J – 1689

(Pages : 4)

Reg. No. : .....

Name : .....

Sixth Semester B.A. Degree Examination, March 2020

First Degree Programme Under CBCSS

Economics

Core Course XIII

EC 1643 – BASIC TOOLS FOR ECONOMICS– II

(2013 & 2014 Admissions)

Time : 3 Hours

Max. Marks : 80

SECTION – I

Answer in one or two sentences. Attempt **all** questions.

1. Correlation.
2. Binomial distribution.
3. Price index.
4. Random variable.
5. Residual.
6. Null hypothesis.
7. Baye's theorem.
8. Dependent variable.
9. Least squares.
10. Intercept.

(10 × 1 = 10 Marks)

P.T.O.

SECTION – II

Answer **any eight** questions not exceeding one paragraph. Each question carries **2** marks.

11. Distinguish between simple correlation and multiple correlation.

12. What are important uses of index numbers?

13. Define probability. What is probability distribution?

14. Explain mutually exclusive events.

15. What is coefficient of determination?

16. Distinguish between discrete and continuous variables.

17. Distinguish between consumer price index and wholesale price index.

18. What is regression line?

19. What is purchasing power of money?

20. What is mathematical expectation?

21. What is meant by goodness of fit?

22. What is multiplication theorem?

(8 × 2 = 16 Marks)

SECTION – III

Answer **any six** questions not exceeding 120 words. Each question carries **4** marks.

23. Consider a deck of 52 playing cards. Find the probability of drawing a queen, king and a jack in that order from the pack of cards in three consecutive draws, the cards drawn not being replaced.

24. Distinguish between correlation and regression.

25. Discuss about Bayes' Theorem.

26. What is index number? Explain Laspeyres Index.

27. Construct the consumer price index number for 2018 on the basis of 2017 from the following data using the aggregate expenditure method.

Commodity	Quantity consumed in (Quintal)	Price 2017 (000' ₹)	Price 2018 (000' ₹)
A	6	5.75	6.00
B	6	5.00	8.00
C	1	6.00	9.00
D	6	8.00	10.00
E	4	2.00	1.50
F	1	20.00	15.00

28. A bag contains 5 white and 3 black balls. Two balls are drawn at random one after the other without replacement. Find the probability that both balls drawn are black.

29. Explain the importance of the study of correlation.

30. What are the properties of the coefficient of correlation?

31. Explain Rank Correlation coefficient. State its importance.

(6 × 4 = 24 Marks)

SECTION – IV

Answer **any two** questions not exceeding **4** pages. Each question carries **15** marks.

32. In a correlation study the following values are obtained:

	X	Y
Mean	65	67
Standard deviation	2.5	3.5
Coefficient of correlation	0.8	

Find the two regression equations that are associated with the above values.

33. Three groups of workers contain 3 men and 1 woman, 2 men and 2 women and 1 man and 3 women respectively. One worker is selected at random from each group. What is the probability that the group selected consists of 1 man and 2 women?

34. Compute index numbers from the following data using

(a) Laspeyre's method,

(b) Paasche's method and

(c) Fisher's formula.

Commodity	Base Year		Current Year	
	Quantity	Price	Quantity	Price
A	8	2	6	4
B	10	5	5	6
C	14	4	10	5
D	19	2	13	2

35. What do you mean by normal distribution? State the properties of normal distribution.

(2 × 15 = 30 Marks)
