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B-JFT-J-FA

GENERAL ECONOMICS – I

| Time Allowed : Three Hours | Maximum Marks : 200 |

INSTRUCTIONS

The question paper consists of three Sections. Candidates should attempt FIVE parts of the question in Section I, SEVEN questions from Section II and TWO questions from Section III.

Candidates should attempt questions as per the instructions given in each Section.

The number of marks carried by each question is indicated in each Section.

Answers must be written only in ENGLISH.

Any assumptions made for answering a question must be mentioned clearly.

SECTION I

Attempt any *five* parts of the following question. Answer to each part should be of approximately 50 words.   7×5=35

1. (a) How do you draw a Lorenz curve ? Explain its use.

    (b) What is 'shadow price' ? Why are shadow prices used in project analysis as against market prices ?

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(c) What is Engel's law ? Which sector/product(s) of an economy operate under this law ?

(d) State the first and second fundamental theorems of welfare economics, and comment on their usefulness.

(e) State the Kuhn — Tucker conditions.

(f) Explain how Pareto's law of distribution is useful in measuring income distribution.

(g) Explain total factor productivity and mention any two popular measures of the same.

SECTION II

Attempt any *seven* of the following questions. Each answer is to be in about 150 words.   *15×7=105*

2. Show how a demand function may be derived from the Cobb – Douglas utility function.

3. Formulate a translog cost function and show how the elasticity of input substitution may be obtained.

4. What is "moral hazard" in economic theory ? Discuss a situation that would describe a moral hazard problem.

5. What is "free-rider" problem ? Discuss the possible solutions to this problem.

6. State and explain the Coase theorem in the context of pollution control.

7. Explain Leontief's static input-output model and describe its limitations.

8. What is 'prisoner's dilemma' ? How is it related to a strictly dominant strategy ?

9. What is a superlative index number ? How is it related to the theory of aggregation ?

10. Define a quadratic form, and state the conditions under which it is (i) positive definite, (ii) positive semi-definite, and (iii) negative definite.

SECTION III

Attempt any *two* of the following questions, in about 500 words each.   30×2=60

11. Explain the principle of least squares as a basis for multiple regression analysis. Also state the underlying standard assumptions of ordinary least squares estimation. Explain further the consequences of violation of such assumptions.

12. In the case of a pure exchange economy, how do you characterize Walrasian equilibrium ? Also establish the conditions under which such an equilibrium exists.

13. (a) State and prove Euler's theorem. Is it relevant in the context of a firm ?   10

    (b) Distinguish between technical and allocative efficiency in the context of a firm. Give an example.   10

    (c) Distinguish between parametric and non-parametric tests in testing of hypotheses.   10