

## Midterm 3

Closed book exam. No calculators, cell phones, or other electronic aids allowed.

**Instructions:** Answer these multiple choice questions on your Scantron. Write on the Scantron your name (last name first) and student ID number, section #, and TA name.

YOUR NAME \_\_\_\_\_

Suppose that a monopolist has a total cost of  $60 + 4Q$ , where  $Q$  is output. Suppose the demand curve they face is  $P = 20 - Q$ . Questions 1-8 relate to this monopolist.

1. What is the profit maximizing price?

- A. 4
- B. 5
- C. 11
- D. 12**
- E. 15

2. What are profits at the profit maximizing price?

- A. 20
- B. 16
- C. 10
- D. 9
- E. 4**

3. What is the efficient price?

- A. 3
- B. 4**
- C. 5
- D. 6
- E. 8

4. What are profits at the efficient price?

- A. -84
- B. -75
- C. -72
- D. -60**
- E. -50

5. What is the deadweight loss at the profit maximizing price?

- A. 30
- B. 32**
- C. 40.5
- D. 50
- E. 50.5

6. What quantities of output  $Q$  would generate 0 profits?

- A. 5, 8
- B. 5, 10
- C. 6, 10**
- D. 6, 12
- E. 6, 14

7. If the monopolist can perfectly price discriminate what are his profits now?

- A. 116
- B. 90
- C. 84
- D. 72
- E. 68**

8. What is the maximum total surplus that this market can produce?

- A. 68**
- B. 90
- C. 116
- D. 120
- E. 132

9. Suppose that families with incomes of \$100,000 spend on average \$12,000 on health care, while families with income of \$50,000 spent on average \$4,000. This shows that health care:

- A. Is a **normal** good.
- B. Is a **necessity**.
- C. **Is a normal good and a luxury.**
- D. Is a **normal good** and a **necessity**.
- E. Has **elastic** demand.

10. All firms are assumed to profit maximize. This is assumed true of all firms because:

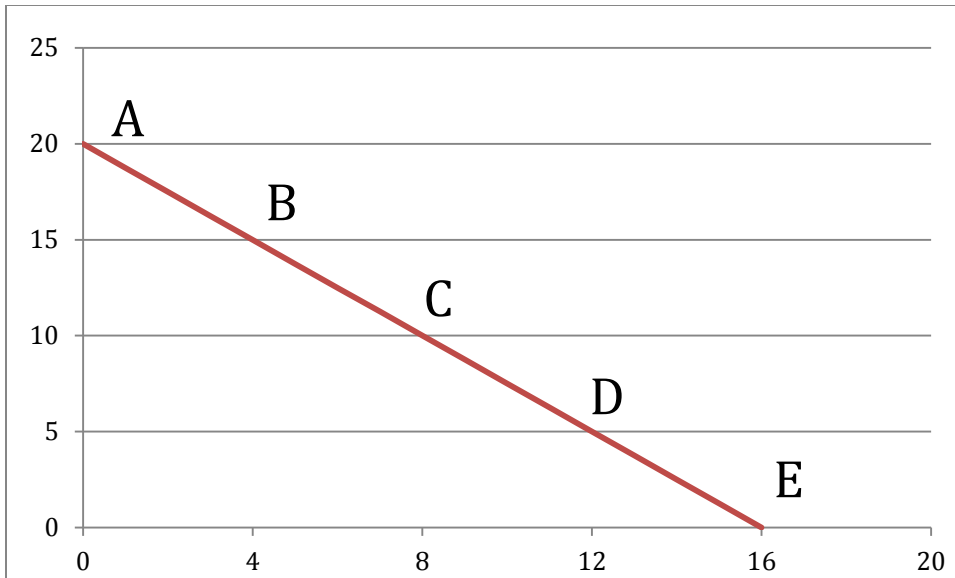
- A. **Managers and owners who do not profit maximize will generally be replaced.**
- B. It makes economics simpler.
- C.  $MR=MC$
- D. Costs include normal returns on capital.
- E. Firm owners, like other people, are greedy and selfish.

11. Suppose the supply of housing lots in Davis is fixed at 10,000. Suppose also that the demand for housing lots is given, in \$, by  $P = 500,000 - 20Q$ . A one-time city tax of \$10,000 imposed on the sellers of each lot will

- A. **Not change the price.**
- B. Reduce the market price by \$10,000.
- C. Reduce the market price by less than \$10,000.
- D. Increase the market price by less than \$10,000.
- E. Increase the market price by \$10,000.

12. Nugget Market offers lower prices to those arriving at the checkout counter with reduced price coupons from the local newspaper. This shows they are engaging in what type of price discrimination?

- A. **Price discrimination through hurdles**
- B. Two part tariffs
- C.  $MR=MC$
- D. Perfect price discrimination.
- E. Market segmentation by observed characteristics



13. Suppose the figure above shows the demand curve for a good. At which point is the price elasticity of demand -1? **C**

14. At which point in the figure is the price elasticity of demand 0? **E**

15. Which of the following statements is *normative*?

- A. **Because competitive markets are efficient, the government should not interfere in them.**
- B. If markets are competitive, then the free market maximizes the \$ value of output in the economy.
- C. Professor Clark thinks it is bad for students to cheat on exams.
- D. Republicans love the free market.
- E. Democrats love the free market.

16. Holiday Theaters in Davis offers different ticket prices based on whether a person is an ADULT, a CHILD or a SENIOR (65 or older). This shows that the cinema is engaging in what type of price discrimination?

- A. **Market segmentation by observed characteristics**
- B. Perfect price discrimination.
- C.  $MR=MC$
- D. Price discrimination through hurdles
- E. Two part tariffs

17. A tax of \$2 is imposed in a competitive market where the elasticity of supply is 0. How much does the total price of the good (market price plus tax) increase for buyers?

- A. \$0
- B. \$1
- C. \$2
- D. Depends on the price elasticity of demand
- E. \$0 if the tax is imposed on the suppliers, \$2 if it is imposed on the demanders.

18. Suppose Long Run Total Costs for any firm in producing a given good are

$$LTC(q) = 200 + 2q$$

where  $q$  is the firm's output. What is the long run structure of this industry likely to be?

- A. Monopoly
- B. Monopolistic Competition
- C. Oligopoly
- D. Zero Profit
- E. Perfect Competition

19. A legal entity owned by stockholders, each of whom faces limited liability for the firm's debts, is called a:

- A. Sole proprietorship
- B. Partnership
- C. Receivership
- D. Multilateral firm.
- E. Corporation

20. A firm's marginal revenue is \$6 irrespective of the amount of output they produce. Which of the following statements is **TRUE**.

- A. At  $MR = MC$  it will NOT have maximized profits.
- B. It is a monopolistic competition firm.
- C. Its marginal cost must also be constant at \$6.
- D. It is a monopolist.
- E. It is operating in a perfectly competitive market.