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

(2015 Admission Onwards)

Time : 3 Hours　　　　　　　　　　　　　　　　　　Max. Marks : 80

SECTION – I

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

1. Linear correlation

2. Base Shifting

3. Empty set

4. Coefficient of Alienation

5. Simple linear regression

6. Mutually exclusive events

7. Sample space

8. Universal Set

9. Compound Events

10. Partial Correlation

(10 × 1 = 10 Marks)

SECTION – II

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

11. Standard Error

12. Least Square Method

13. Scatter Diagram

14. Addition rule

15. Venn Diagram

16. Coefficient of determination

17. Spearman's Rank Correlation

18. Splicing

19. Consumer Price Index

20. Axiomatic Approach

21. Classical Definition of Probability

22. Fishers ideal index

(8 × 2 = 16 Marks)

SECTION – III

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

23. A coin is tossed twice. What is the probability of getting two consecutive tails?

24. Explain the properties of Normal Distribution.

25. What is the probability of drawing a king and a queen consecutively from a deck of 52 cards, without replacement?

26. What is meant by Binomial distribution? Write down the important properties of Binomial distribution?

27. In an Equation on correlation value r is 0.917 and its probable error is 0.034. What is the value of 'N'?

28. If r = 0.6 and n = 64 find out the probable error of the coefficient of correlation.

29. What is the probability of a rolling dice less than 5?

30. Explain the various properties of coefficient of correlation.

31. What is the probability of getting a 2 or a 5 when a die is rolled?

(6 × 4 = 24 Marks)

SECTION – IV

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

32. Calculate Pearson's coefficient of correlation between advertisement cost and sales as per the data given below.

Advertisement cost in '000 Rs.	39	65	62	90	82	75	25	98	36	78
Sales in lakhs Rs.	47	53	58	86	62	68	60	91	51	84

33. Explain the term Probability. Give a brief description of probability under following heads.

    (a) Subjective, (b) Classical, (c) Statistical, (d) Axiomatic (Modern)

34. Construct index numbers of price from the following data by applying Fischer's Ideal Method.

Commodities	1995		2005	
	Price	Quantity	Price	Quantity
A	2	8	4	6
B	5	10	6	5
C	4	14	5	10
D	2	19	2	13

35. Explain the Correlation. What are the merits and limitation of correlation.

(2 × 15 = 30 Marks)