4	**QS4:** Construct and interpret a range of standard graphical forms **QS6:** Calculate cost, revenue and profit (marginal, average, totals) **QS9:** Interpret, apply and analyse information in written, graphical, tabular and numerical forms.	**The only correct answer is A** B is incorrect because this is average variable cost C is incorrect because this is average fixed cost at an output of 10 000 D is incorrect because this is the average total cost at an output of 20 000	**(1)**

1		**The only correct answer is A** **B** *is not correct because the increase in house prices in Sydney relative to other parts of Australia would reduce geographical mobility of labour* **C** *is not correct because the increase in house prices in Sydney relative to other parts of Australia would reduce geographical mobility of labour* **D** *is not correct because the increase in house prices in Sydney affects geographical mobility of labour*	**(1)**

3	**QS6:** Calculate cost, revenue and profit (marginal, average and total) **QS9:** Interpret, apply and analyse information in written, graphical, tabular and numerical forms.	The correct answer is **C** **A** is incorrect because this is average fixed costs at 300 units **B** is incorrect because this is average variable costs at 400 units **D** is incorrect because this is average total costs at 300 units	**(1)**

4	**QS9:** Interpret, apply and analyse information in written, graphical, tabular and numerical forms **QS6:** Calculate cost, revenue and profit (marginal, average, totals)	**The only correct answer is B** ***A*** *is not correct as there are increasing returns to scale* ***C*** *is not correct as diminishing returns have already set in* ***D*** *is not correct as diminishing returns have already set in*	**(1)**

6	**QS9:** Interpret, apply and analyse information in written, graphical, tabular and numerical forms.	**The only correct answer is B** A is incorrect because this indicates that barriers to entry are low C is incorrect because this would encourage entry into the industry D is incorrect because this suggests that it is relatively easy for firms to enter the industry	**(1)**
4	**QS4:** Construct and interpret a range of standard graphical forms **QS6:** Calculate cost, revenue and profit (marginal, average, totals) **QS9:** Interpret, apply and analyse information in written, graphical, tabular and numerical forms.	**The only correct answer is B** A is incorrect because the firm would shut down in the short-run **C** is incorrect because the firm is covering ATC and therefore would not shut down in the long-run **D** is incorrect because the firm is covering ATC and therefore would not shut down in the long-run	**(1)**
5	**QS2:** Calculate, use and understand percentages, percentage changes and percentage point changes. **QS8:** Make calculations of elasticity and interpret the result.	**The only correct answer is B** ***A*** *is not correct because demand for workers falls when wages rise* ***C*** *is not correct because the calculation is incorrect and the demand for workers falls as wages rise* ***D*** *is not correct because the calculation is incorrect.*	**(1)**

6	**QS4: Construct and interpret a range of standard graphical forms** **QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms.**	The only correct answer is B A is incorrect because price would be below average cost C is incorrect because price leadership occurs when businesses follow the price of a dominant business in the market D is incorrect because short-run profit maximisation occurs where marginal cost is equal to marginal revenue	**(1)**

2	**QS9:** Interpret, apply and analyse information in written, graphical, tabular and numerical forms.	The correct answer is **D** **A** is incorrect because price is greater than MC **B** is incorrect because the firm would remain in the industry as ceteris paribus it would be making supernormal profit **C** is incorrect because the firm is not producing at the lowest point on the AC curve	**(1)**

2	**QS6: Calculate cost, revenue and profit (marginal, average, totals)** **QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms.**	The only correct answer is B A is incorrect because this is the MR at $12 C is incorrect because this is the average revenue at $12 D is incorrect because this is the average revenue at $14	**(1)**

Question	Quantitative skills assessed	Answer	Mark
1	**QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms.**	The only correct answer is C A is incorrect because the firms are in the same industry B is incorrect because the firms are at the same stage of production D is incorrect because the firms are at the same stage of production	**(1)**

5	**QS4: Construct and interpret a range of standard graphical forms** **QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms.**	**The only correct answer is A** B is incorrect because this was unemployment at the lower minimum wage C is incorrect because demand would contract from Q_2 to Q_1 D is incorrect because supply would extend from Q_3 to Q_4	**(1)**

