

Select The Best Answer

Question 1 of 20

Costs determine all of the following except _____.

- A. firm behaviour
- B. how firms should expand
- C. firm profitability
- D. demand for a product

Question 2 of 20

_____ are the sum of _____ and _____.

- A. Marginal costs (MC), fixed costs (FC), variable costs (VC)
- B. Total costs (TC), fixed costs (FC), variable costs (VC)
- C. Fixed costs (FC), variable costs (VC), marginal costs (MC)
- D. Variable costs (VC), fixed costs (FC), marginal costs (MC)

Question 3 of 20

The general shape of the marginal cost curve is that it _____ and then _____.

- A. declines, rises
- B. is horizontal, rises
- C. rises, declines
- D. is horizontal, declines

Question 4 of 20

_____ occur when the long-run average total cost curve rises.

- A. Economies of scale
- B. Constant returns to scale
- C. Increasing returns to scale
- D. Diseconomies of scale

Question 5 of 20

A relationship that shows the quantity of output for any given amount of input is called a

_____.

- A. variable cost curve
- B. fixed cost curve
- C. consumption function
- D. production function

Question 6 of 20

The shutdown point occurs when _____.

- A. $P > AVC$
- B. $P = AVC$
- C. $P < AVC$
- D. $P = ATC$

Question 7 of 20

All inputs to a production process are variable in the short run.

- True
- False

Question 8 of 20

The costs of production are unrelated to the production function.

- True
- False

Question 9 of 20

The long-run average total cost curve is traced out by finding the midpoints of the upward-sloping portion of short-run average total cost curves.

- True
- False

Question 10 of 20

Economies of scale and economies of scope are synonymous.

- True
- False

Question 11 of 20

If $MC > AVC$, then _____.

- A. AVC will fall with increased production
- B. MC is at its lowest point
- C. AVC is minimised
- D. AVC will rise with increased production

Question 12 of 20

Graphically, the MC curve cuts through the ATC curve at _____.

- A. the lowest point on the MC curve
- B. the highest point on the MC curve
- C. the lowest point on the ATC curve
- D. the middle of the upward-sloping portion of the total cost curve

Question 13 of 20

A competitive firm maximises profit by finding the level of production at which

_____.

- A. $P = MC$
- B. $P = ATC$
- C. $ATC = MC$
- D. $P < MC$

Question 14 of 20

If, at the profit-maximising quantity, profits are positive, _____.

- A. $P < ATC$
- B. $P > ATC$
- C. $P < AVC$
- D. $P = MC$

Question 15 of 20

In the short run, a firm should shut down when _____.

- A. production losses are less than fixed costs
- B. only normal profits are earned
- C. production losses exceed fixed costs
- D. fixed costs are zero

Question 16 of 20

If a firm experiences economies of scale, then the _____.

- A. long-run average total cost curve is equal to the economies of scope
- B. long-run average total cost curve is positively slopes
- C. long-run average total cost curve is horizontal
- D. long-run average total cost curve is negatively slopes

Question 17 of 20

The long-run average total cost curve _____.

- A. traces out the points on the lowest short-run average total cost curve for each level of production
- B. is inversely related to the depth of the short-run marginal cost curve
- C. traces out the midpoints on an average of several short-run average total cost curves
- D. is downward-sloping under decreasing returns to scale

Question 18 of 20

When ATC declines as a result of a merger of two firms that are not producing the same type of product, the new firm experiences _____.

- A. economies of scale
- B. diminishing returns of labour
- C. mystic revelation
- D. economies of scope

Question 19 of 20

The break-even point occurs when _____.

- A. $P < AVC$
- B. $P < ATC$
- C. $P = ATC$
- D. $P > AVC$

Question 20 of 20

The smallest scale of production for which long-run average total cost is at a minimum is called its _____.

- A. indifference curve
- B. budget curve
- C. economics of scope
- D. minimum efficient scale

Short Answer Question

1. The weekly demand for Pepsi in Bangi is described by: $P = 1000 - 2Q$, where Q is measured as the number of six-packs consumed each week and P is the price of a six-pack. The marginal cost of producing a six-pack is constant at \$8 and local Pepsi producers have no fixed costs.
 - a. What is the equilibrium price and output if the Bangi Pepsi market is perfectly competitive? What will the total amount of producer surplus in the competitive equilibrium? What will be the total amount of consumer surplus?

2. Consider a perfectly competitive market with a market demand curve that is given by the equation $P = 2000 - Q$. A representative firm in this market has a total cost curve given by the equation $TC = 121 + 64q + q^2$ and a marginal cost curve given by $MC = 64 + 2q$. Q is the market quantity and q is the firm quantity.

Let's start in the short-run with this market. Suppose the short-run price in this market is \$100.

- a. What is the market quantity in this market given this short-run price?
- b. What is the representative firm's level of production given this short-run price?
- c. What is the representative firm's level of profits in the short-run given this market price?
- d. Can this short-run equilibrium also represent a long-run equilibrium for this firm? Explain your answer. What do you anticipate will happen as this market adjusts to the long-run?
- e. Rounding to the nearest whole number, how many firms are operating in the short-run in this market given a market price of 100 firms?

Now, let's go to the long-run in this market. Let's assume that nothing happens to the market demand curve, but that the market has adjusted and is now at a long-run equilibrium.

- f. Intuitively thinking, what do you expect to happen to the following in the long-run? Your answers should be "increase", "decrease", or "remain unaffected".
 - i. Market quantity
 - ii. Market price
 - iii. Firm quantity
 - iv. Firm price
 - v. Number of firms in the industry
 - vi. Level of profits for the firm
- g. What is the break-even price in the long-run for a representative firm in this industry?

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- h. Assuming no change in the market demand for this product, what will be the long-run market quantity in this market?
- i. How many firms will be in this industry in the long-run?
- j. What happen to the number of firms in the industry in the long-run compared to the number of firms in the industry in the short-run?
- k. What is the level of profit in the long-run for the representative firm?
- l. Calculate the value of consumer surplus (CS), producer surplus (PS) and deadweight loss (DWL) in the long run. Hint: you will need to find the market supply curve for this one! And, that means you will need to do the horizontal summation of the individual supply curves in order to find the equation for the market supply curve.
- m. Fill in the following table based upon this market being in long-run equilibrium.

Price in the market	
Total Quantity (Q) produced in the long-run	
Profit maximizing quantity (q) produced by the firm in the long-run	
Profit for the firm in the long-run	
CS in the market in the long-run	
PS in the market in the long-run	
DWL in the market in the long-run	