

Place your name on the back of this sheet of paper and nowhere else. Staple your answers face up on the front of this sheet of paper. Failure to follow these directions will cost you 10 points. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Failure to type this assignment will cost you 10 points. If you use double-sided printing or print on the back of scrap paper, I will give you one additional point.

- 1) (30 points) Draw the PPF/CPF/indifference curve diagram for a large country which is capital abundant. Draw the effects of technological progress in the capital intensive industry such that immiserizing growth occurs. Explain why the curves moved as drawn and how your diagram shows immiserizing growth.
- 2) (30 points) Draw the S/D diagram for a product the large country imports. Draw the effects of an implementation of an import tariff. Mark the areas. Find the consumer surplus before and after the tariff, producer surplus before and after the tariff, tax revenue, and dead weight loss. State how you found each. As drawn, does the country gain or lose from the tariff? State how you know.
- 3) (30 points) Draw the S/D diagram for a product the small country exports. Draw the effects of an implementation of an export tariff. Mark the areas. Find the consumer surplus before and after the tariff, producer surplus before and after the tariff, tax revenue, and dead weight loss. State how you found each. As drawn, does the country gain or lose from the tariff? State how you know.
- 4) (10 points) Suppose a country has an import tariff on all imported parts of 20% and an import tariff on final products of 13%. If an industry which competes against imports, has 30% of its parts imported, then what is the effective rate of protection,  $g$ ? Show all calculations. If  $g > t$  then explain the economics of why. If  $g < t$ , then explain the economics of why.