AQA A-LEVEL ECONOMICS · 7136

ECONOMICS



MARK SCHEME

3.1.4 PRODUCTION, COSTS AND REVENUE

SCORE	PERCENTAGE
/933	%

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1.

Level of response	Response	Max 3 marks
3	• A full and precise definition is given.	**3 marks**
2	• The substantive content of the definition is correct, but there may be some imprecision or inaccuracy.	**2 marks**
1	• Some fragmented points are made.	**1 mark**

Example of acceptable definition worth 3 marks:

- total revenue minus total cost.

Examples of a definition worth 2 marks:

- revenue minus cost (no total)
- the difference between total revenue and total cost (no direction)
- the reward to an entrepreneur.

Examples of a definition worth 1 mark:

- the difference between revenue and cost (no total or direction)
- money made by firms.

[3]

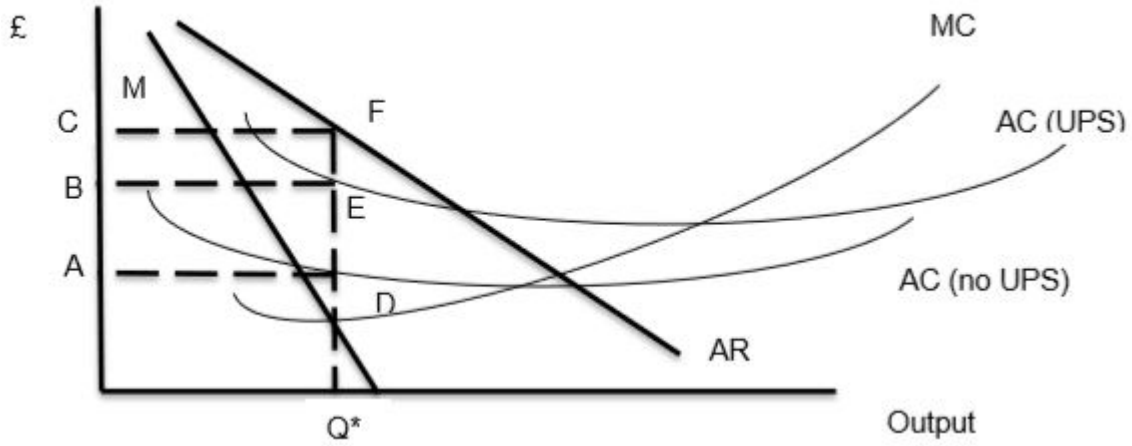
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2.

Level of response	Response	Max 9 marks
3	• is well organised and develops one or more of the key issues that are relevant to the question • shows sound knowledge and understanding of relevant economic terminology, concepts and principles • includes good application of relevant economic principles **and/or** good use of data to support the response • includes well-focused analysis with a clear, logical chain of reasoning • includes a relevant diagram that will, at the top of this level, be accurate and used appropriately	**7 – 9 marks**
2	• includes one or more issues that are relevant to the question • shows reasonable knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles **and/or** data to the question • includes some reasonable analysis but it might not be adequately developed and may be confused in places • may include a relevant diagram	**4 – 6 marks**
1	• is very brief **and/or** lacks coherence • shows some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely • demonstrates very limited ability to apply relevant economic principles **and/or** data to the question • may include some very limited analysis but the analysis lacks focus **and/or** becomes confused • may include a relevant diagram but the diagram is not used **and/or** is inaccurate in some respects	**1 – 3 marks**

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Suggested Diagram:



- A monopoly diagram is required. The monopoly diagram could show two average cost curves, with one indicating the higher level of average costs for Royal Mail operating under the UPS obligations and the other (lower) one indicating the lower average costs if the UPS was not present.

- The diagram could show the different profits made under the two scenarios, either by shading, or by labelling as above (rectangle ACFD represents profits without UPS, whereas BCFE represents profits with UPS).

Relevant issues include

- definitions of monopoly, costs, profits
- explanation of what the UPS is (6 days a week delivery to all addresses in the UK)
- explain that only Royal Mail has the UPS obligation, so there is an unfair market, where competitors can “cherry pick” the most profitable geographic areas or types of business
- larger fleet of vehicles, greater number of staff, more mail depots are all required to provide the necessary scale for delivery to all addresses
- increased time and costs of delivering to rural areas
- explanation of how higher average costs tend to lead to lower profits

Note

Some candidates might also consider how the UPS obligations might affect Royal Mail’s variable and hence marginal costs. If reasonable, such an approach should be rewarded.

Other approaches to the question and related diagrams should be rewarded.

[9]

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3.

Areas for discussion include:

- explanation of privatisation and deregulation
- the arguments in favour of privatisation in general
  - efficiency
  - investment
  - greater responsiveness to customer needs
  - adoption of best practice (including from foreign firms)
  - building a shareholder culture
  - one-off impact on public finances
- the arguments against privatisation in general
  - higher prices due to monopoly/oligopoly power
  - reduced quality of service
  - reduced consistency of service
  - greater risk of externalities
  - difficulties in identifying the true value of state-owned assets at time of privatisation
  - costs incurred in the regulation of newly privatised industries
  - impact on employees and trade unions
- the arguments for and against introducing competition alongside privatisation
- impact on customer service quality, reliability and punctuality
- impact on customer price
- profitability of private operators
- impact on technological innovation and dynamic efficiency
- value for money for the taxpayer, perhaps with reference to the criticisms of the Government's handling of the sale of Royal Mail.
- impact on workers' job security, pay and conditions
- regulation of Royal Mail – the split model of competition in parcels but virtually a monopoly in letters allows for comparisons to be made about the different approaches
- reference to the fact that letter collection is more competitive than letter delivery, and the problems faced by Whistl in attempting to enter the latter market
- alternatives to nationalisation and privatisation: such as contracting out, subsidies
- the possibility of government failure, either in running a nationalised post service, or in organising the privatisation process
- market failure arguments.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the candidate's response to the question.

Level of response	Response	Max 25 marks
5	**Sound, focused analysis and well-supported evaluation that:** • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles to the given context and, where appropriate, good use of data to support the response • includes well-focused analysis with clear, logical chains of reasoning • includes supported evaluation throughout the response and in a final conclusion.	**21 – 25 marks**
4	**Sound, focused analysis and some supported evaluation that:** • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes some good application of relevant economic principles to the given context and, where appropriate, some good use of data to support the response • includes some well-focused analysis with clear, logical chains of reasoning • includes some reasonable, supported evaluation.	**16 – 20 marks**
3	**Some reasonable analysis but generally unsupported evaluation that:** • focuses on issues that are relevant to the question, showing satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles to the given context and, where appropriate, some use of data to support the response • includes some reasonable analysis but which might not be adequately developed or becomes confused in places • includes fairly superficial evaluation; there is likely to be some attempt to make relevant judgements but these are not well-supported by arguments **and/or** data.	**11 – 15 marks**
2	**A fairly weak response with some understanding that:** • includes some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely • includes some limited application of relevant economic principles to the given context **and/or** data to the question • includes some limited analysis but it may lack focus **and/or** become confused • includes some evaluation which is weak and unsupported.	**6 – 10 marks**
1	**A very weak response that:** • includes little relevant knowledge and understanding of economic terminology, concepts and principles • includes application to the given context which, at best, is very weak • includes attempted analysis which is weak and unsupported.	**1 – 5 marks**

[25]

4. C

[1]

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5. C

[1]

6. A

[1]

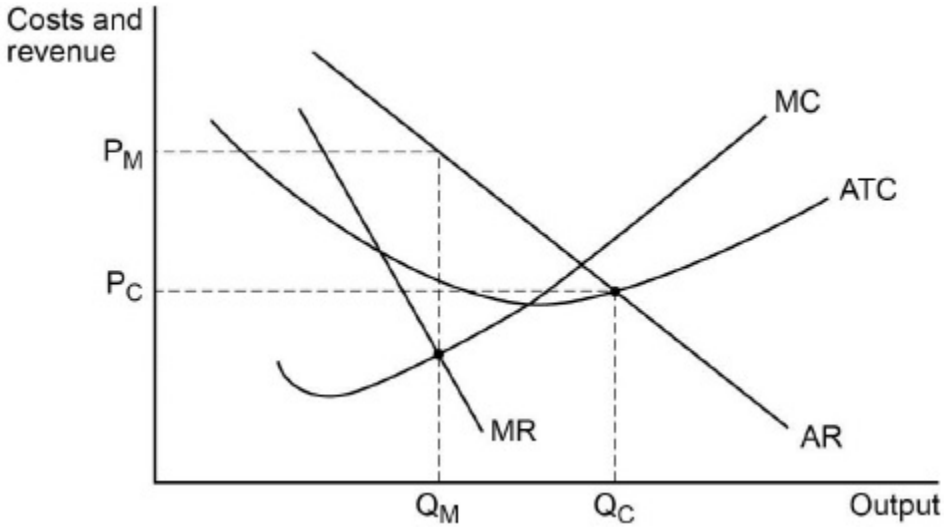
7.

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Suggested Diagram:

- a monopoly diagram is expected, showing a firm profit maximising initially, but subsequently reducing prices closer to (or at) normal profit. A monopolist facing potential entrants in a contestable market would fear entry and reduce price from P_m to P_c, with profits falling to just normal profits



- other reasonable diagrams are acceptable, eg monopolistic competition with the AR/MR shifting left because of entry.

Relevant issues include

- explanation of contestability and barriers to entry in the banking industry
- explanation of "new players", including examples, such as Metro Bank
- why increased competition usually reduces prices and profits
- analysis of how supernormal profits can be driven towards zero by the presence (or even mere threat) of new entrants
- reference to increasing innovation and focus on customer service of new entrants
- explanation of how improving the customer switching service may reduce customer inertia
- reference to falling revenue per customer.

[9]

8. D

[1]

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9.

