RAMAKRISHNA MISSION VIDYAMANDIRA

(Residential Autonomous College affiliated to University of Calcutta)

B.A./B.Sc. SIXTH SEMESTER EXAMINATION, MAY 2016

THIRD YEAR [BATCH 2013-16]

Date : 03/05/2016 **ECONOMICS (Honours)**

Time : 11 am – 3 pm **Paper :** VIII Full Marks : 100

[Use a separate Answer Book for each group]

Group - A

1. Answer **any three** of the following : [3×4]

   a) The PPF of India is summarised in the following table :

Output Combinations					
Commodity X	0	20	40	60	80
Commodity Y	100	90	70	40	0

   i) Draw the PPF. Determine India's optimum production point for each of the following world price ratios $-\frac{P_x}{P_y} = 0\cdot2, 0\cdot8, 1\cdot1, 1\cdot75$ and 3. [2]

   ii) Suppose that India consumes commodities in fixed proportion 1X : 1Y irrespective of prices. If the world price ratio is 0·6 what will India produce, consume, export and import. Give precise quantities. [2]

   b) Suppose Germany and France produce wine and clothe under increasing opportunity costs. At their respective autarkic equilibriums, the marginal costs of production are given in the following table :

	Germany	France
Food	2	4
Cloth	6	24

   i) Which country has comparative advantage in the production of food? In the production of clothe? [1·5]

   ii) Under free trade equilibrium Germany exports 100 units of clothe in exchange for 500 units of French food. Assume that the marginal cost of German clothe rises to 7·5. And that 1 German currency exchanges for 3 French currencies. Determine the equilibrium price of food and clothe in France. [2·5]

   c) It is just as likely that economic growth will worsen a country's terms of trade as that will improve them. Why, then, do most economists regard immiserising growth, while growth actually hurts the growing country, as unlikely in practice? [4]

   d) In what circumstance free trade only leads to gains from specialisation? [4]

   e) What is local content requirement? [4]

   f) Discuss the infant industry argument in favour of tariff. [4]

2. Answer **any one** of the following : [1×8]

   a) In practice, much foreign aid is "tied", that is, it comes with restrictions that require that the recipient spend the aid on goods from the donor country. For example, Germany might provide money for an irrigation project in Sunderban on the condition that the pumps, pipelines, and construction equipment be purchased from Germany rather than from USA.

   How does such tying of aid affect the transfer problem analysis? Does tying of aid make sense from the donor's point of view? Can you think of a scenario in which tied aid makes the recipient really worse off? [8]

   b) Define optimum tariff. How is it related to elasticity of foreign offer curve? [2+6]

3. Answer **any two** of the following : [2×15]

a) Home has 2400 workers available. It can produce two goods – oranges and pears. The unit labour requirement in orange production is 6, while in pear production it is 4. Suppose another country (call it Foreign) with a labour force 1600; unit labour requirements for oranges and pears are 10 & 2 respectively.

i) Graph Home and Foreign's PPF. What is the opportunity cost of oranges in terms of pears in both the countries? Explain. [3]

ii) In the absence of trade, what would be the price of oranges in terms of pears in both the countries? And why? [2]

iii) Construct the world relative supply curve. Now suppose the relative demand takes the following form : $\frac{\text{demand for orange}}{\text{demand for pear}} = \frac{\text{price of pears}}{\text{price of orange}}$. Graph the relative demand with relative supply. What is the world equilibrium relative price of oranges? [5]

iv) What is the pattern of trade? Explain the gains from trade. [5]

b) i) Assume that there are two countries, country A and country B, both produce steel and banana using identical technology (variable coefficient production technology), where banana more labour intensive and steel more capital intensive. Tastes and preferences are assumed to be same in both the nations. But country A is endowed with more labour than country B and country B is capital abundant.

Explain which country has comparative advantage in what commodity? Explain with diagram the pattern and gains from the trade. [5]

ii) Suppose a producer is a monopolist in domestic market, but a price taker in the world market. Explain with diagram how the producer will decide how much to sell and what prices to be charged in domestic and in world market. What are the conditions to be met for doing so? [5]

iii) State and prove Stolper-Samuelson theorem in case of fixed co-efficient production technology. What is the implication of this theorem? [5]

c) i) What is intra-industry trade and what is inter-industry trade? Mention the source of comparative advantage in intra-industry trade and inter0industry trade. If, for example, Home and Foreign country are similar in capital labour ratio which type of trade will be dominant and why? Why intra-industry trade matters? [2+2+2+2]

ii) What is Leontief's Paradox? Explain the reasons behind the paradox. [3·5+3·5]

d) i) How does the Heckscher-Ohlin theory show the relationship between commodity prices and returns to the productive factors? [5]

ii) Compare the impacts of tariff and quota in case of— [5+5]

A. A Perfectly Competitive Market

B. A Monopoly

Group - B

4. Answer **any three** of the following : [3×5]

a) Show that for the production $q = 0 \cdot 75 L^{0.63} K^{0.37}$, the isoquants are negatively sloped and convex to the origin.

b) Find the stability of the market characterised by the following conditions :

$D = 10 - 2P$; $S = -3 + 3P$; $\frac{dP}{dt} = 4(S - D)$.

c) Consider a closed economy without government characterized by the following equations : $C_t = 0 \cdot 5Y_t + 0 \cdot 4Y_{t-1} + 300$; $I_t = 0 \cdot 2Y_{t-1} + 200$; $Y_0 = 6500$. Find the equilibrium national income and examine the stability of the equilibrium.

d) Show that Price Effect = Substitution Effect + Income Effect interms of Slutsky Equation.

e) What are the properties of profit function?

f) State the fundamental duality relationships in the context of indirect utility function and expenditure function.

5. Answer **any one** of the following : [1×10]

a) i) Construct a two commodity one factor (primary and non-reproducible) Leontief's static open model and state the assumptions. What are the problems of output system and consumption possibilities? [3]

ii) Define the solvability condition and state and give economic interpretation of Hawkin-Simon condition. [3]

iii) Find out the equilibrium prices for the following two sector Leontief open input-output model—

$$A = \begin{bmatrix} 0\cdot3 & 0\cdot3 \\ 0\cdot2 & 0\cdot5 \end{bmatrix},\ a_L^T = [4 \quad 6],\ w = 10\,.$$ [4]

b) Suppose a consumer faces the following utility function U = (x+2) (y+1). If $P_x = 4$, $P_y = 6$ and M = 130.

i) Write the Lagrangian function. [1]

ii) Find the optimal level of purchase of x and y. [3]

iii) Find if the second order condition for maximization is satisfied or not. [3]

iv) What are the impacts of changes in P_x and P_y on the optimal purchases of the two commodities. [3]

6. Answer **any three** of the following : [3×5]

a) Mention some of the basic features of the colonial economy in India.

b) Discuss briefly some of the demerits of permanent settlement in India.

c) Mention some of the major constituents of economic drain in India during the British period.

d) Briefly discuss the 'railway versus irrigation controversy' in pre-independent India.

e) Discuss briefly some of the featured of Old Guarantee System in the British period.

7. Answer **any one** of the following : [1×10]

a) What do you mean by deindustrialisation? Mention some of the causes of deindustrialisation in India during the British rule. [3+7]

b) Discuss the causes and consequences of commercialisation of Indian agriculture during the British rule. [5+5]

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