



(Pages : 3)

G – 1270

Reg. No. :

Name :

Sixth Semester B.A. Degree Examination, April 2019

First Degree Programme Under CBCSS

Economics

Core Course – XIII

EC 1643 : BASIC TOOLS FOR ECONOMICS – II

(2013-14 Admissions)

Time : 3 Hours

Max. Marks : 80

SECTION – I

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

1. Rank correlation.
2. Explanatory variable.
3. Normal distribution.
4. Alternative hypothesis.
5. GNP deflator.
6. Type I error.
7. Slope coefficient.
8. Sample.
9. Confidence interval.
10. Regressand.

(10×1=10 Marks)

P.T.O.



SECTION - II

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

11. What do you mean by Standard Error ?
12. Discuss briefly about index number.
13. Explain independent and dependent events.
14. Briefly explain Paasche's method of constructing index numbers.
15. Explain the multiplication theorem.
16. What is a stochastic variable ?
17. What do you mean by linear regression analysis ?
18. What is probability distribution ?
19. What is cost of living index ?
20. What is a hypothesis ?
21. Define primary and secondary data.
22. Distinguish between R^2 and adjusted R^2 .

(8×2=16 Marks)

SECTION - III

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

23. Explain different types of correlation.
24. Trace out the relationship between the binomial and normal distributions.
25. Explain different methods of constructing index numbers.
26. One card is drawn from a standard pack of 52. What is the probability that it is either a king or a queen ?
27. What are the important rules of probability ?



28. What are the important properties of the binomial distribution ?
29. Find the correlation coefficient of correlation from the following data.

X	12	20	15	22	18	24	20	12	15	22
Y	30	35	28	36	29	39	30	25	30	38

30. What are the important features of Spearman's correlation coefficient ?
31. What is mathematical expectation ? A petrol pump proprietor sells an average of ₹ 80,000 petrol on rainy days and an average of ₹ 95,000 on clear days. The weather forecast shows that the probability is 0.76 for clear weather and 0.24 for rainy whether on coming Monday. Find the expected value of petrol sale.
(6×4=24 Marks)

SECTION - IV

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

32. Find the Karl Pearson's coefficient of correlation between X and Y series.

X	78	89	96	69	59	79	68	61
Y	125	137	156	112	107	136	123	108

33. The following table gives the aptitude test scores and productivity indices of 10 workers selected at random.

X	60	62	65	70	72	48	53	73	65	82
Y	68	60	62	80	85	40	52	62	60	81

Calculate the regression equation of X on Y. Find the Productivity index of a worker whose test score is 75.

34. What is consumer price index ? Explain the various steps to construct CPI.
35. Compute index numbers from the following data using (i) Laspeyre's method, (ii) Paasche's method and (iii) Fisher's formula 2018 considering 2010 as base year.

Items	Quantities in kg.		Price in ₹	
	2010	2018	2010	2018
Rice	08	10	04	09
Corn	07	08	03	05
Maize	06	05	04	08
Wheat	05	07	02	04

(2×15=30 Marks)