Areas for discussion include:

- definition of profit, normal profit, supernormal profit, firm
- the need for firms to make at least normal profit to remain in their present use, including short run vs long run requirements
- firms use of supernormal profits as a necessary inducement for risk-taking, source of investment funds, as a reward to the owners of the firm, as an indicator of the firm's health as a going concern and as a source of working capital
- the role of profit in the wider economy
  - as the incentive to establish and run any enterprise in a free market economy
  - investment in technology and innovation, eg public benefits of new drugs
  - as a source of income, especially for pensioners
  - as a signalling device for high growth industries, to promote the efficient allocation of resources within an economy
  - as a source of tax revenue.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the candidate's response to the question.

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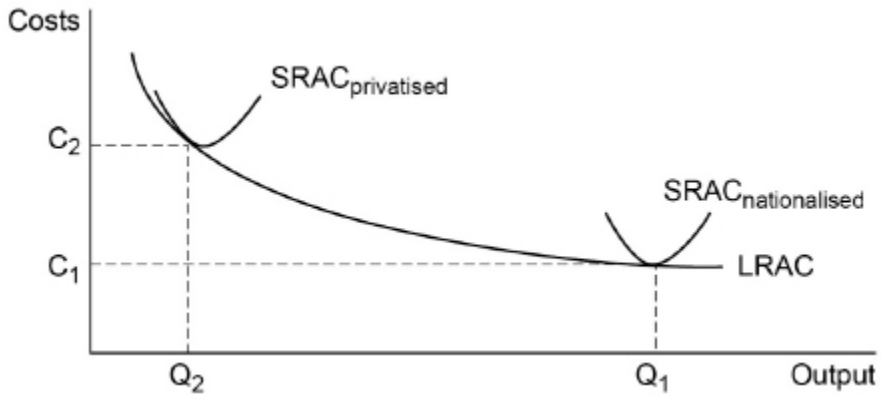
[15]

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10.

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A natural monopoly diagram is expected, showing constantly declining LRAC in the rail sector. In addition, two or more SRAC curves contained within the LRAC envelope could be used to illustrate the different cost profiles of the sector, though these are not essential. One SRAC to show where the opportunities for economies of scale aren't adequately exploited and the other showing where the industry is operating as a monopoly, exploiting more fully the potential economies of scale.



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Relevant issues include:

- explain what is meant by long-run average costs
- explanation of the characteristics of natural monopoly, and why railways can be considered a natural monopoly (huge network, large capital costs, etc)
- explanation of minimum efficient scale relative to the size of the market
- how automation and technological progress boost labour productivity within industries and markets
- provide examples of economies of scale that might be available to firms operating in the railway sector
- reference to the fact that costs are 40% higher in the UK than the rest of Europe
- explanation of the higher long run average costs that are likely to flow from fragmenting the railways into numerous smaller parts
- explain the franchise model and how this encourages short-term priorities at the expense of long-run average cost reductions
- explain that the profit motive forces firms to cut costs in order to maximise profit – this could be via a reduction in X-inefficiency.

[9]

11.

Areas for discussion include:

- what is meant by 'firm'
- explanation of profit, drawing a distinction between normal and abnormal profit
- explanation of profit maximisation
- why profit is usually an important objective
  - reward to enterprise
  - source of finance for investment
  - signalling corporate health to shareholders
- how firms in perfectly competitive sectors have little choice but to pursue profit-maximisation but firms with monopoly power have greater flexibility
- how ownership of the firm affects behaviour and performance
- how the divorce of ownership from control and the principal-agent problem affect behaviour and performance
- revenue maximisation and sales maximisation as alternative objectives
- limitations to the feasibility of pursuing profit maximisation, for example the difficulty many firms face in calculating marginal revenue and marginal cost
- discussion of profit satisficing rather than maximising
- sales growth as a goal in itself, or as a short-term means to a long-term goal of profit maximisation
- non-financial objectives such as environmental goals and corporate social responsibility
- whether the assumption of profit-maximisation is any more or less valid than in the past
- examples of firms which have/have not pursued the aim of profit maximisation.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the student's response to the question.

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[25]

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12.

Areas for discussion include:

- definitions of short run and long run
- definition of normal profit, awareness that it should be considered a cost and why it is required to remain in business in the long run
- explanation of profit maximisation
- explanation of what is meant by loss, in other words total costs exceeding total revenues
- explanation of why this is likely to be problematic in the short run (eg cash-flow problems) and long run
- analysis of breakeven point for a firm and the need for average revenue to cover average total costs at the profit-maximising point in the long run
- analysis of the need for average revenue to cover average variable costs at the profit-maximising point in the short run, to avoid the firm shutting down
- explanation of why a loss-making firm is able to carry on as long as it is covering its variable costs
- the availability of options for continuing if running operations at a loss, eg the existence of affordable credit or investment, or previously retained earnings
- analysis of barriers to exit such as sunk costs
- application to perfectly and/or imperfectly competitive markets
- impact of business cycles on a firm's profit – cycles may be caused by booms and recessions, or by seasons
- firms may consider long-run profits rather than short-run profits and continue despite making losses
- in the short run the firm may be investing heavily in capital, R & D or marketing, which may lead to short-run losses but long-run profits
- in the short run the firm may be pursuing strategies to increase market share, and gain monopoly power in the long run
- use of examples, including those mentioned in the quote, to illustrate why a firm may to continue to produce in the short run, despite making losses.

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[15]

13. A or C

[1]

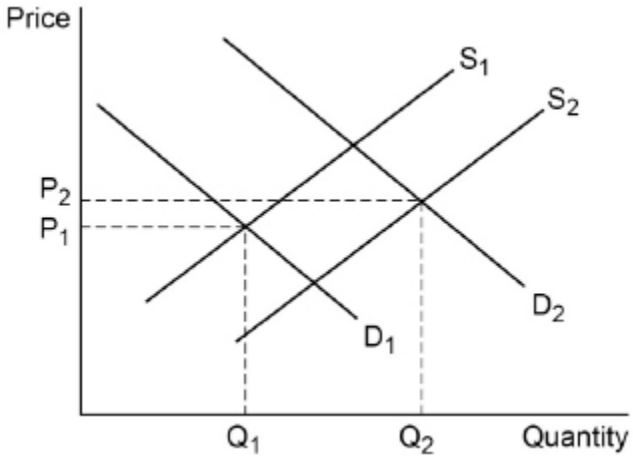
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14.

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Suggested diagram

A supply and demand diagram is expected, showing a shift right in the supply curve and a shift right in the demand curve, resulting in higher levels of output.



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Two separate diagrams are acceptable.

Other relevant diagrams, such as cost curve diagrams, may be rewarded as part of a logical explanation.

Relevant issues include:

- explanation of cheaper transportation
- explanation of construction boom
- explanation of derived demand
- how cheaper transportation shifts the supply curve out
- how construction booms trigger greater demand for sand (via land reclamation in Singapore's case, or as an ingredient in cement and other building materials)
- how cheaper shipping (for example) can create new opportunities for trade between countries
- explanation of how cheaper shipping, by itself, would create excess supply at the original equilibrium price, thus resulting in lower prices and some additional demand
- explanation of how a construction boom, by itself, would create excess demand at the original equilibrium price, thus resulting in higher prices and some additional supply
- analysis of how the combination of demand and supply shifts may enable the sector to grow without prices rising
- reference to extracts including **Figure 2**, Chinese construction statistics, the export of Australian sand to Dubai and 'megacities'.

[9]

15. B

[1]

16. B

[1]

17. **Areas for discussion include:**

- definitions of perfect competition, productive efficiency, allocative efficiency
- explanation of the assumptions of perfect competition
- explanation of how and why firms are forced to be price-takers in perfect competition
- the ability to earn supernormal profits is restricted. In the short run, perfectly competitive firms may make some supernormal profit, in the long run such profits will be eroded by new entrants joining the market or existing competitors expanding output. This contributes to allocative and productive efficiency
- explanation of how firms must produce output at the lowest point on the average cost curve. Any productive inefficiency will be punished by other more efficient firms selling at a lower price
- explanation of the condition for allocative efficiency (P=MC) and how and why this will be ensured in perfect competition.

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[15]

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18. **Areas for discussion include:**

- definition of technological change, perfect competition
- discussion of the features of competitive markets in relation to technological change and market structure
- recognition that perfect competition is an unattainable ideal in many sectors, and is best thought of as one end of a spectrum of market structures to which sectors should (arguably) be guided
- in some sectors, the use of the internet and other technological innovation has hugely improved price transparency, thus minimising information asymmetry and getting closer to perfect information (eg price comparison websites, insurance brokers)
- in some sectors, firms have strengthened dominant positions by erecting barriers to entry such as massive economies of scale and advanced inventory systems (eg Amazon)
- the impact of artificial intelligence, robotics, and retention of personal data on markets, making markets less competitive, eg online customers now receiving personalised adverts
- the improvement of communications has led to improved information flows and made some markets more competitive, but has also led to the demise of other sectors, eg streaming replacing CDs and radio to an extent
- the impact of technology on reducing average costs and thus potentially reducing prices
- the impact of technology on the number of sellers in a market, eg possibility of starting a business with a laptop from a bedroom
- the impact of technological change on homogeneity of products and services
- discussion of productive, allocative and dynamic efficiency
- discussion of Schumpeterian creative destruction
- examples of markets that have become more competitive
- examples of markets that have become more concentrated
- overall assessment about whether technological change tends to bring industries closer to the market structure of perfect competition.

