

No. of Printed Pages : 3 **REC-102/REC-002**

**Ph. D. (ECONOMICS) (PHDEC)**

**Term-End Examination**

**December, 2023**

**REC-102/REC-002 : ECONOMIC THEORY**

*Time : 3 Hours*

*Maximum Marks : 100*

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*Note : Answer questions from each Section as directed.*

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**Section—A**

*Note : Answer any **two** questions from this Section.*

2×20=40

1. Consider the utility function  $u = x_1^\alpha x_2^\beta$ . Let the prices be  $p_1$  and  $p_2$  and income be  $m$ .

Derive the :

- (i) Hicksian demand function
- (ii) Indirect utility function
2. Explain Arrow's Impossibility Theorem. Stating the assumptions, sketch a proof for the same.

**P. T. O.**

3. Differentiate between a static game of incomplete information and a dynamic game of incomplete information. Discuss the structure of both the types of games and the relevant equilibrium concept of each.
4. Discuss the overlapping generations model.

### Section—B

*Note : Answer any **five** questions from this Section.*

5×12=60

5. Explain the concept of a social welfare function. Compare the Bergson social welfare function with that of the Arrow social welfare function.
6. Discuss decision-making by an economic agent in an environment of uncertainty. Bring out the difference of decision-making under uncertainty with that under certainty.
7. Explain Walras' law. Give a simple proof of the existence of general equilibrium under exchange.

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8. Discuss real business cycle theory. How does real business cycle theory differ from the New Keynesian approach ?
9. Explain the following :
  - (i) Expenditure function
  - (ii) Shepard's lemma
10. Explain the concept of adverse selection. How does it differ from moral hazard ? Show how equilibrium may be sub-optimal in situation of adverse selection, and of moral hazard.
11. What is meant by a cooperative game ? Discuss the concepts of (i) characteristic function and (ii) the core.
12. Discuss pricing under monopoly. Explain the first-, second- and third-degree price discrimination.

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