ECON F211: PoE : Tut Test 2
23rd Feb 2021

1. The marginal utility of a commodity is best explained as:
   a. an indication of the last use to which the commodity has been put or the use to which it would next be put if more were available.
   b. equal to the price of that commodity.
   c. the ratio of the total utility generated by consuming that commodity to the total utility of all other commodities that are consumed.
   d. the extra utility yielded by consuming each successive unit of that commodity.
   e. the same thing as the total utility derived from consuming that commodity.

   Ans: D

2. Assume the marginal utility of good X is 10 utils, the price of X is $5 per unit, the marginal utility of good Y is 25 utils, and the price of Y is $25 per unit. What should the consumer do next to maximize his/her utility, keeping income as constant?
   a. Buy more X and less Y.
   b. Buy more Y and less X.
   c. This is an equilibrium point.
   d. Not enough information is given to answer this question.
   e. Buy more X and more Y

   Ans: A

3. Jim tells you that he prefers commodity P to C, C to U, and U to P. This violates what assumption made when analyzing consumer preferences?
a. that more is better
b. that there is a diminishing marginal rate of substitution
c. that consumers are rational
d. that consumers are able to choose among all the combinations of goods and services available
e. none of the given options are necessarily correct

Answer: C

4. A consumer is maximizing his or her utility subject to the constraint of income and given prices, which of the following statements is most accurate:
   a. total satisfaction derived from each commodity must equal the total satisfaction derived from ever other commodity.
   b. ratio of the total satisfaction derived from any commodity to the price of that commodity must be equal for all commodities.
   c. satisfaction derived from the last tiny unit of each commodity bought must be equal for all commodities.
   d. ratio of the total satisfaction derived from any commodity to the total expenditure on that commodity must be equal for all commodities.
   e. none of the given descriptions is necessarily correct.

   Ans: E

5. Assume that an individual consumes two commodities that are both normal and both commodities compete with each other with respect to the satisfaction they yield to the consumer. So keeping the income of the individual constant, if price of one of the commodity falls then it is most likely that its consumption by the individual will _____ because of _____:

a. increase; income effect + substitution effect
b. increase; income effect – substitution effect
c. increase; income effect*substitution effect
d. increase; substitution effect/income effect
e. none of the given options are correct

Ans: A

6. A rise in the price of X that causes a household to shift its purchasing pattern toward Y and away from X is the _____ effect of a price change (assume X and Y are substitutes and normal goods).
a. income
b. substitution
c. complementary
d. diminishing marginal utility
e. none of the given options is correct

Answer: B

7. Generally, for normal goods
a. the substitution and income effects of a price decrease will both decrease the quantity of the good demanded.
b. the substitution and income effects of a price decrease will both increase the quantity of the good demanded.
c. the substitution effect of a price decrease will increase the quantity of the good demanded while the income effect of a price decrease will decrease the quantity of the good demanded.
d. the substitution effect of a price decrease will decrease the quantity of the good demanded while the income effect of a price decrease will increase the quantity of the good demanded.
e. none of the given options are correct.

Answer: B

8. Ted has $600 a week to spend on clothing (*c*) and food (*f*). The price of clothing is $30 and the price of food is $5. What is the equation for Ted's budget constraint, assuming he spends his entire budget?
A) $30 × Clothing + $5 × Food < $600
B) $30 × Clothing + $5 × Food ≤ $600
C) $30 × Clothing + $5 × Food > $600
D) $30 × Clothing + $5 × Food = $600
e. none of the given options are correct.

Answer: D

9. Assume that donating money to charity is a normal good, the income effect of a decrease in

personal tax rates would lead to
a. less giving because giving to charity would become more expensive relative to other goods.
b. more giving because giving to charity would become less expensive relative to other goods.
c. more giving because households would have more disposable income.
d. less giving because households would spend that money on luxury goods.
e. none of the given answers are correct.
Answer: C

10. Assume that leisure is considered a normal good. In that case the substitution effect of a wage decrease will likely imply a _____ demand for leisure and a _____ labor supply.
a. lower; higher
b. higher; lower
c. higher; higher
d. lower; lower
e. none of the given options are correct
Answer: B

11. Identify the truthfulness of the following statements.

I. When the marginal product of labor is falling, the average product of labor is falling.
II. When the marginal product curve lies above the average product curve, then average product is rising.

a) Both I and II are true.
b) Both I and II are false.
c) I is true; II is false.
d) I is false; II is true.

Ans: D

12. Diminishing marginal returns occur when the total product function is
a) decreasing.
b) increasing at a decreasing rate.
c) increasing at a constant rate.
d) increasing at an increasing rate.

Ans: B

13. An isoquant represents
a) all combinations of inputs that produce a given level of output at the same cost.
b) all combinations of inputs that produce a given level of output.
c) all combinations of output that require the same levels of inputs.
d) all combinations of inputs that cost the same amount.

Ans: B

14. The short-run is
    a) a time period in which all input levels are fixed.
    b) a time period in which at least one input level is fixed.
    c) three months.
    d) a time period in which no input levels are fixed.

