RAMAKRISHNA MISSION VIDYAMANDIRA

(Residential Autonomous College under University of Calcutta)

FIRST YEAR
B.A./B.Sc. SECOND SEMESTER (January – June) 2015
Mid-Semester Examination, March 2015

Date : 18/03/2015 **ECONOMICS (Honours)**
Time : 11 am – 1 pm Paper : II Full Marks : 50

[Use a separate answer book for each group]

Group – A

1. **Answer any two questions :** [2×6]
   a) Why might a firm remain in business in short run even if incurring a loss, but will always leave the industry if incurring a loss in the long run.
   b) In a perfectly competitive market what is the relationship between the market price and the cost of production for all firms in the industry.
   c) Explain the concept of economic efficiency using the concepts of consumer surplus and producer surplus. Show how a competitive market achieves economic efficiency.

2. **Answer any one question** : [1×10]
   a) Suppose that a perfectly competitive firm has no knowledge of the exact shape of its STC curve. It knows that its total fixed cost is \$200, and it assumes that its average variable costs are constant at \$5.
      i) If the firm can sell any amount of commodity at that price of \$10 per unit, draw a figure and determine the sales volume at which the firm breaks even. [4]
      ii) How can an increase in the price of the commodity, in the total fixed costs of the firm, and in the average variable costs, be shown in the figure of part (i) of this problem? [4]
      iii) What is an important shortcoming of this analysis? [2]
   b) i) Suppose that the revenue and the total cost of a firm are given by the equation $R = 60Q$ and $C = 10 + 5Q^2$ (Q = output). What will be the profit-maximising output and total profit of the firm? [3]
      ii) A firm's total variable cost is given by the following $TVC = 75Q - 10Q^2 + Q^3$. Will the firm produce the product if price of the product is Rs. 40? [3]
      iii) Given the following short-run cost function of a firm $TC = 1000 + 10Q^2$. What is the firm's shut down point? Derive the expression for firm's short-run supply curve. [4]

3. Is the following statement true or false, explain— [1·5+1·5]
   a) In the long run the supply curve will always be upward sloping.
   b) In the short run, the supply curve will be upward sloping.

Group – B

4. **Answer any one question** : [1×15]
   a) Consider an economy in the long run. Explain the impact of increase in government spending on the real variables of the economy when—
      i) Savings is a function of income only
      ii) Savings is also a function of rate of interest.
   b) State the Quantity Theory of Money in it's two versions. What according to the theory, will be the impact of an increase in money supply? [10+5]

5. **Answer the following questions** :
   a) Explain the concept of Seigniorage. [5]
   b) Write some of the costs of expected inflation. [5]

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