8 TOPICS IN DEMAND AND SUPPLY ANALYSIS

1. If a good has elastic demand, a small percentage price increase will cause:
   (A) a larger percentage increase in the quantity demanded.
   (B) a larger percentage decrease in the quantity demanded.
   (C) a smaller percentage increase in the quantity demanded.

2. Based on the concept of diminishing returns, as the quantity of output increases, the short-run marginal costs of production eventually:
   (A) fall at a decreasing rate.
   (B) rise at a decreasing rate.
   (C) rise at an increasing rate.

3. A firm is operating in a perfectly competitive market. Market price is greater than average variable cost (AVC) but lower than average total cost (ATC). Which of the following statements is most accurate?
   (A) The firm should continue to produce and sell its product in the short run but not in the long run, unless the price increases.
   (B) The firm should decrease its production in the short run in order to increase price and either reduce losses or produce profits.
   (C) If the owner thinks the price eventually will exceed ATC, the firm should shut down its operations temporarily and resume when price exceeds ATC.

4. Which of the following most accurately describes economies of scale? Economies of scale:
   (A) are dependent on short-run average costs.
   (B) increase at a decreasing rate.
   (C) occur when long-run unit costs fall as output increases.

5. If the price elasticity of demand is -1.5 and the price of the product increases 2%, the quantity demanded will:
   (A) decrease approximately 0.75%.
   (B) decrease approximately 1.5%.
   (C) decrease approximately 3%.

6. Income elasticity is defined as the percentage change in:
   - (A) income divided by the percentage change in the quantity demanded.
   - (B) quantity demanded divided by the percentage change in income.
   - (C) quantity demanded divided by the percentage change in the price of the product.

7. Income elasticity is defined as the:
   - (A) percentage change in the quantity demanded divided by the percentage change in income.
   - (B) percentage change in income divided by the percentage change in the quantity demanded.
   - (C) change in quantity demanded divided by the change in income.

8. Which of the following statements regarding diminishing marginal returns is most accurate?
   - (A) The total cost curve arches downward.
   - (B) As the quantity produced rises, costs begin to rise at a decreasing rate.
   - (C) As the quantity produced rises, costs begin to rise at an increasing rate.

9. When household incomes go down and the quantity of a product demanded goes up, the product is:
   - (A) a normal good.
   - (B) a Veblen good.
   - (C) an inferior good.

10. The primary factors that influence the price elasticity of demand for a product are:
    - (A) changes in consumers' incomes, the time since the price change occurred, and the availability of substitute goods.
    - (B) the availability of substitute goods, the time that has elapsed since the price of the good changed, and the proportions of consumers' budgets spent on the product.
    - (C) the proportions of consumers' budgets spent on the product, the size of the shift in the demand curve for a product, and changes in consumers' price expectations.

11. Price elasticity of demand is most accurately defined as the change in:
    - (A) quantity demanded in response to a change in income.
    - (B) quantity demanded in response to a change in market price.
    - (C) market price in response to a change in the quantity demanded.

12. A good is considered an inferior good if it exhibits a negative:
    - (A) elasticity of demand.
    - (B) income effect.
    - (C) substitution effect.

13. The price of milk in a country increases from €1.00 per liter to €1.10 per liter, and the quantity supplied does not change. This suggests the elasticity of the short-run supply of milk in this country is equal to:
    (A) infinity, and supply is perfectly inelastic.
    (B) zero, and supply is perfectly inelastic.
    (C) infinity, and supply is perfectly elastic.

14. Suppose a price-taker firm produces baseball bats that sell at a price of $100 each. This firm's average total cost at the current level of production is $150 per bat, and the average fixed cost is $40 per bat. Which of the following statements is most accurate regarding this firm? They should:
    (A) continue producing baseball bats because they are covering their fixed costs.
    (B) shut down in the short run because their average total cost is greater than their price.
    (C) shut down in the short run because their average variable cost is greater than their price.

15. Which of the following is most likely to cause a decrease in the consumption of a good in response to a decline in the price of the good?
    (A) Substitution effect.
    (B) Law of demand.
    (C) Income effect.

