

# CAMBRIDGE A LEVEL ECONOMICS TOPICAL MULTIPLE CHOICE QUESTIONS

COST, REVENUE, PRODUCT, INTEGRATION, ECONOMIES OF SCALE & RETURNS TO SCALE

### **PAST QUESTIONS**

1 A major UK chemical firm was bought by its rival, a Dutch chemical firm.

What definitely occurred when the Dutch firm bought the UK firm?

A a partnership

B economies of scale

C horizontal integration

D increased profits

2 A firm increases its output, starting from zero.

How will this affect its short-run marginal cost (MC), average total cost (ATC) and average fixed cost (AFC)?

|   | МС             | ATC            | AFC  |
|---|----------------|----------------|------|
| Α | fall then rise | fall then rise | fall |
| В | fall then rise | rise then fall | rise |
| С | rise then fall | fall then rise | fall |
| D | rise then fall | rise then fall | rise |

3 What is likely to make it more difficult for a small firm to survive?

A increased preference on the part of consumers for distinctive non-standardised products

B reductions in the rate of interest charged by commercial banks

C the absence of effective barriers to the entry of potential competitors

D the existence of decreasing returns to scale

4 What is an example of backward vertical integration?

A a bakery buying a wheat farm

B a car manufacturer buying a car showroom

C a vineyard buying an apple orchard

D two rival supermarkets joining together

|   | 1      | 2      | 3                  |
|---|--------|--------|--------------------|
| Α | demand | labour | returns to scale   |
| В | demand | labour | normal profit      |
| С | output | inputs | returns to scale   |
| D | output | inputs | supernormal profit |

6 Two firms selling the same type of product find it more efficient to merge.

Which combination describes how the merged firm's average costs of production and demand curve are expected to change?

|   | average costs | demand curve   |
|---|---------------|----------------|
| Α | fall          | more elastic   |
| В | fall          | more inelastic |
| С | rise          | more elastic   |
| D | rise          | more inelastic |

7 Company R manufactures steel. Company S produces ships. Company T operates oil tankers. Company V operates cruise liners.

Which statement is correct?

A If R takes over S, this is an example of forwards vertical integration.

B If S takes over V, this is an example of backwards vertical integration.

C If T takes over S, this is an example of diversification.

D If V takes over S, this is an example of horizontal integration.

8 A firm at its current level of production finds that its short-run marginal cost is less than its short-run average variable cost.

Which conclusion about the firm can be drawn from this information?

A Average variable cost is constant.

B Average variable cost is falling.

C Average variable cost is greater than its average total cost.

D Average variable cost is rising.

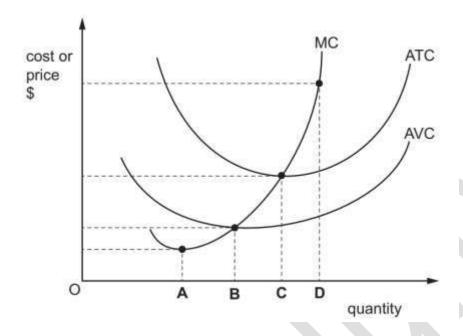
9 Steel producer X takes over its main competitor, steel producer Y.

What would X expect to happen to the price elasticity of demand for its product and its long-run average cost as a result of this takeover?

| 10 | price elasticity of demand | long-run<br>average cost |
|----|----------------------------|--------------------------|
| Α  | decrease                   | decrease                 |
| В  | decrease                   | increase                 |
| С  | increase                   | decrease                 |
| D  | increase                   | increase                 |

10 The diagram shows the cost curves of a firm.

What is the level of output below which the firm will shut down in the long run?



11 Steel producer X takes over its main competitor, steel producer Y.

What would X expect to happen to the average revenue for its product and its long-run average cost as a result of this takeover?

|   | average revenue | long-run<br>average cost |
|---|-----------------|--------------------------|
| Α | decrease        | decrease                 |
| В | decrease        | increase                 |
| С | increase        | decrease                 |
| D | increase        | increase                 |

12 The table shows how a firm's total cost changes as more workers are employed.

| number of workers | total costs<br>\$ |
|-------------------|-------------------|
| 1                 | 1200              |
| 2                 | 2000              |
| 3                 | 2700              |

What would be the effect of employing a third worker on the firm's average costs and its marginal costs?

|   | average costs | marginal costs |
|---|---------------|----------------|
| Α | decrease      | decrease       |
| В | decrease      | increase       |
| С | increase      | decrease       |
| D | increase      | increase       |

13 The production schedule indicates how total output increases as up to five workers are employed per week.

| employment of workers | total product<br>(units) |
|-----------------------|--------------------------|
| 0                     | 0                        |
| 1                     | 6.0                      |
| 2                     | 13.0                     |
| 3                     | 21.0                     |
| 4                     | 27.5                     |
| 5                     | 33.5                     |

What is the marginal product when the average product per worker equals 7.0 units?

