

Department of Economics

Course name:	International Economics
Course code:	EC2301
Examiner:	Anders Åkerman
Number of credits:	7,5 credits
Date of exam:	Thursday 8 January 2015
Examination time:	3 hours [15:00-18:00]

## Write your identification number on each paper and cover sheet (the number stated in the upper right hand corner on your exam cover).

**Use one cover sheet per question.** Explain notions/concepts and symbols. If you think that a question is vaguely formulated, specify the conditions used for solving it. Only legible exams will be marked. **No aids are allowed.** 

## Answer in Swedish or English.

## \_\_\_\_\_

The maximum number of credits is 99 (for answers on the exam) + 16 (for assignments). Credits correspond to grades as follows:

\_\_\_\_\_

Your results will be made available on your "My Studies" account (<u>www.mitt.su.se</u>) on January 29 at the latest.

Good luck!

1. Explain the following concepts in 50 words maximum for each concept. (3 points per concept, i.e. maximum 24 points).

a) dumping

b) internal economies of scale

c) Heckscher Ohlin theorem

d) free trade area versus customs union

e) a capital intensive sector

f) horizontal foreign direct investment

g) infant industry

h) comparative advantage

2. Suppose that a country currently engages in free trade in fish but is exploring alternatives to protect this sector through trade policy. This question will ask you to use a partial equilibrium analysis to provide answers to the government about how different trade policies will affect the country's welfare.

a) Use a graph showing the supply and demand curves of fish under free trade. Show also what areas in the graphs that can be used to depict consumer surplus and producer surplus. Assume that the country is a net importer of fish. Explain your answer. (5 points)

b) Consider now the introduction of an import tariff on fish. Show in a graph similar to that in a) how this policy affects the consumer surplus, producer surplus and government revenues. Assume that the country is a large enough fish consumer so that it affects the world price of fish. Explain your answer. (5 points)

c) Describe the net effect of the tariff on a country's welfare. (5 points)

d) Consider instead the introduction of an import quota. This quota would be designed so that it allows exactly as much fish to be imported as would be the market outcome under the import tariff in b). Explain how the welfare effects from such a quota differs from that of the import tariff in b) and why. (5 points)

e) Suppose that the government motivates its trade policy by the fact that workers in its fishing industry are often older and find it difficult to change into other jobs. If this is the reason for the government to introduce an import tariff, can this policy then be considered a first best or second best policy? Can you suggest another policy that would address the problem with fewer distortions? (5 points)

3. Assume that two countries can potentially trade goods in an industry that is characterized by <u>external economies of scale</u>. This means that the average cost of production in a country decreases with the quantity produced in the country. Country A's and B's average cost curves and the world demand curve are drawn in Figure A.



Figure A: The lines  $AC_A$  and  $AC_B$  show the average cost in country A and country B, respectively, and how they depend on the quantity produced in each country. The line Demand<sub>World</sub> shows the total demand of countries A and B for each price (i.e. demand in country A plus demand in country B). The levels  $c_{0,A}$  and  $c_{0,B}$  show the average cost when production is zero in country A and B, respectively.

a) Assume that autarky production is such that country A produces  $Q_A$  in autarky and country B produces  $Q_B$  in autarky (the difference could, for example, be due to differences in country size). What will the allocation of production look like if the two countries start to trade? (5 points)

b) Describe and explain the effect that free trade has on the output produced in country A and country B. (5 points)

c) Imagine now, after free trade has been introduced and the allocation of production has adjusted to this, that country B considers introducing a production subsidy. How large would this have to be to change the free trade equilibrium in a)? Explain. (5 points)

d) Theory predicts that free trade in sectors characterized by external economies of scale increases welfare in the world as a whole. Explain why. (10 points)

4. Consider a small country that produces and consumes two goods: motorcycles and apples. There are three production factors: capital is specific to motorcycle production (it can only be used in motorcycle production), trees are specific to apple production while labor is needed in the production of both goods. Use the <u>specific factor model</u> to answer the following questions.

a) Assume that the country moves from autarky to free trade with the rest of the world. The world price is such that the relative price of motorcycles is higher than the autarky relative price in the country we study. Explain how and why the allocation of labor between the two sectors changes <u>and</u> what goods the country will export and import, respectively. (10 points)

b) How do <u>real</u> returns to capital, labor and trees change in the country when it enters into free trade? Explain your answer. (6 points)

c) If the country instead is a large country (i.e. that it is large enough to affect world prices), how would this change your answer to b)? Would real returns move in the same direction and, if so, would they move by more or less than if the country was small? Explain your answer. (5 points)

d) Assume that, under free trade, an apple tree epidemic causes a reduction in the number of trees in the country. How would this affect real wages (i.e. the real return to labor) in the country? Explain your answer. For clarity: assume that the country is small when answering this part. (4 points)