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[25]

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19. Calculation: $2.6bn × 1.8% = $46 800 000

Correct answer is: $47 million

Response:	**Max 2 marks**
For the correct answer, to nearest million, with $ sign	**2 marks**
For the correct answer but without the $ sign **and/or** not to nearest million **OR** For the correct method, but the wrong answer, to nearest million, with the $ sign	**1 mark**

[2]

20. **Areas for discussion include:**

- explanation of pharmaceutical market structure
- discussion of consumer interests in this market: low and stable prices, safe and effective products, access to drugs (these are merit goods)
- discussion of the role the NHS plays in acting as a monopsonistic buyer of pharmaceuticals in the UK, whereas in the USA and elsewhere, there are many more buyers
- the oligopolistic nature of the generics market, with a small number of firms typically producing each drug, and the opportunity for collusion and price-fixing, especially as there is little or no branding of products
- the fact that monopoly power is legally granted to firms in order to encourage research and development into new drugs. The advantage of this is that new drugs are invented. The disadvantage is that it can take 20 years for lifesaving drugs to become more affordable
- the ability of pharmaceutical firms to exploit monopoly power and inelastic demand by massively increasing prices
- the importance of economies of scale
- the importance of dynamic efficiency and links to market structure
- the significance of productive and allocative efficiency
- in generic pharmaceutical markets, oligopoly power can lead to tacit or collusive price-setting
- very high levels of investment in research and development for new drugs and treatments, contributing to rising life expectancy and improved survival rates, for example cancer and HIV/AIDS
- discussion of possible policies at the national level which may impact on consumer interests, eg regulation by the CMA
- market failure arguments
- government failure arguments.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the student's response to the question.

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Level of response	Response	Max 25 marks
5	**Sound, focused analysis and well-supported evaluation that:** • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles to the given context and, where appropriate, good use of data to support the response • includes well-focused analysis with clear, logical chains of reasoning • includes supported evaluation throughout the response and in a final conclusion.	**21 – 25 marks**
4	**Sound, focused analysis and some supported evaluation that:** • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes some good application of relevant economic principles to the given context and, where appropriate, some good use of data to support the response • includes some well-focused analysis with clear, logical chains of reasoning • includes some reasonable, supported evaluation.	**16 – 20 marks**
3	**Some reasonable analysis but generally unsupported evaluation that:** • focuses on issues that are relevant to the question, showing satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles to the given context and, where appropriate, some use of data to support the response • includes some reasonable analysis but which might not be adequately developed or becomes confused in places • includes fairly superficial evaluation; there is likely to be some attempt to make relevant judgements but these aren't well-supported by argumentsand/or data.	**11 – 15 marks**
2	**A fairly weak response with some understanding that:** • includes some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely • includes some limited application of relevant economic principles to the given context and/or data to the question • includes some limited analysis but it may lack focus and/or become confused • includes some evaluation which is weak and unsupported.	**6 – 10 marks**
1	**A very weak response that:** • includes little relevant knowledge and understanding of economic terminology, concepts and principles • includes application to the given context which is, at best, very weak • includes attempted analysis which is weak and unsupported.	**1 – 5 marks**

[25]

21. B

[1]

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22.

Level of response	Response	Max 15 marks
3	**A good response provides an answer that:** • is well organised and develops a selection of the key issues that are relevant to the question • shows sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles and, where appropriate, good use of data to support the response • includes well-focused analysis with clear, logical chains of reasoning.	**11–15 marks**
2	**A reasonable response provides an answer that:** • focuses on issues that are relevant to the question • shows satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles and, where appropriate, some use of data to support the response • includes some reasonable analysis but which might not be adequately developed or becomes confused in places.	**6–10 marks**
1	**A weak response provides an answer that:** • has one or more relevant issues identified • has some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely • has very limited application of relevant economic principles and/or data to the question • might have some limited analysis but it may lack focus and/or become confused.	**1–5 marks**

Remember: AO4, ie evaluation, is not being assessed through this question.

Relevant issues include:

- meaning of forecast and the inevitable uncertainties involved when forecasting future sales
- identifying that the growth in the demand for aircraft is derived from the demand for both passenger and freight air transport
- explain the significance of the growth in the world economy and cyclical fluctuations in economic activity
- explain the significance of the growth in the middle-class population
- linking the above to the growth in tourism, the demand for air travel and hence aircraft
- the income elasticity of demand for air transport
- expected developments in the globalisation of the world economy
- the relative price of the company's aircraft
- explain the relevance of both price and cross elasticities of demand
- the effect of changes in exchange rates
- the rate of growth in different market segments and how they link to the type of aircraft the company sells
- the effect of new entrants into the market, eg COMAC
- the extent to which the airlines need to replace ageing aircraft
- changes in technology and the impact on the cost of operating aircraft
- changes in technology and its effect on the environmental impact of air transport

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- the effect of government policies and global agreements that might affect the need to replace older aircraft by new aircraft that have a less damaging impact on the environment
- the efficiency (eg cost per seat) of operating the company's aircraft compared to its competitors
- the environmental impact of the company's aircraft compared to its competitors
- the safety record of the company's aircraft compared to its competitors
- the impact of unexpected events such as the 2007-08 financial crisis and the global pandemic
- consumer confidence in air travel
- the growth in the demand for air freight, perhaps linked to expected changes in the pattern of world trade
- use of extracts A, B and C to support the above.

The use of relevant diagrams to support analysis should be taken into account when assessing the quality of a candidate's response to the question.

[15]

23. A

[1]

24. **Areas for discussion include:**

- explanation of the gig economy and the difference between terms of employment in the gig economy and standard employment
- discussion of the emerging trends that have contributed to the rise of the gig economy, such as technological progress and online commerce
- what is meant by the 'interests of people who are working in the gig economy'
- discussion of the reasons why some roles/industries are more likely to arise in the gig economy than others
- the benefits of gig economy work to the individual, such as: flexibility over hours, ease of switching between jobs, autonomy from having no supervising manager
- the costs of gig economy work to the individual, such as lower pay and fewer non-wage benefits (for example pension, health insurance, maternity benefits)
- analysis of why wages may be lower and working conditions worse in the gig economy than in the formal sector
- benefits and costs of the gig economy to firms and the wider economy, such as greater labour mobility, lower costs of production, economic efficiency
- discussion of the impact of the pandemic on the gig economy
- discussion of possible policies, such as legislation, raising minimum wages, guaranteeing minimum hours for all roles, redefining gig economy workers as 'employed' rather than 'self-employed'
- the argument that the need for government intervention is reduced by the existence and growth of trade unions representing gig economy workers
- the argument that the need for government intervention is reduced by the fact that some firms in the gig economy are improving conditions for their workers anyway
- use of examples
- market failure arguments
- government failure arguments.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the student's response to the question.

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Level of response	Response	Max 25 marks
5	**Sound, focused analysis and well-supported evaluation that:** • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles to the given context and, where appropriate, good use of data to support the response • includes well-focused analysis with clear, logical chains of reasoning • includes supported evaluation throughout the response and in a final conclusion.	**21–25 marks**
4	**Sound, focused analysis and some supported evaluation that:** • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes some good application of relevant economic principles to the given context and, where appropriate, some good use of data to support the response • includes some well-focused analysis with clear, logical chains of reasoning • includes some reasonable, supported evaluation.	**16–20 marks**
3	**Some reasonable analysis but generally unsupported evaluation that:** • focuses on issues that are relevant to the question, showing satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles to the given context and, where appropriate, some use of data to support the response • includes some reasonable analysis but which might not be adequately developed or becomes confused in places • includes fairly superficial evaluation; there is likely to be some attempt to make relevant judgments but these aren't well-supported by arguments and/or data.	**11–15 marks**
2	**A fairly weak response with some understanding that:** • includes some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely • includes some limited application of relevant economic principles to the given context and/or data to the question • includes some limited analysis but it may lack focus and/or become confused • includes attempted evaluation which is weak and unsupported.	**6–10 marks**
1	**A very weak response that:** • includes little relevant knowledge and understanding of economic terminology, concepts and principles • includes application to the given context which is, at best, very weak • includes attempted analysis which is weak and unsupported.	**1–5 marks**

[25]

25. C

[1]

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1. **Issues and areas for discussion include**

Introduction	• Definitions of, eg. ◦ monopoly policy ◦ long run ◦ abuse of power.
Developing the response to the question **Application/ Analysis**	**Application** • Policy options, eg ◦ ending monopoly (losing advantages as well as disadvantages ◦ amending monopoly (keep advantages, control disadvantages, through regulation/taxation/other means) ◦ remove barriers to entry or other market imperfections. **Analysis** • basic criticisms of monopoly (eg efficiency, deadweight losses) • basic defence (eg econs of scale) • basic arguments in favour of competition policy • relevant concepts, producer surplus, consumer surplus • welfare transfers and welfare losses between producers and consumers when monopolies are broken up ◦ without consideration of scale economies ◦ with consideration of scale economies • effects of wider considerations, eg technological change employment, international competition • efficiency concepts: productive, allocative • contestability; • “creative destruction”

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Evaluation	• Question of whether breaking up a monopoly leads to 'perfect' competition, or merely replaces a monopoly with an oligopoly. • The role of government, regulators • Occasions where monopoly is arguably in the consumer interest, eg when copyrights, designs, patents, grant a limited monopoly in order to encourage innovators to share their ideas • Occasions when patents etc are used to restrict competition and work against the consumer interest • The greater divisibility of many modern technologies, eg PCs and laptops replacing large business machines. MES moves to the left on a LRAC graph, when there is an absence of indivisibilities • Market forces along with technical change have made computer technology affordable to the masses • Similar experiences with other products, eg audio-visual, phones • Whether the experience of the computer industry is of wider significance in all cases • Question the 'will not last'. Is it the case they can't abuse monopoly power? • Maybe IBM was effectively targeted by anti-monopoly policy • This question is worded to allow high evaluation scores for a focus on examples other than the computer industry. *Examiners should note that, for some of the weaker or average candidates, parts of the above represent quite sophisticated evaluation and so it is important to ensure that more basic evaluation is adequately rewarded where a genuine effort has been made to display that skill.*
Also give credit for	• Diagrams • An overall judgement on the issues raised. • Examples.

It will only be possible for candidates to consider a few of the above. They may also discuss issues not discussed above.

