

**RESEARCH DEGREE PROGRAMME IN  
ECONOMICS**

**Term-End Examination**

**December, 2016**

**REC-002 : ECONOMIC THEORY**

00251

*Time : 3 hours*

*Maximum Marks : 100*

*Note : Answer the questions from each section as directed.*

**SECTION - A**

Answer **any two** questions from this section.

**2x20=40**

1. Explain the concept of the dual in optimisation theory. Show the relationship between the indirect utility function and expenditure function.
2. Explain the concept of Nash equilibrium, bringing out its relationship with dominant strategy equilibrium. Explain how Nash equilibrium is refined in sequential games of complete information.
3. Explain the Giffard-Satterthwaite Theorem. In what way is it related to Arrow Impossibility Theorem ?
4. Describe the Ramsey-Cass-Koopmans set-up of inter temporal optimisation. Explain how this can be extended to describe the Real Business cycle set-up.

## SECTION - B

Answer any five questions from this section.

5x12=60

5. State and prove Motelling's lemma.
  6. Explain the structure of a general auction. What do you understand by 'winner's curse' ?
  7. Explain the concept of rational expectations. Describe a basic new-classical macro model with rational expectations.
  8. Explain adverse selection. How is it different from moral hazard ?
  9. Describe the process of decision making by a rational economic agent under conditions of uncertainty.
  10. Sketch a proof of the existence of competitive equilibrium under pure exchange, stating the assumptions carefully.
  11. In what way is the New Keynesian approach different from the Standard Keynesian approach to macro economics ?
  12. Discuss second-degree price discrimination by a monopolist. How is it different from first-degree price discrimination ?
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