



UNIVERSITY OF NORTH BENGAL
B.A./B.Sc. Honours 2nd Semester Examination, 2021

CC4-ECONOMICS (204)

MATHEMATICAL ECONOMICS

Full Marks: 60

ASSIGNMENT

The figures in the margin indicate full marks.

GROUP-A

Write any two questions from the following 20×2 = 40

1. Describe the Cobweb model mathematically and diagrammatically. 20
2. Find the value of the game of a 2X2 pay-off matrix with mixed strategy. 20
3. (a) How do we interpret 1st order differential equations with the help of Domar's Growth Model? 10+10=20
(b) Explain the Knife-edge problem of economic growth in this context.
4. Explain the following concepts: 5×4 = 20
 - (a) Saddle point
 - (b) Zero-sum Game and Two-person-zero-sum Game
 - (c) Fair Game and Strictly determinable Game
 - (d) Pay-off Matrix.

GROUP-B

Write any two questions from the following 10×2 = 20

5. Describe Solow growth model mathematically. 10
6. Write the assumptions of two-person-zero-sum game. Explain the two-person-zero-sum game with pay-off matrix. 4+6=10
7. Explain the Dominance property of game theory with the help of a numerical example. 10
8. Explain Samuelson Multiplier-Accelerator Interaction Model. 10

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