21103007

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 λ 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

(10×2=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.

$$\begin{pmatrix} 6 & -3 & 7 \\ -3 & 0 & 4 \end{pmatrix}$$

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 theMonopoly .

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 A_1, A_2, A_3, A_4, A_5 and B_1, B_2

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

(2×15=30)