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QP CODE: 21103007

Reg No	:	
Name	:	

## **B.A DEGREE (CBCS) EXAMINATIONS, OCTOBER 2021**

### **Fourth Semester**

B.A Economics Model I

# Complementary Course - EC4CMT03 - MATHEMATICS FOR ECONOMIC ANALYSIS - 2

2019 Admission only

3BBEC87E

Time: 3 Hours

Max. Marks : 80

#### Part A

## Answer any **ten** questions.

Each question carries **2** marks.

- 1. Ordinal Utility
- 2. Returns to Factor
- 3. Diseconomies of scale
- 4. Explicit and Implict Cost
- 5. Average Revenue
- 6. Determinants of supply
- 7. Financial Market
- 8. Product Differentitation
- 9. For the following game matrix, find the Saddle Point and State the Game Value. Strategies are P,Q and M,N

$$\begin{pmatrix} 6 & 2 \\ -1 & -4 \end{pmatrix}$$

10. For what value of  $\lambda$  the Game with the following Matrix is determinable. Strategies are  $A_1, A_2, A_3$  and  $B_1, B_2, B_3$ 

$$\begin{pmatrix} \lambda & 6 & 2 \\ -1 & \lambda & -7 \\ -2 & 4 & \lambda \end{pmatrix}$$

11. The Following is a Pay Off Matrix

$$\begin{pmatrix} 1 & -2 \\ 2 & -1 \end{pmatrix}$$

What is the value of Game? Who will be the winner of the Game? Why?

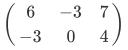
12. Nash Equilibrium

 $(10 \times 2 = 20)$ 

#### Part B

## Answer any six questions. Each question carries 5 marks.

- 13. What do you mean by Demand ? What are the factors affecting Demand ?
- 14. Explain the degrees of Price Elasticity of Demand
- 15. What do you mean by Isocost line ? In what circumstances they would shift.
- 16. Analyse the role of time element in the determination of value
- 17. Examine the Price Leadership Model
- 18. Using Principle of Dominance.



- 19. Solve the following 2X2 Game by Probability Method.  $\begin{pmatrix} 2 & 5 \\ 4 & 1 \end{pmatrix}$
- 20. Explain Two Person Two Commodity Game
- 21. Explain zero sum game theory with example

(6×5=30)

### Part C

#### Answer any two questions.

Each question carries 15 marks.

- 22. Critically explain the indifference curve approach to Demand Theory.
- 23. Critically evaluate the Monopoly.
- 24. Evaluate the price and output determination under the Monopsony and Bilateral Monopoly.



25. Solve graphically the game whose Pay Off Matrix is given below. Strategies are A1, A2, A3, A4, A5 and B1, B2

$$\begin{pmatrix} -6 & 7 \\ 4 & -5 \\ 1 & -2 \\ 2 & 5 \\ 7 & -6 \end{pmatrix}$$

(2×15=30)