[25]

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2.

The issues identified below are intended to provide an indication of some of the areas which might be discussed. Candidates can only be expected to consider a few of these and/or other issues in the time available.

Issues and areas for discussion include:

Introduction	• definintion of monopoly • examples of monopolies • explanation of 'legally backed' monopoly (IPR as an entry barrier) • discussion of the idea of 'public interest'
Developing a response to the question:	• General advantages / justification of monopolies (economies of scale, etc) • IPRs are justified because ◦ They support the creative industries ◦ Reference to economic importance of these industries (Extract C) ◦ Innovation, creativity, dynamic efficiency ◦ Return on risky investment • Arguments against 'stronger action' (general arguments against monopoly applied to the specific case of IPRs), eg ◦ Artificially high prices ◦ Loss of efficiency ◦ Reduced consumer choice
Evaluation:	• role of government / legal sanctions • market failure versus government failure • producer versus consumer sovereignty • alternatives to the legal approach, eg ◦ Regulators ◦ Leave it to market forces ◦ The need for international / global action / agreement *Examiners should note that it may be possible to award some marks for basic evaluation such as consideration of a number of pros and cons. However, this must be considered as low-level evaluation and rewarded accordingly. Stronger evaluation would prioritise the arguments for and against, and/or give economic reasons for justifying a particular policy decision.*
Also give credit for:	• use of data • relevant use of evidence and examples not contained in the data

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	• diagrams • an overall judgement on the issues raised

[25]

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3.

Issues and areas for discussion include

Introduction	• Links between the quotation and economic issues that affect firms operating in the SEM, e.g: ◦ Economies of scale ◦ Market size ◦ Market share ◦ Efficiency
Developing the response to the question:	• Benefits to large retailers • Supply side, e.g. ◦ Economies of scale ◦ Specialisation ◦ Diversification ◦ Labour market (a source of willing workers) • Demand side, e.g. ◦ More consumers ◦ Growth opportunities • Costs to large retailers, e.g. ◦ New competitors ◦ Firms ◦ Products ◦ Currency problems (euro against pound) ◦ EU competition regime • Benefits to small firms, e.g. ◦ Internet trading without cross-border restrictions ◦ Specialist 'niche' in the market ◦ Consumers travelling to continental markets ◦ Peripatetic markets visiting UK towns ◦ Cheap labour from Eastern Europe ◦ Examples, e.g. the phenomenon of the Polish grocery shop • Costs to small firms, e.g. ◦ Excessive bureaucracy, e.g. regulations against ugly fruit ◦ Costs of compliance, e.g. metrication of weights and measures • Costs/benefits to consumers, e.g. ◦ Lower prices ◦ Greater choice

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	◦ More innovation ◦ Homogenisation of products and retailers ◦ Disappearance of local shops
Evaluation	• discussing whether retailing relates to the single market in the same way as, say, manufacturing • distinguishing between the positions of different types of retailers, e.g. grocers, white goods, clothes • the different impacts on small/ large retailers • the extent to which the interests of consumers and retailers coincide • the possible impact of EU competition policy *Examiners should note that it may be possible to award some marks for basic evaluation such as consideration of a number of pros and cons. However, this must be considered as low-level evaluation and rewarded accordingly. Stronger evaluation would prioritise the benefits and costs, and/or give economic reasons for justifying a judgement on, for example whether benefits generally outweigh costs.*
Also give credit for:	• relevant use of evidence and examples not contained in the data • diagrams • an overall judgement on the issues raised

[25]

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4.

Issues and areas for discussion include

Introduction	• Links between the quotation and economic issues that are contested e.g: ◦ Positive/ negative externalities ◦ Consumer choice/ monopoly power ◦ Food security/ distributive issues
Developing the response to the question	• Arguments for government support of production and use, e.g: ◦ Consumer sovereignty (assuming consumers want them) ◦ Efficiency arguments ◦ The need to feed a rapidly expanding population ◦ The need for technical progress ◦ Alleged external benefits • Arguments against, e.g: ◦ Consumer sovereignty (European consumers appear not to want them) ◦ Market failures such as Environmental damage, Other negative externalities such as damage to organics; health concerns, Monopolistic practices, Asymmetric information ◦ Government failure
Evaluation	• Market failure versus government failure • Consideration of whether consumers/governments/farmers have sufficient information, or whether they are influenced by the media, pressure groups and interested parties (both for and against GM crops) • Very perceptive and aware candidates might discuss whether the word 'support' in the question simply means 'allow' or 'facilitate' or whether there is an argument about actively encouraging GM growers, e.g. through subsidy. • Discussing whether intervention: is likely to correct or reduce any perceived market failure, eg the negative externalities produced by petrol/diesel fuelled cars; might lead to government failure; might increase or reduce economic efficiency; might increase or reduce economic welfare. *Examiners should note that it may be possible to award some marks for basic evaluation such as consideration of a number of pros and cons. However, this must be considered as low-level evaluation and rewarded accordingly. Stronger evaluation would prioritise the arguments for and against, and/or give economic reasons for justifying a particular policy decision.*

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Also give credit for:	• relevant use of evidence and examples not contained in the data • diagrams • an overall judgement on the issues raised

It will only be possible for candidates to consider a few of the above. They may also discuss issues not discussed above

[25]

5.

Explanation

- Define productivity/the long run or any other term
- Either define/describe diminishing returns in general terms and/or state the law of diminishing returns, or relate diminishing returns specifically to food production, e.g. by explaining how food output at first rises more than proportionately than inputs, then less than proportionately as the capacity limits of farmland are approached (alternatively they could explain in terms of falling then rising short run average costs).
- Explain that GM crops could increase productivity in the short run, e.g. by arguably 'delaying' diminishing returns by making more intensive use of the fixed factor, land through increasing its productive capacity.
- And/or explain that GM crops could bring economies of scale and provide increasing returns in the long run (alternatively they could explain in terms of falling long run average costs)

[9]

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7. **Issues and areas for discussion include:**

Introduction	• the meaning of cost minimisation • the meaning of revenue maximisation.
Developing the response to the question:	• methods of reducing / minimising costs • implications of cost minimisation • methods of increasing / maximising revenues • implications of revenue maximisation • discussion of whether both can be pursued at once • profit maximisation / satisficing • other possible objectives; the importance of the type of firm, eg small, large • issues to do with the divorce of ownership and control; different sections / interests within a single firm might have different objectives, eg production process (minimise costs) sales / marketing (maximise total revenue) managers (utility / status / bonuses linked to profits / sales / other indices), shareholders (long-run, short-run perspectives on share prices and dividends).
Evaluation	• consequences of different types of conduct / market structure • explanation that while Total Profit = TR −TC, maximum profit is at MC = MR and can occur in the short run when revenues are not maximised and costs are not minimised • consideration of short-run and long-run equilibrium • possibility of satisficing and other types of behaviour • picking up on the word ‘always’ in the question. Examiners should note that it may be possible to award some marks for basic evaluation such as consideration of a number of pros and cons. However, this must be considered as low-level evaluation and rewarded accordingly. Stronger evaluation would prioritise the arguments for and against, and / or give economic reasons for justifying a judgement.
Also give credit for:	• relevant use of evidence and examples not contained in the data • diagrams • an overall judgement on the issues raised

[25]

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8.

For candidates who:

Explain the difference between the short run and long run, eg in terms of a fixed factor of production in the short run and variable productive capacity in the long run; or define terms: diminishing returns, economies of scale.

Explain the relationship between diminishing returns and short run costs, and returns to scale and long run costs (explanation can refer to marginal or average values) eg:

- diminishing returns operate in the short run as successive units of a variable factor are combined with a fixed factor; example given of a fixed factor and variable factor; eventually average / marginal physical output falls and average / marginal costs rise.
- if a production unit operates at a level of output well below capacity then efficiency is low, average costs will be high; as more units of variable factors are used average costs will fall as productive capacity is approached.
- in the long run all factors are variable and the LRAC curve can be falling, horizontal or rising, depending on increasing returns to scale, constant returns to scale, or decreasing returns to scale
- types of scale economies / diseconomies / indivisibilities etc.
- reward a direct discussion of the quote, regarding certainty. For example, if diminishing returns never set in, we could feed the world out of one farmer's field (factors are not perfectly substitutable); in the long run we are looking into the future, which is inherently unpredictable, so scale economies are less certain.

A maximum of **10 marks** for explaining the relationship if reference to either the diminishing returns (short run) or returns to scale (long run) is omitted from this explanation.

[15]

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9.

The issues identified below are intended to provide an indication of some of the areas which might be discussed. Candidates can only be expected to consider a few of these and/or other issues in the time available.

Issues and areas for discussion include:

Introduction	• distinction between mobility and flexibility • mobility: occupational, geographical • flexibility: hiring and firing, skills, etc.
Developing a response to the question:	• Costs to UK economy, eg ◦ Wages depressed by cheap influx of labour ◦ Shortages re-appear when migrants return home ◦ Loss of spending power when earnings are repatriated • Benefits to UK economy, eg ◦ Better information ◦ Recognition of UK qualifications in EU ◦ Job opportunities in EU for UK workers ◦ Possible harmonisation of working conditions, tax rates, pension rights, health services ◦ Skills gaps filled ◦ Labour shortages alleviated
Evaluation:	• benefits versus costs • discussion of the 'proper' role of government / NHS / other bodies • Consideration of monetary / non-monetary factors (Extract F suggests that a 'scheme' was considered necessary to attract dentists) • complications arising from cross-border movements, eg ◦ 'British jobs for British workers' ◦ Difficulty of long-term stability, when workers can leave as easily as they can arrive ◦ Effects on economic welfare in the countries that dentists / other workers leave (the question is UK centric, but there is such a thing as 'interdependence' − what if other countries respond by trying to 'poach' key UK workers?) • Other considerations ◦ Pressure on housing / schools and benefits ◦ Possible multiplier effects ◦ Implications for government tax revenues ◦ Impact on wage inflation and economic growth

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	◦ Significance of 'flexibility' in general. *Examiners should note that it may be possible to award some marks for basic evaluation such as consideration of a number of pros and cons. However, this must be considered as lowlevel evaluation and rewarded accordingly. Stronger evaluation would prioritise the benefits and costs, and / or give economic reasons for justifying a judgement on, for example, whether benefits generally outweigh costs, or whether large firms on balance benefit more than small firms.*
Also give credit for:	• relevant use of evidence and examples not contained in the data • diagrams • an overall judgement on the issues raised • use of data

[25]

10.

