4 The table shows the total costs of a clothing manufacturer producing jeans at different levels of output.

Output	Total costs $
0	40000
10000	60000
20000	100000
30000	160000
40000	240000

What is the average fixed cost per unit if the firm produces 20 000 pairs of jeans?

☒ **A** $2

☒ **B** $3

☒ **C** $4

☒ **D** $5

(Total for Question 4 = 1 mark)

1 Between 2009 and 2019 real house prices in Sydney, Australia rose by 40%. This price increase was more than in any other part of Australia.

What might be the effect of this increase in house prices in Sydney on the mobility of labour?

☒ **A** A decrease in the geographical mobility of labour

☒ **B** A decrease in the occupational mobility of labour

☒ **C** An increase in the geographical mobility of labour

☒ **D** An increase in the occupational mobility of labour

(Total for Question 1 = 1 mark)

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3 The table shows the total costs of a battery manufacturer at different levels of output.

Output	Total costs (£)
0	£4 500
100	£8 000
200	£10 700
300	£13 200
400	£15 300

Which **one** of the following is the average variable cost at 300 units?

- ☒ **A** £15
- ☒ **B** £27
- ☒ **C** £29
- ☒ **D** £44

(Total for Question 3 = 1 mark)

4 The table shows the total costs of producing sports footwear by a firm in the USA.

Units of output	Total Cost ($)
0	12
1	16
2	19
3	22
4	27
5	33
6	40
7	48

Between which of the following outputs do diminishing returns start to set in?

- ☒ **A** 1–2 units
- ☒ **B** 3–4 units
- ☒ **C** 5–6 units
- ☒ **D** 6–7 units

(Total for Question 4 = 1 mark)

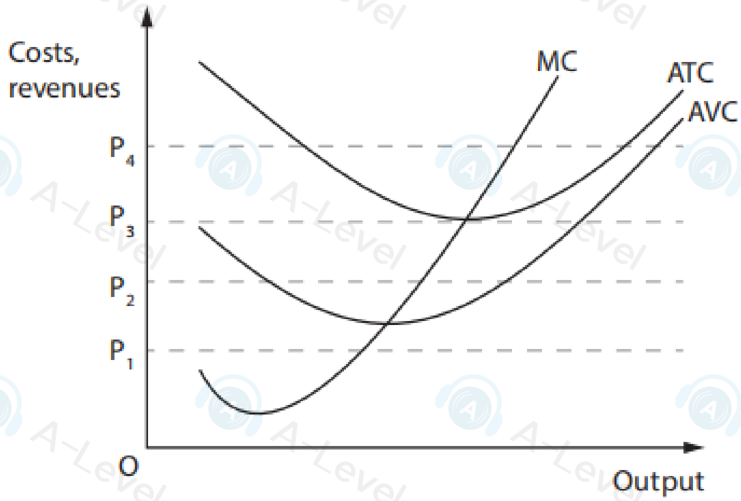
6 A diamond mining company is considering whether to set up operations in Botswana.

Which **one** of the following would be a barrier to entry into this industry?

- ☒ **A** High level of government subsidies
- ☒ **B** High sunk costs
- ☒ **C** Low level of government regulation
- ☒ **D** Low concentration ratio

(Total for Question 6 = 1 mark)

4 The diagram shows marginal cost, average total cost and average variable cost curves for a profit-maximising sweetcorn producer in Argentina operating in a perfectly competitive market.



At which **one** of the following prices would the producer sell sweetcorn in the short-run but shut-down in the long-run?

- ☒ **A** P_1
- ☒ **B** P_2
- ☒ **C** P_3
- ☒ **D** P_4

(Total for Question 4 = 1 mark)

5 In 2019 the minimum wage rate in Spain was increased by 22%.

If the elasticity demand for labour currently earning the minimum wage is –0.6, then the demand for these workers will

- ☒ **A** rise by 13.2%
- ☒ **B** fall by 13.2%
- ☒ **C** rise by 36.7%
- ☒ **D** fall by 36.7%

(Total for Question 5 = 1 mark)

