

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 240 points (to be scaled up to 250 points) and is scheduled to take 120 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) For ONE of the events below, set up the double entry bookkeeping. Briefly explain how you determined the debits and the credits.
 - A) A citizen of the USA sends \$500 worth of clothes to Haiti for earthquake relief.
 - B) An American buys \$300 worth of computer supplies from South Korea.

- 2) (10 points) State EITHER the Stolper-Samuelson Theorem OR the Rybczynski Theorem OR the Leontief Paradox. (Yes, that is one of three. No, I will not take off for misspelling.)

- 3) (12 points) For EITHER the current account OR the capital-financial account, what gets added together to find the account?

- 4) (12 points) Answer EITHER Part A OR Part B.
 - A) According to the Heckscher-Ohlin Model, who in the USA would oppose opening up to free trade with more countries? Explain your logic.
 - B) According to the Specific Factors Model, who in the USA would oppose opening up to free trade with more countries? Explain your logic.

- 5) (14 points) Answer EITHER Part A OR Part B.
 - A) Suppose countries are considering forming a customs union. If they had high external tariffs prior to forming the customs union, will that quality mean that a customs union is more likely to have trade creation or trade diversion? Explain your logic.
 - B) What are the advantages of going from a customs union to a common market?

- 6) (18 points) Answer EITHER Part A OR Part B.
 - A) Suppose that a country exports \$1500 worth of hats and imports \$2500 worth of hats. Calculate the Intra-industry Trade Index (T). Show all work. What does that number mean?
 - B) Suppose a country has a 14% import tariff on desks and a 20% import tariff on wood. If wood is 40% of the cost of production for a desk, then what is the effective rate of protection (g)? What does that tell you about the effect of the tariff on the domestic desk manufacturing firms' profits?

- 7) (20 points) For EITHER the event in Part A OR the event in Part B, illustrate the effects of that event on the S/D for the \$, with the ¥ as the other currency. Explain why the curve(s) moved as drawn. Which currency appreciated? How can you tell?
 - A) The American economy picks up.
 - B) Interest rates in Japan go up.

- 8) (20 points) Answer EITHER Part A OR Part B.
 - A) State and prove the law of comparative advantage.
 - 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 mathemat-

ics.

9) (26 points) Answer EITHER Part A OR Part B.

A) Draw the offer curve diagram for a large country (USA) which is capital abundant and a small country (Italy). Suppose that fire trucks are capital-intensive and olive oil is labor-intensive. Briefly explain why the offer curve for the USA takes its shape. Draw the American trade indifference curves. Draw the offer curve for the USA which would correspond to us putting on our optimal tariff. Explain how you found it.

B) Draw the offer curve diagram for a large country which exports cars (capital intensive good). State how you know they are exporting cars. Draw an increase in the amount of labor. Explain why the curve(s) moved as drawn. Add indifference curves for both countries. Did the growth make them better off?

10) (28 points) Answer EITHER Part A OR Part B.

A) Draw a PPF/indifference curve/CPF diagram for a country exporting the capital intensive good, ships. Draw an improvement in technology for that good such that the country experiences immiserizing growth. Explain how your graph shows they export the capital intensive good, why the line(s) moved as drawn, and how it shows immiserizing growth.

B) Draw the PPF/indifference curve diagram for a small country which exports cars (capital intensive good). State how you know that they are exporting the car. Draw an increase in capital. Explain how why the curve(s) moved as drawn. According to your graph is the growth trade neutral, antitrade, or protrade? Explain how you reached that conclusion.

11) (30 points) Answer EITHER Part A OR Part B.

A) Draw the supply and demand for a good we import and we are a small country. Illustrate the effects of an import quota which is **not** auctioned off. Explain why the curve(s) moved as drawn. Find the consumer surplus and producer surplus with and without the quota. Briefly state how you found them. What areas are lost with the quota? Are any of those areas gained by somebody else? If yes, explain who earns it and why.

B) Draw the supply and demand for a good we import and we are a small country and have a non-prohibitive import tariff on. Suppose we join a customs union. Draw the diagram such that $P_C + T > P_N + T > P_C > P_N$. Here “_C” represents a country in the customs union and “_N” represents a non-union country. Find the consumer surplus, producer surplus, and tariff revenue for both the pre-union situation and for the customs union. Briefly state how you found them. Given your diagram, is there more trade creation than trade diversion or vice versa? How do you know?

12) (40 points) Suppose the USA has 120 units of labor and China has 120 units of labor. In the USA, it takes 2 units of labor to produce 1 unit of food and 6 units of labor to produce 1 computer. In China, it takes 1 unit of labor to produce 1 unit of food and 5 units of labor to produce 1 computer. **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.