Wilfrid W. Csaplar Jr., Ph.D. Economics 360 Exam #1 2014/2/24

Write your name on the cover of the test booklet and nowhere else. Enclose this sheet and any graph paper you used with the booklet. Failure to follow these directions will cost you 1 point. The test has 150 points (to be scaled up to 210 points) and is scheduled to take 75 minutes. Therefore, expect to spend 1 minute for every 2 points. For example, a 12-point question should take 6 minutes. I can give extra time, but I will not give much.

1) (10 points) Suppose that Brazil is capital abundant and India is labor abundant. Use the Specific Factors Model with labor being mobile and capital immobile. Wood is capital intensive while rice is labor intensive. For ONE of the following groups of people, what happens to their **real** income? Explain your logic. (Yes, this is "Do one of three.")
A) Labor in India
B) Owners of logging companies in India
C) Owners of rice farms in India.

2) (10 points) Answer EITHER Part A OR Part B.
A) Suppose all countries have the same tastes. What would determine which country you would get the most benefit from trading with? Explain your logic.
B) Suppose all countries have the same production capabilities. What would determine which country you would get the most benefit from trading with? Explain your logic.

3) (10 points) Answer EITHER Part A OR Part B.
A) The Heckscher-Ohlin Model assumes *perfect internal factor mobility*. What does that mean? How my the results change if we relax that assumption? Explain your logic.
B) The Heckscher-Ohlin Model assumes *identical tastes*. What does that mean for the graphs we drew? How my the results change if we relax that assumption? Explain your logic.

4) (14 points) Answer EITHER Part A OR Part B.
A) State the *Factor-Price Equalization Theorem*. What is the economic reason why it is logical?
B) State the *Leontief Paradox*. What do you think was the main cause of the paradox? Explain your logic.

5) (16 points) We have three models of how the PPF's shape is determined. Two of them give curved PPFs. For ONE of those models, explain how the assumptions of that model results in a curved PPF. Make sure you draw the PPF while explaining its shape.

6) (20 points) Answer EITHER Part A OR Part B.
A) On the PPF diagram the line representing the relative price of the good on the X-axis has another name. What is that name? Why are they the same? On the offer curve diagram the line representing the relative price of the good on the X-axis has another name. What is that name? Why are they the same?
B) For social optimality, why do we want the $MRS_{XY} = P_X/P_Y$? For social optimality, why do we want the $MRT_{XY} = P_X/P_Y$? For both questions, I am looking for economic logic, not mathematics.

7) (30 points) Answer EITHER Part A OR Part B.
A) Draw three terms of trade lines and three trade indifference curves for the USA when we export wigs and import bananas. Use this to get three points on the offer curve. Explain why the trade indifference curves look as drawn. It does not matter to me if you use just the first quadrant or all four quadrants.
B) Draw the PPF/indifference curves for melons for the USA assuming we export melons. Use it to find three points on the offer curve for the USA, where the other good is glasses. Draw the offer curve. Explain how you found those points.

8) (40 points) Suppose the USA has 10 units of labor and China has 10 units of labor. In the USA, 1 units of labor can produce 3 units of food or 1 computer. In China, 1 unit of labor can produce 4 units of food or 4 computers. **For each part, show all mathematics and briefly explain how you reached your conclusion.** In autarky, what would be the relative price of a computer in each country? Which country has the absolute advantage in producing each good? Which country has the comparative advantage in producing each good? Which country would specialize in which good? What relative price would be acceptable to both countries for trading computers and food? Draw the PPF and CPF (when the countries are trading) for **EITHER** the USA **OR** China. Add indifference curves to show where they consume. Make sure the graph has the same the relative price you mentioned in earlier. Draw the world supply and demand for EITHER food OR computers which illustrates the situation. Remember to explain all graphs.