Stockholm University

Department of Economics

Course name:	**International Economics**
Course code:	**EC2301**
Type of exam:	**Retake**
Examiner:	**Pehr-Johan Norbäck**
Number of credits:	**7,5 credits (hp)**
Date of exam:	**20th of February 2016**
Examination time:	**9-12**

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.**

The exam consists of 2 parts with a total of 8 questions, 100 points in total. For the grade E 45 points are required, for D 50 points, C 60 points, B 75 points and A 90 points.

Note that **Part I** with **Questions 1, 2 and 3 are credit questions**.

If you have full extra credit (30p) from the assignments, skip part 1. With full credit you will automatically get 30 points for part 1.

(Example: if you have, say, a credit of 15 points and get 20 points on Questions 1 and 2, then you get 20 points for Questions 1 and 2 in your exam; if you get 15 points on your answers on Questions 1 and 2 and have a credit of 20 points, then you get 20 points for Questions 1 and 2 in your exam).

Your results will be made available on your "My Studies" account (www.mitt.su.se) on the 14th of March at the latest.

Good luck!

PART 1: For students without full credit from the problem sets:

1. Consider the Ricardian model with two countries (Home and Foreign), two goods (Computers and Games) and one factor (labor). Assume that there are two workers in each country. Suppose that each worker in Home can produce four Computers or two Games. Suppose that each worker in Foreign can produce two Computers or four Games. (16p)

    a. Derive and graph the production possibilities frontier (PPF) for Home. *Use a diagram where you put Computers on the x-axis and Games on the y-axis.* (2p)

    b. What is the no-trade relative price of Computers in Home? Motivate! (3p)

    c. Derive and graph the production possibilities frontier (PPF) for Foreign. *Use a diagram where you put Computers on the x-axis and Games on the y-axis.* (2p)

    d. What is the no trade relative price of Computers in Foreign? Motivate! (3p)

    e. Which country has a comparative advantage in the production of Computers? Explain why. (3p)

    f. Which country has a comparative advantage in the production of Games? Explain why(3p)

2. Continue with the model in Question 1. Suppose that there is now trade between Home and Foreign. Suppose that the world relative price of Computers in the trade equilibrium is $(P_{Computers}/P_{Games})^{Int} = 1$. (8p)

    a. In which good will Home specialize? Explain! (2p)

    b. In which good will Foreign specialize? Explain! (2p)

    c. Use the labor market equilibrium to give a formal proof to your answer in Question 2a. (4p)

3. Explain briefly the "Leontief-paradox" (6p)

PART 2: All students!

4. There are two countries (Germany and Polen), two factors of production (labor and capital) and two goods (Cars and Wine). Suppose that when trade is opened up between Germany and Polen, Polen starts to export wine, which is labor intensive in production. (12p)

     a. If you apply the Heckscher-Ohlin theorem, is Polen capital-abundant or labor abundant. Briefly explain why. (3p)

     b. If you apply the Stolper-Samuelsson theorem, what is the impact on the real wage of labor in Polen? Briefly explain. (3p)

     c. If you apply the Stolper-Samuelsson theorem , what is the impact on the real rate of return to capital in Polen? Briefly explain. (3p)

     d. What group (capital or labor) in Polen would be expected to support policies to limit free trade? (3p)

5. Consider the Monopolistic Competition model with one good and two countries (Home and Foreign). (9p)

     a) From the monopolistic Competition model there are two types of gains to trade. Briefly state and explain these two types of gains to trade. (6p)
   b) There is also a cost from opening up for trade in the Monopolistic Competition model. Explain. (3p)

6 Figure 1 shows the US relative wage of non-production workers to production workers on the y-axis and the US relative supply of non-production to production workers on the x-axis. The relative wage of nonproduction workers to production workers is a measure of the so-called "skilled wage premium". Figure 1 illustrates that the relative wage of nonproduction workers increased in the US during the period 1979-1990 and that this is explained by an increase in the relative demand for non-production workers. (10p)

