Written Exam for the B.Sc. in Economics Summer 2010

Micro B, 2nd year

Final Exam

June 22nd, 2010

(3-hour closed book exam)

Please note that the language used in your exam paper must correspond to the language of the title for which you registered during exam registration. I.e. if you registered for the English title of the course, you must write your exam paper in English. Likewise, if you registered for the Danish title of the course or if you registered for the English title which was followed by "eksamen på dansk" in brackets, you must write your exam paper in Danish.

If you are in doubt about which title you registered for, please see the print of your exam registration from the students' self-service system.

1

In traditional neoclassical theory, when there is perfect information, the rate of interest will adjust to clear the market for credit. Explain how the phenomenon of asymmetric information and moral hazard can cause credit rationing.

2

Give a clear illustration of an Edgeworth economy with two consumers (both having monotone, continuous and convex preferences, and both needing to consume non-negative quantities of each of the two goods), and point out three different allocations:

- an allocation which is Pareto Optimal but not equitable
- an allocation which is equitable but not Pareto Optimal
- an allocation which is Pareto Optimal as well as equitable

3

Consider an industry which has stable (short-term as well as long-term) downward-sloping demand curve, D(p). On the producer side there is commonly known production technology; correspondingly there is, for every (potential) producer, an identical U-shaped long-term-average-cost curve, the LAC-function having its global minimum at the production level y*, LAC(y*) = c.

Give a description of how price, quantity, and the number of producers actively supplying to the market, are determined in the long run, when there is perfect competition as well as free entry and exit.

4

Suppose that a society decides that the quantity produced of some public good, such as street lighting, is to be determined by donations given voluntarily by individual citizens to finance the public good. Will this result in the optimal quantity of light being produced? If not, why?

5

The Fernandez family grows oranges near a popular tourist attraction. They sell the oranges to the local café, Juice Jack, and rightly recognize that they can act as a monopoly.

Juice Jack produces orange juice drinks and the café sells the drinks to thirsty tourists coming to visit the attraction. It is the only café in the area and can therefore act as a monopoly.

Describe the efficiency issues in this situation (comparing to perfect competition), and explain why Fernandez and Juice Jack have an incentive to merge. How would this affect the welfare of tourist consumers?

6

The restaurant Mitchell Lang Cuisine offers a dinner menu with wine. It faces two market segments. The consumers from the Eastern part of the town constitute the inverse demand curve $p_E(x_E) = 1000 - x_E$, x representing the number of (weekly) guests who order the menu, whereas the Western, and less wealthy, part has $p_W(x_W) = 400 - x_W$. Assume, for simplicity, that marginal costs are zero, and likewise there are no fixed costs.

It is the only restaurant in town and recognizes its monopoly status. Mitchell cannot discriminate between costumers, but has to set one common price for the menu. Which price should he set, how many menus will be sold, and what are his profits?

Answer the same questions if $p_W(x_W) = 440 - x_W$. Comment the change in the aggregate demand curve and the change in menu price.