	Base Year(q_0)	Current Year(q_1)
A	4	5	10	8
B	3	6	15	5
C	2	3	20	15
D	5	4	8	12

18. What are the characteristics of a good sample?
19. Distinguish between Dependent variable and Independent variable
20. Define Cartesian Products. What are its properties?

21. Briefly describe the different tests of Index numbers.
22. Explain the importance of Time Series analysis.

(8×2=16)

PART C

III. Answer any six of the following. Each question carries 4 marks.

23. Compute Cost of Living Index using the Family Budget method.

Commodities	A	B	C	D	E
Index	200	150	280	300	250
Weight	4	3	1	5	2

24. What are the methods used for collecting Primary data?
25. Define Tabulation. What are the objectives of Tabulation?
26. Describe with example the different ways to describe a Set.
27. What is meant by Time Series analysis? What are its components?
28. Fit a Trend line using the Semi Average method

Year	2008	2009	2010	2011	2012	2013	2014	2015
Profit (in millions)	24	16	14	26	12	16	24	20

29. Define
    i) Supply function ii) Production function
    iii) Cost function iv) Consumption function
30. Explain the organisation and functioning of C.S.O.
31. By means of the Venn diagram show the basic Set operations.

(6×4=24)

PART D

IV. Answer any two of the following. Each question carries 15 marks.

32. Define Sampling. What are different methods for selecting Samples?
33. Following are the data relating to monthly expenditure of three families A, B and C on different heads. Construct a Percentage Compound Bar chart.

Items	Family A	Family B	Family C
Food	900	1200	1600
Clothing	500	600	800
Rent	400	900	1000
Other Expenditure	200	300	600
Total	2000	3000	4000

34. For the data given below examine whether i) Laspeyer's Index number ii) Paasche's Index number and iii) Fisher's Index number satisfy Factor Reversal test.

Year	Price		Quantity	
	Base Year(P_0)	Current Year(P_1)	Base Year(q_0)	Current Year(q_1)
A	8	15	6	5
B	6	12	10	8
C	10	5	5	25
D	4	10	20	10
E	5	8	15	15

35. Define a Matrix. Explain the different types of matrices with examples .What is meant by equality of two matrices?

(2×15=30)