UNIVERSITY OF NORTH BENGAL

B.A./B.Sc. Honours 4th Semester Examination, 2020

CC10-ECONOMICS (410)

STATISTICS AND ECONOMETRICS

Full Marks: 60

ASSIGNMENT

The figures in the margin indicate full marks.

GROUP-A

Answer any *two* questions from the following $20×2 = 40$

1. Discuss various methods of sampling. 20

2. What are the properties of least square estimators? Explain. 20

3. (a) Explain the concept of confidence interval, confidence limits and confidence co-efficient. $15+5 = 20$

   (b) A sample of 6500 screws is taken from a large consignment and 75 are found to be defective. Estimate the percentage of defective screws in the consignment and assign limits within which the percentage lies.

4. Find the mean and standard deviation of Binomial distribution. 20

GROUP-B

Answer any *two* questions from the following $10×2 = 20$

5. (a) Distinguish between probability mass function and probability density function. $5+5 = 10$

   (b) State the properties of Poisson distribution.

6. With the help of a suitable example and using scatter diagram show that the regression line is obtained by connecting the averages. 10

7. (a) State the importance of testing hypotheses in research problem. $4+6 = 10$
   (b) Explain the concepts of null hypothesis and alternative hypothesis.

8. Discuss Type-I and Type-II errors. 10

——×——