### Assignment-10

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment. **Due on 2019-04-10, 23:59 IST.**

1) Suppose, there are two options, corn-based feed (C) or soybean-based feed (S) to feed the cattle (K) such that the production function is \( K = 2C + 5S \). If the price of corn feed is INR 4 and the price of soybean feed is INR 5, what is the cost minimizing combination of producing \( K = 200 \)?

- C = 100
- S = 40
- C = 50, S = 20
- C = 20, S = 50

No, the answer is incorrect.

Score: 0

Accepted Answers:

- S = 40

2) If a production function exhibits diminishing marginal product, the slope of the corresponding total-cost curve

- is linear (a straight line)
- is negative throughout its length
- becomes steeper as the quantity of output increases
- becomes flatter as the quantity of output increases

No, the answer is incorrect.

Score: 0

Accepted Answers:

becomes steeper as the quantity of output increases

3) Slope of the marginal revenue curve corresponding to the market demand curve \( P=15-2Q \), will be

- 2 points

- 1 point

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4) For a firm with production function \( Q = 70\sqrt{LK} \), demand curve for capital is \( 2 \text{ points} \)

- \( K = \left( \frac{Q}{70} \right) \sqrt{\frac{w}{r}} \)
- \( K = \left( \frac{Q}{70} \right) \sqrt{\frac{r}{w}} \)
- \( K = \left( \frac{Q}{70} \right) \left( \frac{w}{r} \right) \)
- \( K = \left( \frac{Q}{70} \right) \left( \frac{r}{w} \right) \)

No, the answer is incorrect.

Score: 0

Accepted Answers:
\( K = \left( \frac{Q}{70} \right) \sqrt{\frac{w}{r}} \)

5) For a firm with production function \( Q = 70\sqrt{LK} \), demand curve for labour is \( 0 \text{ points} \)

- \( K = \left( \frac{Q}{70} \right) \sqrt{\frac{w}{r}} \)
- \( K = \left( \frac{Q}{70} \right) \sqrt{\frac{r}{w}} \)
- \( K = \left( \frac{Q}{70} \right) \left( \frac{w}{r} \right) \)
- \( K = \left( \frac{Q}{70} \right) \left( \frac{r}{w} \right) \)

No, the answer is incorrect.

Score: 0

Accepted Answers:
\( K = \left( \frac{Q}{70} \right) \sqrt{\frac{r}{w}} \)

6) Long run total cost curve for \( Q = 70\sqrt{LK} \) with \( r=70 \) and \( w=70 \) is \( 2 \text{ points} \)

- Straight line with a positive intercept on y axis
- Straight line with a negative intercept on y axis
- Straight line passing through origin
- None of the above

No, the answer is incorrect.

Score: 0

Accepted Answers:
Straight line passing through origin

7) Long run marginal cost for \( Q = 70\sqrt{LK} \) with \( r=70 \) and \( w=70 \) is \( 1 \text{ point} \)

- 1
- 2
- 3
- 4

No, the answer is incorrect.

Score: 0
8) For a firm with production function \( Q = 70\sqrt{LK} \), short run cost minimization quantity of labour for producing \( Q=700 \) units with capital fixed at \( K=5 \) is

- 15
- 10
- 20
- 25

No, the answer is incorrect.
Score: 0
Accepted Answers: 20