## MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) Suppose a firm is producing 100 units of output, incurring a total cost of $\$ 10000$ and total variable cost of $\$ 6000$. It can be concluded that average fixed cost is
A) $\$ 40$.
B) $\$ 60$.
C) $\$ 100$.
D) $\$ 160$.
E) $\$ 4000$.
2) Assume hockey player Jarome Iginla is averaging three points per game going into the last game of the season in which he collects four points, thereby changing his seasons average. To use an analogy in economics, it could be said that
A) hockey has nothing to do with economics.
B) average product increases when marginal product increases.
C) average product increases when average product exceeds marginal product.
D) average product increases when total product increases.
E) average product increases when marginal product exceeds average product.
3) The point of diminishing marginal productivity is the point where
A) the total product begins to fall.
B) the marginal product begins to fall at an increasing rate.
C) marginal product has reached a maximum.
D) the marginal product curve lies below the average product curve.
E) average product has reached a maximum.
4) Economist Armen Alchian has suggested that in the long run firms will
A) always maximize profit.
B) evolve to become profit maximizers.
C) suffer economic losses because they are not profit maximizing.
D) evolve to become sales maximizers.
E) suffer from the principal-agent problem.
5) Real capital includes
6) $\qquad$
7) $\qquad$
8) $\qquad$

9) $\qquad$
10) 

$\qquad$
$\qquad$
A) a firm's bank account deposits.
B) a firm's physical assets.
C) corporate bonds.
D) corporate stock.
E) owner's equity.

The following data show the total output for a firm when specified amounts of labour are combined with a fixed amount of capital. When answering the questions, you are to assume that the wage per unit of labour is $\$ 25$ and the cost of the capital is $\$ 100$.

| Labour per unit of time | Total Output |
| :---: | :---: |
| 0 | 0 |
| 1 | 25 |
| 2 | 75 |
| 3 | 175 |
| 4 | 250 |
| 5 | 305 |

TABLE 7-1
6) Refer to Table 7-1. The change in average total cost associated with changing output from 175 to 250 units is approximately
A) 20 cents.
B) 33 cents.
C) 57 cents.
D) 80 cents.
E) $\$ 1.00$.
7) The opportunity cost of using an asset is zero if
7)
6) $\qquad$
A) the asset was given to the firm for free.
B) no money was spent to acquire the asset.
C) the asset is already owned by the firm.
D) the asset has zero sunk costs associated with it.
E) the asset has no alternative uses.
8) Stock markets in Canada are
8)
A) a primary source of partnership financing.
B) a primary source of corporate financing.
C) used strictly for speculation.
D) a source of financing for sole proprietorships.
E) a primary source of physical capital.
9) Which of the following is most likely a long-run decision?
9) $\qquad$
A) The hours a store should stay open.
B) How many warehouses to build.
C) The price at which to sell the product.
D) The number of workers to hire.
E) The amount of inventory to stock.
10) An example of inputs to production termed intermediate products is
10) $\qquad$
A) an input that is an output of another firm.
B) capital.
C) money.
D) labour.
E) land.
11) The period of time in which the firm can vary any of its inputs within a given technology of production is the
A) very-short run.
B) short run.
C) long run.
D) very-long run.
E) infinite.
12) In which of the following items is the opportunity cost potentially different than its market price?
A) The use of firm-owned assets.
B) The purchase of raw materials used in production.
C) The use of rented land.
D) The interest paid on borrowed money.
E) The services of hired workers.
13) When marginal cost is rising, we know that
A) average fixed cost must be rising.
B) marginal product must be falling.
C) average variable cost must be rising.
D) average total cost must be rising.
E) marginal product must be zero.
14) A limited partnership differs from an ordinary partnership by
12)
$\qquad$
$\qquad$
13) $\qquad$
A) including at least one partner whose liability is restricted to the amount that he or she invested in the firm.
B) having unlimited liability for all partners.
C) having limited liability of all partners.
D) having a limited number of partners, each with limited liability.
E) having a limited number of partners.
15) Churches and homeless shelters are examples of
15)
A) limited partnership.
B) partnership.
C) single proprietorship.
D) corporations.
E) non-profit organizations.
16) In the short run, when capital is a fixed factor, a rise in the cost of labour
16)
A) shifts the $A V C$ curve down.
B) leaves the MC curve unchanged.
C) shifts the total product curve downwards.
D) shifts the marginal cost curve upwards.
E) leaves the ATC curve unchanged.
17) A firm's depreciation charges
17)
A) are an estimate of the loss of value of the firm's durable assets.
B) are a measure of the depreciation of financial assets of the firm.
C) are the cost of money borrowed to buy a durable asset.
D) are irrelevant to an accounting of the firm's total costs.
E) measure payments to those outside the firm.
18) In case of bankruptcy, the priority on the assets of a corporation is
A) bank loans before shareholders before bondholders.
B) shareholders before bondholders.
C) shareholders and bondholders share equally.
D) bank loans and bondholders before shareholders.
E) bondholders before shareholders before bank loans.