5	**QS4:** Construct and interpret a range of standard graphical forms **QS9:** Interpret, apply and analyse information in written, graphical, tabular and numerical forms.	**The only correct answer is D** **A** is incorrect because at this level of output profits would be maximised **B** is incorrect because at this level of output total revenue will not be maximised **C** is incorrect because at this level of output average revenue will be greater than zero	**(1)**

3		**The only correct answer is A** B is incorrect as this would cause more available labour to enter the country B is incorrect as incentives to work would increase D is incorrect as this would not affect the supply of labour	**(1)**

6	**QS9:** Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is A** **B** *is not correct because it is not producing at the lowest point on the AC curve in the short run* **C** *is not correct because these firms make normal profits in the long run* **D** *is not correct because price is not equal to marginal cost in the short run*	**(1)**

3	**QS4:** Construct and interpret a range of standard graphical forms **QS9:** Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is A** **B** is incorrect because a business in a monopolistically competitive market does not make supernormal profit in the long-run **C** is incorrect because a business in a monopolistically competitive market is not allocatively efficient **D** is incorrect because a monopolistically competitive business would make normal profit in the long-run	**(1)**

3	**QS9:** Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is B** A is incorrect because PES of labour would not change C is incorrect because this would not decrease the skills of construction workers D is incorrect because the wage rates of construction workers are likely to increase	**(1)**

2	**QS4:** Construct and interpret a range of standard graphical forms **QS9:** Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is B** **A** is incorrect because satisficing would result in a reduction of profits **C** is incorrect because shareholders would not accept a low level of dividend payments **D** is incorrect because the manufacturer would not want to maximise total costs	**(1)**

Question Number	Answer	Mark
7 (a)	**QS6:** Calculate cost, revenue and profit. **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms. **Application 2** Up to 2 marks for calculation: • Total costs = total revenue - profit **(1)** **OR** • 73822 bn Rs - 22854 bn Rs **(1)** • = 50968 bn Rs **(1)** **NB: Award full marks for correct answer regardless of working.** **If Bn omitted from answer award 1 mark only**	**(2)**

Question Number	Answer	Mark
7 (b)	**QS9:** Interpret, apply and analyse information in written, graphical, tabular and numerical forms. **Knowledge 2, Application 2** **Knowledge:** 1 mark for definition of monopsony employer: • Monopsony employer - where there is only one employer/buyer of labour in the market **(1)** **PLUS ONE MARK FOR DEVELOPMENT** • Monopsony employer has buying or bargaining power in the labour market **(1)** • Monopsony employer can exploit its bargaining power with employees to negotiate lower wages **(1)** **Application –** Up to 2 marks for application to context of Tata steel • Tata Steel and Thyssenkrupp would become a monopsony employer of steel workers in the UK and the Netherlands **(1)** • Employees expected job losses **(1)** and lower real wages if the merged company's monopsony strength grew **(1)** • Steel workers would have no alternative employer for their skill set **(1)**	**(4)**

<table>
<tr><th>Question Number</th><th>Answer</th><th></th></tr>
<tr><td>7 (c)</td><td>

Knowledge 2, Application 2, Analysis 2, Evaluation 2

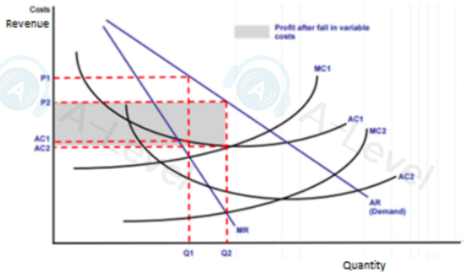
Quantitative skills assessed:

QS4: Construct and interpret a range of standard graphical forms

QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms.

