ECON 1 Final (B) Key

1. If the price consumption curve of good X, which is on the horizontal axis, slopes downward, we can be sure that   
A. consumers spend less money on X even though they buy more of it.  
B. consumers spend the same proportion of their budget on X.  
**C.** consumers spend more money on X but they get more of X.  
D. none of the above is true because a price-consumption curve tells us nothing about the amount spent on X.

2. The income effect   
A. moves in the opposite direction from the substitution effect for a normal good.  
B. moves in the same direction as the substitution effect for an inferior good.  
C. relates to increases in nominal rather than real income.  
**D.** is described by none of the answers above.

3. For a Giffen good   
A. the income effect is greater than the substitution effect.  
B. the income effect is less than the substitution effect.  
C. the income effect is in the opposite direction of the substitution effect.  
**D.** a and c.  
E. b and c.

4. One aggregates individual demand curves by   
**A.** adding horizontally.  
B. adding vertically.  
C. adding horizontally and subtracting vertically.  
D. none of the above.

5. As one moves southeast on a downward sloping demand curve   
A. demand becomes more elastic.  
B. demand becomes more inelastic.  
C. elasticity stays the same.  
**D.** one cannot tell what happens to elasticity unless the demand curve is linear.

6. The point on a linear demand curve where revenue is maximized is   
**A.** where elasticity equals -1.  
B. where elasticity equals 0.  
C. where elasticity equals infinity.  
D. where the price is the highest.

7. A horizontal demand curve is   
**A.** perfectly elastic.  
B. perfectly inelastic.  
C. unit elastic.  
D. none of the above.

8. The cross-price elasticity of demand for complements is   
A. is positive.  
**B.** is negative.  
C. is zero.  
D. cannot be specified without more information.



9. In the graph above, as the consumer moves from indifference curve 1 to 3, his   
**A.** real income is rising and his nominal income is constant.  
B. real income is falling, and his nominal income is rising.  
C. real income is falling and nominal income is constant.  
D. real and nominal income are falling, but he can buy more anyway.

10. For the demand function P=50–5Q   
A. a producer would do well to price at 50.  
B. a producer could give away only 10.  
C. the total revenue is the same whether the price is 20 or 30.  
**D.** both b and c are correct answers.  
E. all of the above are correct answers.

11. In a typical production function the relevant factors of production are land, labor, capital, and   
A. raw materials  
B. technology  
**C.** entrepreneurship  
D. all of the above

12. If a chef and her equipment transform $50 worth of raw foodstuff into a meal with a total value of $150,   
A. the resulting output would be measured as the $150 total value.  
B. the resulting output would be referred to as an intermediate product.  
**C.** the resulting output would be measured as the $100 of value added.  
D. b and c.

13. The short run is defined as that period of time during which   
**A.** one or more inputs cannot be freely varied.  
B. all inputs are variable.  
C. all inputs are fixed.  
D. labor is counted as a fixed input.

14. The marginal product of a variable input is   
A. zero at the point of diminishing returns.  
B. the change in the average product that occurs when the variable input is increased one unit.  
**C.** the change in the total product that occurs in response to a unit change in the variable input.  
D. the second derivative of the total product function.

15. In a typical short-run production function, before diminishing returns set in,   
A. the slope of the total product curve is decreasing.  
**B.** the slope of the total product curve is increasing.  
C. the slope of the total product curve rises and then falls before diminishing returns sets in.  
D. the slope of the total product curve falls and then rises before diminishing returns sets in.

16. When the marginal product curve lies below the average product curve,   
**A.** the average product curve must be falling.  
B. the total product curve must be falling.  
C. the average product curve must be rising.  
D. the marginal product curve must be rising.

17. On an isoquant, the MRTS is defined as

A.   
B. MPL/MPK at the relevant point on the isoquant.  
**C.** both a and b.  
D. neither a nor b.

18. Returns to scale refers to   
A. what happens to output when at least one input is fixed and one is varied.  
B. what happens to output when all inputs are held fixed.  
**C.** what happens to output when all inputs are varied in some proportion.  
D. the law of diminishing returns.

