ECON 251
Practice questions based on Spring 2013 Exam 2

Taylor has $100 to spend on playing golf and running in races. The price of a round of golf is $20 and the price of running a race is $10. The total utility she receives from various quantities of rounds of golf and races run are presented in the table below. Use this information to answer the following 3 questions.

Rounds of Golf	Total Utility from Golf	Quantity of Running Races	Total Utility from Running Races
1	100	1	60
2	180	2	110
3	240	3	150
4	280	4	180
5	300	5	200
6	280	6	210

1. What is Taylor's marginal utility from the 3rd round of golf?
   a. 60
   b. 120
   c. 180
   d. 240

2. What is Taylor's marginal utility per dollar spent on the 2nd race?
   a. 2
   b. 3
   c. 4
   d. 5

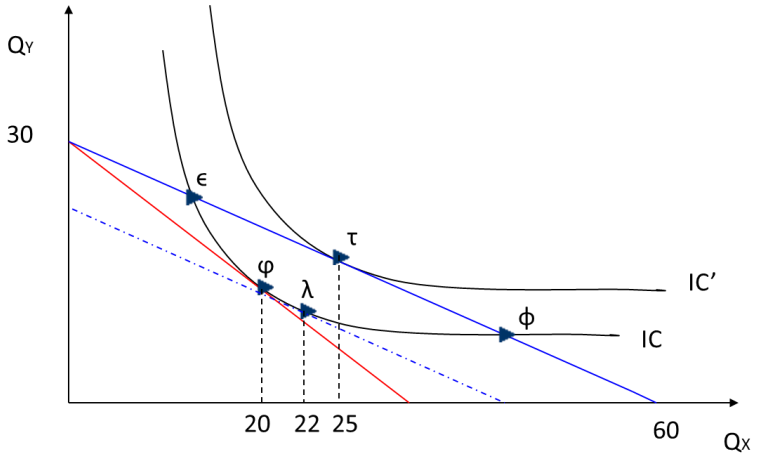
3. Taylor is currently consuming 4 rounds of golf and 2 races. Given her budget of $100, to maximize utility she should:
    a. Play fewer rounds of golf and run more races
    b. Play more rounds of golf and run less races
    c. Play more rounds of golf and run more races
    d. She should not change anything because the consumption bundle of 4 rounds of golf and 2 races maximizes her utility

4. Suppose running a race is an inferior good. If the price of running races increases then,
    a. The effect of the income effect will increase the quantity of races run and the effect of the substitution effect will decrease the quantity of races run.
    b. The effect of the income effect will increase the quantity of races run and the effect of the substitution effect will increase the quantity of races run.
    c. The effect of the income effect will decrease the quantity of races run and the effect of the substitution effect will decrease the quantity of races run.
    d. The effect of the income effect will decrease the quantity of races run and the effect of the substitution effect will increase the quantity of races run.

5. Derek has $50 and can purchase either an ice cream cone at $5 or a pizza for $10 dollars. If pizza is measured on the X-Axis, the slope of Derek's budget line is _____.
    a. 1/5
    b. -2
    c. 0.5
    d. -0.5

6. Given the information above, Derek's marginal rate of substitution when he is maximizing his utility is equal to
    a. 2
    b. 1/5
    c. 0.5
    d. 5

The consumer whose preferences and budget are depicted below has an income of $120 dollars and can purchase either good X or good Y. The price of good X decreases. Please use the figure below to answer the following 6 questions.



7. According to the figure, what is the price of good X after the price decrease?
   a. $2
   b. $4
   c. $6
   d. $60

8. According to the figure, bundle τ will cost how much after the price decrease?
   a. $90
   b. $27
   c. $120
   d. Not enough information to say.