Explain (eg define / describe) how the size of a firm can be measured (eg in terms of capital employed, profits, market share, employment).

Explain the different ways in which a firm can grow, eg

- internal (organic) growth which can arise through, for instance, selling to an expanding market, or achieving greater market share and can be financed through means such as ploughed-back profits or borrowing/leverage
- external growth (mergers / takeovers)
- vertical integration
- horizontal integration
- diversification (lateral / conglomerate integration)

[15]

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11. **Issues and areas for discussion include:**

Introduction	• Definition/explanation of 'more responsive to market forces' • Basic reasons why governments of developed countries support agriculture.
Developing the response to the question (application)	**NOTE**: Students are **not** confined to discussion of direct intervention on farm prices; they can discuss government intervention anywhere along the supply chain (e.g. government attempts to modify the behaviour of supermarkets/powerful buyers), and they could then discuss effects working backwards along the chain to the farm source. • Comments from own economic knowledge or based on the data, eg • S & D theory (elasticities, shifts, potentially unstable prices; price support through quotas shifting S to left) • Possible policies for stabilising prices and incomes ◦ national government: competition policy, regulation ◦ EU level: quotas, intervention buying, buffer stocks ◦ milk as a staple foodstuff, an 'essential' ◦ effects of free trade and globalisation (imports are mentioned in **Extract E**) ◦ production and productivity (**Extract F**; further discussion of **Extract D**) ◦ intensity of production (mentioned in **Extract F**) ◦ economies of scale (**Extract F**)
Developing the response to the question (analysis)	• Arguments for markets, eg ◦ rationing/signalling ◦ consumer sovereignty and choice ◦ decentralisation ◦ opportunity costs ◦ efficiency ◦ problems with government failure. • Arguments against, eg ◦ market failure, externalities ◦ need for price and Income stabilisation ◦ imperfect information ◦ influence of supermarkets • changes in demand and supply conditions • globalisation, free trade • need for government to act as a broker between producers and retail sector.

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Evaluation	• Market failure versus government failure • Consequences of government involvement (eg costs to the taxpayer) versus consequences of non-involvement (eg costs to the consumer; danger of a break in supply) • Free trade versus protection • Power of the supermarkets/small number of processors • Policy appropriate at national level or EU level? • Difficulties of identifying and acting for public interest/interests of consumers/producers • Unintended consequences, eg effects of quotas; milk as a raw material, impacting on many other industries; environmental side-effects of intensive farming • There is information in the data regarding Spain and UK which appears to indicate that quotas discourage economies of scale, and lifting quotas therefore increases efficiency. *Examiners should note that, for some of the weaker or average candidates, parts of the above represent quite sophisticated evaluation and so it is important to ensure that more basic evaluation is adequately rewarded where a genuine effort has been made to display that skill.*
Also give credit for	• Diagrams/An overall judgement on the issues raised.

It will only be possible for candidates to consider a few of the above. They may also discuss issues not discussed above.

[25]

12. Analyse **two** effects of technological change which either increase or reduce barriers, for example:

- an argument to the effect that digital/ virtual products are 'weightless' (this word need not be used) and can be brought to market/ retailed at lower cost than traditional, physical products thus reducing entry barriers, increasing competition.
- economies of scale are less important when small firms can have easy access to mass markets through the internet, thus reducing barriers
- technological change can increase the influence of product differentiation, eg by monopolising a new industry format (Blu-Ray), or building in features to thwart industry-wide standards (mobile phone chargers, printer ink cartridges); all the above increasing barriers
- the question refers to Extract B. However, it is perfectly legitimate for candidates also to refer to Extract C where there is mention of legal barriers. Technology can be used to support these and therefore reinforce barriers to entry and restrict access to products (make them more excludable), eg through encryption (satellite TV). On the other hand, technology can be used (often illegally) to circumvent barriers.

[9]

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14.

For relevant definitions, eg

- normal/supernormal profits
- short run/long run

- Barriers to entry are a reason. These can include patents which are relevant to pharmaceuticals; they reduce competition and allow a degree of monopoly preventing prices from falling in the long run and thus maintaining supernormal profits.
- Structure of the industry, product differentiation, imperfect knowledge, technological change collusion, limit pricing etc.

Use of appropriate diagrams to help support explanations, e.g. monopoly and/or perfect competition diagram accompanied by analysis of the effects of entry barriers

[15]

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16. **Issues and areas for discussion include**

Introduction	• definitions of 'large' and 'small' firms • problems of comparison, e.g. capital intensive and labour intensive firms • definitions of efficiency.
Developing the response to the question: **Application / Analysis**	• discussion of efficiency • advantages of large firms ◦ internal economies of scale • types • effects on costs • external economies ◦ effects on large and small firms • disadvantages of large firms ◦ diseconomies of scale ◦ X inefficiency (note, this is not actually in the specification) ◦ divorce of ownership and control • less clear objectives • size and market structure • advantages of small firms ◦ impact of technology ◦ divisibilities of capital.
Evaluation	• significance of large firms, eg ◦ output ◦ market share ◦ efficiency, dynamic, static • significance of small firms, eg ◦ employment ◦ entrepreneurship and innovation ◦ niche markets ◦ personal service • effects of changes in markets and technology, eg ◦ divisibilities ◦ internet trading ◦ mass production versus mass customisation; dozens of markets of millions versus millions of markets of dozens. *Examiners should note that, for some of the weaker or average*

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	students, parts of the above represent quite sophisticated evaluation and so it is important to ensure that more basic evaluation is adequately rewarded where a genuine effort has been made to display that skill.
Evaluation	• diagrams • an overall judgement on the issues raised

It will only be possible for students to consider a few of the above. They may also discuss issues not discussed above.

[25]

17.

For relevant definitions / descriptions / distinctions, eg • short run / long run • examples of fixed / variable factors • economies of scale.

Short run, for example, successive units of a variable factor are applied to a fixed factor as optimum capacity limits are approached first marginal returns then average returns diminish. Eventually total returns diminish. Returns are related to costs. Productive efficiency maximised at the point of maximum average physical product or minimum average cost.
Long run, explanation of long run returns / relationship to internal economies of scale. Relationship between long run and short run.
Use of diagrams to help support explanations.

[15]

18.

For relevant definitions, e.g. competition, efficiency

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Award one mark for each step in a logical chain of argument up to 15 marks, for example
• Allocative: Perfect competition leads to an efficient allocation of resources. Price = marginal cost so that producers are compensated for the effort of production and consumers receive benefit both of which are reflected in the price. Movement away from this equilibrium rewards one group at the expense of the other. • Productive efficiency arising out of competition, marginal cost = average cost, average cost minimised
Use of appropriate diagrams to help support explanations, e.g. LR equilibrium under perfect competition, monopoly equilibrium

Maximum of 10 marks if only one of the types of efficiency in the question is considered.

[15]

19.

Explanation:

For a relevant definition/explanation of economies of scale, e.g. a reduction in long-run average costs due to the growth of the firm or industry, internal economies, external economies.

Analysis:

Technical economies, related to the use of large scale machinery, reference to factory ships, more capital intensive, less labour employed problems such as 'hoovering up' the seas.
Other economies, e.g. financial, managerial, risk bearing/marketing etc (note: fishing industry can be interpreted to include markets and processing). Reward EXTERNAL as well as INTERNAL economies.
Make appropriate use of diagrams to support the analysis, e.g. LRAC, minimum efficient scale

[9]

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20.

Relevant issues/logical chains of analysis include:

- **relevant definitions** eg infrastructure, investment, product markets, labour markets, general technical
- **explanation** of effects on labour and product markets
- The short run (construction phase) will create a demand for the labour of workers directly involved in making the new railway, and also spin-off jobs in firms supplying components and materials
- In the long run (operational phase) reduced journey times for commuters will increase viable travel-to-work distances However, the increased demand might be London based rather than based in the northern cities, so might increase the north-south labour market divide
- Short run (construction phase) the demand for raw materials, components, rolling stock, etc.
- Long run (operational phase): more efficient HS2 line takes pressure of conventional lines, so all lines help get goods and freight to market, more quickly.
- diagrams to help support explanations, eg supply of and demand for labour, and/or goods and freight.

[15]

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23. Candidates do **NOT** have to discuss the effects of both the size of firms and structure of the market for full marks.

