Homework 5—Chapter 8

1) Five months ago Wilson opened up a health club. Which of the following is an implicit cost related to the health club?
   A) Wilson paid $120 for an outside laundry service to clean the towels used at the club.
   B) Wilson paid $100 for the pest control exterminator to spray the health club.
   C) Wilson previously worked as an accountant, earning $3,000 a month.
   D) Wilson usually eats four hamburgers a day, priced at $3 each.

2) Economic profit is the difference between total revenue and
   A) explicit costs.
   B) implicit costs.
   C) sunk costs.
   D) the sum of explicit and implicit costs.

3) Consider the following information about a business Diane opened last year:
   price = $10, quantity sold = 25,000; implicit cost = $55,000; explicit cost = $160,000. What was Diane's economic profit?
   A) $35,000
   B) $195,000
   C) -$35,000
   D) $90,000
   E) There is not enough information provided to answer this question.

4) If a firm earns normal profit, then it has generated revenues
   A) equal to the sum of implicit and explicit costs.
   B) greater than total opportunity costs.
   C) sufficient to cover explicit costs, but not implicit costs.
   D) sufficient to cover implicit costs, but not explicit costs.

5) Carol says the following to an economist: "I hate playing the guitar, but I have taken lessons for 10 years, so I might as well continue. There is a chance I will become a professional guitarist one day." An economist would probably make which of the following statements?
   A) In a world of scarcity and unhappy alternatives, guitar playing may be your best bet.
   B) You're right; it is better not to let all that time, energy, and money on guitar lessons go to waste. That would be uneconomical and irrational.
   C) The music made by a guitar is nice; maybe you should stay with it, you may come to like it.
   D) The cost you have incurred for guitar lessons is sunk. You should not allow something that can't be undone to influence a current decision.

6) Cy recently went into the business of producing and selling cardboard boxes. For this business, which of the following is most likely to be a fixed cost?
   A) fire insurance
   B) labor costs
   C) paper costs
   D) adhesive costs
   E) b, c, and d are equally likely to be fixed costs

7) The change in total cost that results from a change in output is __________ cost.
   A) average fixed
   B) average variable
   C) average total
   D) marginal

8) The short run is
   A) a period of time in which all inputs are fixed.
   B) a period of time in which all inputs are variable.
   C) a period of time in which some inputs are fixed.
   D) always less than a year.
   E) a and d

9) The law of diminishing marginal returns holds for a situation in which
   A) all inputs are variable.
   B) all inputs are fixed.
   C) some inputs are variable and some inputs are fixed.
   D) all inputs are increased in the same proportion.

10) The law of diminishing marginal returns
    A) is a short run concept.
    B) is a long run concept.
    C) is both a short run and a long run concept.
    D) does not hold in the real world.

11) The marginal physical product (MPP) of a variable input is
    A) total output divided by the quantity of the input used.
    B) the change in total output that results from changing the variable input by one unit.
    C) the change in total revenue that results from changing the variable input by one unit.
    D) the change in total output that results from changing the fixed input by one unit.
    E) the change in total costs that results from a change in output.
12) As the marginal physical product of a variable input ________, the marginal cost ________.
A) increases; increases
B) increases; decreases
C) decreases; increases
D) b and c

13) If the average variable cost curve is falling,
A) the MC curve must be below it.
B) marginal cost is greater than average variable cost.
C) the MC curve is necessarily falling.
D) the MC curve is necessarily horizontal (neither rising nor falling).
E) the MC curve is necessarily rising.

14) If the wage rate is constant and diminishing marginal returns have already set in, then
A) the wage rate must increase.
B) marginal cost increases.
C) marginal cost decreases.
D) the wage rate must decrease.

15) The marginal cost curve passes through the ________ curve at its lowest point.
A) average variable cost
B) average total cost
C) average fixed cost
D) a and b
E) a, b, and c

16) Diseconomies of scale are said to exist when inputs are increased by some percentage and output increases by a(n) ________ percentage, causing unit costs to ________.
A) greater; fall
B) smaller; fall
C) greater; rise
D) smaller; rise
E) equal; fall

17) If inputs are increased by 10 percent and output increases by 20 percent, then ________ are said to exist.
A) economies of scale
B) constant returns to scale
C) diseconomies of scale
D) diminishing marginal returns

18) If the "minimum efficient scale" in an industry is at 25 percent of market sales, what is the maximum number of efficient firms the economy can support in this industry?
A) 75
B) 25
C) 10
D) 4