Sample Exam 2

1. An industry is comprised of 20 firms, each with an equal market share. What is the 4-firm concentration ratio of this industry?
   A. 0.2
   B. 0.4
   C. 0.6
   D. 0.8

2. An unregulated industry has a Lerner index of zero. These numbers:
   A. Reveal that social welfare would be improved by regulating the firms
   B. Are consistent with the industry being monopolistically competitive
   C. Are consistent with the industry being perfectly competitive
   D. Reveal that social welfare would be improved by regulating the firms and are consistent with the industry being monopolistically competitive

3. Suppose that there are two industries, A and B. There are five firms in industry A with sales at $5 million, $2 million, $1 million, $1 million, and $1 million, respectively. There are 4-firms in industry B with equal sales of $2.5 million for each firm. The four-firm concentration ratio for industry A is:
   A. 0.9
   B. 1.0
   C. 0.8
   D. 0.7

4. As a general rule of thumb, industries with a Herfindahl index below ______ are considered to be competitive, while those above ______ are considered non-competitive.
   A. 1,000, 1,800
   B. 1,800, 1,000
   C. 1,000, 3,000
   D. 1,800, 3,000

5. When the relevant markets are local, the concentration and HHI based on figures for the entire United States tend to:
   A. Be biased downward
   B. Be biased upward
   C. Give a more precise description of the real situation
   D. Ignore the presence of import goods
6. The industry elasticity of demand for telephone service is -2 while the elasticity of demand for a specific phone company is -5. What is the Rothchild index?
A. 0.2
B. 0.4
C. 0.5
D. 0.7

7. According to the "feedback critique"
A. The conduct of firms may affect firm performance
B. The conduct of firms may affect market structure
C. Market structure may affect the firm's conduct
D. All of the statements associated with this question are correct

8. You are the manager of a firm that produces output in two plants. The demand for your firm's product is \( P = 78 - 15Q \), where \( Q = Q_1 + Q_2 \). The marginal cost associated with producing in the two plants are \( MC_1 = 3Q_1 \) and \( MC_2 = 2Q_2 \). What price should be charged in order to maximize revenues?
A. $39
B. $47
C. $52
D. $56

9. You are the manager of a firm that sells its product in a competitive market at a price of $50. Your firm's cost function is \( C = 40 + 5Q^2 \). Your firm's maximum profits are
A. 125
B. 250
C. 100
D. 85

10. Which of the following is true?
A. A monopolist produces on the inelastic portion of its demand
B. A monopolist always earns an economic profit
C. The more inelastic the demand, the closer marginal revenue is to price
D. In the short run a monopoly will shutdown if \( P < AVC \)

11. If a monopolistically competitive firm's marginal cost increases, then in order to maximize profits the firm will
A. Reduce output and increase price
B. Increase output and decrease price
C. Increase both output and price
D. Reduce both output and price
12. The primary difference between Monopolistic Competition and Perfect Competition is
A. The ease of entry and exit into the industry
B. The number of firms in the market
C. All of the statements associated with this question are correct
D. None of the statements associated with this question are correct

13. A monopoly has two production plants with cost functions $C_1 = 50 + 0.1 Q_1^2$ and $C_2 = 30 + 0.05 Q_2^2$. The demand it faces is $Q = 500 - 10 P$. What is the profit maximizing price?
A. $12.5 per unit
B. $6.25 per unit
C. $31.25 per unit
D. $18.75 per unit

14. What contributes to the existence of multiproduct firms?
A. Economies of scale
B. Economies of scope
C. Cost complementarity
D. Economies of scope and cost complementarity

15. "An oligopoly is an oligopoly. Firms behave the same no matter what type of oligopoly it is." This statement is:
A. True
B. False
C. True of homogeneous product industries
D. None of the statements associated with this question are correct

16. If firms compete in a Cournot fashion, then each firm views the
A. Output of the rival as given
B. Prices of rivals as given
C. Profits of rivals as given
D. All of the statements associated with this question are correct

17. An oligopolist faces a demand curve that is steeper at higher prices than at lower prices. Which of the following is most likely?
A. The firm competes with others in the Cournot fashion
B. Other firms match price increases but do not match price reductions
C. Other firms match price reductions but do not match price changes
D. The firm competes with others in the Bertrand fashion
Question 18 is based on the following game, where firms one and two must independently decide whether to charge high or low prices.

