TB256455S

Reg. No :.....

Name :.....

BACHELOR'S DEGREE (C.B.C.S) EXAMINATION, MARCH 2025

2018, 2019, 2020, 2021 ADMISSIONS SUPPLEMENTARY

SEMESTER VI - CORE COURSE (ECONOMICS)

EC6B11B18 - Quantitative Economics

Time : 3 Hours **Maximum Marks : 80**

Part A

I. Answer any Ten questions. Each question carries 2 marks **(10x2=20)**

1. Define random experiment.
2. What is impossible event in a random experiment?
3. What is probability?
4. What is type II error?
5. What are uses of Z-test ?
6. Give the Pearson Correlation Coefficient Formula.
7. What is Correlation?
8. Write a note on scatter diagram.
9. What is a line of best fit?
10. What are the important methods of measuring Trend?
11. What do you mean by family budget method?
12. Give the methods for construction of index numbers.

Part B

II. Answer any Six questions. Each question carries 5 marks **(6x5=30)**

13. A basket contains 20 bad oranges and 80 good oranges. Three oranges are drawn at random from this basket. Find the probability that of three (1) exactly 2 (2) at least two are good oranges.
14. What are the uses of normal distribution?
15. What is the difference between Statistics and parameter?
16. A soap manufacturing company was distributing a particular brand of soap through a number of retail shops . Before a heavy advertisement campaign the mean sales per week per shop was 140 dozens . After the campaign a sample of 20 shops was taken and mean sales was found to be 147 dozen with a standard deviation of 16. Can you consider the advertisement effective.?
17. Fit a straight line from the foloowing data by the method of least squares.

x	3	5	4	10
y	2	3	5	8

18. Fit a straight line trend to the following series by the method of lease squares.

Year	1994	1995	1996	1997	1998	1999	2000
Production of steel(tonnes)	10	13	12	14	12	16	14

19. Explain the merits and demerits of moving average method.
20. What are the uses and limitations of Index numbers?
21. From the following data Construct an index for 2012 taking 2011 as base:

Commodity	Price in 2011	Price in 2012

A	50	70
B	40	60
C	80	90
D	110	120
E	20	20

Part C

III. Answer any Two questions. Each question carries 15 marks **(2x15=30)**

22. Fit a normal curve to the data given below:

Diameter in Inches	7	8	9	10	11	12	13	14	15
Frequency	1	6	7	11	20	10	6	5	1

23. Test whether son's eye colour and father's eye colour are associated with the help of the data given below.

	Eye colour of a son	
Father's eye colour	Not light	Light
Not light	230	148
Light	151	471

24. Why are there two regression line? Explain the properties of regrssion coefficients. Discuss the importance of studying regression .

25. Explain Factor reversal test . Test whether Paasche's and Fishers formula satisfy it