A 6.0 units B 6.5 units C 7.0 units D 8.0 units

14 In many developed economies, large and small firms often exist side by side in the same industry.

What is most likely to explain the survival of the small firms?

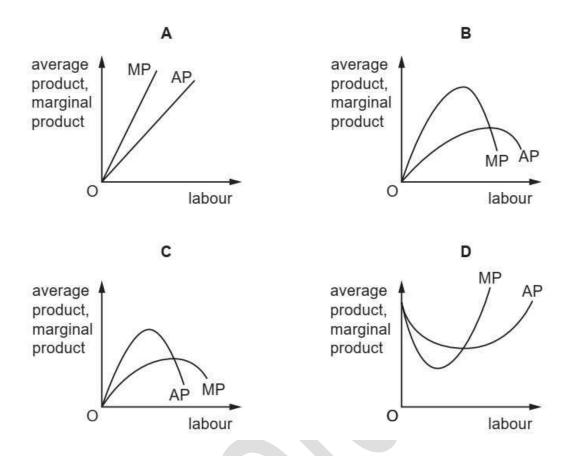
A They each offer a much wider range of products.

B They have a higher minimum efficient scale.

C They pay much higher wages to their staff.

D They provide a more personal level of consumer service.

15 Which diagram correctly shows the relationship between the average product (AP) and the marginal product (MP) of labour, given that the quantities of other factor inputs remain constant?



16 Firms often remain small even when growth could result in technical economies of scale.

What is not a likely reason for this?

A Demand for the product tends to change often and rapidly.

B Individual entrepreneurs wish to keep a tight personal control over their own firm.

C The entrepreneurs who establish the firms tend to be ambitious risk-takers.

D The market in which they operate is very specialised in nature, often selling unique products.

17 What would encourage an increase in the number of small firms?

A increasing government regulation of conditions in the workplace

B more risk-averse (cautious) lending policies by banks

C stronger government laws against the growth of monopoly

D tougher penalties in the case of personal bankruptcy

18 What would be most likely to allow the survival of small firms in an economy?

A an increase in the cost of borrowing from commercial banks

B an increase in personal services as a share of GDP

C an increase in the rate of change of information technology

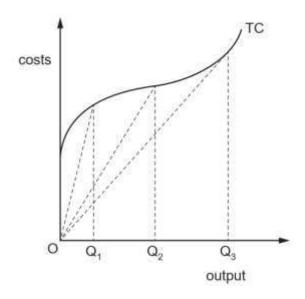
D an increase in the ratio of capital to labour employed in an economy

19 In 2012, an Australian airline company separated its international and domestic operations into separate companies. The company had been facing increasing competition from much larger competitors in international markets but had relatively little competition in domestic markets that had a higher price elasticity of demand.

Which row shows the reasons that would support this separation?

| , | diseconomies of scale<br>in the combined<br>company before the<br>separation | markets can easily<br>be separated by<br>this company | the level of<br>competition and<br>price elasticity in<br>domestic markets |
|---|--|---|--|
| Α | no   | yes   | yes  |
| В | yes  | no  | yes  |
| С | yes  | yes   | no   |
| D | yes  | yes   | yes  |

20 In the diagram, TC is a firm's short-run total cost curve.



Which statement is correct?

A Average total cost is minimised at output OQ<sub>3</sub>.

B Average variable cost is minimised at output OQ<sub>2</sub>.

C Average variable cost is minimised at output OQ<sub>3</sub>.

D Marginal cost is minimised at output OQ<sub>1</sub>.

21 When output increases in the short run, which statement is correct?

A Average fixed cost first falls and then, beyond some point, rises.

B Average variable cost increases as soon as the law of diminishing marginal returns begins to operate.

C The minimum point of the average total cost curve occurs at a greater level of output than the minimum point of the average variable cost curve.

D When marginal cost reaches its minimum point, average variable cost must be greater than average fixed cost.

22 A firm that controlled over 50% of the market successfully merges with its main competitor to form one large company.

What is the most likely reason why, from the firm's point of view, the merger will fail?

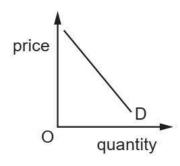
A a fall in consumer surplus

B cost of funding the merger

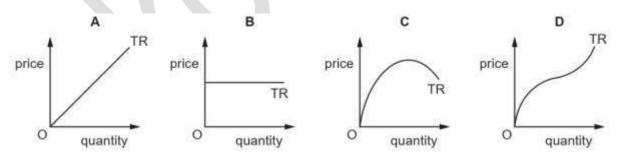
C economies of scale

D market dominance

23 The diagram shows the demand curve for a firm's product.



Which diagram depicts the shape of the firm's corresponding total revenue (TR) curve?



