

B.A. DEGREE END SEMESTER EXAMINATION MARCH 2018**SEMESTER – 6: ECONOMICS (CORE COURSE)****COURSE: 15U6CRECO11: QUANTITATIVE ECONOMICS***(For Regular - 2015 Admission)*

Time: Three Hours

Max. Marks: 75

PART A

Explain all the following in one or two sentences.

Each question carries **1** mark.

1. Mode
2. Range
3. Positive and Negative Correlation
4. Regression
5. Skewness
6. Integration
7. Independent and dependent events
8. Conditional probability
9. Binomial distribution
10. Standard deviation

(1 x 10 = 10)

PART BAnswer **any eight** of the following in three or four sentences.Each question carries **2** marks.

11. What are the properties of Median? Give its merits and demerits
12. Write a short note on Lorenz curve
13. Explain coefficient of correlation
14. Explain Scatter diagram
15. What is the chance of getting a head when a coin is tossed?
16. What are the merits and demerits of standard deviation
17. What are positive and negative skewness
18. Explain sample point and sample space
19. Explain Maxima and Minima of functions
20. What is mutually exclusive and exhaustive events

(2 x 8 = 16)

PART CAnswer **any five** of the following in not more than one page.Each question carries **5** marks.

21. Briefly explain the theorems of probability
22. Explain the various methods of studying correlation
23. What are the measures of dispersion

24. From the data given below find the regression equation of X on Y

X	5	6	7	3	2
Y	4	5	8	2	1

25. Explain the rules of differentiation
 26. Find mean from the following frequency distribution

Class	15-25	25-35	35-45	45-55	55-65	65-75
Frequency	4	11	19	14	0	2

27. For the following data calculate Standard deviation

Marks	2	4	6	8	10
No.of students	8	10	16	9	7

(5 x 5 = 25)

PART D

Answer **any two** of the following in not exceeding four pages.

Each question carries **12** marks.

28. Find Mean, Median and Mode for the following data

Size	10	12	15	20	22	28	30
Frequency	3	9	12	25	18	7	6

29. Compute Karl Pearson's Coefficient of correlation and interpret the result

Price (Rs.)	11	12	13	14	15	16	17	18	19	20
Demand	30	29	29	25	24	24	25	21	18	15

30. Explain the concept of probability giving its different schools of thought. A ball is drawn from a bag containing 4 white, 6 black and 5 green balls. Find the probability that a ball is drawn 1) white, 2) green, 3) black, 4) not green, 5) green or white
31. What are the properties of Normal Distribution? The per acre yield of a crop in a particular area is observed to follow a normal distribution with mean 15 quintals and S.D. of 5 quintals. Find
- The proportion of the area yielding at least 25 quintals
 - What extend of the land under the crop can yield between 10 and 20 quintals if the total land under crop is 782 acres?

(12 x 2 = 24)
