



UNIVERSITY OF NORTH BENGAL

B.A. Honours Part-II Examination, 2021

ECONOMICS

PAPER-IV

MATHEMATICAL ECONOMICS AND STATISTICS

Full Marks: 100

ASSIGNMENT

*The figures in the margin indicate full marks.
All symbols are of usual significance.*

GROUP-A

MATHEMATICAL ECONOMICS

Answer any two questions from the following

25×2 = 50

1. What is saddle point? How value of a game under mixed strategy is determined when saddle point does not exist? 25
2. Find the value of a game using graphical method for (2XN) and (MX2) games. 25
3. State and explain the stability conditions of Cobweb model graphically and mathematically. 25
4. Write a short note on: (a) Two-person zero sum game, (b) Maximin-Minimax principle, (c) pure strategy, (d) fair game and (e) dominance property. 25

GROUP-B

STATISTICS

Answer any two questions from the following

25×2 = 50

5. Give the classical definition of probability. What are its limitations? State and prove the axioms of probability. 25
6. Define Binomial distribution. Find mean and variance of Binomial distribution with parameters n and p . 25
7. State the properties of Normal distribution. Show that Normal distribution is a limiting case of Binomial distribution. 25
8. What are the different ways of selecting a sample? Distinguish between Statistic and Parameter with example. What is Standard Error? Distinguish between Standard error and Standard deviation. 25

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