Test 2 - Econ 5000
Name $\qquad$
Spring 2002 - Dr. Rupp
(Keep your answers covered. Bubble in name and id\#)
The following formula maybe useful on this test: $\mathrm{E}_{\mathrm{P}}=(\mathrm{P} / \mathrm{Q})^{*}(1 /$ slope $)$

1. When a firm is a monopoly, its
A) price is constrained by marginal cost.
B) price is constrained by demand.
C) price is constrained only by its social agenda.
D) price is not constrained.
E) price is constrained by fixed cost.
2. Which of the following factors can lead to market dominance by a monopoly
A) barriers to entry.
B) perfectly elastic demand.
C) perfectly inelastic demand.
D) availability of "free" natural resources, such as water or air.
E) fixed costs that equal zero.
3. True or False: A monopolist is guaranteed to make a profit.
A) True
B) False
4. True or False: Monopolies are inefficient.
A) True
B) False
5. The monopolist faces the demand curve: $\mathrm{P}=10-2 \mathrm{Q}$, what is the price elasticity of demand at $\mathrm{Q}=2$ ?
A) -0.5
B) -0.67
C) -1
D) -1.5
E) -3
6. Based on your calculation above, what should the monopolist do to increase total revenue?
A) increase price
B) decrease price
C) keep price unchanged since total revenue is already at its maximum.
7. True or False: In the long-run monopolistically competitive firms can make economic profits.
A) True
B) False
8. The mark-up is defined as the difference between
A) price and average total cost
B) price and average variable cost
C) price and average fixed cost
D) price and marginal cost

