



21101027

QP CODE: 21101027

Reg No :

Name :

BA DEGREE (CBCS) EXAMINATION , MARCH 2021

Fourth Semester

B.A Economics Model I

Complementary Course - EC4CMT03 - MATHEMATICS FOR ECONOMIC ANALYSIS

2017 ADMISSION ONWARDS

251B8246

Time: 3 Hours

Max. Marks : 80

Part A

Answer any ten questions.

Each question carries 2 marks.

1. Cardinal Utility
2. Average Product
3. Cobb - Douglas Production Function
4. Isocost lines
5. Total Cost
6. Supply schedule
7. Non-Collusive Oligopoly
8. Marginal Physical Product
9. Find Maximin and Minimax. Strategies are A_1, A_2, A_3 and B_1, B_2, B_3

$$\begin{pmatrix} 5 & 3 & 2 \\ 1 & -2 & 0 \\ 8 & -1 & 1 \end{pmatrix}$$

10. Saddle Point
11. Principle of Dominance
12. Fair Game

(10×2=20)





Part B

Answer any **six** questions.

Each question carries **5** marks.

13. What are the determinants of Demand?
14. Define Income Elasticity. How is it useful for classifying commodities.
15. Draw a consumption curve from the following function. $C=200+0.8Y$
16. Define Monopoly. What are the social cost of Monopoly power?
17. Explain the price and output determination under Dumping.
18. What are the assumptions and limitations of Game Theory?
19. What is a Two Person Zero Sum Game ?
20. Using the Principle of Dominance.

$$\begin{pmatrix} 2 & 4 & 3 & 3 & 4 \\ 5 & 6 & 3 & 7 & 8 \\ 6 & 7 & 9 & 8 & 7 \\ 4 & 2 & 8 & 4 & 3 \end{pmatrix}$$

21. Explain Prisoner's Dilema.

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **15** marks.

22. Explain how the indifference curve technique is useful in the analysis of returns to scale.
23. Briefly explain the price and output determination under perfect competition .
24. Briefly analyse the shortrun and longrun equilibrium of Monopolistic Competition.
25. Solve the following Game Problem by Simplex Method

$$\begin{pmatrix} 1 & -1 & 3 \\ 3 & 5 & -3 \\ 6 & 2 & -2 \end{pmatrix}$$

(2×15=30)

