1. Which of the following is a characteristic of a monopoly firm?
   A) easy entry and exit
   B) barriers to entry
   C) vertical individual demand curve
   D) many buyers and sellers

2. An example of natural monopoly would be which of the following firms/industries?
   A) the beer industry
   B) Pabst Brewing Company
   C) the market for cotton
   D) a residential electricity company

Use the following to answer question 3:

**Figure: Monopoly Pricing and Output Decisions**
3. (Figure: Monopoly Pricing and Output Decisions) Using the graph, what is the equilibrium price for this monopolist?
   A) $12
   B) $16
   C) $20
   D) $30

Use the following to answer question 4:

**Figure: Determining Monopolist Profit**

4. (Figure: Determining Monopolist Profit) In the graph, the profit earned by the monopolist is represented by the rectangle:
   A) $abfe.
   B) $aceg.
   C) $adeh.
   D) $abcd.
5. Which of the following statements is TRUE about the relationship between a firm's demand curve under perfect competition and monopoly?
A) Under monopoly, the demand curve is perfectly elastic; under perfect competition, the demand curve has elastic, unit-elastic and inelastic portions.
B) We can define a demand curve under perfect competition but not under monopoly.
C) The demand curves for a monopoly and perfect competition are always inelastic.
D) Under perfect competition, the demand curve is perfectly elastic; under monopoly, the demand curve has elastic, unit-elastic, and inelastic portions.

Use the following to answer question 6:

**Figure: Effects of Monopolies on Markets**

6. (Figure: Effects of Monopolies on Markets) In the graph, which area represents the inefficiencies caused by a monopoly?
A) e
B) f
C) g
D) h
7. (Figure: Monopolies Versus Competitive Industries) In the graph, if the monopoly depicted were to become a competitive industry, what would happen?
   A) \( i \) would become consumer surplus
   B) \( i \) would become producer surplus
   C) \( i \) would become deadweight loss
   D) \( i \) would become tax revenue

8. X-inefficiency results from:
   A) protection from competitive pressures.
   B) rent-seeking behavior.
   C) deregulation.
   D) competitive markets.

9. Which of the following is NOT an example of price discrimination?
   A) Soup companies sending coupons to select buyers.
   B) Retirees getting a discount at a local movie theater.
   C) Drug companies charging people living in wealthier countries higher prices than for the same drug in a poorer nation.
   D) A novel printed in paperback selling for more than the same book in an electronic format.
10. If Tire Guy Tommy negotiates a separate deal with each customer, then Tommy is engaging in:
   A) fourth-degree price discrimination.
   B) second-degree price discrimination.
   C) third-degree price discrimination.
   D) perfect price discrimination.

11. When a business offers its customers bulk discounts, they are practicing:
   A) first-degree price discrimination.
   B) second-degree price discrimination.
   C) third-degree price discrimination.
   D) perfect price discrimination.

12. Which of the following is MOST likely to be a natural monopoly?
   A) an ambulance service in a small town in Wyoming
   B) Apple, Inc.
   C) an automobile manufacturer with a national market
   D) United Parcel Service

13. The Federal Trade Commission Act, as amended, prohibits:
   A) price-fixing agreements.
   B) unfair competitive practices and deceptive acts.
   C) price discrimination based on elasticity of demand.
   D) vertical and horizontal mergers.

14. The HHI of a pure monopoly:
   A) is equal to 10,000.
   B) is equal to the four-firm concentration ratio.
   C) is equal to 100.
   D) cannot be measured because there is no competition.

15. Monopolistic competition is like perfect competition in that they both:
   A) have numerous competitors.
   B) put labels on their products.
   C) erect barriers to entry.
   D) make zero economic profit in the short run.
16. (Figure: Monopolistic Competition) Under monopolistic competition, the price for this good or service in the graph will be:
   A) $e$
   B) $f$
   C) $g$
   D) $d$

17. Suppose a firm produces 20 units of output. At that level, ATC is 70, $P = 50$, MR and MC = 30. The firm is experiencing a loss of:
   A) $400$
   B) $1,000$
   C) $600$
   D) $1,400$

18. Which of the following industries is MOST likely to be an oligopoly?
   A) agriculture
   B) steel
   C) beer
   D) ketchup
19. The market for air travel from Dallas to Chicago is:
   A) a monopoly.
   B) an oligopoly.
   C) monopolistically competitive.
   D) competitive.

20. Before deciding on a pricing strategy, Worldwide Widgets consults with its market intelligence team to understand what discounts the Gargantuan Gizmo Company is offering. The model that BEST fits this industry is:
   A) pure competition.
   B) monopolistic competition.
   C) oligopoly.
   D) monopoly.

21. If a cartel member is considering cheating in order to earn profits, it should:
   A) increase the price of the goods it sells at quota.
   B) decrease the price of the goods it sells at quota.
   C) increase the quantity it sells at the quota price.
   D) decrease the quantity it sells at the quota price.

22. If an oligopolistic firm attempts to increase its price:
   A) total revenue will increase.
   B) it faces an inelastic demand curve.
   C) it faces an elastic demand curve.
   D) competitors will match its increased price.

23. A Nash equilibrium:
   A) can be found only in positive sum games.
   B) assumes that each player chooses his or her best strategy.
   C) involves a zero-sum game scenario.
   D) assumes that some players are better equipped to strategize.