Issues and areas for discussion include

Introduction	Basic definitions/descriptions of ownership, control, structure (eg. competition/monopoly) barriers), conduct (eg pricing behaviour); performance (eg productive/allocative efficiency).
Developing the response to the question **Application/ Analysis**	**Application** • Candidates might approach the information in the stem from the angle of perfect/imperfect competition, price taking versus price making, or product differentiation. • They could also elaborate on the possibility of some element of price discrimination taking place here. **Analysis** • Using the basic information given in the quote, and making reasonable assumptions, candidates can analyse the Cafe scenario. They might also use examples from other industries to support the cafe example. They can comment, for example, on ◦ ownership and control together: profit maximising ◦ divorce of ownership from control: alternative objectives ◦ structure • number of firms • size of firms • entry conditions • location. ◦ Conduct (Behaviour) • pricing taking/price making/price seeking/price leadership (barometric, dominant firm) • ownership/profit maximisation/non-profit objectives • product differentiation/Advertising/Marketing/Brand image-making/Product differentiation • non-price competition (ambience, free wifi etc) ◦ Performance (Efficiency) • productive • allocative • static • dynamic. NOTE: Monopolistic Competition is not on the current specification, but should be credited if used in relevant discussion

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Evaluation	• Reasons why ownership and control might be related to structure, conduct and behaviour. • Reasons why size and structure might be closely related to behaviour and efficiency. ◦ eg the assumptions of perfect competition: profit maximising behaviour and price taking, leading to long run equilibrium and productive and allocative efficiency. • The question of whether structure automatically governs behaviour and efficiency. ◦ for example, a group of multinational coffee outlets in a town centre can look monopolistic, but actually behave very competitively, perhaps exhibiting 'price taking' behaviour ◦ possibility of price leadership • following the dominant firm • the small independent firm setting the pace ◦ possibility of collusion **PLEASE NOTE:** The strongest evaluative answers are likely to discuss the above concepts **in the context of the Cafe/Coffee Shop scenario.** *Examiners should note that, for some of the weaker or average candidates, parts of the above represent quite sophisticated evaluation and so it is important to ensure that more basic evaluation is adequately rewarded where a genuine effort has been made to display that skill.*
Also give credit for	• Diagrams • An overall judgement on the issues raised • Examples

It will only be possible for candidates to consider a few of the above. They may also discuss issues not discussed above.

[25]

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24.

Relevant issues/logical chains of analysis include:

- **relevant definitions**, eg monopoly, monopoly power
- **Barriers to entry** affecting the **number of competitors**, these can include legal barriers, such as patents/copyright; set up costs; economies of scale. These barriers might be deliberate, eg supported by government, or might be inherent in the nature of the product or a 'natural monopoly' such as water. Monopolies might be a single firm or created by a 'collusive' or 'complex' monopoly during the production stage or a 'cartel' at the selling stage (1mark). Cartels are generally illegal
- **NOTE:** Several individual **barriers to entry**, for example economies of scale, minimum efficient scale, can be regarded as 'sources' and expanded for further marks.
- **Advertising and product differentiation** aimed at creating real or imagined differences between products through branding and image building, reducing the price elasticity of demand by convincing consumers that products are less homogeneous than they really are
- **Other market imperfections**, eg lack of consumer information, minimum efficient scale, international trade barriers, a break in the chain of substitutes, natural monopoly
- diagrams to support explanations, e.g oligopoly/monopoly/minimum efficient scale (M.E.S.)

[15]

25.

Relevant issues/logical chains of analysis include:

- relevant definitions, e.g. PED, total revenue, costs, price discrimination
- Price elasticity of demand can change with the time of day eg people on their way to work or on a timed lunch break have fewer alternatives and therefore lower PED. Afternoon customers are under less pressure and so have more alternatives and therefore higher elasticity. The café has large fixed costs, eg staff and therefore there are times of day when it works to full capacity and others where it is under capacity. It therefore needs to spread costs more evenly and then if it can maximise TR it will also maximise profit. Revenue is increased by increasing price when PED is inelastic and reducing price when demand is elastic. In some ways this is a similar pricing strategy to that of the low cost airlines
- This pricing strategy as an example of price discrimination
- Explanation of geometrical relationships on a diagram.
- diagrams to support the explanation, eg AR, MR, MC, price-elastic and inelastic demand.

NOTES: (1) PED, revenues and costs are mentioned in the stem of the question to assist students in focusing their answer. Do not penalise if any of these three items is not specifically discussed. Full marks can be achieved for a clear explanation which does not necessarily discuss all three of these items in any depth, although it can be expected that at least two will be necessary to convey a convincing explanation. **(2)** Scenarios other than the Cafe/Coffee Shop can be credited here if they help the explanation (e.g. on-peak/off peak rail travel can be used in a relevant way)

[15]

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Mark schemes

1. In this part of the question, candidates will need to demonstrate that they are able to evaluate issues and arguments to support a conclusion if they are to be awarded **more than 15 marks**.

Where there is no **explicit** reference to the data, award a maximum of **21 marks**.

Level 5	**Good analysis and good evaluation**	**22 to 25 marks** *Mid-Point 24 marks*
Level 4	**Good analysis but limited evaluation** **OR** **Reasonable analysis and reasonable evaluation**	**17 to 21** *Mid-Point 19 marks*
Level 3	**Reasonable including some correct analysis but very limited evaluation**	**10 to 16** *Mid-Point 13 marks*
Level 2	**Weak with some understanding**	**4 to 9** *Mid-Point 7 marks*
Level 1	**Very weak**	**0 to 3** *Mid-Point 2 marks*

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Issues and areas for discussion include

Introduction	• Definitions / descriptions of, e.g. ◦ Privatisation ◦ Public ownership
Developing the response to the question: **(Application)**	• Comments from own economic knowledge or based on the data, e.g. ◦ Further comments on **Extract A**, (differences / similarities between different governments) ◦ Examples from **Extract B** of privatisations ◦ Dangers of privatisation mentioned in **Extract C**
Developing the response to the question: **(Analysis)**	NOTE There are two aspects to the question: privatisation vs. nationalisation, and domestic ownership vs. international ownership. To achieve Level 5 both aspects must be analysed **and** evaluated. Level 4 can be achieved by a thorough treatment of one aspect, as long as the other is addressed to some extent. • Arguments for nationalisation / against privatisation, e.g. ◦ Externalities ◦ Inability of markets to make long term predictions ◦ Health and safety issues arising from environmental problems ◦ The need for coordinated international action ◦ Merit goods, demerit good, public goods • Arguments for privatisation / against nationalisation, e.g. ◦ Efficiency ◦ Competition, enterprise, efficiency ◦ Signalling, incentive, rationing functions of price • Advantages / disadvantages of international cooperation. • Implications of inward investment; skills / knowledge transfer, comparative advantage vs. self-sufficiency, import substitution
Evaluation	• Evaluation of some specific privatisations, e.g railways, nuclear power, water • Discussion of the quotation (whether the exclusion of British state ownership can be justified if owners are nationalised by their states, or have the backing of a foreign sovereign wealth fund) • Advantages and disadvantages of a mixed economy approach • Market failure versus government failure • Need for privatisation to be accompanied by effective regulation • Globalisation and globalism • Protection vs. free trade; free movement of capital *Examiners should note that, for some of the weaker or average candidates, parts of the above represent quite sophisticated evaluation and so it is important to ensure that more basic evaluation is adequately rewarded where a genuine effort has been made to display that skill.*
Also give credit for	• Relevant diagrams • An overall judgement on the issues raised.

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It will only be possible for candidates to consider a few of the above. They may also discuss issues not discussed above.

[25]

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2. **Issues and areas for discussion include**

Introduction	• Description of 'market forces' in housing ◦ perfect competition ◦ resource allocation ◦ efficiency
Developing the response to the question: Application/ **Analysis**	Application ◦ consequences of the assumptions of perfect competition ◦ price taking behaviour ◦ short run equilibrium, incentives to expand or contract ◦ long run equilibrium, price = MC; MC = MR; AC = AR ◦ productive and allocative efficiency Analysis • Market success: consumer and producer surplus ◦ Market failures: dominant firms; externalities; lack of public goods/services; merit goods ◦ Lack of economies of scale.
Evaluation	• Do firms and consumers really have perfect knowledge, e.g. of marginal costs and benefits? ◦ Asymmetric information, are decisions really made on the margin? ◦ Monopoly and monopsony ◦ Merit and demerit goods ◦ Externalities/social optimum ◦ Non-monetary considerations ◦ Static/dynamic efficiency/Economies/diseconomies of scale ◦ Is perfect competition a value laden concept (note the word 'perfect')? ◦ Can all goods and services (e.g. roads, health) be treated as consumer goods, when they have significant spill-over effects? ◦ Situations where the supplier needs to be 'de-centralised' and close to the consumer, to cater for consumer preference, choice, etc.: e.g. few would argue that the government should run our supermarkets. ◦ Situations where some degree of 'centralised' command & control and/or coordination and/or strategic forward planning is necessary: e.g. should competing companies be running our railways? *Examiners should note that, for some of the weaker or average*

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	candidates, parts of the above represent quite sophisticated evaluation and so it is important to ensure that more basic evaluation is adequately rewarded where a genuine effort has been made to display that skill.
Also give credit for	• Diagrams ◦ An overall judgement on the issues raised ◦ Examples.

It will only be possible for students to consider a few of the above. They may also discuss issues not discussed above.

[25]

3. D

[1]

4. Relevant issues raised:

Explanation For a relevant explanation of supernormal profit eg in terms of profit in excess of normal profit which is the minimum return required to keep an enterprise in its current use.

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Analysis of effects
For Example • If firms are colluding closely, then the industry can be analysed as a (complex) monopoly. If the business is profit maximising then MC = MR; a percentage tax rate takes a proportion of total profit which is the difference between TC and TR. The rational business decision is to continue at the same level of output and price because a proportion of a maximised profit is better than a proportion of a less than maximum profit. The tax therefore has no immediate or short run effect on the equilibrium position of the firm, instead it acts as a revenue-raiser for the government; however, in the longer term the firm might react with decisions about such matters as investment or expansion. • Other considerations, e.g. the special circumstance of companies that, in effect, sell electricity to themselves (a form of 'transfer pricing') and/or have to estimate demand in advance, and have a product that cannot be stored. • Analysis in terms of supply and demand curves might be used to illustrate the effects of a tax. While this might not be appropriate to an imperfect market, which is the context of the data, the question does not specify the type of market. Also, it could (conceivably) be argued that in a global context, energy supply might be structured monopolistically but behave competitively, e.g. by price taking. While this might be more credible in the case of supermarkets, we will accept an argument that the tax will shift supply to the left and further raise prices, and mark the subsequent logical chain of reasoning on its quality.
For making appropriate use of diagrams, e.g. profits diagram for a monopolist; S & D analysis (see notes above).

