

Mathabhanga College
Internal Assessment Test-2023
B.A.Honours 3rd Semester
Subject-Economics (Honours)
Paper Name-Microeconomics-II
Paper code-CC7

Time allotted-1 hour

Full marks-20

The figures in the margin indicate full marks

Section -1

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

1x5=5

- a) What do you mean by zero sum game ?
- b) What is pay off matrix?
- c) What is meant by basic solution in LPP problem?
- d) What is feasible solution in LPP problem?
- e) State the rules of dominance property.
- f) The time path of Y is given as $Y^t=2^t+2$. Examine the stability of the equilibrium.
- g) What is mixed strategy ?

Section-II

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

5x1=5

A) Find the dual of the following LPP problem

$$\begin{aligned} \text{Maximise } & Z=5x_1+6x_2 \\ \text{Subject to } & 2x_1+3x_2 \leq 5 \\ & 3x_1+4x_2 \leq 12 \\ & x_1-2x_2 \leq 6 \\ & x_1 \geq 0, x_2 \geq 0 \end{aligned}$$

B) Solve the game whose payoff matrix is given by

	B1	B2	B3	B4
A1	1	7	3	4
A2	5	6	4	5
A3	7	2	0	3

Section-III

Answer any one from the following questions.

10x1=10

3 Solve the following LPP problem using simplex method

$$\begin{aligned} \text{Maximise } & Z= 2X +5Y \\ \text{Subject to } & X+4Y \leq 24 \\ & 3X+Y \leq 21 \\ & X+Y \leq 9 \\ \text{And, } & X, Y \geq 0 \end{aligned}$$

4, A monopolist sells his product in two different markets. The demand curves faced by him in two markets are given as-

$$P_1=60-5q_1, P_2= 260-20q_2$$

If the cost function of the monopolist is given by $C =50+20q$ where $q=q_1+q_2$ find out the maximum profit of he monopolist can earn.