Either Approach 1

Knowledge



Up to 2 marks for drawing a diagram that shows knowledge of:

- Original AR, MR, AC1, MC1 and profit-maximising equilibrium **(1)**
- Decrease in variable cost would cause downward shift from MC and AC curves to MC2 and AC2 **(1)**

Analysis

Up to 2 marks for linked explanation of impact on car manufacturers' profits e.g.**:**

- Car manufacturers face lower manufacturing costs **(1)** and if demand is unchanged then supernormal profits will increase **(1)**
- Diagram showing increase in output at new MC=MR **(1)** with new profit area shown **(1)**

Application

Up to 2 marks for reference to Extract B

- The merger would result in savings of €400 million' **(1)**
- 4000 reduction in staff from the merger **(1)**
- The firms hoped to benefit from lower long-run average costs **(1)**

OR Approach 2

</td><td></td></tr>
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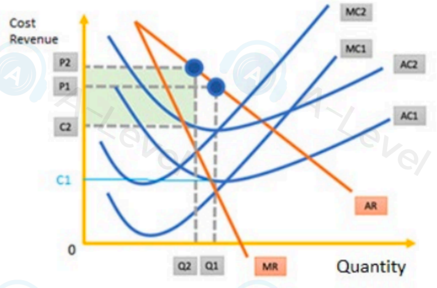
Knowledge

Merger causes increase in market power between the two firms. This enables them to increase prices.



Up to 2 marks for drawing a diagram that shows knowledge of:

•Original AR, MR, AC1, MC1 and profit-maximising equilibrium **(1)**
•Increase in variable cost would cause upward shift in MC and AC curves to MC2 and AC2 **(1)**

Analysis

Up to 2 marks for linked explanation of impact on car manufacturers' profits e.g.**:**

- Profit-maximising (loss-minimising) output would fall from 0Q1 to 0Q2 / price will rise from 0P1 to 0P2 **(1)**
- Final profit-maximising (loss-minimising) equilibrium showing higher price, lower output **(1)** and fall in supernormal profit (C1, P1, Q1 to C2, P2, Q2) **(1)**

Application

Up to 2 marks for reference to Extract B

- The merged company would become the 2nd largest European steel manufacturer **(1)**
- 48000 workers & generate €15 billion in sales **(1)**
- Increased market power **(1)**

Evaluation 2

Up to 2 marks for evaluative comments, e.g.:

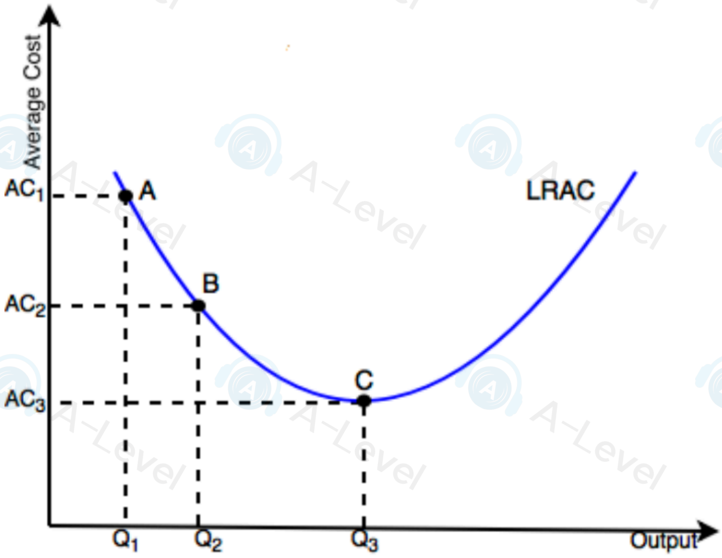
- Increased market power of the merged firms creates price setting ability **(1)** firms could raise prices to car manufacturers reducing profits **(1)**
- If demand is inelastic car manufacturers can raise prices **(1)** and increase revenues and profits **(1)**

		• If demand for cars is inelastic, car manufacturers will increase their prices **(1)** the increase in revenue will offset any increase in costs and profits remain the same **(1)** • It depends on the significance of steel as part of the production process. **(1)** If it is a small part of the total production costs the impact would be limited **(1)** • Merger may lead to lower average costs of production/economies of scale which may be passed on to car manufacturers **(1)** • Firms might be able to reduce costs elsewhere maintaining profits **(1)** • There is still competition in the steel market (oligopoly) **(1)** therefore prices may not increase significantly **(1)** • Car manufacturers may decide to switch to lower priced imported steel **(1)** steel costs may fall, increasing profits **(1)**	**(8)**