19. The isoquant mapping for perfect complements in production is   
**A.** L-shaped.  
B. a straight line.  
C. a ray passing through the origin.  
D. concave.  
E. none of the above.

20. If the owner of an ice-cream stand told a student looking for summer work that he would not hire him even if he worked for nothing, we can infer that   
A. the marginal product of the labor is zero or less.  
B. the average product of labor is falling.  
C. the marginal product of labor is falling.  
**D.** all of the above are true.  
E. none of the above are true.

21. (Appendix) The defining characteristics of increasing returns to scale may be summarized as   
**A.** F(cK,cL) > cF(K,L).  
B. F(cK,cL) = cF(K,L).  
C. F(cK,cL) < cF(K,L).  
D. Q = min(aK,aL).

22. Given input prices and the usual strategy of a profit maximizing firm, efficient production occurs at   
A. the highest isoquant Q for a given isocost C.  
B. the lowest isoquant Q for a given isocost C.  
C. the highest isocost C for a given isoquant Q.  
**D.** the lowest isocost C for a given isoquant Q..

23. When costs are at a minimum,   
A. the ratio of the MPL/MPK< Price L/Price K.  
B. MPL= MPK.  
**C.** the extra output we get from the last dollar spent on an input must be the same for all inputs.  
D. b and c are true.

24. Suppose labor and capital are both used to produce output. In the long run, if the wage rate rises while the rental rate on capital remains unchanged,   
A. the process will become more labor intensive.  
**B.** the process will become more capital intensive.  
C. market forces will come into play to bring the prices back to their earlier relationship.  
D. the marginal product of capital will rise and the marginal product of labor will fall.

25. Once we enter the region of diminishing returns,   
A. variable cost increases at a decreasing rate.  
**B.** variable cost increases at an increasing rate.  
C. variable cost decreases at a decreasing rate.  
D. variable cost decreases at an increasing rate.

26. The short run total cost of zero output is equal to   
A. variable cost.  
**B.** fixed cost.  
C. zero.  
D. variable cost plus fixed cost.

27. Output for a simple production process is given by Q = 2KL, where K denotes capital, and L denotes labor. The price of capital is $25 per unit and capital is fixed at 8 units in the short run. The price of labor is $5 per unit. What is the total cost of producing 80 units of output?   
A. $525  
B. $200  
C. $233  
D. $185  
**E.** none of the above

28. Output for a simple production process is given by Q = 2KL, where K denotes capital, and L denotes labor. The price of capital is $25 per unit and capital is fixed at 8 units in the short run. The price of labor is $5 per unit. What is the variable cost of producing 80 units of output?   
A. $200  
B. $33  
**C.** $25  
D. $85

29. The vertical distance between the average total cost and the average variable cost curves at any level of output will always be   
A. variable cost.  
**B.** average fixed cost.  
C. fixed cost less variable cost.  
D. total cost less fixed cost.

 30. When marginal cost is greater than average total cost,   
A. average total cost must be increasing with output.  
B. average variable cost must be increasing with output.  
C. average fixed cost must be increasing with output.  
**D.** Both A and B will be true.

31. Markets characterized by declining long-run average costs are often referred to as   
A. perfect competition.  
B. diseconomies of scale.  
**C.** natural monopolies.  
D. nonprofit organizations.

32. The MC curve slopes upward due to   
A. increasing returns to scale.  
B. decreasing returns to scale.  
**C.** diminishing returns.  
D. none of the above.

33. ATC equals   
A. AVC + AFC.  
B. TC/Q.  
C. (TFC + TVC)/Q.  
**D.** all of the above.

34. Let the TC curve be given by the equation TC(Q) = 20 + 5Q. The variable cost curve can be expressed as   
A. 20 + 5Q.  
B. 20.  
**C.** 5Q.  
D. 5.  
E. it cannot be determined from the information given.