Use the following to answer question 24:

<table>
<thead>
<tr>
<th></th>
<th>Left</th>
<th>Right</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Katy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up</td>
<td>4, 8</td>
<td>3, 7</td>
</tr>
<tr>
<td><strong>Jesse</strong></td>
<td>6, 5</td>
<td>5, 2</td>
</tr>
</tbody>
</table>

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24. (Table) In this game table, the dominant strategies are:
   A) Jesse plays Up and Katy plays Left.
   B) Jesse plays Up and Katy plays Right.
   C) Jesse plays Down and Katy plays Left.
   D) Jesse plays Down and Katy plays Right.

Use the following to answer question 25:

<table>
<thead>
<tr>
<th>Coke's Price per 12-pack</th>
<th>Pepsi's Pricing Strategy per 12-Pack</th>
<th>$4</th>
<th>$5</th>
</tr>
</thead>
<tbody>
<tr>
<td>$4</td>
<td></td>
<td>$2 million</td>
<td>$4 million</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$2 million</td>
<td>$1 million</td>
</tr>
<tr>
<td>$5</td>
<td></td>
<td>$1 million</td>
<td>$3 million</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$4 million</td>
<td>$3 million</td>
</tr>
</tbody>
</table>

25. (Table) In this payoff matrix, two possible pricing strategies per 12-pack for Coke and Pepsi are shown and the profit payoff to each firm is also shown. Note that the top value in each outcome is the profit for Coke. What is the Nash equilibrium?
   A) Both firms charge $5 per 12-pack.
   B) Pepsi charges $4 and Coke charges $5 per 12-pack.
   C) Both firms charge $4 per 12-pack.
   D) Pepsi charges $5 and Coke charges $4 per 12-pack.

Use the following to answer question 26:

<table>
<thead>
<tr>
<th>Delta</th>
<th>JetBlue</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>700, 100</td>
</tr>
<tr>
<td>Low</td>
<td>550, 70</td>
</tr>
</tbody>
</table>

26. (Table) In this game table representing airfare pricing between Delta and JetBlue, what is the Nash equilibrium?
   A) Delta = high; JetBlue = high
   B) Delta = high; JetBlue = low
   C) Delta = low; JetBlue = high
   D) Delta = low; JetBlue = low
27. Which of the following is a benefit that results from a Prisoner's Dilemma outcome?
   A) charging high prices leads to more profits
   B) charging high prices leads to more customers
   C) charging low prices leads to fewer customers
   D) charging low prices leads to more customers

28. If a positive externality exists in a market, the marginal:
   A) private cost exceeds the marginal social cost.
   B) social cost exceeds the marginal private cost.
   C) private benefit exceeds the marginal social benefit.
   D) social benefit exceeds the marginal private benefit.

Use the following to answer question 29:

**Figure: Determining Externalities**

29. (Figure: Determining Externalities) Total consumer surplus plus producer surplus at point i is:
   A) $75,000.
   B) $80,000.
   C) $100,000.
   D) $125,000.
30. (Figure: Nail Polish Externalities) In the figure, $S_p$ (MPC) represents the private supply curve of a particular type of nail polish, whose manufacture is associated with the release of toxic chemicals into the atmosphere. $S_s$ (MSC) includes the costs of that toxicity borne by others. What is the socially optimal quantity of this nail polish?

A) $Q_1$
B) $Q_2$
C) 0
D) It is unknown.

31. The Coase theorem states that, under certain conditions, the efficient allocation of resources among parties can be attained through:

A) regulation.
B) government intervention.
C) bargaining.
D) taxation.

32. Market failures can arise when:

A) externalities exist.
B) there is a change in quantity demanded.
C) wages increase.
D) there is an increase in demand.
33. All of the following are considered private goods, EXCEPT:
   A) street lights.
   B) an ice cream cone.
   C) a car.
   D) a house.

34. Amtrak exhibits _______, and a can of Budweiser is a _______ product.
   A) excludability; rival
   B) nonexcludability; rival
   C) excludability; nonrival
   D) nonexcludability; nonrival

35. Market demand for public goods is sometimes better referred to as the:
   A) marginal social cost curve.
   B) total social benefit curve.
   C) willingness to pay curve.
   D) individual demand curve.

36. Which of the following is the BEST example of a common property resource?
   A) lobsters off the coast of Maine
   B) a hospital
   C) an international airport
   D) an army base

37. If a plant that employs 1,500 workers is assessed a fee to pay for its effluent costs, the firm will be likely to:
   A) reduce its labor force because its cost of production has increased.
   B) add to its labor force in order to perform cleanup tasks
   C) reduce its product price as compensation for its environmental impact.
   D) reduce its product price to increase its sales volume.

38. Which of the following is both finite and nonrenewable?
   A) helium
   B) gold
   C) copper
   D) Helium, gold, and copper are all finite and nonrenewable.
39. The socially optimal point of radiation pollution is:
   A) when the marginal damage is equal to the marginal abatement costs.
   B) when all radiation pollution is eliminated.
   C) when the marginal abatement cost is equal to the marginal price that citizens are willing to pay.
   D) best determined by a scientific survey of attitudes of Chernobyl citizens.

40. Market-based environmental policies include all of the following, EXCEPT:
   A) taxes.
   B) subsidies.
   C) permits.
   D) regulations.
ECO 2023 Principles of Microeconomics - Fall 2015
Practice Test #3 - Answer Key

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