

**Mathabhanga College**

**Class Test 2022**

**Semester IV**

**Economics (Honours)**

**Paper Name-Statistical methods for economics.**

**SEC**

**Time 1 hour**

**Full marks-20**

**1. Answer any five questions from the following.**

**1X5=5**

c) What is the probability of getting a number greater than 6 when a dice is thrown?

i) .5

ii).3

iii)0

iv)1

b) Which of the following statement is true

i) For normal distribution mean=median =mode

ii) For normal distribution skewness =0, Kurtosis =0

iii) Both (i) and (ii) are correct

iv) None of the statement is true

e) Extrapolation refers to

v) i) projection a value for the future

vi) ii) insertion of an intermediate value in the series.

vii) iii) calculation of mean value.

viii) iv) calculation of variance

f) What is type-1 error

i) What is conditional probability ?

g) What is meant by unbiased estimator ?

j) What do you mean by critical region?

**2. Answer any one question from the following.**

**5x1=5**

a) What is addition theorem of probability ? Prove the theorem

b) Show that if A and B are two independent event then  $A^c$  and  $B^c$  are also independent.

3. Answer any one question from the following.

**10X1=10**

a) State the criteria of a good estimator. Give illustration.

b) ) What are the properties of standard normal distribution?