IMPORTANT INSTRUCTIONS:

1. No computers, calculators, cell phones, or any kind of electronic device may be used.
2. Any printed material – books, notes, etc. – can be used.
3. Write your name on each answer book you use.
4. Write out and sign the honor pledge on the cover of your first answer book: “I pledge my honor that I have not violated the Honor Code during this examination.”
5. Show the steps of your reasoning and calculation. Use well-labeled diagrams where appropriate. Write clearly and succinctly.
6. The total time available for writing is 80 minutes. Allocate your time carefully, using the suggestions for each question. We suggest 5 minutes for reading the exam carefully, and 75 minutes total for answering the questions.
7. Extra time can be “purchased” at the rate of FOUR points per MINUTE or part thereof.

QUESTION 1: 20 points, 15 minutes

[1] What is Krugman's criticism of the concept of national competitiveness, and why does he call the concern with one's country's international competitiveness “a dangerous obsession”?

[2] “Industry A is said to be more capital-intensive than country B if, in the long run under free trade, capital earns a higher rate of return in A than in B.” Is this definition clearly true, clearly false, or true only under certain circumstances that have to be specified? Explain your answer. If the statement is false, give the correct definition.

QUESTION 2: 40 points, 30 minutes

The world of this question consists of two countries, England and Italy, and two goods, Gin and Vermouth. England has an endowment consisting of 180 units of Gin, and Italy has an endowment consisting of 100 units of Vermouth. Consumers in England consume only Martinis; each Martini consists of 4 units of Gin and 1 unit of Vermouth. Thus they have Leontief indifference curves. Consumers in Italy care only for the total amount of alcohol they consume; each unit of Gin has twice as much alcohol as each unit of Vermouth. All consumers everywhere are price-takers.

Using offer curve analysis in an Edgeworth box diagram, find the trading equilibrium. Which country gains from trade and which one loses?

EXAM CONTINUES WITH Q. 3 ON P. 2
QUESTION 3: 40 points, 30 minutes

There are two goods, Wheat and Clothing, and two factors of production, Capital and Labor. Wheat production is relatively more capital-intensive. Constant returns to scale prevail in each sector. Goods are freely traded internationally, but factors are immobile across countries. All markets (international for goods, domestic for factors) are perfectly competitive.

Canada exports Wheat and imports Clothing. Throughout this question, Canada is incompletely specialized, i.e. it produces positive quantities of both goods. Its production is initially in a long-run equilibrium with both Capital and Labor allocated optimally to production of the two goods. Suddenly, Canada's terms of trade improve because of a shift in conditions in the rest of the world. The following sequence of time-frames then unfolds: [1] In the short run, both factors are completely specific to their initial sectors of employment. [2] In the medium run, Capital is specific but Labor can relocate across sectors. [3] In the long run, both factors are mobile across sectors. In each run, the prices of factors adjust to equilibrate the factor markets.

[A] You are asked to consider the effects of the change in the goods' relative price on the real incomes of the owners of various factors in Canada in the three different time-frames. Reproduce the following table in your answer-book. In each cell, write whether the owner of that factor in that time-frame is a clear gainer from the change, is a clear loser, or is ambiguously affected, in each case the standard of comparison being the initial long-run equilibrium.

<table>
<thead>
<tr>
<th>Capital initially in</th>
<th>Labor initially in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>Clothing</td>
</tr>
</tbody>
</table>

Short run

Medium run

Long run

[B] You will find that one factor initially in one sector has the same direction of gain or loss in all three runs compared to the initial long-run equilibrium, but for different reasons. Identify this factor and sector and briefly (in one sentence each) explain how the reasons differ.

[C] For the second column (Capital initially in Clothing), briefly (in one sentence each) explain the different reasons for its gains or losses in each of the three runs.

Your answer will be graded as follows: 2.5 points for the entry in each of the 12 cells; 5 points for each of parts [B] and [C].