No. of Printed Pages: 4

**REC-102** 

# RESEARCH DEGREE PROGRAMME IN ECONOMICS

### **Term-End Examination**

June, 2018

**REC-102: ECONOMIC THEORY** 

Time: 3 hours

Maximum Marks: 100

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

#### SECTION A

Answer any two questions from this section.

*2*×2*0*=4*0* 

- 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.
- 2. Discuss the structure of the overlapping generations model. In what way is this model different from the Ramsey-Cass-Koopmans model?

3. Consider the utility function  $u = q_1^{\alpha} - q_2^{\beta}$ . Let prices of  $q_1$  and  $q_2$  be  $p_1$  and  $p_2$  respectively. Let the consumer's income be m.

#### Derive

- (a) The indirect utility function
- (b) The expenditure function
- 4. Prove the existence of an equilibrium set of prices in a system of general equilibrium under pure exchange. State carefully the assumptions to be made for the proof.

#### SECTION B

Answer any five questions from this section.

 $5 \times 12 = 60$ 

- 5. State and prove Hotelling's Lemma.
- 6. What do you understand by rational expectations? Differentiate between rational and adaptive expectations. Briefly discuss the new classical macroeconomic model under rational expectations.
- 7. Explain the concept of adverse selection with the aid of an example. How does adverse selection differ from moral hazard?
- 8. Explain the process of decision making by a rational economic agent under conditions of uncertainty.
- 9. Discuss the New Keynesian approach to macroeconomics. In what way is this approach different from the Standard Keynesian approach?
- 10. Discuss second-degree price discrimination by a monopolist. How is it different from first-degree and third-degree price discriminations?

## 11. Explain the following:

- (a) Slutsky equation
- (b) Roy's identity

## 12. Explain the following concepts:

- (a) Shapley Value
- (b) The Core