

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) Answer EITHER Part A OR Part B.

- A) Does the Rybczynski Theorem apply to small or large countries? Briefly explain your logic.
- B) Is the growth of a country's scarce factor of production going to be pro-trade or anti-trade? Briefly Explain your logic.

2) (10 points) Answer EITHER Part A OR Part B.

- A) Why does intra-industry trade require differentiated products?
- B) How does increasing returns to scale lead to intra-industry trade? You do not need to draw a graph.

3) (12 points) Answer EITHER Part A OR Part B.

- A) Define both an *ad valorem tariff* and a *specific tariff*.
- B) State the Stolper-Samuelson Theorem.

4) (16 points) Answer EITHER Part A OR Part B.

- A) Explain the economic logic as to how a large country can gain by restricting trade with another large country. Why can't a small country gain by restricting trade?
- B) Draw the offer curve diagram for a large country (USA) which is capital abundant and a small country (Greece). Suppose that computers are capital-intensive and figs are labor-intensive. Briefly explain why the offer curve for the USA takes its shape.

5) (16 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?

6) (18 points) Answer EITHER Part A OR Part B.

- A) Draw the diagram with a vertical axis up the middle and the supply and demand for two countries on the two sides of the axis. Find the equilibrium price of the good in both countries and the volume of trade assuming there are transportation costs. Briefly explain how you found the two prices and the volume of trade.
- B) Draw the diagram which has the number of firms on the horizontal axis and the price on the vertical axis. Explain why the two lines look as drawn.

Questions #7 - 9 are on the next page.

7) (20 points) For EITHER a small country with an export tariff OR a large country with an import tariff, draw the S/D diagram for that product. Assume the tariff is **non-prohibitive**. Find the free trade price, quantity bought, quantity sold, consumer surplus, producer surplus, and volume of trade. Find the price with a tariff, quantity bought, quantity sold, consumer surplus, producer surplus, volume of trade, and tariff revenue. Briefly state how you found each one. Who in the country gains and who loses from the tariff?

8) (22 points) Answer EITHER Part A OR Part B.

A) Draw three terms of trade lines and three indifference curves for a country which imports the labor-intensive good. Explain why the indifference curves are curved as drawn. Use your diagram to find the country's offer curve. Briefly explain how you found it.

B) Suppose Canada is capital abundant and Brazil is labor abundant. Lamps are capital-intensive and grapes are labor-intensive. Draw the two countries' offer curves. State how you know which is which. Draw the effects of Brazil placing the optimal import tariff. Explain why the curve(s) moved as drawn and how you know it is the optimal tariff.

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

A) Draw the PPF/CPF/indifference curve diagram for a small country which is capital abundant. Use artwork as the labor intensive good and cars as the capital intensive good. Explain why the graph looks as drawn. Illustrate an increase in the amount of labor. Explain why the curve(s) moved as drawn. As drawn, was this pro-trade, trade-neutral, or anti-trade? Explain your logic.

B) Draw the PPF/CPF/indifference curve diagram for a large country which imports the capital intensive good cars, and exports the labor intensive good, wigs. Draw the effects of growth in the wig industry such that there is immiserizing growth. Explain how your graph shows immiserizing growth and what causes it.