Ans: B

15. The cost-minimization problem of the firm is to
    a) minimize total costs.
    b) minimize average costs.
    c) minimize total cost of producing a particular amount of output.
    d) maximize output subject to a cost constraint.

Ans: C

16. Let a firm use labor *(L)* and capital *(K)* as its only inputs to produce an output, *Q*. The cost of labor is $w = \$5$ per labor hour and the cost of capital is $r = \$15$ per machine hour. When capital is measured on the vertical axis and labor on the horizontal axis, what is the slope of an isocost line for this firm?
    a) *-3*.
    b) *-5*.
    c) *-15*.
    d) *-1/3*.

Ans: D

17. A firm uses labor and capital, (L, K), to produce an output. The hourly cost of labor is $10, and the hourly cost of capital is $50. Which of the following combinations of labor and capital hours of use represent points on the firm's $100,000 isocost line?
    a) (10000, 2000)
    b) (2000, 10000)
    c) (1000, 1800)
    d) (1000, 1000)

Ans: C

18. The expansion path graphs
    a) the combinations of capital and labor that minimize total cost for various levels of output.
    b) the combinations of capital and labor that have the same total cost for various levels of output.
    c) the combinations of capital and labor that have the same level of output.
    d) how the firm can expand output while holding total cost constant.

Ans: A

19. When average cost is "u-shaped" (neither always rising or always falling), the marginal cost curve will
    a) cross through (bisect) the average cost curve at its maximum.
    b) not intersect with the average cost curve at all.
    c) be a fixed distance above the average cost curve.
    d) cross through (intersect) the average cost curve at its minimum.

Ans: D

20. Identify the truthfulness of the following statements.
    I. When marginal cost is rising, average total cost is rising.
    II. When marginal cost is below average total cost, average total cost is falling.
    a) Both I and II are true.
    b) Both I and II are false.
    c) I is true; II is false.
    d) I is false; II is true.

Ans: D

21. Identify the truthfulness of the following statements.
    I. A firm can earn a positive accounting profit but a negative economic profit.
    II. Opportunity cost is included in the definition of economic profit but not in the definition of accounting profit.
    a) Both I and II are true.
    b) Both I and II are false.
    c) I is true; II is false.
    d) I is false; II is true.

Ans: A

22. Which of the following does not represent a profit-maximizing condition for a firm operating in a perfectly competitive industry?
    a) $P = MC$.
    b) $MC = MR$.
    c) MC must be increasing.
    d) MC must be falling.

Ans: D

23. Identify the truthfulness of the following statements.
    I. A profit-maximizing firm never produces where $P < AVC$.
    II. A profit-maximizing firm never produces where $P < AC$.
    a) Both I and II are true.
    b) Both I and II are false.

c) I is true; II is false.
d) I is false; II is true.

Ans: C

24. Sometimes a firm will continue to operate even if that firm incurs short-run negative profits (losses). Which of the following characterizes this situation?
a) $P = MC = AC$.
b) $P = MC = AVC$.
c) $P = MC$ where $P > AVC$ but $P < AC$.
d) $P = MC$ where $P > AC$ but $P < AVC$.

Ans: C

15. Jatin owns a small coffee shop, and his production function is Q = 3KL where Q is total output in cups per hour, K is the number of coffee machines (capital), and L is the number of employees hired per hour (labor). If Jatin's capital is currently fixed at K=3 machines, what is his short-run production function?
A) q = 3L
B) $q = 3L^2$
C) q = 9L
D) $q = 3K^2$

Answer: C

16. When labor usage is at 12 units, output is 36 units. From this we may infer that
A) the marginal product of labor is 3.
B) the total product of labor is 1/3.
C) the average product of labor is 3.
D) none of the other options are correct

Answer: C

17. The law of diminishing returns applies to
A) the short run only.
B) the long run only.
C) both the short and the long run.
D) neither the short nor the long run.
E) all inputs, with no reference to the time period.

Answer: A

18. What describes the graphical relationship between average product and marginal product?
A) Average product cuts marginal product from above, at the maximum point of marginal product.

B) Average product cuts marginal product from below, at the maximum point of marginal product.
C) Marginal product cuts average product from above, at the maximum point of average product.
D) Marginal product cuts average product from below, at the maximum point of average product.
E) Average and marginal product do not intersect.

Answer: C

19. The demand curve facing a perfectly competitive firm is
A) the same as its average revenue curve, but not the same as its marginal revenue curve.
B) the same as its average revenue curve and its marginal revenue curve.
C) the same as its marginal revenue curve, but not its average revenue curve.
D) not the same as either its marginal revenue curve or its average revenue curve.
E) not defined in terms of average or marginal revenue.

Answer: B

20. Suppose Arun starts his own business. In the first year the business earns $100,000 in revenue and incurs $85,000 in explicit costs. In addition, Arun has a standing offer to come work for his brother for $40,000 per year. Arun's accounting profit is _____ and Arun's economic profit is _____.

A) -$25,000 and $15,000
B) $15,000 and $65,000
C) $15,000 and $60,000
D) $15,000 and -$25,000

Ans: D

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