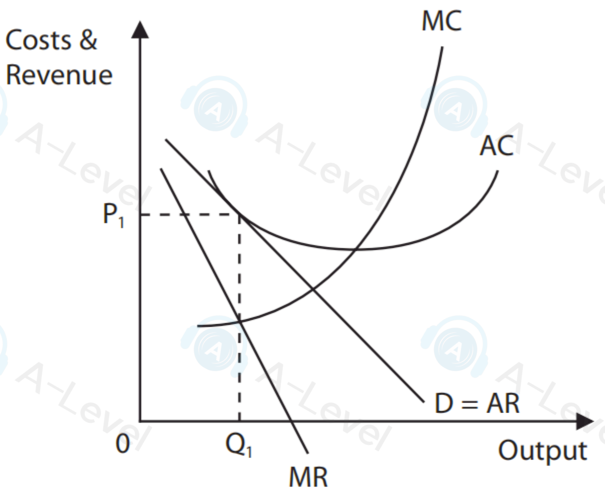
6 A cereal manufacturer lowers its price to deter new firms from entering the market while still covering its costs.

Which **one** of the following best describes this pricing strategy?

- ☒ **A** Predatory pricing
- ☒ **B** Limit pricing
- ☒ **C** Price leadership
- ☒ **D** Short-run profit maximisation

(Total for Question 6 = 1 mark)

2 The diagram shows the long-run equilibrium for a restaurant in Bangkok, Thailand, operating in a monopolistically competitive market.



Which **one** of the following can be deduced from the diagram?

- ☒ **A** The firm is producing the allocatively efficient level of output at price P_1
- ☒ **B** The firm will leave the industry if average costs fall
- ☒ **C** The firm is producing the productively efficient level of output Q_1
- ☒ **D** The firm is making normal profit

(Total for Question 2 = 1 mark)

2 The table shows the quantity of shirts that would be sold at different selling prices by a textile manufacturer based in Botswana.

Selling price ($)	Quantity of shirts demanded	
18	4000	
16	5000	
14	6000	
12	7000	

Which **one** of the following would be the textile manufacturer's marginal revenue if the price was reduced from $16 to $14?

You may want to use the final column for your workings.

☒ **A** $0

☒ **B** $4

☒ **C** $12

☒ **D** $14

(Total for Question 2 = 1 mark)

1 In 2022 Canadian National Railway paid $27.2 billion to acquire Kansas City Southern, a Mexico-USA cross-border railway.

Which **one** of the following best describes the acquisition of the Kansas City Southern railway by Canadian National Railway?

☒ **A** Conglomerate integration

☒ **B** Forward vertical integration

☒ **C** Horizontal integration

☒ **D** Backward vertical integration

(Total for Question 1 = 1 mark)

