



**UNIVERSITY OF NORTH BENGAL**  
B.A./B.Sc. Honours 4th Semester Examination, 2021

**CC10-ECONOMICS (410)**

**STATISTICAL AND ECONOMETRIC**

Full Marks: 60

**ASSIGNMENT**

*The figures in the margin indicate full marks.*

**GROUP-A**

**Answer any two from the following questions**

20×2 = 40

1. State and prove the Bayes' theorem of Conditional probability. 20
2. (a) Find mean and standard deviation in case of Poisson distribution. 10+10 = 20  
(b) Show that the Poisson distribution is a limiting case of Binomial distribution.
3. (a) What are the assumptions of Classical Linear Regression Model? 10+10 = 20  
(b) Explain the properties of the Ordinary Least Square estimators.
4. Discuss the different methods of sampling. 20

**GROUP-B**

**Answer any two from the following questions**

10×2 = 20

5. Find out the mean and variance of Binomial distribution with parameters n and p. 10
6. State the properties of random variable. 10
7. Discuss the properties of Normal distribution. 10
8. Write a short note on outcome, independent event, mutually exclusive events, equally likely events. 10

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