Past-paper walk-through

Firms and production ▪ 3.5

eXercise

Questions in this set

- 0455/11 N25 Q14 ▪ 1 mark
- 0455/13 N25 Q13 ▪ 1 mark
- 0455/22 N25 Q3 ▪ 20 marks
- 0455/11 J25 Q14 ▪ 1 mark
- 0455/12 J25 Q11 ▪ 1 mark
- 0455/12 J25 Q16 ▪ 1 mark
- 0455/12 M25 Q13 ▪ 1 mark
- 0455/11 N24 Q12 ▪ 1 mark
- 0455/12 N24 Q13 ▪ 1 mark

Reading the mark scheme

- **B1** a mark that stands on its own – the point is either made or not.
- **M1** a *method* mark: the right approach, even if the number is wrong.
- **A1** an *answer* mark, and it usually needs its M mark first.
- **C1** a working mark on the way to the answer.
- // separates answers the examiner accepts equally.
- **ecf** = error carried forward: a later part is marked on your own earlier answer.
- **owtte** = "or words to that effect" – the wording need not match.

Question 14

0455/11 N25 ▪ Q14 ▪ 1 mark

14 What must occur if a firm experiences economies of scale?

A average costs decrease

B profits decrease

C the number of workers increases

D total advertising costs decrease

Solution 14

Answer: **A**

Why

- Economies of scale mean average cost falls as output rises.
- That is the definition, so lower average cost must follow.
- Total cost still rises with output – it is the cost *per unit* that falls.

Question 13

0455/13 N25 ▪ Q13 ▪ 1 mark

13 The size of the domestic car industry in Japan has enabled Japanese car producers to be more price competitive than rival car producers.

What is an explanation for this?

A Economies of scale are present in the Japanese car industry.

B Managerial problems exist in the Japanese car industry.

C Productivity is low in Japan.

D The Japanese car industry is very labour-intensive.

Solution 13

Answer: **A**

Why

- The Japanese car industry's size lets its firms produce at a lower cost per unit.
- Cost savings arising from the size of the whole *industry* are external economies of scale.
- They benefit every firm in the industry, not just one.

Question 3

0455/22 N25 ▪ Q3 ▪ 20 marks

3 In April 2023, a French cosmetics firm merged with an Australian cosmetics firm. It is expected the merger will lower average total cost as the new firm is likely to benefit from greater internal economies of scale. A manager stated that a key aim is to make the firm's production more sustainable by using raw materials taken from renewable sources. In most countries, the cosmetics firm's products, including perfume, are taxed at a higher rate than food.

(a) Define average total cost. [2]

(b) Explain how using renewable raw materials may affect a firm's profits. [4]

(c) Analyse the internal economies of scale that a cosmetics firm could experience. [6]

(d) Discuss whether or not perfume should be taxed at a higher rate than food. [8]

(a) (a) Define average total cost. [2] **[2]**

(b) (b) Explain how using renewable raw materials may affect a firm's profits. [4] **[4]**

Question 3

(c) (c) Analyse the internal economies of scale that a cosmetics firm could experience. [6] **[6]**

(d) (d) Discuss whether or not perfume should be taxed at a higher rate than food. [8] **[8]**

Solution 3

(a)

Mark scheme

- Define average total cost.
- Total cost divided by output (2).
- Cost per unit (1).
- 2

Solution 3

(b) Mark scheme

- Explain how using renewable raw materials may affect a
- firm's profits.
- Logical explanation which might include the following.
- ▪
- Using renewable resources may be more expensive 1
- increase costs of production (1) reduce profits (1).
- ▪
- Can advertise that renewable resources which create

Solution 3

- less pollution / improve environmental sustainability are
- being used (1) increase image of the firm (1) raise
- demand (1) increase profits (1).
- ▪
- Using renewable resources may be subsidised (1). May
- become cheaper to use renewable resources in the long
- run (1).
- ▪
- Resources will not be depleted / firms have a constant
- supply of raw materials (1) raise profits (1).

Solution 3

- 4 A simple statement that profits rise or fall with no relevant
- explanation is 0 marks.
- Profits rising and profits falling can both be credited if each
- is explained.
- 0455/22
- October/November 2025
- Guidance

Solution 3

(c) Mark scheme

- Analyse the internal economies of scale that a
- cosmetics firm could experience.
- Coherent analysis which might include the following.
- ▪
- Buying / purchasing economies (1) buy ingredients in
- bulk at a discount (1).
- ▪
- Labour economies (1) workers specialising e.g.

Solution 3

- designing the packaging (1).
- ▪
- Managerial economies (1) e.g. specialist human
- resource manager (1).
- ▪
- Technical economies (1) advanced technology could be
- used to produce perfume (1).
- ▪
- Financial economies (1) the firm finding it cheaper /
- easier to borrow from banks (1).

Solution 3

- ▪
- Research and development economies (1) develop new
- perfumes (1).
- ▪
- Selling / marketing economies (1) lower average
- advertising costs (1).
- ▪
- Risk-bearing economies (1) selling perfume in more
- markets (1).
- 6 Maximum of 3 marks for a list of different types of internal

Solution 3

- economies of scale with no development / explanation.
- 0455/22
- October/November 2025
- Guidance

Solution 3

(d) Mark scheme

- Discuss whether or not perfume should be taxed at a
- higher rate than food.
- In assessing each answer, use the table opposite.
- Why it should:
- ▪
- perfume is a luxury whereas food is a necessity
- ▪
- rich spend more on perfume than the poor

Solution 3

- ▪
- taxing food more may increase poverty as poor spend a
- high proportion of their income on food
- ▪
- perfume is less likely than food to be a merit good
- ▪
- a higher price for perfume will not significantly contribute
- to inflation, not a significant item in CPI
- ▪
- perfume may be imported while food may be supplied

