INDIAN INSTITUTE OF TECHNOLOGY, KHARAGPUR

End-Spring Semester 2022-23

Subject No.: HS40078 **Subject Name:** International Trade **Duration:** 3 hrs
Full Marks: 50
Department/Center/School: Humanities & Social Sciences
Specific charts, graph paper, log book etc., required No
Special Instruction: Question Number 1 and 2 are compulsory. Answer any two from the rest.

1. Distinguish between the following concepts (any three): $5 \times 3 = 15$

   (a) Inter industry trade and intra industry trade;
   (b) Revenue maximizing versus optimum tariff;
   (c) Quota versus VER;
   (d) Price equivalence and welfare equivalence of tariff and quota.

2. Write short notes on the following concepts (any three): $5 \times 3 = 15$

   (a) Leontief paradox;
   (b) Heckscher-Ohlin-Vanek model;
   (c) Export subsidy;
   (d) Conditions for incomplete specialization.

3. "The impact of a change in commodity price on factor price depends on the factor intensity assumption." Establish the statement algebraically, graphically and intuitively in a 2x2x2 Heckscher-Ohlin-Samuelson model by making suitable assumptions regarding factor intensity. 10

4. Discuss the basis of trade and gains from trade in the love-of-variety approach following Krugman (1979). Point out the major criticism of the model. 10

P.T.O.

5. Consider a hypothetical situation where U.S. domestic car producers compete with newly emerging Indian car producers (assume homogeneous car produced in U.S. and India).

Suppose that supply of cars by Indian producers is perfectly elastic at a price of P=150.

The domestic supply function of U.S. producers is given by:

$$P = 100 + 5Q$$

where price is in thousands of dollars and quantities in millions of cars.

The U.S. domestic demand for cars is given by:

$$Q = -\frac{1}{10}P + 100$$

(a) Find out the equilibrium of the U.S. car market under autarky. 1.5

(b) Now suppose that the U.S. opened its market to trade and allowed Indian manufacturers to import their cars to the U.S. without any additional tariffs or quotas. Find out the following at the post-trade price (which is nothing but Indian price): 2.5

(i) Domestic production of U.S. car;

(ii) Import of Indian car by U.S.

(c) Suppose that U.S. manufacturers feel threatened facing competition from Indian firms. Hence, they lobby the government so that a tariff t = 100 is imposed on import of car. How would this tariff change the equilibrium price, domestic sell, amount of imports and tariff revenue earned by U.S. government? 3

(d) Now suppose instead of tariff, the government imposed a quota. Calculate the quota that would result in the same quantity of domestic production and imports as under t = 100 tariff. 3