35. Let the TC curve be given by the equation TC(Q) = 10 + 5Q. The average total cost can be expressed as   
A. 10.  
**B.** (10/Q)+5.  
C. 10 + (5/Q).  
D. none of the above.

36. If a firm's demand curve falls below its AVC curve, then the firm should   
**A.** shut down now.  
B. operate in the short run but not the long run.  
C. set price = marginal cost.  
D. do none of the above.

37. If the demand curve falls below the ATC curve but lies above AVC, then the firm should   
A. should shut down.  
**B.** operate in the short run but not the long run.  
C. set price = marginal cost.  
D. do none of the above should be done.

Joe is self-employed in a store that has a rental value of $500 a month which he pays, but he can vacate the building without giving notice. His other expenses are $100 a month for maintenance. He makes $25,000 a year on net sales (total revenue minus the wholesale cost of the product). If he quit his job and worked the same number of hours elsewhere at a job he liked equally well, he estimates that he could make $20,000 a year. No one else can be hired to work in the store.

38. Joe should   
**A.** quit his job.  
B. keep the job.  
C. work part-time.  
D. none of the above.

39. Suppose that Joe had a long term lease which requires him to pay the rent even if he doesn't operate the store. What should Joe do?   
A. quit immediately  
B. keep the job permanently  
**C.** keep the job until the lease expires  
D. none of the above

40. At the output where MC = ATC = P, the firm   
A. should shutdown.  
**B.** has no economic profit.  
C. is profit maximizing.  
D. should raise output.

41. If firms are price takers this implies   
A. that in the short-run economic profits will be zero.  
**B.** that the demand curve facing the firm is perfectly elastic.  
C. that the total revenue curve is horizontal.  
D. all of the above.



42. In the above diagram profit is maximized at point   
A. A.  
B. B.  
**C.** C.  
D. D.

43. Producer surplus is given by   
**A.** the area above the supply curve but below the price.  
B. the area below the supply curve.  
C. the area below the demand curve but above the price.  
D. none of the above.

 44. The elasticity of supply is given by

A.   
**B**.   
**C**. .  
D. all of the above.

45. Other things remaining the same, in the long-run as compared to the short-run   
**A.** supply elasticity will increase.  
B. supply elasticity will decrease.  
C. supply elasticity will remain the same.  
D. one cannot tell.

46. A firm's total revenue curve is given by 3Q2 - 7Q . The firm   
A. is perfectly competitive.  
B. may be perfectly competitive.  
**C.** is not perfectly competitive.  
D. one cannot tell.

47. If a firm is producing where its LMC = price and the LMC is equal to LAC, then it would do better in the long run by   
A. increasing output with its existing plant until LMC equals price.  
B. increasing plant size until LMC and SAC are identical and equal to price.  
C. decreasing plant size until LAC, SAC and price are equal.  
**D.** changing nothing because it is already at the long run profit maximizing point.

48. I get $200 revenue from the sale of my product each day. I rent the factory that I use for $90 a day. The raw materials of the operation cost $115 a day. I do all the work myself. Recently, a competitor offered me $30 a day to work for him. Both jobs are equally attractive as far as the work is concerned. My accounting profit is \_\_\_\_\_, and my economic profit is \_\_\_\_\_\_.   
**A.** -5, -35  
B. -35, -35  
C. 25, -5  
D. 110, -30

49. Which is not true of a perfectly competitive market?   
A. The typical industry demand curve is downward sloping.  
**B.** There is no incentive to innovate since economic profit is zero in the long-run.  
C. If the long-run average total cost curve is horizontal in the relevant range of production, perfectly competitive firms can be various sizes in long-run equilibrium.  
D. At long-run equilibrium, economic profit is less than accounting profit.

50. In the long-run, any perfectly competitive firm that produces will choose a quantity such that   
A. short-run average cost is minimized.  
B. long-run average cost is minimized.  
C. short-run marginal cost equals long-run marginal cost.  
D. price equals marginal cost.  
**E.** all of the above are true.