EC101 DD/EE. Problem Set 9

Multiple Choice [MC] questions have only one correct answer. Other kinds of questions may have more than one correct answer. You should understand ***why*** *your answers are correct. If you don't understand the meaning of a question, you may write to your own TF, but do not expect him/her to give you answers. The problem set will not be graded, but the way you discuss the problems in your discussion section will affect your discussion-section score.*

1. *[MC]* One of the main differences between the models of perfect competition and monopolistic competition is that
   a. There are a small number of sellers in the monopolistic-competition model.
   b. Under monopolistic competition, the marginal revenue is less than the price.
   c. There isn't perfect information under monopolistic competition.
   d. ***NONE*** of the above

2. Are the following statements true or false? Explain.
   i. Monopolists tend to restrict production to below the efficient level, an action that causes a deadweight loss of surplus.
   ii. It is economically efficient for the private sector to produce nonexcludable goods.
   iii. A small number of sellers and product differentiation are the only important causes of imperfect competition.
   iv. Monopolies are bad for consumers and the economy.

3. *[MC]* According to economists, which of the following is the best way to deal with the free-rider problem of public goods?
   a. taxing the good
   b. regulating the good to limit its overuse
   c. letting the government itself provide the good
   d. educating consumers so they buy the optimal quantity of the good

4. How should the government decide whether or not to provide a particular public good?

5. Is each of the following goods nonexcludable? nonrivalrous? Is it a public good? a common good? What kind of problems will arise if the good is provided by the private sector: free riders, under-provision, over-provision, underuse, overuse?
   i. an idea that has been patented
   ii. streetlights in the public streets of Brookline
   iii. a large museum with beautiful works of art
   iv. a bench in the Boston Common
   v. Manove's confusing lecture on public goods
   vi. a concert by Twenty One Pilots in a very large public area

6. State the type of market structure that each of the following cases most closely resembles.
   i. Unilever and P&G together control most of the UK detergent industry.
   ii. Individual corn farmers and buyers are unable to affect the price of corn.
   iii. The market for men's watches has thousands of different brands.
   iv. The so-called Big Four accounting firms (Deloitte, PwC, EY, KPMG) provide audit services to 99 percent of FTSE 100 companies.

7. Which of the following is an example of moral hazard, adverse selection, both or neither? Explain.
   i. A person who has dental insurance stops brushing his teeth.
   ii. A student pays too much for a bicycle that will probably last 6 months.
   iii. A person on unemployment insurance does not try to find a job.
   iv. Customers at all-you-can-eat restaurants (restaurants with a fixed price that let customers eat as much as they want).

8. *[MC]* A patent creates a monopoly by restricting
   a. entry into the market.
   b. demand for the product.
   c. the amount of advertising that can be undertaken.
   d. the number of complements of the product.

9. Are the following statements true or false? Explain.
   i. Since they are price setters, monopolists tend to choose the price that maximizes profits.
   ii. Monopolists tend to worry about the possible entry of other firms that sell close substitutes.
   iii. Suppose a worker is being paid a fixed wage per hour worked. He is able to produce 100 units per hour, but he pretends he can only produce 80 units. This is an example of adverse selection.

10. *[MC]* Which of the following firms is most likely to be a monopoly?
    a. a shoe store
    b. a computer store
    c. a local fast-food restaurant
    d. a local bus company

11. You own a pizza restaurant in the free city of Karalis. You hire a teenager and pay her a fixed wage of $10 per hour to manage the restaurant. Because she is lazy, your shop doesn't produce many pizzas, and you lose money.
    i. Does the teenager have an incentive to work hard? Explain.
    ii. How does this relate to the concept of moral hazard?
    iii. Based on your answers, is there a different payment system (other than a fixed hourly wage) that would be likely to increase your profits?

12. Are the following statements true or false? Explain.
    i. The more elastic demand is, the higher the producer surplus for a monopolist will be.
    ii. Taxes on a goods produced by a monopoly are paid mainly by consumers.
    iii. Apple and Samsung engage in monopolistic competition.

13. Consider the market for bank loans: people ask for money and promise to repay the debt plus interest. Determine whether the following statements are true or false, and explain why:
    i. In this market there is room for moral hazard.
    ii. Adverse selection plays a major role in this market.

14. Markets for healthcare tend to be inefficient. What are the main reasons for such inefficiencies? Explain.