Mathabhanga College

Class Test 2022

Semester IV

Economics (Honours)

Paper Name-Statistical methods for economics -II

Core- 10

Time 1 hour   **Full marks-20**

1.Answer any five questions from the following.   **1X5=5**

a) Laspeyre's index number formula satisfies

   i) time reversal test

  ii) factor reversal test

  iii) both time reversal and factor reversal test

  iv) none of the test

b) With which characteristic movement of a time series would you associate a decline in ice-cream sale during November to march.

    i)Trend

    ii)Seasonal variation

    iii)Cyclical fluctuations

    iv)Irregular movement

c) A table with all values of random variable and its corresponding probabilities is called

   i) Probability density function

  ii) Probability mass function

  iii) Probability distribution

  iv) Cumulative probability function

d)What is meant by sampling ?

e) What do you mean by standard error?

f) What is the value of skewness and kurtosis for a normal curve ?

g) What is meant by random variable?

2. **Answer any one questions from the following** 5X1=5

a) Arithmatic mean and standard division of a binomial distribution are respectively 4 and $\sqrt{(8/3)}$. find the values of n and p.

b) A coin is tossed six times . What is the probability of obtaining i) two heads.ii) four or more heads?

3. **Answer any one questions from the following** 10X1=10

a)'Fisher's ideal index formula satisfies both time reversal and factor reversal test'-is the statement true ? prove.

b)Discuss the characteristics of binomial distribution.