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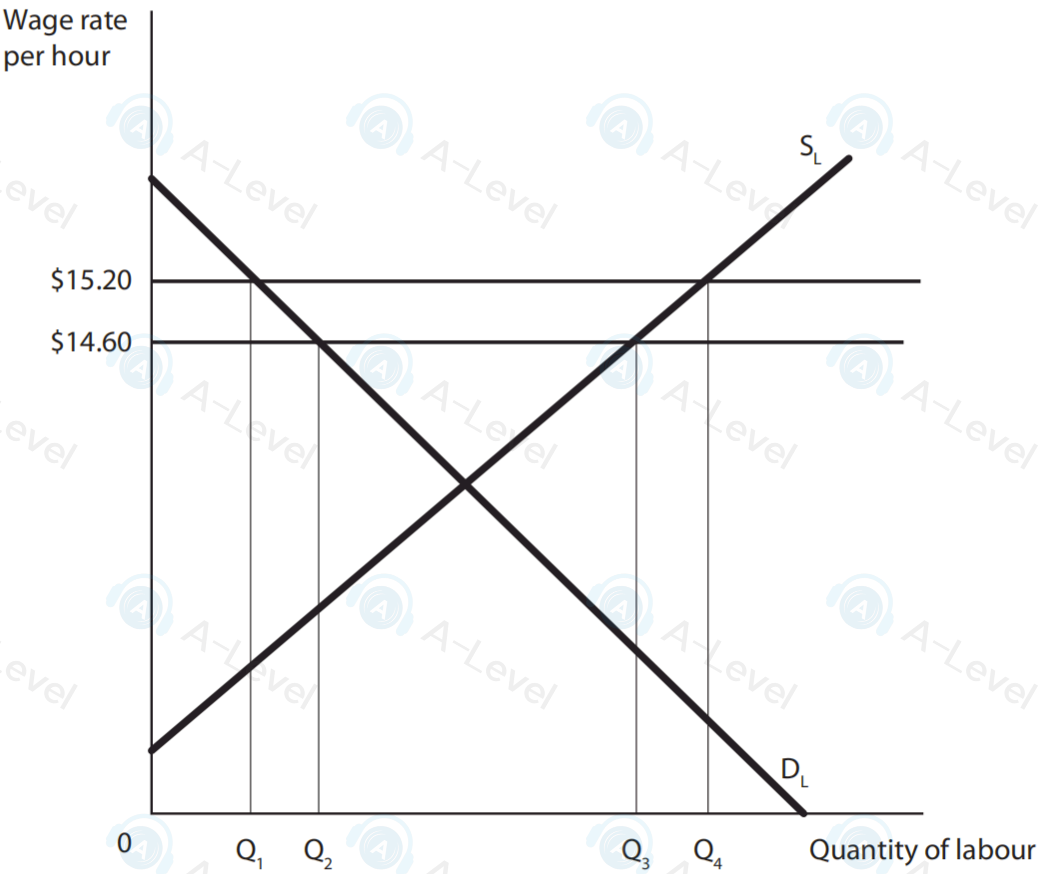
5 The diagram shows an increase in the minimum wage in British Columbia, Canada. In 2021 it rose from \$14.60 to \$15.20 per hour.



Which **one** of the following is the most likely impact of this increase in the minimum wage on shop assistants in the retail industry in British Columbia?

☒ **A** Unemployment would rise to Q_1–Q_4

☒ **B** Unemployment would rise to Q_2–Q_3

☒ **C** The demand for labour would extend from Q_1 to Q_2

☒ **D** The supply of labour would contract from Q_4 to Q_3

(Total for Question 5 = 1 mark)

5 A German electricity company aims to maximise its total revenue.

At which **one** of the following would total revenue be maximised?

☒ **A** The level of output at which marginal cost is equal to marginal revenue

☒ **B** The level of output at which average variable cost is equal to marginal cost

☒ **C** The level of output at which average revenue is equal to zero

☒ **D** The level of output at which marginal revenue is equal to zero

(Total for Question 5 = 1 mark)

DO NOT WRITE IN THIS AREA

3 From September 2019 to September 2021 the US labour force participation rate fell.

Which **one** of the following is most likely to have caused this fall in the supply of labour?

☒ **A** An increase in benefit payments

☒ **B** An increase in net migration

☒ **C** An increase in the wage rate

☒ **D** An increase in productivity

(Total for Question 3 = 1 mark)

DO NOT WRITE IN THIS AREA

6 A farm producing wheat is operating in a monopolistically competitive market. Which **one** of the following will apply to this firm?

☒ **A** Allocative inefficiency in the long-run

☒ **B** Productive efficiency in the short-run

☒ **C** Supernormal profit in the long-run

☒ **D** Allocative efficiency in the short-run

(Total for Question 6 = 1 mark)

3 A hairdressing business in Sri Lanka is operating in a monopolistically competitive market.

Which **one** of the following combinations would apply to such a business in long-run equilibrium?

	Profit	Allocatively efficient
A	Normal	No
B	Supernormal	No
C	Normal	Yes
D	Supernormal	Yes

(Total for Question 3 = 1 mark)

3 In 2024, the Government of Japan decided to subsidise construction companies to modernise old homes in the city of Kyoto.

Ceteris paribus, which **one** of the following is the most likely impact of this policy?

☒ **A** The price elasticity of supply of construction workers would increase

☒ **B** The demand for construction workers would increase

☒ **C** The skills of construction workers would decrease

☒ **D** Wage rates for construction workers would decrease

(Total for Question 3 = 1 mark)

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2 The shareholders of a car manufacturer, who own the company, are separate from its management team, that makes the operational decisions. Assume that this manufacturer has a satisficing objective.

