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No. of Printed Pages : 4

REC-002

M.Phil./Ph.D. PROGRAMME IN ECONOMICS

Term-End Examination

December, 2014

REC-002 : ECONOMIC THEORY

Time : 3 hours *Maximum Marks : 100*

SECTION A

*Answer any **two** questions from this section.* *2×20=40*

1. A consumer has the utility function $U = x_1^{\alpha} x_2^{\beta}$ where $\alpha + \beta = 1$ with income 'M'. The prices of the two goods are p_1 and p_2. Derive the Hicksian demand function and the expenditure function. *20*

2. Explain the concept of Nash equilibrium, bringing out its relationship with dominant strategy equilibrium. Explain how the concept of Nash equilibrium is refined in sequential games of complete information. Discuss the pertinent equilibrium concept for static games of incomplete information. *20*

3. State Walras's law. Sketch a proof of the existence of a general equilibrium under pure exchange, making relevant assumptions. *20*

4. Explain the Gibbard-Satterthwaite Theorem. In what way is it related to the Arrow Impossibility Theorem ? *20*

SECTION B

*Answer any **five** questions from this section.* *5×12=60*

5. Bring out the salient features of the Ramsey Infinite-horizon model. *12*

6. What is the impact of the presence of asymmetric information on the equilibrium outcomes of a competitive market ? Explain the concepts of adverse selection and moral hazard, and distinguish between the two. *12*

7. What do you understand by the term 'business cycle' ? Discuss the main features of Real Business Cycle Theory. *12*

8. Explain the concept of the following : *12*

(a) Shapely value

(b) Core as a solution concept for cooperative games

9. Explain the following : *12*

(a) Roy's Identity

(b) Shephard's Lemma

10. Explain the concept of rational expectations. How is it different from adaptive expectations ? Sketch out a simple model of money demand and supply in the presence of rational expectations. *12*

11. Discuss the basic structure of New Keynesian Economics, explaining the basic concepts. In what way does it differ from New Classical Economics and in what way is it similar ? *12*

12. Discuss the equilibrium of the firm under monopoly. *12*