RAMAKRISHNA MISSION VIDYAMANDIRA

(Residential Autonomous College affiliated to University of Calcutta)

B.A./B.Sc. SIXTH SEMESTER EXAMINATION, MAY 2018
THIRD YEAR [BATCH 2015-18]
ECONOMICS (Honours)
Paper : VIII

Date : 07/05/2018
Time : 11 am – 3 pm
Full Marks : 100

[Use a separate Answer Book for each Group]

Group - A

1. Answer **any four** questions : [4×3]
   a) Why did the industrial revolution take place in Britain first?
   b) What is the mystery of 'missing women'?
   c) What are the basic tenets of the 'Dependency theory'?
   d) Distinguish between GATT and WTO.
   e) Define organic composition of capital.
   f) Distinguish between market failure and government failure.
   g) What do you mean by decentralised planning?
   h) Briefly state the arguments of the Prebisch-Singer thesis.

2. Answer **any one** question : [1×8]
   a) What do you mean by the structural adjustment programme of the World Bank and the IMF? Analyse the impact of such programme on the economies of LDC's. [4+4]
   b) Make a comparative assessment of Rostow's stage theory vis-a-vis the Marxian one.

3. Answer **any two** questions : [2×15]
   a) i) Critically analyse Rostow's stage theoretic approach towards development. [7]
      ii) Discuss the role of higher investment rate and the leading growth sector in an economy for the attainment of take off stage as described by Rostow. [4]
      iii) What are the criticisms labelled against Rostow's theory? [4]
   b) i) Write a short note on women labour in agriculture. [5]
      ii) Explain the implication of gender discrimination with respect to work, health, and education. [10]
   c) Discuss in detail the major arguments for planning in developing countries and briefly analyse the reasons for plan failures in these countries. [8+7]
   d) Define an MNC. Discuss the major objections commonly raised by the developing countries against the activities of MNCs in these countries. [2+13]

Group - B

4. Answer **any three** questions : [3×4]
   a) Take two countries, Home and Foreign that have different relative endowments of the two factors of production, capital and labour. These two factors are used in the production of two goods, automobiles, which use relatively intensively capital, and wheat, which use labour relatively

intensively. Assume that the Home country is relatively better endowed with capital than labour with respect to the Foreign country. Explain, in brief, qualitatively and draw the appropriate graphs to illustrate the impact on the two countries' terms of trade and welfare of the following growth patterns:

i) Increase in the capital stock in the Home country [2]

ii) Increase in the capital stock in the Foreign country [2]

b) i) "*If a country is "large", imposing a positive tariff on some of its imports can result in total welfare gain for the country".* What effect accounts for this outcome? Discuss in no more than 4 sentences (a diagram is always welcome). [2]

ii) What would be the effective rate of protection on assembled computers if India places a 50% tariff on them, which have a world price of Rs. 30,000, and no tariff on computer components, which together have a world price of Rs 10,000? [2]

c) Is there any contradiction between Leontief paradox and the factor proportions theory? Explain. [4]

d) "Japanese labour productivity is roughly the same as that of the United States in the manufacturing sector (higher in some industries, lower in others), while the United States is still considerably more productive in the service sector. However, international tourists often complain that Japan is an incredibly expensive place, compared to the US." Explain this phenomenon in terms of wages and the implied prices of non-traded goods in a Ricardian model. [4]

e) What is the rate of optimum tariff for a small country and why is it so? [4]

f) i) The blue-collared workers in Developed Countries have traditionally favored limits on imports from less-affluent countries. In the light of the Heckscher-Ohlin model of trade, discuss (in no more than 3 sentences) if this is a shortsighted policy or a rational one in view of the interests of union members. [2]

ii) Using your answer from part i, argue why we do not find many North-South free trade agreements in the real world. How relevant is your argument in explaining the low success rate of South-South agreements? [2]

5. Answer **<u>any one</u>** question : [1×8]

a) Suppose a capital-abundant country levies a tariff on its labour-intensive imports. Show and explain that this must improve the real wage of workers. What further changes would in the home country's real wage be if foreign countries counter with tariffs of their own on home exportables? [4+4]

b) Consider an economy with two goods, with production functions $y_1 = L_1^{\frac{1}{3}} K_1^{\frac{2}{3}}$ and $y_2 = L_2^{\frac{2}{3}} K_2^{\frac{1}{3}}$. Consider the optimization problem of maximizing the value of total output for given output prices, p_1 and p_2, and total factor endowments *L* and *K*.

