## Indian Institute of Technology Kharagpur

Department of Humanities & Social Sciences

Mid-Spring Semester Examination, 2016

Sub. Name: International Trade

Sub. No. HS40078

Full Marks: 30

Time: 2 Hrs.

## Instruction. All questions are compulsory.

No queries will be entertained during examination.

- 1. Argue whether the following statements are true or false giving appropriate reason(s) in favour of your answer:  $5\times3$ 
  - (a) Absolute advantage implies comparative advantage but the converse is not true.
  - (b) Free trade is a Pareto improvement over autarchy.
  - (c) In a two-country world, the equilibrium in international market will be maintained whenever the offer curves of the two countries intersect each other.
  - (d) The convexity condition for gains from trade is always violated with IRS.
  - (e) American workers gain from free trade with China because free trade lowers prices of clothing (which is relatively labour intensive) in the United States and American workers spent very large portion of their income on clothing.
- 2. Consider the following equations as in Jones (1965) to determine factor-price changes from commodity-price changes in a framework where two goods X and Y are produced using two factors of production labour (L) and land (T):

$$\theta_{IX}\hat{w} + \theta_{TX}\hat{r} = \hat{P}_X$$

$$\theta_{LY}\,\hat{w} + \theta_{TY}\,\hat{r} = \hat{P}_Y$$

where  $\theta_{Li} + \theta_{Ti} = 1$ , i = X, Y.

Use these equations to show that if good X is relatively labour intensive, then a rise in  $P_X$  relative to  $P_Y$  will raise w relative to both commodity prices and r. Why is it called excluded middle phenomenon? Can you think of any situation when this phenomenon is lost?

3. Assume that two goods, cloth and food, are produced using two factors – labour and land. The input requirements and the endowments are given in the table below.

	Unit Labor requirement	Unit Land requirement	Labour (L)	Land (T)
Cloth	$a_{LC} = 10$	$a_{TC} = 5$		
Food	$a_{LF} = 2$	$a_{TF} = 4$	100	100

- (a) Draw the production possibility frontier with two factors.
- (b) What happens to domestic production if there is *ceteris paribus* increase in endowment of labour by 20 units? Explain your answer.
- (c) How will be the pattern of trade with a foreign country with identical demand but with a relatively higher endowment of land? 7.5