24 Why might a firm adopt a policy of diversification?

A to achieve cost economies of scale

B to agree common prices with rivals

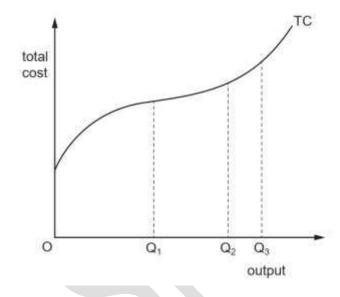
C to ensure greater ability to spread investment risks

### D to increase productivity of labour

## 25 What would be likely to help a small firm to survive and what might be a threat to its survival?

|   | help                                  | threat                                     |
|---|---------------------------------------|--|
| Α | contestability of the market          | expensive new technology                   |
| В | customers valuing personal service    | new government regulations on its business |
| C | low barriers to entering its industry | managerial diseconomies of scale           |
| D | selling a homogeneous product         | new firms entering the market              |

### 26 The diagram shows a firm's short-run total cost curve (TC).



#### Which statement is correct?

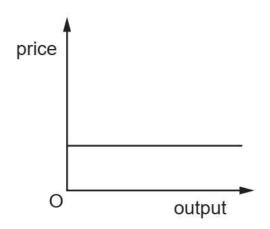
A Average total cost is minimised at output  $OQ_2$ .

B Average variable cost is minimised at output OQ<sub>1</sub>.

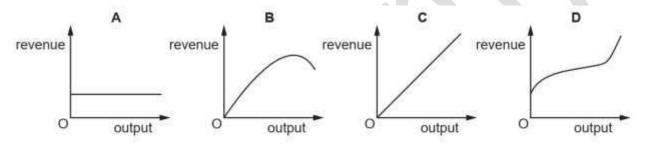
C Average variable cost is minimised at output OQ<sub>3</sub>.

D Marginal cost is minimised at output OQ<sub>1</sub>.

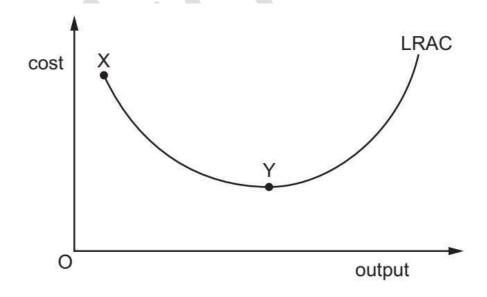
27 The diagram shows the demand curve for a firm's product.



Which diagram shows the shape of the firm's total revenue (TR) curve?



28 The diagram shows a firm's long-run average cost curve (LRAC).



What could explain the shape of the curve from X to Y?

A a decrease in total fixed cost

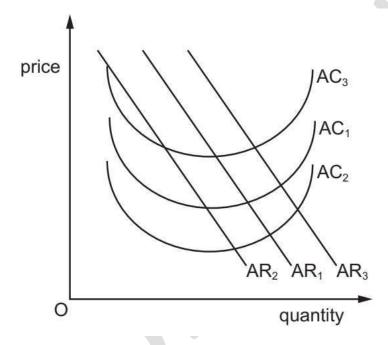
B increasing returns to scale

C internal diseconomies of scale

D more than one factor of production is variable

29 The diagram shows the average revenue (AR) and average cost (AC) curves for a firm X that manufactures electronic goods.

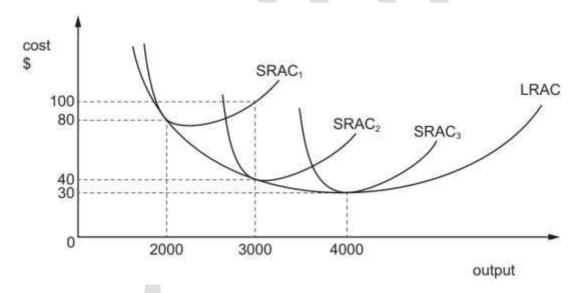
Firm X then completes a takeover of firm Y that supplies its component parts making them cheaper. The original average revenue and average cost curves of firm X are  $AR_1$  and  $AC_1$ .