FIGURE 7-1
18) $\qquad$

The following data show the total output for a firm when specified amounts of labour are combined with a fixed amount of capital. When answering the questions, you are to assume that the wage per unit of labour is $\$ 25$ and the cost of the capital is $\$ 100$.

| Labour per unit of time | Total Output |
| :---: | :---: |
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| 1 | 25 |
| 2 | 75 |
| 3 | 175 |
| 4 | 250 |
| 5 | 305 |

TABLE 7-1
20) Refer to Table $7-1$. The average total cost for 250 units of output is approximately
20)
A) 33 cents.
B) 40 cents.
C) 63 cents.
D) 80 cents.
E) $\$ 1.00$.
21) When one additional unit of labour is hired, total product increases from 100 to 110 units of output
21) per unit of time. Marginal product must therefore be
A) constant.
B) decreasing.
C) positive.
D) increasing.
E) zero.

The following data show the total output for a firm when specified amounts of labour are combined with a fixed amount of capital. When answering the questions, you are to assume that the wage per unit of labour is $\$ 25$ and the cost of the capital is $\$ 100$.

| Labour per unit of time | Total Output |
| :---: | :---: |
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| 1 | 25 |
| 2 | 75 |
| 3 | 175 |
| 4 | 250 |
| 5 | 305 |

TABLE 7-1
22) Refer to Table 7-1. The total cost of producing 175 units of output is
22)
A) $\$ 75$.
B) $\$ 100$.
C) $\$ 150$.
D) $\$ 175$.
E) $\$ 350$.
23) We can predict that resources will move into an industry whenever
23)
A) accounting profits for firms in that industry are zero.
B) that industry becomes fashionable.
C) economic profits for firms in that industry are greater than zero.
D) accounting profits for firms in that industry are greater than zero.
E) economic profits for firms in that industry are zero.
24) The hypothesis that firms will not strive to improve their profit position once they have achieved a
24) given desired level of profit is called
A) the profit maximization principle.
B) the satisficing hypothesis.
C) the profit constraint principle.
D) the evolutionary hypothesis.
E) the saturation hypothesis.
25) If Michelle used $\$ 1000$ from her savings account, which was paying 6 percent interest annually, to invest in her brother's new sporting-goods store, the opportunity cost of her investment on an annual basis would be
A) her share of the store's profits.
B) $\$ 1000$.
C) the dividend paid to her by her brother.
D) $\$ 60$.
E) $\$ 1060$.
26) The period of time for which all factors of production and technology are variable is known as the
A) very-short run.
B) short run.
C) long run.
D) very-long run.
E) infinite run.
27) The non-maximizing models of firm behaviour suggest
A) that firms are not profit-oriented.
B) that firms will make radical changes in their behaviour in response to any profit incentive.
C) it is unlikely that profit-maximizing theory captures all aspects of corporate behaviour.
D) that the search for profits and avoidance of losses embodied in profit-maximization theory is incorrect.
E) sensitivity to small but not large changes in market signals.
28) 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.
E) None are possible.
29) A firm's decision about whether to shut down or continue production would not include in its
30) 
31) $\qquad$
$\qquad$
$\qquad$
32) $\qquad$
33) consideration
A) accounting costs.
B) economic costs.
C) direct production costs.
D) fixed costs.
E) implicit costs.
34) A firm can raise equity capital by issuing new shares and/or
A) making extra dividend payments.
B) investing in new capital equipment.
C) reinvesting profits.
D) issuing bonds
E) increasing its bank loans.


FIGURE 7-1
31) Refer to Figure 7-1. The best level of output to operate this firm is
A) with 7 units of labour and an output of 140 .
B) with 10 units of labour and an output of 210 .
C) impossible to determine form production data alone.
D) zero as no output level is efficient.
E) with 14 units of labour and an output of 150 .
32) If total product is at a maximum, then
31) $\qquad$
32) $\qquad$
A) marginal product must be greater than zero and must be falling.
B) marginal product must be falling and be equal to zero.
C) average product must be rising and must lie above marginal product.
D) average product must be falling and be equal to zero.
E) average product must equal marginal product.

The following data show the total output for a firm when specified amounts of labour are combined with a fixed amount of capital. When answering the questions, you are to assume that the wage per unit of labour is $\$ 25$ and the cost of the capital is $\$ 100$.

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| :---: | :---: |
| 0 | 0 |
| 1 | 25 |
| 2 | 75 |
| 3 | 175 |
| 4 | 250 |
| 5 | 305 |

TABLE 7-1
33) Refer to Table 7-1. The total cost of producing 75 units of output is
A) $\$ 50$.
B) $\$ 100$.
C) $\$ 125$.
D) $\$ 150$.
E) $\$ 175$.
34) Average, marginal, and total product curves
34)
A) express relationships between physical inputs and physical outputs.
B) demonstrate that in the short run, all inputs are variable.
C) demonstrate that each of these measures of output increase as more inputs are applied.
D) relate the prices of inputs (factors of production) to the prices of products.
E) relate the price of output to the quantity supplied.
35) Suppose Jodi's widget business is using two inputs, labour and capital. What would happen if the
35) $\qquad$ price of labour rises?
A) The firm's average total cost curve will shift upward.
B) Jodi will "wind-up" her business.
C) The firm's marginal cost curve will remain unchanged.
D) The firm's average fixed cost curve will shift upward.
E) Jodi would hire more labour.

Testname: MPP-SR-PROD-COST

1) $A$
2) E
3) C
4) $B$
5) $B$
6) A
7) E
8) B
9) B
10) C
11) C
12) A
13) $B$
14) A
15) E
16) $D$
17) A
18) D
19) $D$
20) $D$
21) C
22) D
23) C
24) B
25) D
26) D
27) C
28) D
29) D
30) C
31) B
32) B
33) D
34) A
35) A
