RAMAKRISHNA MISSION VIDYAMANDIRA

(Residential Autonomous College under University of Calcutta)

THIRD YEAR

B.A./B.SC. SIXTH SEMESTER (January – June), 2013

Mid-Semester Examination, March 2013

Date : 05/03/2013 — ECONOMICS **(Honours)**

Time : 12 noon – 2 pm — Paper : VII — Full Marks : 50

[Use separate answer scripts for each group]

Group – A

1. Answer **any two** question from the following :- [2×10]
   a) Discuss briefly The process of transition from Mercantilism to Industrial Capitalism in Western Europe. [10]
   b) Analyse the concept of 'take-off' in Rostow's stage theory. [10]
   c) Discuss the rationale for planning in a ' mixed economy'. Give two illustrations of plan-failure. [8+2]
   d) Give some major arguments in favour of import-substitution in a LDC. Mention some limitation of this strategy. [6+4]

2. Write short-note on **any one** of the following :- [5]
   a) Prebisch-Singer thesis.
   b) Decentralised planning.

Group – B

Answer **five** questions taking atleast two from each unit [5×5]

Unit I

3. Consider the model :

$$D_t = \alpha - P_t$$

$$S_t = -\gamma + \frac{3}{2}P_t$$

$$P_{t+1} = P_t - \frac{1}{2}(S_t - D_t)$$

Find the time path of price (general solution). Is it convergent or divergent? [5]

4. The demand and supply in a market are given by :

$$Q_d = 4 - 3P + \delta\frac{dp}{dt}, \qquad \delta > 0$$

$$Q_s = -2 + 8P$$

Assuming that the rate of change of price over time is directly proportional to excess demand, find the time path P(t). [5]

5. Let the demand and supply in a market be given by $D = \frac{25}{P}$ and $S = \sqrt{5p}$.

   If $\frac{dp}{dt} = k(D - S)$ be the price adjustment equation, find whether the resultant equilibrium is dynamically (locally) stable. [5]

6. Suppose the production function for a country's output be Q = f(K,L) which is homgeneous of degree 1. Derive the relevant differential equation for the Solow model. [5]

Unit II

7. Consider the utility function $U(w) = (1 - e^{-w})$ Show that this function exhibits risk loving behaviour for small values of W and risk averse behavior for high values of W. [5]

8. Suppose that an individual's utility from wealth W is given by $U(W) = a + bW + cW^2, b > 0, c < 0, b + 2cW > 0$ for all W. Show that the individual will accept a higher δ^2 only if he gets a higher mean μ. [5]

9. Using the concept of compensating variation, how can you measure the incremental consumer's surplus when the price of a commodity changes?

10. Find the present value of a perpetual income stream flowing at the uniform rate of Rs. M. per year, if the continuous rated discount is r.