FIFTH SEMESTER B.A. DEGREE EXAMINATION, NOVEMBER 2021

(CBCSS - UG)

CC19U ECO5 B10 - MATHEMATICAL ECONOMICS

(Economics - Core Course)

(2019 Admission - Regular)

Time : 2.5 Hours   Maximum : 80 Marks

Credit : 4

Part A (Short answer questions)

Answer *all* questions. Each question carries 2 marks.

1. What is a rational function?

2. What is an economic function?

3. Define Revenue Function.

4. How the impacts of taxation can be analysed by using elasticity?

5. What is an inferior good?

6. Explain two types of optimization.

7. Define substitution method.

8. Why the production function is said to be a technological function?

9. What do you mean by activity analysis?

10. Explain the dissimilarities of an LPP with the Conventional theory of the firm.

11. Define transaction matrix.

12. What is the open model of an IOA?

13. What is equlibrium?

14. What are the marginalist conditions for equilibrium?

15. What is Price Discrimination?

Part B (Paragraph questions)

Answer *all* questions. Each question carries 5 marks.

16. Write a note on MPC.

17. Find MRSxy for the function $U=3x+y$

18. Optimize $TC=3x^2-xy+2y^2-4x-7y+12$

19. Explain the procedures of profit maximization by using lagrange multiplier.

20. Maximize $Z=45X1+55X2$

   Subject to $6X1+3X2 \leq 120$

   $4X1+10X2 \leq 180$

   $X1, X2 \geq 0$

21. What the dual implies?

22. Explain the usage of Input-Output analysis.

23. Write a note on the technology matrix.

Part C (Essay questions)

Answer any *two* questions. Each question carries 10 marks.

24. What is an economic function, state and explain the important functions involving economic variables?

25. Explain the relationship between AR & MR and AC & MC.

26. What is CD function?

27. Explain the features of various market forms.

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