[9]

6. D

[1]

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7.

Relevant issues include:

- explaining the difference between the short run and long run
- distinction between the marginal and average returns to the variable factor
- explaining law of diminishing returns; increasing returns followed by eventually diminishing returns as more units of a variable factor are applied to a fixed factor
- explaining why, in the short run, diminishing returns are likely to occur at some level of output
- relating marginal and average returns to costs of production, in particular marginal cost and average variable cost
- in the long run all factors are variable and the law of diminishing returns does not apply
- examples of economies of scale and diseconomies of scale
- LRAC curve can be falling, horizontal or rising, depending on economies of scale and diseconomies of scale
- relationship between returns to scale and economies of scale
- why some firms/industries are more likely to benefit from economies of scale than others

[15]

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8.

Level of response	Response	Max 25 marks
5	**Sound, focused analysis and well-supported evaluation that:** • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles and, where appropriate, good use of data to support the response • includes well-focused analysis with clear, logical chains of reasoning • includes supported evaluation throughout the response and in a final conclusion.	**21-25 marks**
4	**Sound, focused analysis and some supported evaluation that:** • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles and, where appropriate, some good use of data to support the response • includes some well-focused analysis with clear, logical chains of reasoning • includes some reasonable, supported evaluation.	**16-20 marks**
3	**Some reasonable analysis but generally unsupported evaluation that:** • focuses on issues that are relevant to the question, showing satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles and, where appropriate, some use of data to support the response • includes some reasonable analysis but which might not be adequately developed or becomes confused in places • includes fairly superficial evaluation; there is likely to be some attempt to make relevant judgements but these aren't well-supported by arguments and/or data.	**11-15 marks**

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2	**A fairly weak response with some understanding that:** • includes some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely • includes some limited application of relevant economic principles and/or data to the question • includes some limited analysis but it may lack focus and/or become confused • includes some evaluation which is weak and unsupported.	**6-10 marks**
1	**A very weak response that:** • includes little relevant knowledge and understanding of economic terminology, concepts and principles • includes analysis which is, at best, very weak • includes attempted evaluation which is weak and unsupported.	**1-5 marks**

Relevant issues and areas for discussion include:

- the stability of the Brazilian economy
- political and social stability
- the rule of law and corruption
- whether the investment is likely to be profitable and whether it is secure
- the nature of any capital controls
- the infrastructure in Brazil
- the skills and abilities of the workforce
- financial and other support from the government
- regulations on business
- the tax regime; both corporate and individual taxes
- availability of finance
- the prospects for future growth of the Brazilian economy
- the size of the Brazilian car market and the potential for future growth
- access and proximity to businesses that can support the car industry, eg component suppliers
- potential for exporting cars from Brazil, eg access to other markets in the Americas
- the prospects for the value of the Brazilian currency, the real, and its stability

[25]

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9.

Areas for discussion include:

- the meaning of cost minimisation/revenue maximisation
- ultimately, minimising total costs means not producing anything
- cost minimisation means minimising the cost of producing any given level of output
- X- inefficiency
- methods of reducing/minimising costs
- implications of cost minimisation
- methods of increasing/maximising revenues
- implications of revenue maximisation
- discussion of whether both can be pursued at once
- profit maximisation/satisficing
- explanation that while Total Profit = TR – TC, maximum profit is at MC = MR
- is cost minimisation and revenue maximisation consistent with profit maximisation?
- the need for firms in the private sector to make profits
- other possible objectives that firms might pursue
- the importance of the type of firm and the structure of the industry
- issues to do with the divorce of ownership and control; different sections/interests within a single firm might have different objectives, eg production process (minimise costs) sales/marketing (maximise total revenue) managers (utility/status/bonuses linked to profits/sales/other indices), shareholders (long-run, short-run perspectives on share prices and dividends)
- picking up on the word ‘always’ in the question

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the candidate’s response to the question.

[25]

10. C

[1]

11. B

[1]

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12.

Areas for discussion include:

- meaning and types of protectionism
- criteria for assessing whether protectionism is damaging, eg resource allocation, employment, growth, environmental impact, social factors
- benefits of free trade as illustrated by the principle of comparative advantage
- dynamic benefits of free trade, eg increased competition, economies of scale
- the problems that may result from free trade
- various arguments for protectionism, eg protection of sunrise and sunset industries, diversification of output, protection of employment, low wage arguments, protection against dumping, raising revenue to correct balance of payments deficits
- protectionism and trading blocs
- trade creation and trade diversion
- protectionism, living standards and inflation
- impact on different economies, eg developed versus developing economies
- protectionism as a means of dealing with domestic macroeconomic problems
- retaliation and 'beggar thy neighbour' policies
- short-run and long-run consequences
- exchange rate changes as an alternative to protectionism or as a form of protectionism, eg emerging economies fixing their exchange rates at a low level to encourage export-led growth.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the candidate's response to the question.

[25]

13.

In this part of the question, candidates will need to demonstrate that they are able to evaluate issues and arguments to support a conclusion if they are to be awarded **more than 15 marks**.

Level 5	**Good analysis <u>and</u> good evaluation**	**22 to 25 marks** *Mid-Point 24 marks*
Level 4	**Good analysis <u>but</u> limited evaluation** **OR** **Reasonable analysis <u>and</u> reasonable evaluation**	**17 to 21** *Mid-Point 19 marks*
Level 3	**Reasonable including some correct analysis <u>but</u> very limited evaluation**	**10 to 16** *Mid-Point 13 marks*
Level 2	**Weak with some understanding**	**4 to 9** *Mid-Point 7 marks*
Level 1	**Very weak**	**0 to 3** *Mid-Point 2 marks*

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Issues and areas for discussion include

Introduction	Basic definitions / descriptions of • long run • profit maximisation • business goals / objectives
Developing the response to the question: **Application/Analysis**	• The importance of the profit motive. • Relevance of the size of firms • The functions of the entrepreneur: ownership, control, decision making and risk taking in small firms and large firms • Directors versus managers • Decision-making in small firms and large firms • The impact of a divorce between ownership and control • Other possible objectives ◦ Sales maximisation ◦ Revenue / turnover maximisation ◦ Maximisation of Market share ◦ Maximisation of company size (world domination) ◦ Industry-specific objectives e.g. newspaper circulation, TV viewing figures ◦ Managerial utility ◦ Social welfare maximisaton ◦ Satisficing
Evaluation	• Critical discussion of the quotation • Bonus culture • Short run vs long run • Large firms vs small firms • Overall view of the various possible objectives • Is any one objective sufficient, or do firms need a range of objectives? • Importance of profits for investment • Can any other objectives be achieved in the long run if profits are not achieved? • Is profit maximising actually possible? Do firms have the information? Can they track MC, MR etc? *Examiners should note that, for some of the weaker or average candidates, parts of the above represent quite sophisticated evaluation and so it is important to ensure that more basic evaluation is adequately rewarded where a genuine effort has been made to display that skill.*
Also give credit for	• Diagrams • An overall judgement on the issues raised • Examples

It will only be possible for candidates to consider a few of the above. They may also discuss issues not discussed above.

[25]

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15.

Areas for discussion include:

- the nature and examples of price discrimination
- allows the producer to convert consumer surplus into producer surplus
- how price discrimination allows the producer to increase revenue and profit compared to a single price
- relevance of price elasticity of demand
- how price discrimination enables the producer to reduce fixed costs by spreading demand more evenly, eg peak and off-peak rail fares
- better capacity utilisation by firms will lower costs and may lead to lower prices for consumers
- why price discrimination may increase total sales and generate economies of scale
- the use of price discrimination as a barrier to entry, reducing competition
- why price discrimination almost certainly means that some consumers will face a higher price than if there was a single price
- the use of price discrimination to cross-subsidise loss-making services
- some consumers will benefit from lower prices and products that might not otherwise be supplied
- equity considerations related to the redistribution of income that results from price discrimination.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the candidate's response to the question.

The use of examples to illustrate price discrimination should also be taken into account when assessing the quality of response.

[25]

16.

In this part of the question, candidates will need to demonstrate that they are able to evaluate issues and arguments to support a conclusion if they are to be awarded **more than 15 marks**.

Level 5	**Good analysis <u>and</u> good evaluation**	**22 to 25 marks** *Mid-Point 24 marks*
Level 4	**Good analysis <u>but</u> limited evaluation** **OR** **Reasonable analysis <u>and</u> reasonable evaluation**	**17 to 21** *Mid-Point 19 marks*
Level 3	**Reasonable including some correct analysis <u>but</u> very limited evaluation**	**10 to 16** *Mid-Point 13 marks*
Level 2	**Weak with some understanding**	**4 to 9** *Mid-Point 7 marks*
Level 1	**Very weak**	**0 to 3** *Mid-Point 2 marks*

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Issues and areas for discussion include

Introduction	• Definitions of, e.g. ◦ concentration ◦ monopoly power
Developing the response to the question: **Application/Analysis**	• Advantages of concentration / monopoly ◦ Economies of scale ◦ International competitiveness ◦ Patents, copyrights, etc. ◦ Public interest arguments, e.g. strategic industries, employment issues ◦ Dynamic efficiency ◦ Natural monopoly • Disadvantages ◦ Consumer surplus transferred to producers ◦ Deadweight losses ◦ Higher prices, lower output, under-used capacity ◦ Possibility of collusion ◦ Market failure ◦ Producer sovereignty
Evaluation	• Critical discussion of the quotation • Advantages versus disadvantages of monopoly / concentration • Possibility of price discrimination (positives and negatives) • Need for government intervention and regulation • Collusion distinguished from cooperation / collaboration • Static / dynamic efficiency • Is perfect competition always 'perfect'? • Does 'perfect' necessarily signal 'the best'? • Global issues (large firms more resilient than small ones faced with international competition and corporatism) • Advantages of monopoly in certain situations (e.g. NHS vs health markets) • Application to particular industries, such as motor manufacturing *Examiners should note that, for some of the weaker or average candidates, parts of the above represent quite sophisticated evaluation and so it is important to ensure that more basic evaluation is adequately rewarded where a genuine effort has been made to display that skill.*
Also give credit for	• Diagrams • An overall judgement on the issues raised • Examples

It will only be possible for candidates to consider a few of the issues and areas noted. They may also discuss issues not mentioned in the table.