<table>
<thead>
<tr>
<th>Firm One</th>
<th>Firm Two</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High Price</td>
</tr>
<tr>
<td>High Price</td>
<td>(10, 10)</td>
</tr>
<tr>
<td>Low Price</td>
<td>(5, -5)</td>
</tr>
</tbody>
</table>

18. Which of the following are Nash equilibrium payoffs in the one-shot game?
A. (0, 0)
B. (5, -5)
C. (-5, 5)
D. (10, 10)

Answer question 19 based on the following information for a one-shot game:

<table>
<thead>
<tr>
<th>Firm A</th>
<th>Firm B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low Price</td>
</tr>
<tr>
<td>Low Price</td>
<td>(2, 2)</td>
</tr>
<tr>
<td>High Price</td>
<td>(-8, 10)</td>
</tr>
</tbody>
</table>

19. What are dominant strategies for Firm A and Firm B respectively?
A. (Low price, high price)
B. (High price, low price)
C. (High price, high price)
D. (Low price, low price)
20. Which of the following is true?
A. A dominant strategy for Firm A is "high price"
B. There does not exist a dominant strategy for Firm A
C. A dominant strategy for Firm B is "low price"
D. None of the statements associated with this question are correct

21. What should the manager do to solve the shirking problem?
A. Always monitor
B. Never monitor
C. Sincerely tell workers not to shirk
D. Engage in "random" spot checks of the work place
22. When a worker announces that he plans to quit, say next month, the "threat" of being fired has no bite. The worker may find it in his interest to shirk. What can the manager do to overcome this problem?
A. "Fire" the worker as soon as he announces his plans to quit
B. Provide the worker some rewards for good work that extend beyond the termination of employment with your firm
C. Monitor the worker more frequently than usual and fire him when he is caught shirking
D. Pay the worker some rewards when he announces his plan to quit

23. Which of the following is a valid critique of the use of game theory in economics?
A. Payoffs to players may be difficult to measure
B. Players may not have complete information about each other's payoffs
C. Game theory assumes rational players
D. All of the statements associated with this question are correct

24. If you advertise and your rival advertises, you each will earn $5 million in profits. If neither of you advertise, you will each earn $10 million in profits. However, if one of you advertises and the other does not, the firm that advertises will earn $15 million and the non advertising firm will earn $1 million. Which of the following is true?
A. A dominant strategy for Firm A is to advertise
B. A dominant strategy for Firm B is to advertise
C. A Nash equilibrium is for both firms to advertise
D. All of the statements associated with this question are correct

25. You are the manager of a Mom and Pop store that can buy milk from a supplier at $3.00 per gallon. If you believe the elasticity of demand for milk by customers at your store is -4, then your profit-maximizing price is
A. $2.00
B. $2.50
C. $4.00
D. $5.00

26. Which of the following is true for perfect competition but not true for monopolistic competition and monopoly?
A. MC = MR
B. P = MC
C. Positive long run profits
D. P = MC and positive long run profits

27. Which of the following pricing strategies does not usually enhance the profits of firms with market power?
A. Price matching
B. Cross-subsidies
C. Two-part pricing
D. Marginal cost pricing
28. If your demand for renting videos is \( Q = 5 - 2P \), should you purchase the annual membership from a video store that charges $0.5 per rental, plus an annual membership fee of $12?
A. Definitely yes
B. Definitely no
C. Probably yes
D. Cannot be decided

29. What price should a firm charge for a package of two shirts given a marginal cost of $2 and an inverse demand function \( P = 6 - 2Q \) by the representative consumer?
A. $2
B. $6
C. $8
D. $10

30. Which of the following statements about a price matching strategy is incorrect?
A. It may be applied in situations besides Bertrand oligopoly
B. It requires that the firms can monitor their rival's prices
C. It reduces the incentive for a rival firm to initiate a price war
D. It only guarantees to match prices that are advertised publicly

31. To circumvent the problem of double marginalization:
A. Transfer prices must be set that maximize the overall value of the firm rather than the profits of the upstream division
B. Firms should engage in two-part pricing, unless it is possible to engage in either first or second degree price discrimination
C. Firms should vertically integrate
D. None of the statements associated with this question are correct

32. Second-degree price discrimination
A. Is the practice of posting a discrete schedule of declining prices for different ranges of quantities
B. Eliminates the problem of double marginalization
C. Results in transfer pricing
D. None of the statements associated with this question are correct

33. Firms will often implement randomized pricing in an attempt to reduce
A. Only competitor price information
B. Only consumer price information
C. Both customer and competitor information about price
D. Randomized pricing does not affect information available to consumers or competitors
34. Joe's search costs are $5 per search. He wants to buy a VCR for his wife for Christmas, and the lowest price he's found so far is $300. Joe thinks 80 percent of the stores charge $300 for VCR's and 20 percent charge $200. Joe's optimal decision is to
A. Continue to search for a lower price since the expected benefit of an additional search is $80, which exceeds his per-unit search costs
B. Stop searching and purchase a VCR for $200
C. Continue to search for a lower price since the expected benefit of an additional search is $50, which exceeds his per-unit search costs
D. None of the statements associated with this question are correct

