

## Guide to Written Exam for the B.Sc. in Economics Summer 2010

### Micro B, 2<sup>nd</sup> year

June 22<sup>nd</sup>, 2010

1

See note by Birgitte Sloth: In some cases, the lender will prefer rationing credit to increasing the interest rate, as a higher interest rate will give the borrowers an incentive to invest in projects that are too risky.

2

The first one might be an allocation in which one consumer gets nothing; the second one the allocation where they both consume half of the resources; the third one a Walrasian equilibrium allocation where they both initially had private ownership to half of the resources (identical incomes).

3

Varian 32.8: In the short term, price and quantity are determined by the number of firms currently active in the industry. As long as the short-run equilibrium price is higher than  $c$  (min-LAC), new firms will tend to enter the industry, increasing the (short term) equilibrium quantity and similarly decreasing the price. The number of firms active in the long run will be approximately  $D(c)/y^*$ , and profits will be approximately zero, as the price converges to  $c$ .

4

Varian 36.6: Each citizen will donate until his or hers marginal donation yields an individual “marginal utility” equal to that donation, thus ignoring the positive externality more light will have on all other citizens. The end result will be not enough street lighting and possibly free-riding on the part of several citizens.

5

This is the “double monopoly” case, Varian 26.3. Tourists are harmed by a “double mark-up” of prices: Fernandez has monopoly power over Juice Jack who has monopoly over the consumers. A merger between the two will still render a juice price higher than in the perfect competition case, but will result in a lower drink price, higher quantity of drinks sold, higher consumers’ surplus, *and* higher aggregate profits; hence the incentive to merge.

6

In the first case, it is not profitable to set the price low enough to attract West customers, and the optimal price is 500 and quantity 500, attracting only East costumers and yielding profits of 250,000. In the second case, however, the price should be 360 and the quantity should be 720, yielding profits that are almost 10,000 higher. Even though aggregate demand has increased, the price has been lowered, to attract Western customers.

Ref.: mtn, 21 May 2010