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Exam

October 21, 2014

Answer all questions. Write your answers in a blue book.

Be sure to look ahead and budget your time. You have 80 minutes to complete the exam. The questions are worth a total of 100 points, as indicated. Note that there are three questions, one on the back of this sheet.

1. (40 points) Consider a small open economy and examine the effects on the well being of workers in that economy – the real wage – of an exogenous change in world prices that improves the country's terms of trade. That is, suppose that the world price(s) of what it exports rises relative to what it imports. Then discuss and illustrate where possible how that change will affect the real wage of workers. Show your familiarity with the Ricardian, Heckscher-Ohlin, and Specific Factors models by writing an essay that describes and demonstrates (with diagrams and/or equations, as needed) the effects of this change on the real wage of various workers in the country, which may or may not be the same for all workers, depending on the context.

2. (30 points) Suppose that a new country were discovered, somewhere in the Pacific Ocean, called Pacificus, whose people had somehow managed never to notice that the rest of the world existed, and the world also had not noticed the country until now. In spite of all this, the country has a well functioning market economy.

   Having now become aware of the world and persuaded by economists that it should open to international trade, you've been brought in as a consultant to explain to its people what the effects of trade are likely to be. Before doing that, however, you need information about the country. What information do you need in order to predict the effects that trade will have on the country, including but not limited to which industries will expand and which will contract, as well as who will gain and who will lose, for those reasons and others, from opening the economy to free international trade? Then explain what your predictions will be, how they will depend on the information that you get, and which of the models that we have studied so far in the course are associated with these predictions.

3. (30 points) Use a partial-equilibrium model to answer the following questions about the effects of a tariff in a small country:

   a. Show that an *ad valorem* tariff will cause output to increase in the import-competing industry if that industry is perfectly competitive.

   b. If the industry instead has only a single firm in the domestic country, how will its output compare with that of an otherwise identical perfectly competitive industry under:

      i. Free trade

      ii. A tariff

      iii. An import quota equal to the quantity of imports that would have come in under the tariff.

   c. A basic result of simple models of industrial organization is that a monopoly produces a smaller output than would be optimal. A basic result of second-best trade theory is that a tariff or other trade restriction may be beneficial when it acts in the direction of correcting a market distortion. Is it therefore the case that, when the import-competing industry has only a single firm, a tariff – by expanding its output – may improve the country's welfare? Why or why not?