Use the following to answer questions 9-12:
9. In the above diagram the monopolistically competitive firm maximizes profits at point
A) $Q_{0}$
B) $Q_{1}$
C) $Q_{2}$
D) $Q_{3}$
E) $Q_{4}$
10. The profit maximizing monopolistically competitive firm will have total revenue equal to
A) $\mathrm{Q}_{0} * \mathrm{P}_{5}$
B) $\mathrm{Q}_{2} * \mathrm{P}_{3}$
C) $\mathrm{Q}_{3} * \mathrm{P}_{2}$
D) $\mathrm{Q}_{1} * \mathrm{P}_{4}$
E) $\mathrm{Q}_{4} * \mathrm{P}_{1}$
11. The profit maximizing monopolistically competitive firm will have total cost equal to
A) $\mathrm{Q}_{3} * \mathrm{P}_{1}$
B) $\mathrm{Q}_{3} * \mathrm{P}_{2}$
C) $\mathrm{Q}_{0} * \mathrm{P}_{2}$
D) $\mathrm{Q}_{1} * \mathrm{P}_{1}$
E) $\mathrm{Q}_{4} * \mathrm{P}_{1}$
12. The profit maximizing monopolistically competitive firm will have profit equal to
A) $\left(\mathrm{P}_{5}-\mathrm{P}_{2}\right) * \mathrm{Q}_{0}$
B) $\left(\mathrm{P}_{5}-\mathrm{P}_{0}\right) * \mathrm{Q}_{0}$
C) $\left(P_{4}-P_{1}\right) * Q_{1}$
D) $\left(P_{3}-P_{1}\right) * Q_{2}$
E) $\left(\mathrm{P}_{2}-\mathrm{P}_{1}\right) * \mathrm{Q}_{3}$
13. A firm that sells the identical product as many other firms is called:
A) an oligopoly
B) perfectly competitive.
C) a monopoly.
D) monopolistically competitive.
14. A firm that is the only seller of its product and the product has no close substitutes is called:
A) an oligopoly
B) perfectly competitive.
C) a monopoly.
D) monopolistically competitive.
15. A firm that operates in an industry with barriers to entry and yet does not produce at the minimum point of its average total cost curve is called:
A) an oligopoly
B) perfectly competitive.
C) a monopoly.
D) monopolistically competitive.
16. When a firm operates at excess capacity
A) additional production would lower the average total cost.
B) additional production would increase the average total cost.
C) fixed costs are always higher than variable costs.
D) additional production would lower marginal cost.
17. All of the following are effects of advertising except
A) advertising makes the product demand more inelastic
B) advertising serves as a signal of quality
C) advertising provides information about a product
D) advertising lowers prices
E) advertising encourages other firms to enter
18. Who is Sherron Watkins?
A) She patented the first cigarette making machine.
B) She wrote the Reader's Digest article in 1954 that linked cigarette smoking to cancer.
C) She is the Enron employee that alerted Enron's CEO and Arthur Andersen of questionable partnerships.
D) She developed the Watkins Index, a measure of market power.
E) She is the Exxon engineer that developed 3-D imaging to search for underwater oil fields.
19. In the 1930s (during the Great Depression) the large tobacco companies were losing market share to smaller firms. How did the big tobacco companies respond to the lost market share?
A) introduced premium brands.
B) introduced generic brands.
C) bribed workers to strike at small firm's manufacturing plants.
D) lobbied the government to increase taxes on smaller tobacco companies.
E) decreased the price of premium brands.
20. In 1993 "Marlboro Friday" occurred, what happened on this day?
A) Marlboro prices dropped 40 cents, causing Phillip Morris stock to fall.
B) Phillip Morris announced that the actor who portrayed the Marlboro man died of cancer.
C) Phillip Morris announced that they would stop issuing print advertising for Marlboro.
D) A jury awarded $\$ 10$ million to a Marlboro smoker that died of lung cancer.
E) The Federal Trade Commission announced it was investigating a Marlboro advertising campaign that targeted underage smokers.
21. What did James Bonsack do?
A) He is an engineer who patented a smaller drill bit that reduced the oil drilling costs.
B) He is credited with discovering the first U.S. oil field.
C) He is the Enron CEO who resigned in 2001 before Enron's financial problems were known.
D) He patented the first machine that allowed for mass production of cigarettes.
E) He developed the first low-tar, low nicotine cigarette.
22. What role has Col. Muamer Qadaffi of Libya played in the oil industry?
A) He was the first Middle Eastern country to get major international oil companies to develop oil.
B) He implemented netback pricing which reduced the risk of buying Libya oil.
C) He was the first Middle Eastern country to develop oil fields without assistance from major international oil companies.
D) He was the first country to renegotiate oil contracts to get more favorable terms for Libya.
E) He was the first Middle Eastern country to tap underwater oil fields.
23. What type of good should a state governor tax if the goal is to increase tax revenue?
A) A good with unit elastic demand.
B) A good with elastic demand.
C) A good with inelastic demand.
24. Suppose that Exxon uses a fixed mark-up rule of $20 \%$. If the marginal cost of a gallon of gas is $\$ 1$, what price does Exxon sell a gallon of gas?
A) $\$ 0.20$
B) $\$ 0.80$
C) $\$ 1.00$
D) $\$ 1.10$
E) $\$ 1.20$
25. The targeted rate of return from your investment in a tennis racquet-stringing machine is $20 \%$. The machine costs $\$ 1,000$. You estimate that you can string 200 racquets at an average total cost of $\$ 5$ each. What price must you charge to string a racquet to achieve your target rate of return?
A) $\$ 5.20$
B) $\$ 6$
C) $\$ 6.20$
D) $\$ 7$
E) $\$ 8$

Short answer

1. In 1953, Readers Digest published the first report that cigarette smoking causes lung cancer in men and probably in women too. How did the cigarette companies respond to this report? ( 8 points)
2. You and a friend open a car wash business. You are debating whether to form a partnership or a corporation. What are the advantages and disadvantage of each? Which do you decide to do and why? (8 points)
3. Find the expected value from the following lottery game, there is a $10 \%$ probability of winning $\$ 2$, a $1 \%$ probability of winning $\$ 100$ and a $89 \%$ probability of earning $\$ 0$.
a) Calculate the expected value from this lottery game. (4 points)
b) If the price of a lottery ticket is $\$ 2$ and you base your decision solely on the expected value calculation above, do you buy a lottery ticket? Why or why not? (4 points)
4. There were many lessons to be learned from Enron's failure. Briefly discuss three of these lessons. (9 pts)
5. The is a conflict of interest between the host countries (i.e., Iran) and the major oil companies (Exxon, Mobil) that develop oil fields in Iran. Explain this conflict of interest. How can it be avoided? (8 points)
6. The demand curve equation for the monopolist is $\mathrm{P}=100-\mathrm{Q}$ and $\mathrm{MC}=8 \mathrm{Q}$. $\mathrm{TC}=10+\mathrm{Q}$
a) Find the profit-maximizing output. (3 points)
b) Find the profit-maximizing price. (3 points)
c) Find the profit or loss for this monopoly. (3 points)

## Extra Credit (+3 points)

d) How much is the consumer surplus for this monopoly?