16. If the price elasticity of demand is -2 and the price of the product decreases by 5%, the quantity demanded will:
    (A) increase 7%.
    (B) decrease 2.5%.
    (C) increase 10%.

17. The percent change in demand for a good divided by the percent change in the price of another good is known as the:
    (A) price elasticity of demand.
    (B) income elasticity of demand.
    (C) cross price elasticity of demand.

18. If the price elasticity of demand for a good is -4.0, then a 10% increase in price would result in a:
    (A) 10% decrease in the quantity demanded.
    (B) 4% decrease in the quantity demanded.
    (C) 40% decrease in the quantity demanded.

19. The cross price elasticity of demand for a substitute good and the income elasticity for an inferior good are:

	Cross elasticity	Income elasticity
(A)	> 0	< 0
(B)	< 0	> 0
(C)	< 0	< 0

20. With respect to utility theory, the income effect for a decrease in the price of a good:
   (A) may increase or decrease consumption of the good.
   (B) will decrease consumption of the good.
   (C) will increase consumption of the good.

21. At a fixed level of capital, output increases as the quantity of labor increases, but at a decreasing rate. This phenomenon is an example of:
   (A) diminishing costs to labor.
   (B) diminishing returns to capital.
   (C) diminishing returns to labor.

22. The daily demand curve for olive oil (in liters) for a particular distributor is estimated as:
   $\text{Price}_{\text{olive oil}} = 20 - Q_{\text{olive oil}} / 150$
   At a price of $10 per liter, the price elasticity of demand for olive oil is closest to:
   (A) - 0.007.
   (B) -1.000.
   (C) -1.300.

23. If the price elasticity of a linear demand curve is -1 at the current price, an increase in price will lead to:
   (A) an increase in total revenue.
   (B) no change in total revenue.
   (C) a decrease in total revenue.

24. If a good has elastic demand, a small price decrease will cause:
   (A) a larger decrease in the quantity demanded.
   (B) no change in the quantity demanded.
   (C) a larger increase in quantity demanded.

25. A firm that is experiencing diseconomies of scale should:
   (A) decrease its plant size.
   (B) decrease output in the short run.
   (C) shut down in the long run.

26. A firm in a perfectly competitive industry that seeks to maximize profit is most likely to continue production in the short run as long which of the following conditions exists? Price is equal to or greater than:
    (A) average fixed cost.
    (B) average variable costs.
    (C) marginal cost.

27. The demand for a product tends to be price inelastic if:
    (A) few good complements for the product are available.
    (B) few good substitutes for the product are available.
    (C) people spend a large share of their income on the product.

28. The law of diminishing returns states that at some point as:
    (A) less of a resource are devoted to production, holding the quantity of other inputs constant, the output will decrease, but at an increasing rate.
    (B) more of a resource is devoted to production, holding the quantity of other inputs constant, the output will increase, but at a decreasing rate.
    (C) more of a resource is devoted to production, holding the quantity of other inputs constant, at some point output will begin to decrease.

29. If the price of its product is less than its average total cost in the long run, a firm operating under perfect competition should:
    (A) keep operating and attempt to eliminate its fixed costs.
    (B) shut down.
    (C) keep operating only if it is covering its variable costs.

30. If the demand curve for a given product is a straight line with a slope of -5, this indicates that:
    (A) elasticity is constant along the demand curve.
    (B) demand is more elastic at higher prices.
    (C) demand is unit elastic.

31. If quantity demanded increases 15% when the price drops 1%, demand for this good:
    (A) elastic, but not perfectly elastic.
    (B) inelastic, but not perfectly inelastic.
    (C) perfectly elastic.

32. If quantity demanded increases 20% when the price drops 2%, this good exhibits:
    (A) perfectly inelastic demand.
    (B) inelastic, but not perfectly inelastic, demand.
    (C) elastic, but not perfectly elastic, demand.

33. A good for which consumers exhibit a negative income effect that is smaller than the substitution effect is most accurately described as a(n):
    (A) Giffen good.
    (B) inferior good.
    (C) Veblen good.

34. The upward sloping segment of a long-run average total cost curve represents the existence of:
    (A) diseconomies of scale.
    (B) economies of scale.
    (C) efficiencies of scale.