Figure 1
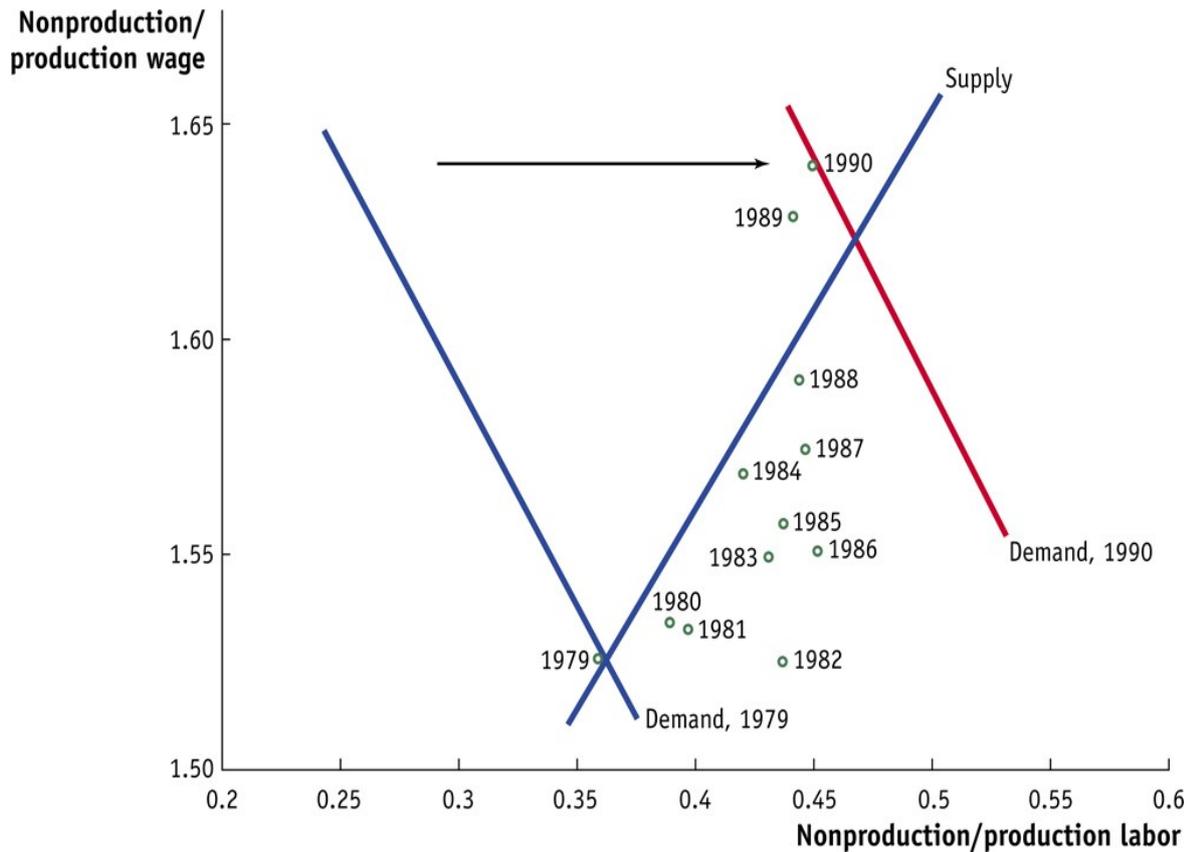
a. Explain how foreign outsourcing can explain the increase in the relative wage of nonproduction workers in Figure 1. (5p)

b. Why may foreign outsourcing by US firms also the increase relative wage of nonproduction workers in the host country for outsourcing, i.e. the country to which US firms outsource activities (Mexico, for instance)? (5p)

7. Figure 1 shows the market for Wheat in Home. Assume that Home is small on the world market for wheat. (21p)

Home price, $

Figure 2: The market for wheat in Home
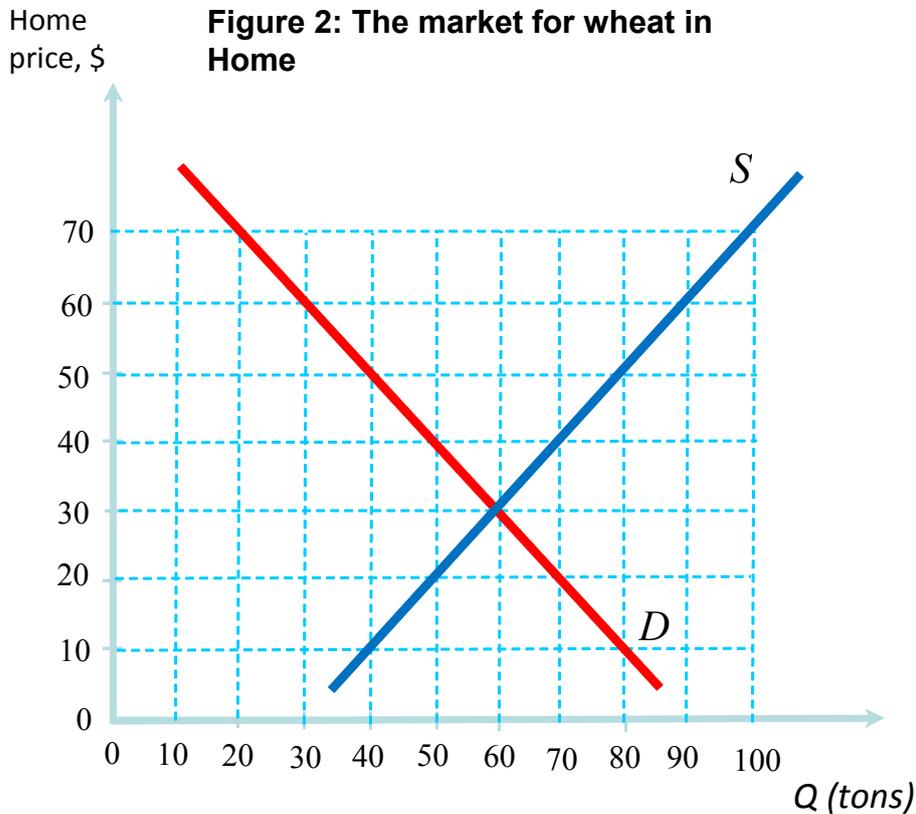
a. What is the no-trade price of Wheat in Home? (2p)