9. Which of the following bundles maximizes the consumer's utility given the budget after the price of X decreases?
   a. τ
   b. ε
   c. φ
   d. λ

10. What is the marginal rate of substitution at τ?
    a. 0.5
    b. 1
    c. 2
    d. 5

11. Based on the same figure above, which of the following points would be on the consumer's demand curve for good X?
    a. (20, $8)
    b. (25, $2)
    c. (22, $4)
    d. None of the above

12. The income effect of the decrease in price changes consumption of good X from _____, implying that good X is a(n) _____ good
    a. 20 to 22; normal
    b. 22 to 20; inferior
    c. 22 to 25; inferior
    d. 22 to 25; normal

13. Elsa spends all of her $500 income on 5 dresses and 2 scarves. The marginal utility of the last dress she bought was equal to 10, and the marginal utility of the last scarf she bought was 25. If the combination of dresses and scarves she purchases maximizes her utility, what are the prices of dresses and scarves?
    a. Dresses are $10 each and scarves are $25 each.
    b. Dresses are $2 each and scarves are $12.50 each.
    c. Dresses are $100 each, and scarves are $40 each.
    d. Dresses are $50 each, and scarves are $125 each.

14. There are 6 firms in the orange juice market. Sales revenue for each firm in the orange juice market is given in the table below. Based on this information the four-firm concentration ratio is _____, and the Herfindahl-Hirschman Index is ____.

Firm	Sales Revenue
Apples and Oranges Inc.	$170,000
California Company	$100,000
Concentrate Company	$20,000
Fresh Juice Company	$10,000
Joe Juice Inc.	$500,000
Orange Company	$200,000

a. 30; 2,892
b. 50; 2,500
c. 90; 9,409
d. 97; 3,294

15. If the Herfindahl-Hirschman Index is equal to 1,950 in the market for sweatshirts and is equal to 2,500 in the market for sneakers, which of the following is true?
a. There are more firms in the market for sneakers than in the market for sweatshirts
b. The market for sweatshirts is more concentrated than the market for sneakers.
c. The market for sneakers is more competitive than the market for sweatshirts.
d. None of the above is true.

Labor (workers per day)	Total product (units per day)	Marginal product	Average product
0	0	--	--
1	2	2	2
2	8		
3	12		
4	15		
5	16	1	

16. In the table above, the marginal product of the third worker is
    a. 1.
    b. 2.
    c. 3.
    d. 4.

17. When the marginal product of labor exceeds the average product of labor,
    a. the average product of labor is increasing.
    b. the average product of labor is decreasing.
    c. the total product curve is negatively sloped.
    d. the firm is experiencing decreasing returns to scale.

18. A firm can produce 100 units of output for a total cost of $2,000 or 120 units of output for a total cost of $2,200. Based on this information, the firm is experiencing _____ as output expands from 100 to 120.
    a. Economies of scale
    b. Diseconomies of scale
    c. Constant returns to scale
    d. None of the above

Quantity	AVC	AFC	MC	ATC
10	250			
12	240			
14	220			
16		10	460	
18	280			
20				308

19. According to the table above, the marginal cost of producing the 18th unit of output is equal to _____, and the average variable cost of producing 20 units of output is equal to _____.
    a. $15; $28
    b. $230; $15
    c. $115; $85
    d. $520; $300

20. A firm in a perfectly competitive industry maximizes profit where
    a. Marginal revenue is maximized
    b. Marginal revenue is equal to marginal cost
    c. Average total cost is equal to average fixed cost
    d. Price is equal to average fixed cost

The table below provides cost information for Fred's Fish. Assume the fish market is perfectly competitive. Use this information to answer the following 5 questions.

Quantity	TC
0	1000
100	1100
200	1300
300	1600
400	2000
500	2500
600	3100

21. Fixed costs are _____ indicating Fred is operating in the _____.
    a. $0; short run
    b. $0; long run
    c. $1,000; short run
    d. $1,000; long run

22. If the price of a fish is $4, what is the marginal revenue from selling the 2nd fish?
    a. $0
    b. $2
    c. $4
    d. $8

23. If the price of a fish is $4, what quantity of fish maximizes profit for Fred's Fish?
    a. 0
    b. 200
    c. 400
    d. 600

