QUIZ 6 ANSWERS

1) With regard to economic decision making for firms, the short run is
A) a period when the quantities of all factors of production and technology are variable.
B) a period when the quantity of at least one significant factor of production is fixed.
C) a definite number of months.
D) a period when the quantities of all factors of production are variable but technology is fixed.

2) Average product is maximized when
A) marginal product is maximized.
B) average product equals marginal product and marginal product is falling.
C) the maximum quantity of the variable input is employed.
D) total product is maximized.

3) If total product is at a maximum, then
A) marginal product must be greater than zero and must be falling.
B) average product must equal marginal product.
C) marginal product must be equal to zero.
D) average product must be rising and must lie above marginal product.

4) The law of diminishing returns states that if increasing quantities of a variable factor are applied to a given quantity of fixed factors, then
A) the marginal product and the average product of the variable factor will eventually decrease.
B) total product will eventually begin to fall.
C) the average product will eventually decrease with constant marginal product.
D) the marginal product will eventually decrease with constant average product.

5) If we know that capital is fixed and a basket-producing firm can produce 36 baskets per day with 3 workers and 44 baskets per day with 4 workers, then we know all of the following EXCEPT:
A) The firm has passed the point of diminishing average productivity.
B) The average product of the fourth worker is 12.
C) The marginal product is below the average product.
D) The marginal product of the fourth worker is 8.

6) Marginal cost can be defined as the
A) cost per unit when the firm is operating at capacity.
B) cost of an additional unit of a variable factor of production.
C) change in total cost resulting from an additional unit of output.
D) difference between average total cost and average variable cost.

7) When a plant is operating at the level of output where its short-run average total cost is at a minimum,
A) average variable cost is at a minimum.
B) marginal cost is at a minimum.
C) average fixed cost is at a minimum.
D) the plant is operating at its efficient capacity.

8) When marginal cost is rising, we know that
A) average fixed cost must be rising.
B) average variable cost must be rising.
C) marginal product must be zero.
D) marginal product must be falling.

9) Increasing returns to scale for a firm are shown graphically by
A) a horizontal long-run average cost curve.
B) an upward-sloping long-run average cost curve.
C) a downward-sloping long-run average cost curve.
D) a vertical long-run average cost curve.

10) Jodi recently went into business producing widgets. Which of the following would be a fixed cost?
1. labour costs are $1000 per month
2. raw material costs are $5000 per month
3. a one-year lease on a building is $12 000
A) 1 only B) 2 only
C) 3 only D) all of the above

11) The firm's short-run cost curves, as conventionally drawn, show
A) the MC curve intersects the AVC and ATC curves at their minimum points.
B) *AVC* decreases as long as *MC* > *AVC*.
C) ATC decreases and then increases as output increases.
D) *ATC* = *FC* + *VC*.

12) In the short run, if average total cost is decreasing, then
A) average variable cost is decreasing.
B) marginal cost is decreasing.
C) average fixed costs are decreasing.
D) total fixed costs are decreasing.

13) Suppose fixed costs are $100 and average variable costs are constant regardless of output. Which of the following is then true?
A) Marginal cost will be less than average variable cost.
B) Average total costs will be constant.
C) Average total cost will decrease when output is increased.
D) Marginal cost will equal average total cost.

14) Assume capital is fixed and one more unit of labour is hired, thereby increasing the total product. Which of the following statements are possible?
1. Marginal cost would remain constant.
2. Marginal cost would increase.
3. Marginal cost would decrease.
A) 1 only
B) 2 only
C) 3 only
D) Any of 1, 2, and 3 is possible.

15) In the short run, when capital is a fixed factor, a rise in the cost of labour
A) shifts the *AVC* curve down.
B) shifts the marginal cost curve upwards.
C) leaves the *MC* curve unchanged.
D) shifts the total product curve downwards.

QUIZ 6 VERSION 1 KEY

1) B

2) B

3) C

4) A

5) B

6) C

7) D

8) D

9) C

10) C

11) C

12) C

13) C

14) D

15) B