b. Suppose the world market price is 40$/ton. How large are Home's exports under free trade? (2p)

c. Suppose that Home gives an export subsidy to Home producers of 20$/ton. Home also applies an import tariff of 20$/ton. How large are Homes exports of wheat under the combined subsidy and tariff policy. (3p)

d. What is the change in consumer surplus, the change producer surplus, the change government revenue and the change in overall welfare from the combined subsidy and tariff policy (compared to the situation under free trade). (8p)

e. *Explain* why Home's welfare is reduced from the combined subsidy and tariff policy.(2p)

f. Suppose that Home instead applies a production subsidy 20$/ton (removing the combined subsidy and tariff policy). Calculate the change in welfare as compared to free trade. Is the change in welfare different from your result under question c.)? Explain. (4p)

8. Figure 2 shows the market for Sugar in Home. Assume that Home is small in world market. (18p)

Figure 3: The market for sugar in Home
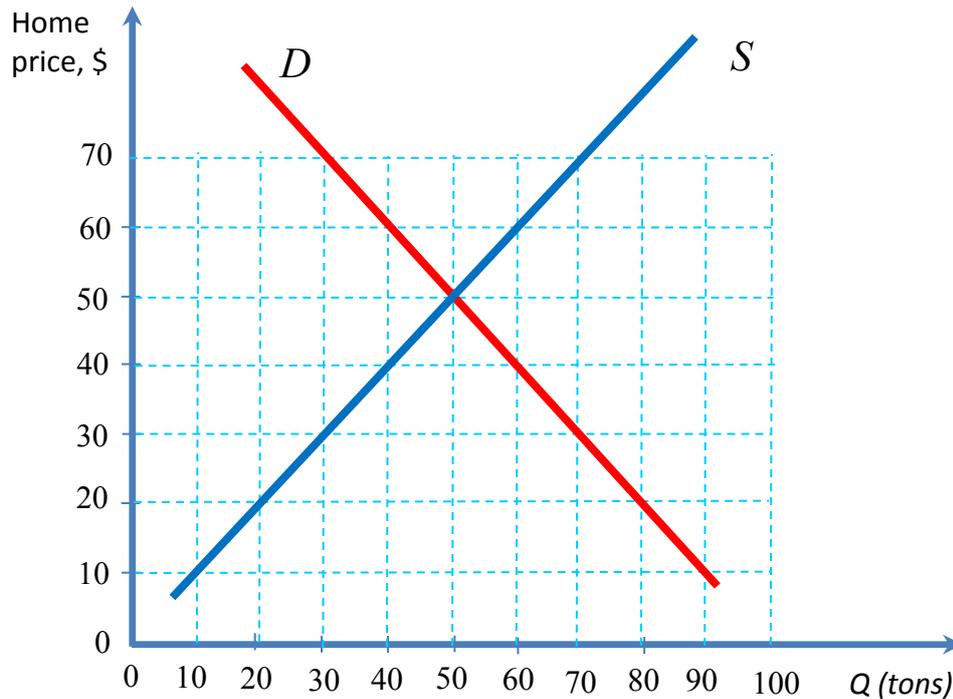
a. From the Figure, what is the no-trade price of sugar in Home?(2p)

b. Suppose that the world market price is 20$/ton. At this world market price and with free trade, how large are Home's imports of Sugar? (2p)

c. Compare the free-trade equilibrium and the autarchy equilibrium. Calculate and illustrate graphically the "production gain to trade" and the "consumption gain to trade".(4p)

d. Assume now that Home applies a tariff of 20$/ton. Calculate the following measures. (10p)

(i)   The change in consumer surplus from the tariff
(ii)   The change in producer surplus from the tariff
(iii)   The change in government revenues from the tariff
(iv)   The change in overall welfare from the tariff