i) Show that the equilibrium capital-labour ratio in industry 1 will always be four times the capital-labour ratio in industry 2. [2]

ii) Show that equilibrium unit input requirements $(a^*_{L1}, a^*_{K1}, a^*_{L2}, a^*_{K2})$ are a function of the factor price ratios only. Find $\frac{\delta a^*_{Li}}{\delta w}$ and $\frac{\delta a^*_{Ki}}{\delta r}$, and confirm that they are negative in sign, i = 1,2. [2]

iii) On the basis of the factor intensities in each industry, which factor price would you expect to increase and which to decrease when p_1 increases? Find the explicit functions $w = w^*(p_1, p_2)$ and $r = r^*(p_1, p_2)$ and verify this. [2]

iv) On the basis of factor intensities, which industry will increase output and which will decrease output when the endowment of labour increases? To do this you should solve for optimum values of y_1 and y_2 in terms of output prices and total factor endowments. [2]

6. Answer **any two** questions : [2×15]

a) i) Which one is preferable to a country, depending on the effect on terms of trade: an import tariff or an export subsidy? Explain. [6]

ii) If there is a transfer of income from a particular country to the other, does it necessarily affect the terms of trade? Explain in terms of world relative demand and relative supply curves. [6]

iii) Is it true that a large country may not be able to gain by imposing a tariff on it's import item? (Use partial equilibrium approach) [3]

b) Suppose that fixed costs for a firm in the automobile industry (start-up costs of factories, capital equipment, and so on) are Rs 5 billion and that variable costs are equal to Rs 17,000 per finished automobile. Because more firms increase competition in the market, the market price falls as more firms enter an automobile market, or specifically, $P = 17,000 + (150/n)$, where n represents the number of firms in a market. Assume that the initial size of the Indian and the remaining South-East Asian automobile markets are 300 million and 533 million people, respectively.

i) Calculate the equilibrium number of firms in the Indian and the remaining South-East Asian automobile markets without trade. What is the equilibrium price of automobiles in each of these markets if the automobile industry is closed to foreign trade? Plot the results in an appropriate diagram. [5]

ii) Now suppose that India decides on free trade in automobiles with remaining South-East Asia. This trade agreement adds 533 million consumers to the automobile market, in addition to the 300 million in India. How many automobile firms will there be in India and the remaining South-East Asia combined? What will be the new equilibrium price of automobiles? Show the new results in the same diagram as in (i). [5]

iii) Why are prices in India different in (i) and (ii)? Are consumers better off with free trade? In what ways? [5]

c) Two countries, Home and Foreign, use one factor, labour, to produce two goods, Shoes and Computers. The Home country can produce Shoes with one unit of labour and Computers with two units of labour. The Foreign country can produce Shoes with 3 units of labour and Computers with 4 units of labour. Home country is endowed with a labour force of 200 units, while Foreign country is endowed with a labour force of 100 units. Preferences are the same in the two countries and are described by the following utility function: $U = \log S + \log C$.

i) What is the pattern of production and consumption in the Home country when in autarky? What is the pattern of production and consumption in the Foreign country when in autarky? [3]

ii) Draw for both countries a graph with the production possibility frontier and the graphical solution to the maximization problem. [3]

iii) Now imagine the two countries are allowed to trade. Draw the world relative supply curve. For which range of prices will both countries specialize? What happens if the price is not in this range? [4]

iv) Now draw the world relative demand curve and find the world equilibrium price. Do both countries specialize? What is the pattern of trade? [3]

v) Explain the source of gains from trade in this problem. [2]

d) In a small country the market for cars is described by the following demand and supply equations:

$$Q^D = \frac{196}{p};\ Q^S = p$$

where quantities are in millions and prices are in thousands of rupees.

i) What is the autarky price for cars, p^A, in this country? [2]

ii) Imagine the price of cars on the international market is $p^W = 9$. At this price how much would the country produce, how much would it demand, and how much would it import? [2]

iii) Imagine the country imposes a quota for the import of cars. The government establishes that 1 million cars can be imported into the country. What is the amount of cars supplied and demanded under this regime? [2]

iv) Find the specific tariff that would yield exactly the same level of imports as established in part iii. [2]

v) Draw a graph that represents the autarky equilibrium, the free trade equilibrium, and the two equivalent restricted trade equilibriums. [2]

vi) Under the assumption that the government doesn't auction off the quotas, but randomly assigns them to foreign countries, calculate the consumer surplus, producer surplus, and government revenues under free trade, import, and quota. Then compare welfare loss due to the two types of trade restrictions. [5]

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