What is the position of the average cost curve and the average revenue curve after the takeover?

|   | average<br>cost | average revenue |
|---|-----------------|-----------------|
| Α | AC <sub>1</sub> | AR <sub>3</sub> |
| В | $AC_2$          | AR <sub>1</sub> |
| С | $AC_2$          | AR <sub>3</sub> |
| D | $AC_3$          | AR <sub>2</sub> |

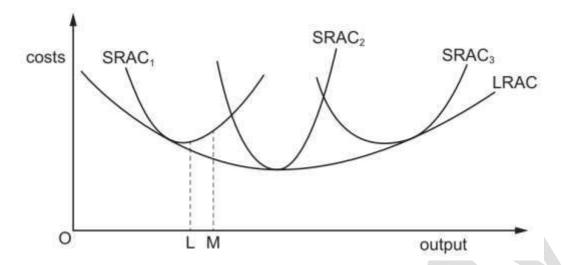
30 The diagram shows the short-run average cost, SRAC, and long-run average cost, LRAC, curves for a firm producing computers. It usually produces 2000 computers per week. An increase in demand requires the firm to produce 3000 computers per week.



How much will the average costs change in the long run if the firm makes a permanent decision to produce 3000 computers per week?

A \$20 B \$40 C \$50 D \$60

31 The diagram shows a long-run average cost curve (LRAC), and three short-run average cost curves (SRAC<sub>1</sub>, SRAC<sub>2</sub> and SRAC<sub>3</sub>) for an individual firm. Each short-run average cost curve represents a fixed factor of production.



Between levels of output OL and OM, which statement is not correct?

A Average fixed costs are falling.

B Economies of scale are being experienced.

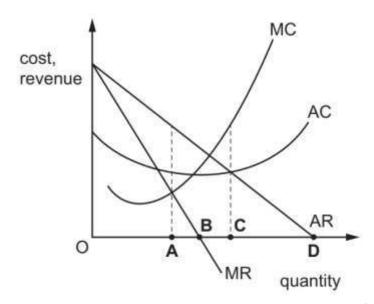
C The law of diminishing returns is operative.

D There are decreasing returns to scale.

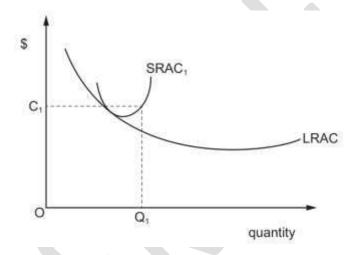
32 The diagram shows four possible output levels of a firm.

At its current level of output, the firm's product has a price elasticity of demand of exactly -1.

Which output is the firm selling?



33 The diagram shows a firm producing at Q<sub>1</sub> on short-run average cost SRAC<sub>1</sub>.



Which strategy will achieve the greatest reduction in average costs at this output?

A increasing its fixed factors of production only

B increasing its fixed and variable factors of production

C reducing its fixed factors of production only

D reducing its fixed and variable factors of production

34 Firm X, which currently specialises in producing cars, takes over firm Y, which owns a number of car retail outlets.

How may this be described?

A horizontal integration

B the formation of a cartel

C vertical integration backwards

D vertical integration forwards

35 A firm always operates with economies of scale in the long run.

What is the shape of its long-run average cost curve?

A It is horizontal.

B It is 'U' shaped.

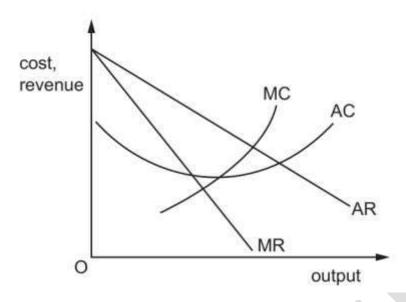
C It slopes downwards.

D It slopes upwards.

36 What is the most likely combination of income elasticity of demand and price elasticity of demand that explains why a firm can make higher profits in specialised luxury product markets?

|   | income elasticity of demand | price elasticity<br>of demand |
|---|-----------------------------|-------------------------------|
| A | high                        | high                          |
| В | high                        | low                           |
| С | low                         | high                          |
| D | low                         | low                           |

37 The diagram shows a firm's cost and revenue curves.



The firm embarks on a single successful \$100 million advertising campaign.

How will this affect its costs and revenue curves?

|   | MR curve        | AR curve        | MC curve  | AC curve  |
|---|-----------------|-----------------|-----------|-----------|
| Α | shifts to right | shifts to right | shifts up | unchanged |
| В | shifts to right | shifts to right | unchanged | shifts up |
| С | unchanged       | unchanged       | shifts up | unchanged |
| D | unchanged       | unchanged       | unchanged | shifts up |

### **MARK SCHEME**

1 C

2 A

3 C

4 A

5 C

6 B

7 A

8 B

9 A

10 C

11 C

12 A

13 D

14 D

15 B

16 C

17 C

18 B

19 D

20 A

21 C

22 B

23 C

24 C

25 B

26 D

27 C

28 B

29 B

30 B

31 D

32 B

33 B

34 D

35 C

36 B

37 B