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Fall 2012 - Dr. Rupp
25 Multiple Choice Questions (60 pts) + discussion questions (40 pts) Signature "I have neither given nor received aid on this exam"
$M R=P\left(1+\frac{1}{E_{P}}\right)$

1. In the long-run, how does a monopolist determine whether to be open or closed?
A. Close if cannot cover all fixed costs
B. Close if price exceeds marginal costs
C. Close if earning zero economic profit
D. Close if losing money
E. Close if price exceeds average variable costs
2. What role did the Texas Railroad Commission have in the U.S. oil industry?
a. They set shipping rates for the transportation of oil in the U.S.
b. They set oil prices at artificially high prices
c. They were the first to set environmental standards on oil extraction
d. They determined which states were allowed to drill for oil
e. They founded the Oil Petroleum Engineering program at Texas A\&M University
3. In which country did independent oil companies first gain access to?
a. Mexico
b. Saudi Arabia
c. Iran
d. Iraq
e. Kuwait
4. What is hydraulic fracturing?
a. Deep water drilling for oil technique
b. Method of lowering health care costs
c. Means of stabilizing underground oil pools
d. Underground drilling technique for capturing natural gas
e. Means of extracting fresh drinking water
5. What is the "law of common capture"?
a. promoted competition among the cigarette companies
b. reduced the U.S. dependence on foreign sources of oil
c. allowed individuals and companies to keep any oil pumped from the ground
d. established the federal income tax
e. placed advertising restrictions on cigarette companies to reduce the sale of cigarettes to minors
6. Why are most oil fields jointly produced in the Middle East?
a. Less risk to host country
b. Less risk to the oil companies
c. Increases the proportion of oil that can be extracted
d. Avoids the common oil pool problem
e. All of the above
7. What is Medicare?
a. Private health insurance for the elderly
b. Public health insurance for the poor
c. Public health insurance for the elderly
d. Private health insurance for the poor
e. Dental insurance for the poor and elderly
8. What has the federal government done to encourage the public to purchase health insurance?
a. Began a public service announcement campaign promoting health insurance
b. Hired the U.S. women's gymnastics team as spokespersons for health insurance
c. Allowed individuals to buy health insurance with pre-tax dollars, hence lowering the price
d. Lowered the corporate tax rates of health care insurers
9. Why have cost based reimbursement form of health insurance fallen out of favor in the past 30 years?
a. Tax code changes which limit the tax deductibility of premiums
b. Moral hazard problems
c. Laws which have restricted health insurance companies ability to market these policies
d. Many doctors stopped accepting traditional health insurance policies
10. If the price elasticity of demand for Pirate beer is $\mathrm{E}_{\mathrm{p}}=-1.2$. And the marginal cost of a case of Pirate beer is $\$ 12$. What is the profit maximizing price of a case of Pirate beer?
a. $\quad \$ 24$
b. $\$ 14.44$
c. $\$ 72$
d. $\$ 32.12$
e. $\$ 60$

Figure 6-6

11. Refer to Figure 6-6. If the government imposes a price ceiling of $\$ 8$ on this market, then there will be
a. equilibrium (no shortage or surplus).
b. a shortage of 10 units.
c. a shortage of 20 units.
d. a shortage of 40 units.
e. a surplus of 20 units.
12. Refer to Figure 6-6. If the government imposes a price floor of $\$ 6$ on this market, then there will be
a. equilibrium (no shortage or surplus).
b. a surplus of 20 units.
c. a surplus of 30 units.
d. a surplus of 40 units.
e. a shortage of 40 units.
13. If the government levies a $\$ 1,000$ tax per boat on sellers of boats, then the price paid by buyers of boats would
a. increase by more than $\$ 1,000$.
b. increase by exactly $\$ 1,000$.
c. increase by less than $\$ 1,000$.
d. decrease by an indeterminate amount.
14. The tax incidence
a. is the manner in which the burden of a tax is shared among participants in a market.
b. can be shifted to the buyer by imposing the tax on the buyers of a product in a market.
c. can be shifted to the seller by imposing the tax on the sellers of a product in a market.
d. All of the above are correct.

## Table 7-3

The only four consumers in a market have the following willingness to pay for a good:

| Buyer | Willingness to Pay |
| :---: | :---: |
| Carlos | $\$ 15$ |
| Quilana | $\$ 25$ |
| Wilbur | $\$ 35$ |
| Ming-la | $\$ 45$ |

15. Refer to Table 7-3. If the market price for the good is $\$ 20$, who will purchase the good?
a. Ming-la only
b. Carlos and Quilana only
c. Quilana and Wilbur only
d. Quilana, Wilbur, and Ming-la only

## Figure 7-4


16. Refer to Figure 7-4. If the price of the good is $\$ 12$, then consumer surplus is
a. $\$ 9$.
b. $\$ 11$.
c. $\$ 13$.
d. $\$ 16$.
17. Producer surplus is
a. measured using the demand curve for a good.
b. always a negative number for sellers in a competitive market.
c. the amount a seller is paid minus the cost of production.
d. the opportunity cost of production minus the cost of producing goods that go unsold.

