

Past-paper walk-through

Types of cost, revenue and profit, short-run and long-run production ■ 7.5

eXercise

Questions in this set

- 9708/14 N25 Q5 ■ 1 mark
- 9708/33 N25 Q4 ■ 1 mark
- 9708/33 N25 Q7 ■ 1 mark
- 9708/34 N25 Q5 ■ 1 mark

Question 5

9708/14 N25 ■ Q5 ■ 1 mark

- 5** Which statement about factors of production is correct?
- A** In the short run all factors are fixed; in the long run all factors are varied.
 - B** In the short run at least one factor is fixed; in the long run all factors can be varied.
 - C** In the short run at least one factor is varied; in the long run all factors are fixed.
 - D** In the short run at least one factor is varied; in the long run at least one factor is fixed.

Solution 5

Answer: **B**

Why

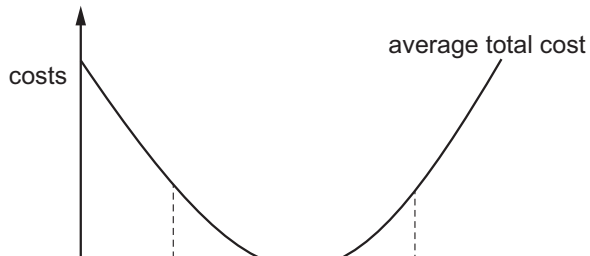
- The short run is defined as the period when at least one factor is fixed.
- In the long run all factors can be varied.
- So it is wrong to say all factors are fixed in the short run – at least one is variable.

Question 4

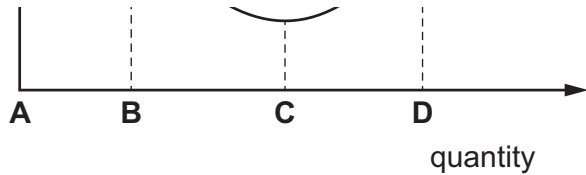
9708/33 N25 ■ Q4 ■ 1 mark

- 4 The diagram shows the average total cost for a firm.

At what level of output does marginal cost exceed average total cost?



Question 4



Solution 4

Answer: **D**

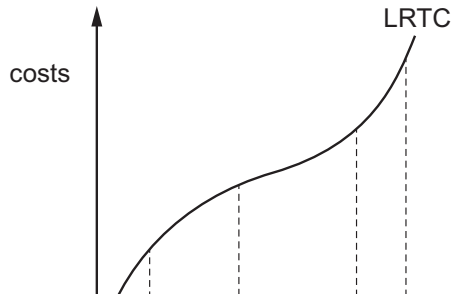
Why

- Marginal cost cuts average total cost at the *minimum* of the ATC curve.
- Left of that point MC is below ATC, which is why average cost is still falling.
- So MC exceeds ATC only to the *right* of the minimum, where average cost is rising.

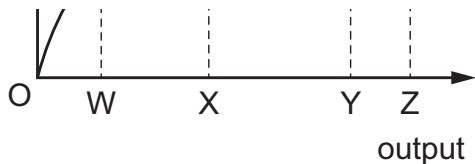
Question 7

9708/33 N25 ■ Q7 ■ 1 mark

- 7 The diagram shows the long-run total cost (LRTC) curve of a firm.



Question 7



At which output is the long-run average total cost at its minimum?

A OW

B OX

C OY

D OZ

Solution 7

Answer: **C**

Why

- Long-run average total cost is total cost divided by output.
- On a total cost curve that is the slope of a ray from the origin to the curve.
- So LRATC is at its minimum where that ray is *tangent* to the LRATC curve – the flattest ray that still touches it.

Question 5

9708/34 N25 ■ Q5 ■ 1 mark

- 5** A firm has fixed costs of \$300 and can produce two units per hour. Its total variable costs are \$200 for one unit and \$300 for two units.

Which cost will fall by the lowest amount when the second unit is produced?

- A** average fixed cost
- B** average total cost
- C** average variable cost
- D** marginal cost

Solution 5

Answer: **C**

Why

- Average fixed cost is fixed cost divided by output, so it falls fastest as output rises.
- $300/1 = 300$ falls to $300/2 = 150$ – a fall of 150.
- Compare that with the fall in average variable cost ($200 \rightarrow 150$) and average total cost to find the smallest fall.