



BA DEGREE (CBCS) EXAMINATION, MARCH 2020

Fourth Semester

B.A Economics Model I

Complementary Course - EC4CMT03 - MATHEMATICS FOR ECONOMIC ANALYSIS

2017 ADMISSION ONWARDS

4E273B59

Time: 3 Hours Marks: 80

Part A

Answer any ten questions.

Each question carries 2 marks.

- 1. Law of Diminishing Marginal Utility
- 2. Indifference Curve
- 3. Inelastic Demand
- 4. Production Function
- 5. CES Production Function
- 6. Product Market
- 7. Imperfect Market
- 8. Low-Cost Firm
- 9. Find the Saddle Point of a Game. Strategies are A₁,A₂,A₃ and B₁,B₂,B₃

$$\begin{pmatrix} 3 & 2 & 4 \\ -2 & 1 & -3 \\ 0 & -2 & 3 \end{pmatrix}$$

- 10. Dominant Strategy
- 11. Solve the Game whose Pay Off Matrix is given below.

$$\begin{pmatrix}
9 & 3 & 1 & 8 & 0 \\
6 & 5 & 4 & 6 & 7 \\
2 & 4 & 3 & 3 & 8 \\
5 & 6 & 2 & 2 & 1
\end{pmatrix}$$

12. Zero Sum Game

 $(10 \times 2 = 20)$



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Part B

Answer any six questions.

Each question carries 5 marks.

- 13. Explain expenditure method of measuring Elasticity.
- 14. Explain Different types of cost.
- 15. What are the features of Income Consumption Curve.
- 16. Evaluate the Price and Output determination under discriminating Monopoly
- 17. Analyse the different concept of Personal and Functional Distribution
- 18. What is Game Theory? Discuss its importance to business decisions.
- 19. Solve the following Game . Strategies are $A_1,\,A_2$ and $B_1,\,B_2$

$$\begin{pmatrix} 3 & 5 \\ 4 & 1 \end{pmatrix}$$

20. Solve the following 2X2 Game by Probability Method.

$$\begin{pmatrix} 3 & -2 \\ -2 & 3 \end{pmatrix}$$

21. Solve Graphically the Game whose Pay Off Matrix is given below. Strategies are A₁, A₂, A₃, A₄,

$$\mathrm{A}_5$$
 and $\mathrm{B}_1,\,\mathrm{B}_2$

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

 $(6 \times 5 = 30)$

Part C

Answer any two questions.

Each question carries 15 marks.

- 22. Critically evalate the least cost combination of inputs.
- 23. What are the different methods of measuring elasticity of supply ?How does supply elasticity is classified?
- 24. Define Dumping.Brefly explain the equilibrium under Dumping.
- 25. Critically evaluate the Two- Person Zero Sum Game.

 $(2 \times 15 = 30)$

