ECON 202

Problems Set 3

1. **Which of the following descriptions is the best description of an oligopoly?**
   (a) A market with many firms producing differentiated products
   (b) A market with numerous firms producing the same product
   (c) A market with few firms that dominate the industry
   (d) A market that is controlled by a single seller

   **Use figure 3-1 to answer problems 2 and 3:**

2. **Based on figure 3-1, what can be said about this monopolistic competitor?**
   (a) It is breaking even
   (b) It is making economic profit
   (c) It is loosing money, but can still cover its variable cost
   (d) It is loosing money and can not cover its variable cost

3. **What will happen to this monopolistic competitor in the long run?**
   (a) Additional firms will produce similar products and will reduce its marginal revenue
   (b) It will have to increase its price to remain competitive
   (c) Some firms will stop producing close substitutes, which will increase its demand
   (d) It can continue to produce at the same price and quantity

4. **Which one of these industries is the best example of monopolistic competition?**
   (a) Cable service providers
   (b) Electronics producers
   (c) Gasoline companies
   (d) Farmers
5. All of these conditions make entry into an industry more difficult, EXCEPT:
(a) High fixed cost to start the business
(b) Strict government licensing
(c) Diseconomies of scales
(d) Patents protection

6. A hotel gives discounts to local residents. The hotel is using:
(a) First-degree price discrimination
(b) Second-degree price discrimination
(c) Third-degree price discrimination
(d) Geo-economical price discrimination

7. Why is the marginal revenue curve downward sloping for a monopoly?
(a) Because a monopoly must reduce its price to sell more units
(b) Because most monopolies benefit from economies of scale
(c) Because a monopoly faces diminishing marginal returns
(d) Because the monopoly is a price take

8. Suppose that a market is controlled by a monopoly. If the monopoly figures out a way to charge each consumer their maximum willingness to pay, all of the following will occur as a result of this price discrimination EXCEPT:
(a) The monopoly’s profit will increase
(b) Overall welfare will increase
(c) Consumer surplus will decrease
(d) Production will decrease

9. Why do firms have the incentive defect from collusions?
(a) Because collusions can not increase firms’ profit
(b) Because firms do not want to help their competitors by colluding
(c) Because firms can increase their profit by defecting
(d) Because firms are usually too concerned about their consumers’ welfare

10. Why do governments give patents to firms who produce new products
(a) In order to help small firms compete with large firms
(b) To create natural monopolies
(c) In order to increase production
(d) To encourage firms to develop new products

11. Which of the following conditions is likely to lead to the creation of a monopoly?
(a) Constant economies of scale throughout the industry
(b) Strong anti-trust actions by the government
(c) Control of essential resources by one firm
(d) Extremely low barriers to entry
12. How is a monopolistic competitor different than a perfect competitor?
(a) A monopolistic competitor has a downward sloping marginal revenue curve
(b) A monopolistic competitor is the only seller in a given market
(c) A monopolistic competitor can make profit in the long run
(d) A monopolistic competitor faces high barriers to entry

13. Which one of these anti-trust policies can cause a monopoly to loose money?
(a) Creating a price ceiling where marginal cost intersects the demand curve
(b) Creating a price ceiling where average total cost intersects the demand curve
(c) Taxing the monopoly half of the profit that it makes
(d) Forcing the monopoly to produce the quantity where marginal cost intersects marginal revenue and then charge any prices it wishes

14. Which one of these is a problem that a government may have if it tries to regulate a monopoly?
(a) It may be difficult to identify which companies truly are a monopoly
(b) The monopoly will have the incentive to lie about its true costs
(c) The demand that the monopoly faces may regularly change
(d) All of the above

15. Lawyers Inc. hires new office assistants to help its attorneys. As a result one should expect that:
(a) The productivity of the attorneys will increase and their wage will rise
(b) The productivity of the attorneys will increase and their wage will fall
(c) The productivity of the attorneys will decrease and their wage will rise
(d) The productivity of the attorneys will decrease and their wage will fall

16. When a monopoly hires their fourth worker, their production increases from 10 to 13 units and the price of the good decreases from $5 to $4. What is the Marginal Revenue Product of adding the fourth worker?
(a) $2
(b) $6
(c) $10
(d) $30

17. Hiring another low skill worker will add 24 more units to production and hiring another high-skill worker will add 40 units to production. If low-skill workers have a wage rate of $8 per hour and high-skill workers have a wage rate of $20 per hour, what should this firm do?
(a) Hire more high-skill workers
(b) Hire more low-skill workers
(c) Hire more of both low and high skill workers
(d) It does not matter what the firm does as long as it increases production
Use figure 3-2 to answer problems 18 and 19:

![Figure 3-2: Hiring Decision](image)

18. **How many workers will this firm hire if the market wage rate is $9 per hour?**
   (a) 2 workers
   (b) 3 workers
   (c) 4 workers
   (d) 5 workers

19. **If the second worker adds 2 units to production, what price does this firm get for each of the units assuming that the firm is a price taker?**
   (a) $8
   (b) $6
   (c) $4
   (d) $2

20. **All of the following will increase the number of workers that a firm hires, EXCEPT:**
   (a) A decrease in the wage rate
   (b) An increase in consumers’ income
   (c) An increase in workers’ productivity due to education
   (d) A decrease in the number of consumers who buy the product