35. When demand for a good is relatively inelastic, a higher price will:
    (A) have no impact on the demand for the good.
    (B) fail to reduce the quantity demanded for the good.
    (C) lead to an increase in total expenditures for the good.

36. A distinction between Giffen goods and Veblen goods is that:
    (A) demand curves for Giffen goods slope upward, while demand curves for Veblen goods slope downward.
    (B) Giffen goods are inferior goods, while Veblen goods are not inferior goods.
    (C) the substitution effect is positive for a Veblen good but negative for a Giffen good.

37. For a linear demand curve, at the price where elasticity is -2.0, reducing prices will:
    (A) decrease total revenue and we are not at the point of maximum total revenue.
    (B) increase total revenue and we are at the point of maximum total revenue.
    (C) increase total revenue and we are not at the point of maximum total revenue.

38. According to the law of diminishing returns, doubling the number of salespeople for a firm will most likely result in:
    (A) increasing the total sales of the firm and reducing the average sales per salesperson.
    (B) doubling the total sales of the firm.
    (C) decreasing the total sales of the firm as a result of competition amongst salespeople.

39. Under perfect competition, if the price of a firm's product is below its average total cost, in the short run the firm should:
    (A) shut down, but operate in the long run if it is covering its variable costs.
    (B) operate if it is covering its variable costs.
    (C) increase the product price to at least cover its average total cost.

40. If the price of World Cup Soccer tickets increases from $40 a ticket to $50 a ticket and the quantity demanded of tickets stays the same, demand for the tickets is:
    (A) perfectly inelastic.
    (B) elastic, but not perfectly elastic.
    (C) inelastic, but not perfectly inelastic.

41. Gene Bawerk, an economics professor, is lecturing on the factors that influence the price elasticity of demand. He makes the following assertions:

    Statement 1: For most goods, demand is more elastic in the long run than the short run.

    Statement 2: Demand for a good becomes more elastic when a close substitute for it becomes available on the market.

    With respect to Bawerk's statements:
    (A) both are correct.
    (B) only statement 2 is correct.
    (C) only statement 1 is correct.

41. A good is most likely to demonstrate higher price elasticity of demand:
    (A) if it represents a small portion of the consumer's budget, than if it represents a large portion.
    (B) in the long run than the short run.
    (C) when there are few substitutes for the good, than when there are many good substitutes.

43. A company has estimated that the price elasticity of demand for its output is -1.1. If the company increases the price of its product by 5%, it is most likely that:
    (A) both total revenue and profits will decrease.
    (B) total revenue will decrease but profits may increase.
    (C) total revenue will increase but profits may decrease.

44. If the price elasticity of demand is -1.5 and a change in the price of the product increases the quantity demanded by 4%, then what is the percent change in price?
    (A) -0.375%.
    (B) -2.667%.
    (C) -6.000%.

45. When two goods are complements, the cross elasticity of demand is:
    (A) negative, and for substitutes the cross price elasticity of demand is negative.
    (B) positive, and for substitutes the cross price elasticity of demand is negative.
    (C) negative, and for substitutes the cross price elasticity of demand is positive.

46. A decrease in the price of Good Y can result in a decrease of the quantity of Good Y demanded by consumers if the substitution effect:
    (A) is positive and the income effect is negative and larger than the substitution effect.
    (B) and the income effect are negative.
    (C) is negative and larger than the positive income effect.

47. With respect to utility theory, the substitution effect for a decrease in the price of a good:
    (A) may increase or decrease consumption of the good.
    (B) will decrease consumption of the good.
    (C) will increase consumption of the good.

48. The law of diminishing returns states that for a given production process, as more and more of a resource (such as labor) are added, holding the quantities of other resources fixed:
    (A) cost declines at an increasing rate.
    (B) cost declines at a decreasing rate.
    (C) output increases at a decreasing rate.

49. When the price of a good decreases, how do the income effect and the substitution effect change the quantity demanded of the good?
    (A) Both the income effect and the substitution effect increase the quantity demanded.
    (B) The income effect increases the quantity consumed, but the substitution effect may increase or decrease the quantity demanded.
    (C) The substitution effect increases the quantity demanded, but the income effect may increase or decrease the quantity demanded.