35. Risk averse persons sometimes prefer to play some gambles even if they know that those gambles are not fair, i.e., on average people lose by playing them. One plausible explanation of this seemingly paradoxical phenomenon is that:
A. The economic theory of uncertainty is not correct
B. Gambling has entertaining effects which are not treated explicitly as part of the payoffs
C. People's actions are not reasonable
D. None of the statements associated with this question are correct

36. An incumbent usually charges a higher price than a new entrant does. Which of the following is a plausible reason for this observation?
A. An incumbent usually has a bigger bureaucratic body than a new entrant does and hence has a higher marginal cost
B. Consumers are risk averse, hence new firms charge lower prices to attract customers
C. The incumbent is ignorant of the new entrant, hence it is still charging the old high price
D. All of the statements associated with this question are correct

37. Which of the following auction examples have a common value information structure?
A. Three firms bid for an oil lease
B. An auction of a famous painting
C. A college in need of money decides to name a building on campus after the person willing to pay the most for the privilege
D. An auction of a famous painting and a college in need of money decides to name a building on campus after the person willing to pay the most for the privilege

38. The winner's curse occurs:
A. Only in English auctions
B. Only in second-price sealed bid auctions
C. In a common-values auction
D. In a private-values auction

39. Holding the mean constant, the larger the standard deviation, the ___________ the gamble will be.
A. More risky
B. Less risky
C. Higher utility
D. None of the statements associated with this question are correct
40. In order to reduce the undesirable effects of moral hazard, an insurance company can
A. Introduce a deductible
B. Classify clients into different types according to their history
C. Reject the renewal of policies of those people with really bad records
D. All of the statements associated with this question are correct

41. Which of the following phenomena shows that risk aversion is the characteristic of many people?
A. The popularity of high-stakes poker tournaments
B. Horse-race betting
C. Investing in one stock rather than a portfolio
D. Home-owners insurance

42. When managers of firms are given fixed salaries, which are not tied to the firm's profits, they generally put forth less effort than they otherwise would. This is an example of
A. Adverse selection
B. Moral hazard
C. Risk aversion
D. None of the statements associated with this question are correct

43. Which of the following is not a valuable role of government in a free market society?
A. To reduce negative externalities
B. To enhance rent-seeking activities
C. To reduce market power
D. To provide public goods

44. Rent-seeking:
A. Involves resources paid to politicians to enhance one group at the expense of another
B. Results in less monopoly power
C. Results in externalities
D. None of the statements associated with this question are correct

45. When the government imposes an excise tax on foreign imports:
A. Domestic consumers are harmed
B. Domestic firms benefit
C. Domestic firms are harmed
D. Domestic consumers are harmed and domestic firms benefit

46. What is the immediate result of applying the Clean Air Act to a previously non-regulated industry?
A. Price decreases and production is reduced
B. Price increases and production is reduced
C. Price decreases and production is enlarged
D. Price increases and production is enlarged
47. Which of the following statements is not true in the presence of externalities?
A. Social marginal cost equals the sum of internal and external marginal costs
B. A competitive industry generally produces more than a monopoly
C. A competitive industry always produces more than the socially efficient level of output
D. A monopoly always produces more than the socially efficient level of output

48. The domestic demand and supply for sugar are \( Q^d = 40,000 - 200P \) and \( Q^{SD} = 10,000 + 300P \). The foreign supply is \( Q^{SF} = 20,000 + 100P \). Suppose an import quota of 5,000 is imposed in the domestic market. How many units of sugar will domestic producers supply after the quota is imposed?
A. 20,000
B. 25,000
C. 30,000
D. 35,000

49. As additional consumers obtain the benefits of a pure public good, such as national defense, the benefits to the existing consumers will
A. Decline
B. Increase
C. Stay the same
D. Increase in the short run, but decrease in the long run

Use the following graph to answer question 50:

50. Consider the monopoly in the above graph with price regulated at $2 per unit. The deadweight loss under the regulated price is
A. $4.50
B. $5
C. $8
D. There is insufficient information to compute the deadweight loss at the regulated price
KEY

1. A
2. C
3. A
4. A
5. A
6. B
7. D
8. A
9. D
10. D
11. A
12. D
13. C
14. D
15. B
16. A
17. B
18. D
19. D
20. D
21. D
22. B
23. D
24. D
25. C
26. B
27. D
28. B
29. C
30. B
31. A
32. A
33. C
34. A
35. B
36. B
37. A
38. C
39. A
40. D
41. D
42. B
43. B
44. A
45. D
46. B
47. D
48. B
49. C
50. B