24. When producing the profit-maximizing level of output at a market price of $4, Fred's Fish earns economic profit of _____. In the long run, Fred's Fish will earn economic profit of ____.
    a. $1,600; $500
    b. Negative $1,600; $0
    c. Negative $1,000; $1,600
    d. Negative $400; $0

25. What is the shutdown point for Fred's Fish?
    a. $1
    b. $1.50
    c. $2
    d. $4

26. Suppose firms in a perfectly competitive industry are making positive economic profits. As a result,
        i. new firms enter the industry.
        ii. the market price falls.
        iii. the economic profits of the existing firms decrease.
    a. I, II and III
    b. I and II only
    c. II and III only
    d. I and III only

27. If a firm is making positive economic profits,
    a. The resources being used by the firm have a higher value in their best alternative use
    b. The average total cost of production is below the price
    c. The average variable cost of production is above the price
    d. Both b and c

28. In the long run, which of the following is true in perfectly competitive markets?
    a. Price equals average total cost
    b. Marginal cost equals average total cost
    c. Average total cost is minimized
    d. All of the above

Price($)	Quantity demanded
18	0
15	100
12	200
9	300
6	400
3	500

29. Roxie's Movie Theatre is the only one in town. The table above gives the demand schedule for movies. If Roxie's is a single-price monopoly and the marginal cost of a movie is constant at $6, Roxie's will charge _____ a movie and will sell _____ movie tickets a week to maximize profit.
    a. $15; 100
    b. $12; 200
    c. $6; 400
    d. $9; 300

30. If Roxie's were to practice perfect price discrimination, what number of movie tickets would maximize profit?
    a. 200
    b. 300
    c. 400
    d. 500

31. When Roxie's practices perfect price discrimination, consumer surplus is equal to _____, and deadweight loss is equal to _____.
    a. $0; $0
    b. $0; $400
    c. $500; $200
    d. $600; $254

32. A monopolist faces demand given by the equation: $Q^d = 800 – (1/8)P$ and has a constant marginal cost of $800. What is the monopolist's marginal revenue curve?
    a. MR = 800 - ¼ Q
    b. MR = 800 - (1/16)Q
    c. MR = 6400 - 8Q
    d. MR = 6400 - 16Q

33. Given the information in the problem above, at which of the following levels of output is demand facing the monopolist unit elastic?
    a. 800
    b. 400
    c. 200
    d. 100

34. Using the same information again, the monopolist would choose what quantity and price to maximize profits? (Assume the monopolist does NOT practice price discrimination.)
    a. Q*=350, P* = $800
    b. Q*=350, P* = $3600
    c. Q*=700, P* = $800
    d. Q*=700, P* = $3600

35. When this monopolist maximizes profit, what is deadweight loss?
    a. $350,000
    b. $375,000
    c. $490,000
    d. $630,000

36. A natural monopoly exists when
    a. Economies of scale make it cheaper to have one firm produce all of the industry's output
    b. Economies of scale allow a monopoly to maximize profit at the level of output where allocative efficiency is achieved
    c. The long run cost of production for a monopoly is lower than the long run cost of production in a perfectly competitive market
    d. Legal barriers to entry create a monopoly in an industry

37. If a natural monopoly is regulated to produce the level of output that satisfies allocative efficiency, which of the following occurs?
    a. Price and average cost in the long run are equal at that level of output
    b. Price is below the average cost in the long run at that level of output
    c. Price is above the average cost in the long run at that level of output
    d. Profit is $0 in the long run at that level of output

38. The difference between total surplus with a single-price monopoly and total surplus in a perfectly competitive market is equal to
    a. Excess capacity
    b. Markup
    c. Deadweight loss
    d. None of the above

39. Which of the following is NOT a characteristic of monopoly?
    a. There are significant barriers to entry
    b. The firm produces a good for which there are many close substitutes
    c. There is one firm in the industry
    d. None of the above is a characteristic of monopoly

40. In general, a monopoly produces a _____ level of output than a competitive industry and charges _____ prices than a competitive industry.
    a. Higher; higher
    b. Higher; lower
    c. Lower; lower
    d. Lower; higher