Figure 8-8
Suppose the government imposes a $\$ 10$ per unit tax on a good.

18. Refer to Figure 8-8. The tax causes consumer surplus to decrease by the area
a. A.
b. $\mathrm{B}+\mathrm{C}$.
c. $\mathrm{A}+\mathrm{B}+\mathrm{C}$.
d. $A+B+C+D+F$.
19. Refer to Figure 8-8. After the tax goes into effect, producer surplus is the area
a. $\mathrm{D}+\mathrm{F}+\mathrm{G}+\mathrm{H}+\mathrm{J}$.
b. $D+F+G+H$.
c. $\mathrm{D}+\mathrm{F}+\mathrm{J}$.
d. J.
20. Refer to Figure 8-8. The government collects tax revenue that is the area
a. L.
b. $\mathrm{B}+\mathrm{D}$.
c. $\mathrm{C}+\mathrm{F}$.
d. $\mathrm{F}+\mathrm{G}+\mathrm{L}$.
21. Refer to Figure 8-8. The deadweight loss of the tax is the area
a. $\mathrm{B}+\mathrm{D}$.
b. $\mathrm{C}+\mathrm{F}$.
c. $\mathrm{A}+\mathrm{C}+\mathrm{F}+\mathrm{J}$.
d. $\mathrm{B}+\mathrm{C}+\mathrm{D}+\mathrm{F}$.
22. Refer to Figure 8-8. One effect of the tax is to
a. reduce consumer surplus from $\$ 180$ to $\$ 72$.
b. reduce producer surplus from $\$ 96$ to $\$ 24$.
c. create a deadweight loss of $\$ 72$.
d. All of the above are correct.
23. Price discrimination explains why Ivy League universities often base tuition costs on students'
a. age.
b. financial resources.
c. high school GPA.
d. gender.

Figure 15-16

24. Refer to Figure 15-16. If the monopoly firm is not allowed to price discriminate, then consumer surplus amounts to
a. $\$ 0$.
b. $\$ 1,562.50$.
c. $\$ 3,125$.
d. $\$ 6,250$.
25. Refer to Figure 15-16. If the monopoly firm perfectly price discriminates, then consumer surplus amounts to
a. \$0.
b. $\$ 1,562.50$.
c. $\$ 3,125$.
d. $\$ 6,250$.

Extra Credit (+2.4 points)...if your cell phone did not ring...and you are taking this test at the regularly scheduled time: Th. Nov $1^{\text {st }}$ at 9.30 am
26. Refer to Figure 15-16. If the monopoly firm perfectly price discriminates, then the deadweight loss amounts to
a. $\$ 0$.
b. $\$ 1,562.50$.
c. $\$ 3,125$.
d. $\$ 6,250$.
27. Refer to Figure 15-16. If there are no fixed costs of production, monopoly profit with perfect price discrimination equals
a. $\$ 1$.
b. $\$ 1,562.5$.
c. $\$ 3,125$.
d. $\$ 6,250$.

Short-Answer

1. A firm sells a product in a perfectly competitive market, at a price of $\$ 8$ each. The firm has a fixed cost of $\$ 12$.

| Output | AFC | AVC | TC | TR | Marginal <br> Revenue | Marginal <br> Cost | Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | - | - |  |  | -- | -- |  |
| 1 |  | 4 |  |  |  |  |  |
| 2 |  |  |  |  |  | 2 |  |
| 3 |  |  | 24 |  |  |  |  |
| 4 |  |  |  |  |  | 10 |  |

a. Fill in the following table. (7pts)
b. In the short-run, what level of output does the firm maximizes profit? (1.5 pts)
c. Is this firm open or closed in the short-run? (1.5 pts)
2. What did the heart attack study by David Cutler find? (5pts)
3. Discuss the events that led to the founding of OPEC. (5pts)
4. A monopolist has the following demand curve: $Q^{d}=100-4 P$ and total cost curve: $T C=8 Q$
a. (4pts) Graph the demand curve, marginal revenue curve, ATC and MC curves.
b. (1 pt) On the graph, indicate the profit maximizing price: (label it $\mathrm{P}^{*}$ )
c. (1 pt) On the graph, indicate the profit maximizing quantity (label it Q*)
d. (1 pt) On the graph, indicate the total cost area (lightly shade it in)
e. (1 pt) On the graph, indicate the profit area (pin stripe this area)
f. (1 pt) On the graph, indicate the consumer surplus area (heavily shade it in)
g. (1 pt) On the graph, indicate the deadweight loss area (horizontal stripe this area)

## P


5.
a. ( 2.5 pts) Using the information above, calculate the profit maximizing quantity.
b. ( 2.5 pts ) Using the information above, calculate the profit maximizing price.
c. ( 2.5 pts ) Using the information above, calculate the profit.
d. (2.5 pts) Using the information above, calculate the deadweight loss.

