Gregory Clark

## 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 $\qquad$

Suppose that a monopolist has a total cost of $84+5 \mathrm{Q}$, where Q is output. Suppose the demand curve they face is $\mathrm{P}=25-\mathrm{Q}$. 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. 4
B. 9
C. 10
D. 16
E. 20
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. $\quad-50$
B. -60
C. $\quad-72$
D. -75
E. $\quad-84$
5. What is the deadweight loss at the profit maximizing price?
A. 32
B. 40.5
C. 50
D. $\quad 50.5$
E. 60
6. What quantities of output Q would generate 0 profits?
A. 5,8
B. 5,10
C. $\quad 6,10$
D. 6,12
E. 6,14
7. If the monopolist can perfectly price discriminate what are his profits now?
A. 68
B. 72
C. 84
D. 90
E. 116
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. Has elastic demand.
B. Is a necessity.
C. Is a normal good.
D. Is a normal good and a necessity.
E. Is a normal good and a luxury.
10. A firm's marginal revenue is $\$ 6$ irrespective of the amount of output they produce. Which of the following statements is TRUE.
A. It is a monopolistic competition firm.
B. Its marginal cost must also be constant at $\$ 6$.
C. At MR = MC it will NOT have maximized profits.
D. It is a monopolist.
E. It is operating in a perfectly competitive market.
11. Suppose Long Run Total Costs for any firm in producing a given good are

$$
\operatorname{LTC}(q)=200+2 q
$$

where q is the firms output. What is the long run structure of this industry likely to be?
A. Perfect Competition
B. Monopolistic Competition
C. Oligopoly
D. Monopoly
E. Zero Profit

12. Suppose the figure above shows the demand curve for a good. At which point is the price elasticity of demand 0 ? E
13. At which point is the price elasticity of demand $-\infty$ ? A
14. 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. $\quad \mathrm{MR}=\mathrm{MC}$
B. Perfect price discrimination.
C. Two part tariffs
D. Market segmentation by observed characteristics
E. Price discrimination through hurdles
15. A tax of $\$ 2$ is imposed in a competitive market where the elasticity of supply is 0 . How much of the tax is paid by buyers of the good?
A. $\$ 0$
B. $\$ 1$
C. $\$ 2$
D. Depends on the price elasticity of demand
E. $\quad \$ 0$ if the tax is imposed on the suppliers, $\$ 2$ if it is imposed on the demanders.
16. 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 $P=500,000-20 \mathrm{Q}$. A one-time city tax of $\$ 10,000$ imposed on the sellers of each lot will
A. Increase the market price by less than $\$ 10,000$.
B. Reduce the market price by $\$ 10,000$.
C. Reduce the market price by less than $\$ 10,000$.
D. Not change the price.
E. Increase the market price by $\$ 10,000$.
17. 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. Market segmentation by observed characteristics
B. Perfect price discrimination.
C. $\quad \mathrm{MR}=\mathrm{MC}$
D. Price discrimination through hurdles
E. Two part tariffs
18. A legal entity owned by stockholders, each of whom faces limited liability for the firm's debts, is called a:
A. Multilateral firm.
B. Partnership
C. Corporation
D. Sole proprietorship
E. Receivership
19. Which of the following statements is normative?
A. Republicans love the free market.
B. Democrats love the free market.
C. Professor Clark thinks it is bad for students to cheat on exams.
D. If markets are competitive, then the free market maximizes the $\$$ value of output in the economy.
E. Because competitive markets are efficient, the government should not interfere in them.
20. 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. Costs include normal returns on capital.
C. It makes economics simpler.
D. Firm owners, like other people, are greedy and selfish.
E. $\quad \mathrm{MR}=\mathrm{MC}$

