NAME:  

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Midterm  
Economics 181  
International Trade  
Spring 2002  

Please answer all parts. Please show your work as much as possible.

Part I (20 points). Please indicate whether the answer is true or false and explain your answer. You must give an explanation to get full credit for the answer (1 point for correct answer; 1 point for the explanation).

1. (Ricardian framework). Assume that country X produces two goods. Country X has an absolute advantage in the production of both goods. This implies that wages in country X will fall when it opens up to trade.

2. The Theorem of Factor Price Equalization (FPE) states that with trade, returns to factors should equalize throughout the world. This implies that wages should become equal across all countries. One important assumption underlying this theorem is differences in technology across countries.

3. In the specific factor model, the mobile factor may gain or lose from trade.

4. According to the Standard Trade Model, changes in relative prices will lead you to shift to a different production point along the production possibility frontier.

5. The Heckscher-Ohlin framework provides the basis for globalization critics to argue that increasing trade flows are leading to an increase in inequality in the United States. However, the evidence on whether trade is the main explanation for increasing inequality is mixed. An equally likely possibility is that technical change, which leads to greater demand for skilled labor, has led to the observed increase in inequality. Another problem is that greater inequality is observed in developing countries as well as non-traded sectors.

6. If France is abundant in skilled labor relative to unskilled labor, then the Stolper-Samuelson theorem suggests that when France increases its trade with China, wage inequality in France should fall.
7. If the Ricardian framework is correct, then wage differences across countries reflect differences in absolute advantage across countries.

8. A country's terms of trade is defined by the price of exports relative to imports, or $P_x/P_m$. An increase in $P_m$ indicates an improvement in the country’s terms of trade.

9. In the Heckscher-Ohlin framework, assume that China is labor-abundant and capital-scarce. Garments are labor-intensive and telecommunications are capital-intensive. According to the Heckscher-Ohlin framework, if China joins the WTO (implying greater trade with the United States), production of garments in China will rise and production of telecommunications in China will fall.

10. According to the Heckscher-Ohlin framework, if the US is skill-abundant and scarce in unskilled-labor, then the US will produce more skill-intensive goods. If telecommunications is a skill-intensive good, then the Heckscher-Ohlin framework implies that opening up to trade will increase the return to skilled workers relative to unskilled workers, as well as increase the ratio of skilled to unskilled workers within the telecommunications sector.
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Part II. The Ricardian Model of Trade (All parts worth 5 points except (d), which is worth 1 point, and (f), which is worth 4 points).

Malaysia has 300 units of labor while there are 500 units of labor in Indonesia. When they produce, the countries have the following unit labor requirements:

<table>
<thead>
<tr>
<th></th>
<th>Malaysia</th>
<th>Indonesia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cameras</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Rugs</td>
<td>10</td>
<td>20</td>
</tr>
</tbody>
</table>

(a) What is the relative price of rugs to cameras in Malaysia if there is no trade?

(b) Suppose that Malaysia and Indonesia are completely specialized when they trade. Which product will Malaysia produce?

(c) Draw the production possibility frontier for Malaysia. If Malaysia only produces the good in which it has a comparative advantage, where will its production point be on the production possibility frontier? If the post-trade world price will be at 1, can you show that there are gains from trade? (HINT: the point of production and consumption is not the same).

(d) Does Indonesia benefit from trade when the world price for rugs to cameras is 1? Explain.
(e) Draw a world supply schedule which shows rug production relative to cameras. Label all axes, curves, intercepts, and kink points.

(f) Add a relative demand schedule to your diagram that implies that Malaysia is incompletely specialized.
Since the passage of NAFTA eight years ago, imports of corn to Mexico from the United States have increased nearly eighteenfold. Many small corn farmers in Mexico have shut down production, migrating to the cities or to the United States. The small farmers in Mexico cannot compete with US agribusiness operations, who can export corn to Mexico at lower prices.

We can describe what is happening in Mexico using the Specific Factor Model. Assume that there are two goods, corn and garments. Assume that there are two specific factors in Mexico, land (which is specific to corn production) and capital (which is specific to garment production). Assume that labor is the mobile factor.

III.A (15 Points) Show what has happened to nominal wages (using a diagram for labor allocation and wages) as the price of corn has fallen. Assume that there has been no change in the price of garments.

III.B (5 Points) Show what has happened to (a) the return to capital in Mexico and (b) the return to land-owners in Mexico.

III.C (5 Points) What has happened to the real return to labor? If you assume that corn accounts for a bigger share of labor’s consumption than garments, how does this change your answer?
Part IV. The Standard Trade Model.

(15 points) In this week’s New York Times, an article appeared which indicates that the Bush administration plans to impose tariffs of up to 40 percent on imported steel. Using the standard trade model, draw a production possibility frontier with steel products on the vertical axis and all other goods (labeled AOG for all other goods) on the horizontal axis. Draw a line tangent to the production possibility frontier and show the slope (you may label the price of steel as Ps and the price of All Other Goods as Paog). Choose a production point and a consumption point which shows that the USA is a net importer of steel. Label your graph to show clearly how much steel the US imports and how much of All Other Goods it exports.

(15 points) Now, show what would happen if the price of imported steel rises, which is what would happen if the US imposes a tariff on steel imports. What happens to the domestic production of steel? What happens to imports of steel? Add indifference curves on the old relative price line and the new relative price line that show a reduction in consumption at the higher import price. Why do you think the Bush administration will impose this tariff if it leads to a fall in overall welfare? You may refer to one of the trade models to explain your answer.