E 1463 (Pages : 2) Reg. No.....

Name.....

B.A. DEGREE (C.B.C.S.S.) EXAMINATION, MARCH 2016

Sixth Semester

B.A. Economics (Model I)

Core Course—QUANTITATIVE ECONOMICS

(2013 Admissions)

Time : Three Hours Maximum : 80 Marks

Part A (Definition Type Questions)

Answer **all** *questions in* **one sentence** *each.*
Each question carries 1 *mark.*

1. Arithmatic mean.
2. Lorenz curve.
3. Relative measures.
4. Correlation.
5. Dispersion.
6. Median.
7. Standard deviation.
8. Range.
9. Sampling distribution.
10. First order derivative.

(10 × 1 = 10)

Part B (Short Answer Questions)

Answer any **eight** *of the following questions in* **a paragraph** *each not exceeding* 100 *words.*
Each question carries 2 *marks.*

11. What are the properties of median ?
12. Difference between Correlation and Regression.
13. Write a note on quartile deviation.
14. Difference between Bar diagram and Histogram.
15. State and explain trend line.
16. Explain the concept of normal distribution.
17. Calculate Arithmetic mean :

X :	10	20	30	40	50

18. Find out the standard deviation of the data :—

X :	5	7	10	20	25
Y :	3	4	6	9	10

19. If the regression coefficient b_{xy} is 0.39 and b_{yx} is – 0.73, find out the value of regression.

Turn over

20. Find out the value of correlation :

X :	10	15	20	30	40
Y :	5	3	2	4	3

21. Find out the derivatives of $Y = 5x^2 - 2x + 3$.
22. State and explain rules of probability.

(8 × 2 = 16)

Part C (Short Essays)

Answer any **six** *of the following questions in* **one and a half pages** *each not exceeding* 150 *words. Each question carries* 4 *marks.*

23. What are different tools and technique in Statistics ?
24. Difference between Skewness and Kurtosis.
25. Find out the regression by using OLS method :

X :	10	15	20	25	30
Y :	2	3	5	6	7

26. State and explain second order derivatives.
27. State and explain Binomial distribution.
28. Different approaches relating to probability.
29. Explain merits and demerits of mean deviation.
30. Explain various types of sampling.
31. Explain various sources of data.

(6 × 4 = 24)

Part D (Long Essays)

Answer any **two** *of the following questions not exceeding* **four** *pages each. Each question carries* 15 *marks.*

32. State and explain various measures of dispersion.
33. Calculate mean, median and mode from the following data :—

Marks :	40—50	50—60	60—70	70—80
No. students :	15	20	30	40

34. Find out the correlation coefficient of steel production ('000) :

Year		X	Y
2001	...	73	3
2002	...	53	4
2003	...	43	7
2004	...	38	8
2005	...	55	10

35. Define regression analysis. Fit the regression line on X on Y and Y on X :

Demand :	36	35	30	40	50
Price :	5	7	9	8	10

(2 × 15 = 30)