MICROECONOMICS 3 EXAM QUESTIONS – EXAMPLES

1. In the short run, introducing a lump-sum tax under purely competitive conditions, when each of the sellers behaves rationally and aims to maximize profits:

- a) will cause a decrease of an individual firm's output and an increase in the equilibrium price,
- b) will cause a decrease in the number of firms functioning in the market,
- c) will cause a drop in joint profits of the industry, with the output level unchanged,
- d) It is not possible to provide an unambiguous answer without knowing the demand function and tax rate.
- e) None of the remaining answers is correct.

2. In a given village there are 50 inhabitants. The demand of each of them for the height (in cm) of floodwalls protecting all inhabitants from catastrophic floods is given by the formula $q=100-p^2$, where p is the cost of building 1 cm of walls. Which formula specifies the market demand for this good?

- a) Q=50 000 50p²
- b) Q=100-p²
- c) Q=100 p²/2500
- d) $Q=100-(1/50)p^2$
- e) None of the remaining answers is correct.

3. Which of the cases presented below can be an example of moral hazard?

- a) Having purchased comprehensive car insurance (covering theft etc.) someone drives faster than prior to this purchase.
- b) When purchasing mandatory liability insurance a good driver pays the same premium as a bad one (the latter driving more carelessly).
- c) An unexperienced politician attempts to convince the voters of his professionalism by repairing his teeth and putting on a good suit.
- d) An employee buys a university diploma in a bazaar.
- e) None of the remaining answers corresponds to a moral hazard situation.

4. In the case of adverse selection in the market of health insurance efficiency can be increased by:

- a) government intervention (e.g. introducing mandatory insurance for everyone),
- b) partial insurance (i.e. with own contribution),
- c) the requirement to undergo medical tests and submit their results to the insurer,
- d) At least two of the remaining answers are correct.
- e) None of the remaining answers is correct.
- 5. Inhabitants of a small village are constantly under the influence of alcohol. They differ, however, in the willingness to pay for getting to the liquor store and back it oscillates between zero and infinity depending on the concentration of alcohol in their blood at a given moment. Each of them can stay home, go by car or by bike. The costs of gas, effort, lost time etc., are negligible, the only travel cost is connected with the risk of criminal liability: a drunk biker will be caught with probability of 8%, while a drunk driver with probability 2%. If in the case of indifference between those two means of transportation each inhabitant chooses the bike, drunk car-drivers are sentenced to 2 years of imprisonment, the utility loss due to conviction is a linear function depending on the length of the

sentence, and the legislator is primarily willing to limit the number of drunk car-drivers, and only later limit the number of drunk bikers, what should the punishment for drunk biking be?

- a) only an oral rebuke
- b) 2 years of imprisonment
- c) There are not enough data to provide the answer.
- d) It should be as high as possible.
- e) 6 months of inprisonment.