Revision Paper (2023-24)

Class-B.Com-II

Subject: Business Statistics

Paper-BC-204

Time: 3 Hours   **Maximum Marks: 80**

Note: Attempt five questions in all, selecting at least one question but not more than two questions from any unit. All questions carry equal marks.

UNIT- I

1. Define Statistics. Discuss its functions and importance. Why people distrust statistics?

2. What is frequency Distribution? Describe various ways by which a frequency Distribution can be represented graphically.

3. (a) Explain the mathematical properties of standard deviation.

   (b) Calculate Pearson's coefficient of skewness from the following data:-

X	5-7	8-10	11-13	14-16	17-19
Y	14	24	38	20	04

4. Obtain two regression equations from the following data:-

X:	23	26	39	31	36	21	30	39
Y:	45	48	45	42	31	39	38	32

Also find

(i)   Value of Y when X = 30

(ii)   Correlation between X and Y

UNIT- II

5.   "Index numbers are called economic barometers". Explain this statement. What precaution will you take while constructing an index number?

6.   Find Fisher's Price Index from the following data and show how it satisfies Time Reversal Test.

Year	Product A	Product B	Product C

	Price	Value in Rs.	Price	Value in Rs.	Price	Value in Rs.
2010	5	50	8	48	6	24
2011	4	58	7	49	5	15

7.   Calculate trend values by 4-yearly moving average method for the following data:

Year	1981	1982	1983	1984	1985	1986	1987	1988
Production ('000)	13	18	15	21	23	20	24	27

Plot the original and trend values on the graph paper.

UNIT- III

8.   Write short Notes on:

a.   Bayes Theorem.

b.   Dependent and Independent Events.

c.   Mutually Exclusive and Equally Likely Events.

9.   What is Normal Distribution? Explain its properties.

10.   (a)   A Person is known to hit the target in 3 out of 4 shots whereas another person is known to hit the target in 2 out of 3 shots. Find the Probability of the target being hit at all when they both try.

        (b)   A bag contains 5 Red and 4 green balls. Another bag contains 4 Red and 6 green balls. A ball is drawn from first bag and is placed in second bag. A ball is then drawn from the second bag.   What is the probability that it is Red?