Which **one** of the following best describes this objective?

A Maximising profits and reducing costs

B Achieving an acceptable level of profit and sales

C Minimising dividends to shareholders

D Maximising total revenue and total costs

(Total for Question 2 = 1 mark)

7 (a) With reference to Figure 1 and Figure 2, calculate Tata Steel's total costs for steel production in 2019.

(2)

(b) Explain what is meant by the term 'monopsony employer' (Extract C, line 11).

(4)

(c) With reference to Extract B, examine the likely effects of the proposed merger between Tata Steel and Thyssenkrupp on the profits of European car manufacturers.

Illustrate your answer with an appropriate diagram.

(8)

(d) With reference to Extract C, analyse **two** reasons why the proposed merger between Tata Steel and Thyssenkrupp was blocked by the European Competition Commission.

(6)

(e) With reference to Extract A, Extract B and your own knowledge, discuss the benefits to Tata Steel and Thyssenkrupp of the proposed horizontal integration.

Illustrate your answer with an appropriate diagram.

(14)

Tata Steel

Figure 1 Tata Steel's total revenue, 2015–2019, in billion Rupees (Rs)

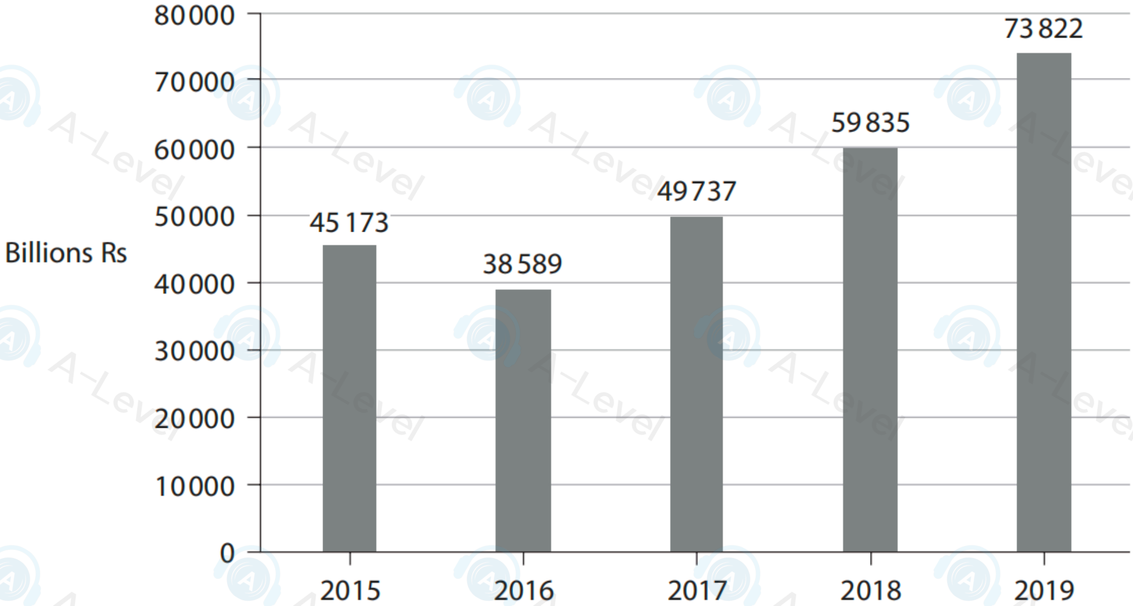
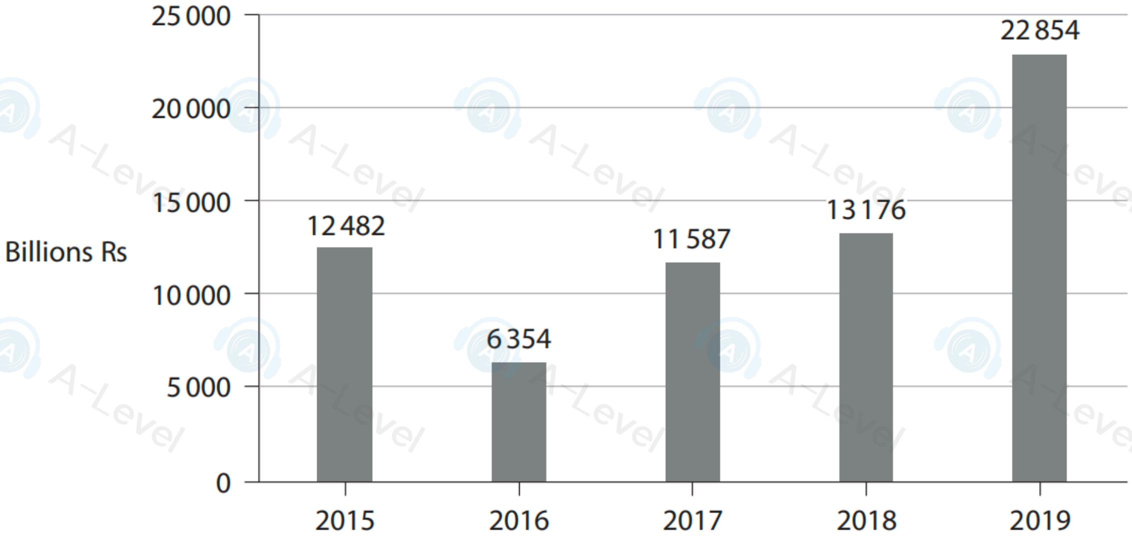