Question Number	Answer	Mark
7 (d)	**Knowledge 2, Application 2, Analysis 2** **QS9:** Interpret, apply and analyse information in written, graphical, tabular and numerical forms. **Knowledge and Analysis** 1 mark for definition of merger, e.g.: • When two firms willingly join together **/** definition of competition policy- government policy that aims to make markets more competitive **(1)** Up to 2 marks for identification of two reasons why the merger was blocked and up to 2 marks for linked explanations e.g.: • Job losses/redundancy as firms cut back on excess staff **(1)** leading to job losses in the steel industry. **(1)** • Losses or fall in profit for firms that use steel in their production process **(1)** as the increase in market power of the merged firms enables these firms to increase the price of steel **(1)** • The increased price of steel **(1)** increases the costs of production for many products **(1)** • An increase in monopsony power gives the firms stronger bargaining power over wages **(1)** this could lead to lower wages in the steel industry **(1)** **Application** Up to 2 marks for reference to Extract C, e.g.: • Reduce competition **(1)** • Tata steel and Thyssenkrupp more dominance in market **(1)** • Monopsony employer of steel workers in UK and Netherlands **(1)** • Negative feedback from car manufacturers/firms in the packaging industry **(1)**	**(6)**

Question Number	Indicative content
7 (e)	**Indicative content guidance** Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make but this does not imply that any of these must be included. Other relevant points must also be credited. **Quantitative skills assessed** **QS4**: Construct and interpret a range of standard graphical forms **QS9:** Interpret, apply and analyse information in written, graphical, tabular and numerical forms. **Knowledge, application, analysis (8 marks) – indicative content** Definition of horizontal integration- when two firms merge at the same stage of the production process in the same industry • Firms in the Indian steel industry are dynamically efficient • Tata steel is the largest producer in India • It would become Europe's second largest steel producer generating €15bn in sales • Firms would be able to recover the fall of profits of between 8% and 17% after the tariff was imposed by the US their biggest export market • The efficiency savings would be worth over €400m • Reducing the number of employees by 4000 in administration (reduction in X-inefficiency) and manufacturing would reduce costs, increasing profits • The firm would benefit from lower LRAC - economies of scale • The firm may reach their minimum efficient scale • The firm may become more productively efficient • Dynamic efficiency may increase • Stronger monopoly power gives the firm greater price setting ability and higher prices may increase profits

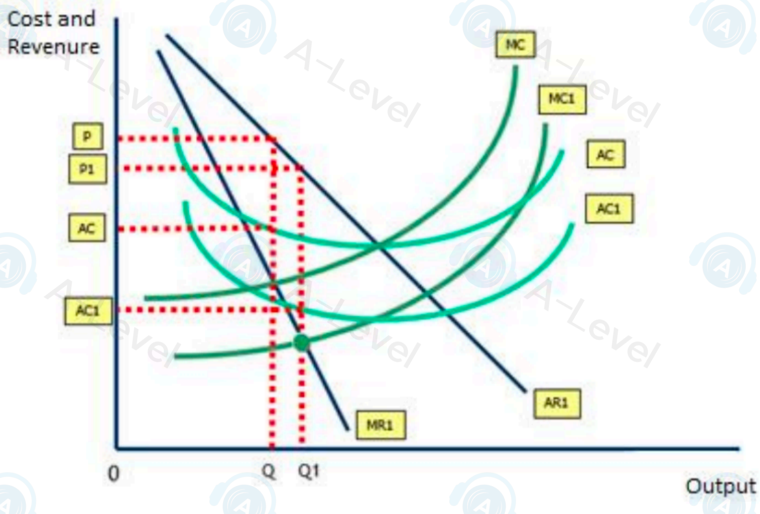
Example of diagram showing LRAC falling as output increases

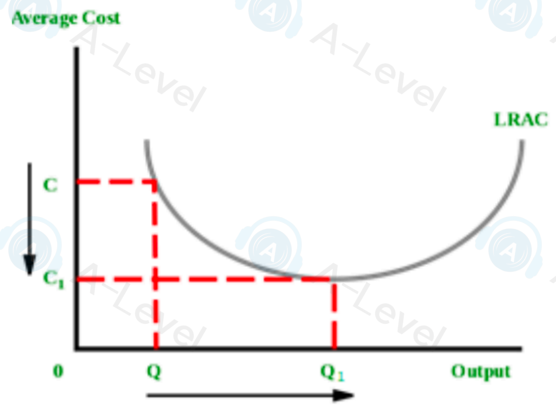


Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach which has no chains of reasoning.
Level 2	4–6	Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.
Level 3	7–8	Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using relevant examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.