Solution 3

- by domestic firms.
- Why it should not:
- ▪
- demand for perfume may be elastic and so may not
- raise much revenue. In contrast, inelastic demand for
- food so may raise high tax revenue
- ▪
- perfume may be an important domestic industry. Higher
- taxes may result in closure / unemployment
- ▪

Solution 3

- some food is a demerit good e.g. food with a high sugar
- content
- ▪
- taxing demerit food may improve health
- ▪
- taxing food may reduce obesity.
- 8
- Level
- Description
- 3

Solution 3

- A reasoned discussion which accurately
- examines both sides of the economic
- argument, making use of economic
- information and clear and logical
- analysis to evaluate economic issues
- and situations. One side of the
- argument may have more depth than
- the other, but overall, both sides of the
- argument are considered and
- developed. There is thoughtful

Solution 3

- evaluation of economic concepts,
- terminology, information and/or data
- appropriate to the question. The
- discussion may also point out the
- possible uncertainties of alternative
- decisions and outcomes.
- 6–8
- 2
- A reasoned discussion which makes
- use of economic information and clear

Solution 3

- analysis to evaluate economic issues
- and situations. The answer may lack
- some depth and development may be
- one-sided. There is relevant use of
- economic concepts, terminology,
- information and data appropriate to the
- question.
- 3–5
- 0455/22
- October/November 2025

Solution 3

- Guidance
- Level
- Description
- 1
- There is a simple attempt at using
- economic definitions and terminology.
- Some reference may be made to
- economic theory, with occasional
- understanding.
- 1–2

Solution 3

- 0
- A mark of zero should be awarded for
- no creditable content.
- 0
- Guidance

Question 14

0455/11 J25 ▪ Q14 ▪ 1 mark

14 There has been an improvement in the transport infrastructure in India that reduces the costs of farming.

What is this an example of?

A external diseconomies of scale

B external economies of scale

C internal diseconomies of scale

D internal economies of scale

Solution 14

Answer: **B**

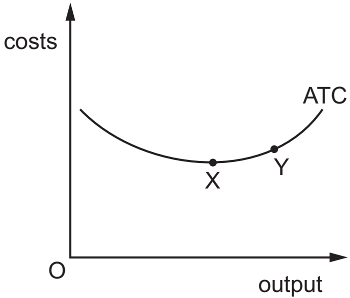
Why

- An external economy of scale is a cost saving that comes from outside the firm.
- Better transport infrastructure benefits every farm in the area, not just one.
- So it lowers costs for the whole industry – an external economy, not an internal one.

Question 11

0455/12 J25 ▪ Q11 ▪ 1 mark

11 The diagram shows the average total cost curve (ATC) for a firm after a merger.



Question 11

Why is the movement from X to Y likely to result from this merger?

A Consumer demand is rising.

B Marketing economies of scale occur at higher levels of output.

C The firm faces problems of co-ordination between departments.

D The firm is negotiating discounts through bulk buying.

Solution 11

Answer: **C**

Why

- Moving down an average total cost curve means average cost is falling as output rises.
- That is economies of scale.
- A merger raises output, so the combined firm can move further down the curve.

Question 16

0455/12 J25 ▪ Q16 ▪ 1 mark

16 If a very competitive market becomes a monopoly, what will be likely to increase and what will be likely to decrease?

	increase	decrease
A	barriers to entry	economies of scale
B	consumer choice	prices
C	long-run profits	competition
D	output	market share

Solution 16

Answer: **C**

Why

- A monopoly faces no competition, so it can raise price and restrict output.
- Being larger it can also exploit economies of scale, so its average costs may fall.
- So price and profit rise while consumer choice and output fall.

Question 13

0455/12 M25 ▪ Q13 ▪ 1 mark

13 What would be most likely to encourage a firm to grow internally?

A when diseconomies of scale occur at low levels of output

B when economies of scale occur at high levels of output

C when new firms enter the market and increase competition

D when the firm only supplies the local market

Solution 13

Answer: **B**

Why

- Internal growth means expanding the firm's own operations rather than buying another firm.
- It is worth doing while average costs are still falling, so economies of scale remain.
- If diseconomies set in at low output, growth would raise costs instead.

Question 12

0455/11 N24 ▪ Q12 ▪ 1 mark

12 A clothes retailer borrows money to finance the opening of another clothes shop.

Which type of growth is this?

A internal and horizontal

B internal and vertical

C external and horizontal

D external and vertical

Solution 12

Answer: **A**

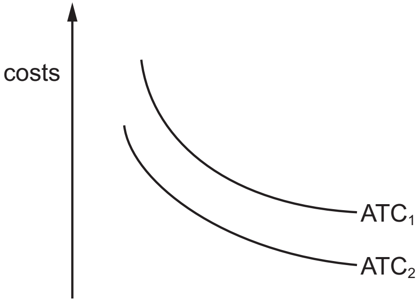
Why

- Internal growth means the firm expands its own operations.
- Opening another shop of its own is internal growth.
- Buying a firm at the same stage of the same industry would be external and horizontal.

Question 13

0455/12 N24 ▪ Q13 ▪ 1 mark

13 The diagram shows the average total cost (ATC) for a firm, in the long run.



Question 13

What would cause the shift from ATC_1 to ATC_2?

A difficulties in controlling the firm

B external economies of scale

C managerial economies of scale

D technical economies of scale

Solution 13

Answer: **B**

Why

- A downward shift of the whole long-run ATC curve means lower average cost at every output.
- That comes from something outside the firm's own scale – a technological advance, or lower input prices.
- Moving *along* the curve would be economies of scale from producing more.