Name $\qquad$

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

1) Which of the following is an explicit cost in Jim's business venture?
2) 

A) the wages Jim pays his workers
B) Jim's normal profit
C) the salary Jim could have earned at another job
D) the interest Jim does not earn because he invested his savings in his business
E) Answers A, B, and D are correct.
2) Economic profit equals total revenue minus total
A) entrepreneur's costs.
B) explicit costs.
C) implicit costs.
D) accounting costs.
E) opportunity costs.
3) Jennifer owns a pig farm near Salina, Kansas. Last year she earned $\$ 39,000$ in total revenue while incurring $\$ 38,000$ in explicit costs. She could have earned $\$ 27,000$ as a teacher in Salina. These are all her revenue and costs. Therefore Jennifer earned an
A) accounting profit of $\$ 1,000$ but incurred an economic loss of $\$ 65,000$. Economic profit (loss)
B) accounting profit of $\$ 1,000$ but incurred an economic loss of $\$ 26,000 . \quad=39000-38000-27000$
C) accounting profit of $\$ 1,000$ but incurred an economic loss of $\$ 38,000$. $=-26000$
D) economic profit of $\$ 1,000$.
E) None of the above answers is correct.
4) The long run is a time period in which
4)
A) the firm cannot increase its output.
B) some of the firm's resources are fixed.
C) all costs become explicit costs.
D) all of the firm's resources are fixed.
E) all of the firm's resources are variable.

| Quantity of labor <br> (workers) | Total product <br> (lawns mowed per week) |
| :---: | :---: |
| 0 | 0 |
| 1 | 30 |
| 2 | 55 |
| 3 | 75 |
| 4 | 80 |
| 5 | 82 |

5) Kenya owns a lawn mowing company. His total product schedule is in the above table. The marginal product of the fourth worker is $\qquad$ lawns mowed per week.
A) 80
B) 25
C) 20
D) 320
E) $5 \quad 80-75=5$
6) Kenya owns a lawn mowing company. His total product schedule is in the above table. When 4 workers are employed, the average product is $\qquad$ lawns mowed per week.
A) 5
B) 80
C) 25
D) 20
$80 / 4=20$
E) 320
7) Kenya owns a lawn mowing company. His total product schedule is in the above table. Decreasing marginal returns first occur with the
A) fourth worker.
B) second worker.
C) first worker.
D) third worker.
E) fifth worker.
8) Chuck owns a factory that produces leather footballs. His total fixed cost equaled $\$ 86,000$ last year. His total cost equaled \$286,000 last year. Hence Chuck's
A) total variable cost was zero.
B) total variable cost equaled $\$ 372,000$.
C) incurred an economic loss.
D) total variable cost equaled $\$ 200,000$.
E) None of the above answers is correct.

| Labor <br> (workers) | Output (bikes) | Total fixed <br> costs (dollars) | Total variable <br> cost (dollars) | Total cost <br> (dollars) |
| :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 200 | 0 | 200 |
| 1 | 20 | 200 | 100 | 300 |
| 2 | 50 | 200 | 200 | 400 |
| 3 | 60 | 200 | 300 | 500 |
| 4 | 64 | 200 | 400 | 600 |

9) The table above gives costs at Jan's Bike Shop. Unfortunately, Jan's record keeping has been spotty. Each worker is paid $\$ 100$ a day. Labor costs are the only variable costs of production. What is the total cost of producing 50 bikes?
A) $\$ 500$
B) $\$ 100$
C) $\$ 300$
D) \$200
E) $\$ 400$
10) The table above gives costs at Jan's Bike Shop. Unfortunately, Jan's record keeping has been spotty. Each worker is paid $\$ 100$ a day. Labor costs are the only variable costs of production. What is the total fixed cost of producing 64 bikes?
A) $\$ 400$
B) $\$ 200$
C) $\$ 500$
D) $\$ 600$
E) $\$ 300$
11) The table above gives costs at Jan's Bike Shop. Unfortunately, Jan's record keeping has been spotty.
12) 
13) $\qquad$ Each worker is paid $\$ 100$ a day. Labor costs are the only variable costs of production. What is the total variable cost of producing 60 bikes?
A) $\$ 500$
B) $\$ 300$
C) $\$ 400$
D) $\$ 200$
E) None of the above answers are correct.

14) In the above figure, curve $A$ is the $\qquad$ curve and curve $B$ is the $\qquad$ curve.
15) $\qquad$
$\qquad$
A) marginal cost multiplied by output.
B) total variable cost divided by output.
C) fixed cost divided by output.
D) marginal cost plus fixed cost.
E) marginal cost divided by output.
16) Cost curves shift if
i. technology changes.
ii. the prices of factors of production change.
iii. productivity changes.
A) i and iii
B) i, ii, and iii
C) only ii
D) i and ii
E) only i
17) As output increases, economies of scale occur when the
18) $\qquad$
A) long- run average cost increases.
B) long- run average cost decreases.
C) long- run fixed cost decreases.
D) short- run average total cost decreases.
E) long- run average cost stays constant.