	Evaluation (6 marks) – indicative content • Culture clashes may make it difficult for the firms to merge • Uncertainty may reduce employees' motivation and productivity • Diseconomies of scale may occur, e.g. if communication is difficult within the merged firm • Legal costs are high when merging, reducing profits • The firm will not become the largest steel producer in the market, limiting their price setting ability • Short-run impacts are not as significant as long-run impacts on the firm, it will take time for the new firm to establish how it will operate to see the maximum benefit • Cost saving might not be big enough to recover costs from fall in profits after tariffs imposed by the US • Risk of government intervention • Magnitude of the benefits in terms of size of the new merged firm • Tata Steel is already dynamically efficient

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–2	Identification of generic evaluative comments. No supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches Some supporting evidence/reference to context. Evaluation is supported by a partially-developed chain of reasoning.
Level 3	5–6	Evaluation recognises different viewpoints and/or is critical of the evidence. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.

Question	For an industry of your choice, evaluate why many businesses have growth as their main objective. Illustrate your answer with an appropriate diagram(s). **Indicative content**
8	**Indicative content guidance** Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make, but this does not imply that any of these must be included. Other relevant points must also be credited. **Quantitative skills assessed:** **QS4:** Construct and interpret a range of standard graphical forms. **QS9:** Interpret, apply and analyse information in written, graphical, tabular and numerical forms. **Knowledge, Application, Analysis (12 marks) – indicative content** • Businesses can grow either organically or inorganically through mergers and takeovers • Business objectives goals/targets for business including profit maximisation, revenue maximisation, sales maximisation and satisficing • Increase in demand leading to higher revenue and profits/higher profits generates more funds for investment, improves innovation, further increasing profits • Businesses such as Visinema would benefit from having more control over every aspect of their business allowing them to expand into new areas such as animated films • Businesses may benefit from increased profits by internalising new areas of the business that they previously outsourced. This reduces costs and increases profits. Fall in AC to AC1and MC to MC1 showing a new equilibrium with a higher profit level P1 x Q1 (TR) - AC1 x Q1 (TC) 

	• Businesses can benefit from economies of scale and a fall in long-run average total costs • The cost savings could be passed onto the consumer in the form of lower prices increasing competitiveness  • Businesses may be able to achieve monopsony power over suppliers and labour enabling them to negotiate better terms when purchasing supplies and workers reducing costs • Increased market share gives higher price-setting ability, potentially increasing prices and profits • Businesses such as Visinema can benefit from risk diversification. If the animated film industry declined other areas of their film production may offset the losses **Accept reverse argument as KAA** **Restrict to a maximum of Level 3 if no appropriate diagram provided**

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach which has no chains of reasoning.

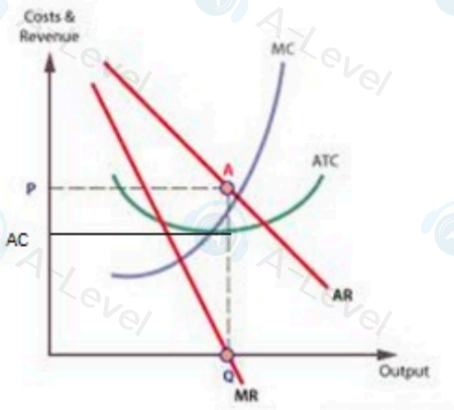
Level 2	4–6	Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Limited application of knowledge and understanding to economic problems in context. A narrow response or superficial, only two-stage chains of reasoning in terms of cause and/or consequence.
Level 3	7–9	Demonstrates accurate knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Analysis is clear and coherent. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.
Level 4	10–12	Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using appropriate examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.