Figure 2 Tata Steel's profit, 2015–2019, in billion Rupees (Rs)



Extract A The Indian steel industry

India is the world's second largest steel producer. The growth in the Indian steel industry has been stimulated by the availability of iron ore and low-cost labour. Firms in this industry are dynamically efficient, using the latest technology in their production process.

Tata Steel is the largest steel producer in India with the capacity to produce 13 million tonnes per year. It is also one of the largest steel-producing companies globally and operates in 26 countries with major sites in India, the Netherlands and the UK. It employs 85 500 workers globally.

Extract B Merger proposal

The German steel producer, Thyssenkrupp, is Europe's second largest producer of high-value steel, followed by Tata Steel. In 2017 these companies planned to merge their European manufacturing operations. This integrated business would have 48 000 workers and generate €15 billion in sales.

The merged company would be based in the Netherlands and become the second largest European steel manufacturer. Even after this merger, ArcelorMittal SA would still be the largest European steel manufacturer.

The merger was proposed after the European steel industry had a 25% tariff (tax on imports) placed on its sales to the USA, its largest market. Since the tariffs were imposed, steel manufacturers experienced a fall in annual profits of between 8% and 17%.

The merged firm expected that improvements in efficiency would result in savings of over €400 million. It is planned to reduce staff by a total of 4 000 in administration and manufacturing. It also hoped that it could benefit from lower long-run average costs.

Extract C Merger blocked

In June 2019 the European Competition Commission blocked the proposed merger between Tata Steel and Thyssenkrupp. It concluded that the merger would cause a reduction in competition which would result in a significant increase in the price of steel. During the investigation the Commission received feedback from car manufacturers and firms in the packaging industry. These industries believed the merger would give Tata Steel and Thyssenkrupp more dominance in the market. This would be likely to result in higher costs of production that would make it difficult for firms in these industries to remain profitable.

Employees of Tata Steel and Thyssenkrupp were concerned that the merger would create a monopsony employer of steel workers in the UK and the Netherlands. Employees expected job losses and lower real wages. This would have a negative effect on their standard of living as they would have no alternative employer for their skill set.

8 Visinema, an Indonesian company that produces TV shows and feature films, is expanding into neighbouring countries. The company is also planning to acquire several Indonesian animation studios.

For an industry of your choice, evaluate why many businesses have growth as their main objective.

Illustrate your answer with an appropriate diagram(s).

(Total for Question 8 = 20 marks)

10 Garuda Indonesia is the country's national airline. In November 2017 the company's Vice-President stated that the airline's main objective was to maximise revenue.

Evaluate the extent to which different business objectives may affect a firm's profits.

Illustrate your answer with an appropriate diagram(s).

(Total for Question 10 = 20 marks)