Evaluation (8 marks) – indicative content

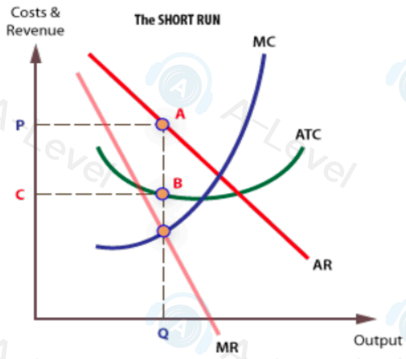
- Firms may wish to stay small to avoid diseconomies of scale if they move beyond their MES
- Some businesses benefit from operating in a niche market and are able to be profitable from selling at a higher price with a lower output
- Small businesses can maintain high levels of flexibility/innovation as the market changes
- Some businesses do not have the finances to grow and therefore getting bigger is not an option
- Large businesses can attract the attention of the competition authorities. Therefore a business may wish to stop growing to stop any form of intervention
- Business owners may have an objective of staying small and keeping total control of all aspects of the businesses
- Alternative business objectives e.g. satisficing

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Identification of generic evaluative comments.

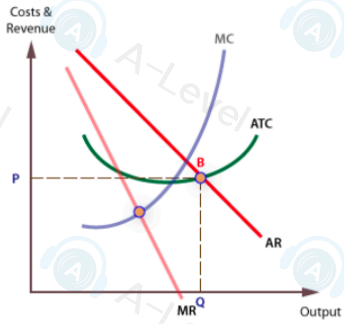
		No supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	4–6	Evidence of evaluation of alternative approaches. Some supporting evidence/reference to context. Evaluation is supported by a partially-developed chain of reasoning.
Level 3	7–8	Evaluation recognises different viewpoints and/or is critical of the evidence, leading to an informed judgement. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.

Question Number	Indicative content
10	**Indicative content guidance** Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make but this does not imply that any of these must be included. Other relevant points must also be credited. **QS4**: Construct and interpret a range of standard graphical forms. **QS9:** Interpret, apply and analyse information in written, graphical, tabular and numerical forms. **Knowledge, Application and Analysis (12 marks) – indicative content** Range of business objectives include: • profit maximisation • revenue maximisation • sales maximisation • profit satisficing will impact on profits • social objectives • growth • If maximising revenue is the main objective, output is where MR=0 and TR is maximised. The firm in the diagram is making a supernormal profit (AR exceeds AC), but profit is less than at profit maximising output. 

- Profit maximisation objective where MC = MR (Accept perfect competition or monopoly diagram). Firm makes highest possible supernormal profit.



- If the firm's objective is sales maximisation this will be where AC=AR or TR=TC. In this case profit is lower but the firm is selling a higher quantity of goods. It is prioritising sales volume/market share over profit



- Some private sector organisations are non-profit making (eg charities), others may prioritise social responsibility eg co-operatives. Therefore profits are likely to be lower or non-existent

- **Restrict to a maximum of 9 marks for Knowledge, Application and Analysis if no diagram provided.**

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach which has no chains of reasoning.

Level 2	4–6	Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Limited application of knowledge and understanding to economic problems in context. A narrow response or superficial, only two-stage chains of reasoning in terms of cause and/or consequence.
Level 3	7–9	Demonstrates accurate knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Analysis is clear and coherent. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.
Level 4	10–12	Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using appropriate examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.
	Evaluation (8 marks) – indicative content • For public sector organisations which can be financed through tax revenues, a profit objective may be non-existent or less important eg health, education, transport, postal services • There may be conflicting objectives in a large private sector organisation where there is a divorce of ownership and control. Eg shareholders want higher profits, managers want sales maximisation • Business objectives can change depending on circumstances - macroeconomic conditions (eg in a recession survival will be a prime objective) - changes within a market (eg more competitive conditions may involve sacrificing some profit in the short-run) - new government legislation (eg tightening up on environmental laws may emphasise social responsibility) - short-run & long-run distinction. Eg a business may seek to maximise revenue in the short-run aiming to remove competitors. This may then enable to business to raise prices and hence profits in the long-run	