[25]

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17.

For relevant definitions, e.g. price discrimination, in terms of different prices charged to different customers **(2 marks)** for the same product **(2 marks)** without the difference explained by cost differences **(2 marks)**.	**Up to 2 marks per point defined or explained to a maximum of 4 marks**
For explanation – award 1 mark for each link in a logical chain of reasoning to a maximum of 15 marks.	
Examples include • The law of diminishing returns (LDR) shows both factor combination and factor substitution **(1 mark)**. It is a short run law, meaning that a variable factor, such as labour **(1 mark)** is combined with other factors, at least one of which, such as a machine or factory building, **(1 mark)** is fixed in terms of size or scale **(1 mark)** and hence productive capacity **(1 mark)**. In effect, an increasing use of a variable factor is used as a substitute for more of the fixed factor **(1 mark)**, and since factors are not perfect substitutes, diminishing returns sets in **(1 mark)**. LDR shows how output changes **(1 mark)** in proportion to factor inputs **(1 mark)** as the fixed factor approaches and passes its optimal capacity **(1 mark)**. In the short run, we can confidently predict that LDR will set in at some point affecting marginal, average and total returns **(1 mark)**. Returns to scale (RTS) operate in the long run **(1 mark)**, when all factors are variable in size or scale **(1 mark)**. RTS show how output changes as the scale of the production unit increases **(1 mark)**. RTS occur in the long run, and nobody can predict the future, so economies of scale are less predictable and less certain than short-run diminishing returns **(1 mark)**. There is the possibility of long run decreasing returns to scale **(1 mark)**. • Allow **maximum of 2 marks** for a mere **list** of different types of scale economy (managerial, technical, etc.). Individual types of economy of scale can only earn **1 mark** if they are integral to the logical chain of discussion explaining long run changes in returns. • Up to **3 marks** for describing increasing returns, constant returns, and decreasing returns to scale as a relevant part of the discussion • While the law of diminishing returns is related to physical output, not the value of output, the law underlies the shape of average and marginal cost curves. Students can therefore discuss this question by reference to short run cost curves, which are the mirror image of physical product curves, with short run costs falling (efficiency increasing) as optimal capacity utilisation is approached, then rising (efficiency reducing). Economists typically draw a long run average cost curve (envelope curve) reflecting increasing returns to scale (falling LRAC), constant returns (horizontal LRAC) and decreasing returns (rising LRAC).	
Use of diagrams to support the explanation, e.g. marginal and average physical product curves and / or cost curves	**Up to 2 marks per diagram (1 mark for labelling, 1 mark for information shown) to a total of 4 marks.**
Relevant real world examples and / or relevant reference to the UK and / or other economies.	**1 mark per reference to a maximum of 2 marks**

[15]

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18.

For relevant definitions, e.g. perfect competition **(2 marks)**, efficient resource allocation **(2 marks)**	**Up to 2 marks per point defined or explained to a maximum of 4 marks**
For explanation – award 1 mark for each link in a logical chain of reasoning to a maximum of 15 marks.	
Examples include • Economic theory predicts that under the conditions perfect competition the market will move towards a long run equilibrium **(1 mark)** where firms are earning only normal profits **(1 mark)** and there is no incentive **(1 mark)** for existing firms to leave **(1 mark)** or new firms to enter **(1 mark)** the industry. At that point P = MC = MR = AC = AR **(1 mark)**. If price equals marginal cost, the producer is compensated for putting the resources together to produce a good or service **(1 mark)**. If price also represents the marginal benefit, then consumers believe a purchase compensates them for the hard-earned money they spend **(1 mark)**. If marginal cost = marginal benefit neither consumers nor producers are benefitting at the expense of the other **(1 mark)** while consumers are receiving the goods and services they want **(1 mark)**. This gives allocative efficiency **(1 mark)**. If MC = AC, then AC must be at its lowest point and this gives productive efficiency **(1 mark)**. So profit maximisation (MC = MR) **(1 mark)** by a large number of small firms has led to an efficient allocation of resource **(1 mark)**. • Because they do not act as price-takers, and AR is therefore not equal to MR firms in any imperfect form of competition cannot achieve all five elements of P = MC = MR = AC =AR at a single equilibrium point and in that sense is less efficient than perfect competition For students who do not go directly to the LR equilibrium position, but start with the short run, distinguish between firm and industry, and proceed through the 'steps' towards achieving LR equilibrium: • Allow **up to 2 marks** for a mere 'list' of conditions of perfect competition. Individual conditions can be credited (**1 mark** each) only if they are discussed within a logical chain of reasoning that explains price-taking and competitive behaviour.	
Use of diagrams to support explanations e.g., Perfect competition, equilibrium, short / long run	**Up to 2 marks per diagram (1 mark for labelling, 1 mark for information shown) to a total of 4 marks.**
Relevant real world examples and / or relevant reference to the UK and / or other economies.	**1 mark per reference to a maximum of 2 marks**

[15]

19. In this part of the question, candidates will need to demonstrate that they are able to evaluate issues and arguments to support a conclusion if they are to be awarded **more than 15 marks**.

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Level 5	**Good analysis <u>and</u> good evaluation**	**22 to 25 marks** *Mid-Point 24 marks*
Level 4	**Good analysis <u>but</u> limited evaluation** **OR** **Reasonable analysis <u>and</u> reasonable evaluation**	**17 to 21** *Mid-Point 19 marks*
Level 3	**Reasonable including some correct analysis <u>but</u> very limited evaluation**	**10 to 16** *Mid-Point 13 marks*
Level 2	**Weak with some understanding**	**4 to 9** *Mid-Point 7 marks*
Level 1	**Very weak**	**0 to 3** *Mid-Point 2 marks*

Issues and areas for discussion include

Introduction	• Definitions, examples ◦ Economies of scale ◦ What is meant by “small” or “large” in this context
Developing the response to the question: **Application/Analysis**	• Distinction between short run and long run • Diminishing returns and returns to scale • Advantages of large firms, e.g. ◦ Types of economy of scale ◦ Other advantages of size, e.g. opportunities for collusion, price making, monopoly, oligopoly, dominant firm price leadership • Disadvantages: diseconomies of scale; x inefficiency ◦ Globalisation and concentrated markets ◦ Government policy (eg sweetheart tax deals) • Advantages of small firms, e.g. ◦ Niche markets ◦ Barometric price leadership ◦ Disruption, e.g. easyJet, Uber ◦ Government policy favouring small firms (eg small business support, start-up grants; business advice agencies) ◦ Government policy hindering small firms, e.g. business rates, VAT, red tape
Evaluation	• Ways in which small firms can fight back, e.g ◦ Reducing costs (internet / weightless economy ◦ Technical change reducing the need for scale economies (eg nuclear power stations versus windmills) • The importance of small firms in the economy ◦ As employers ◦ As motors for growth ◦ As innovators ◦ As ethical producers ◦ Serving specialised markets ◦ Having the potential for growth – large firms start out small • Arguments for and against government intervention to support / promote Small & Medium Enterprises • The question of whether government intervention is necessary • Overall view of advantages and disadvantages of large and small firms *Examiners should note that, for some of the weaker or average candidates, parts of the above represent quite sophisticated evaluation and so it is important to ensure that more basic evaluation is adequately rewarded where a genuine effort has been made to display that skill.*
Also give credit for	• Diagrams • An overall judgement on the issues raised • Examples

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It will only be possible for students to consider a few of the above. They may also discuss issues not discussed above.

[25]

20. **The anticipated diagram would make appropriate use of diagrams, e.g. S & D analysis showing taxation, the effects of 'peak oil' (mentioned in the text) or another relevant example such as rising average costs.**

Relevant issues include:

- For a relevant explanation of a finite resource e.g. in terms of a resource that once consumed cannot be replaced /renewed, or is limited in supply and therefore will become scarcer over time.
- Environmental policies might impose extra costs on businesses for example via taxes or through requirements for types of equipment, such as catalytic converters being fitted to cars. If these policies are unilateral, then international competitiveness might be damaged. There may be bureaucratic costs.
- Further elaboration of a relevant aspect, e.g. the effects of environmental taxes.

[9]

21.

For relevant definitions, e.g. commercial success, in terms of trade and profitability **(2 marks)**, market failure, in terms of opportunity costs / externalities **(2 marks)**	**Up to 2 marks per point defined or explained to a maximum of 4 marks**
For explanation – award 1 mark for each link in a logical chain of reasoning to a maximum of 15 marks.	
Possible explanations include • A major international airport, such as Heathrow has multiplier effects on the local economy **(1 mark)**. It is also important to the national economy as a transport hub **(1 mark)**. The airport itself is these days likely to be a private sector enterprise **(1 mark)** and many other private sector organisations (shops, cafes, suppliers, contractors) will benefit from the economic activity **(1 mark)**. If profitable, the whole enterprise will be a significant commercial success **(1 mark)**. However, the government will be expected to provide infrastructure **(1 mark)** with an opportunity cost **(1 mark)**. The taxpayer might not get an adequate return **(1 mark)**. There are also environmental costs **(1 mark)** such as noise, air pollution and road congestion (**1 mark for an example**). Commercial success is measured by profits, whereas externalities and other market failures are difficult to measure **(1 mark)** therefore they can co-exist **(1 mark)**. • An airport, such as Heathrow, as a major employer	
Use of diagrams to support explanations, e.g. Internal / external costs and benefits	**Up to 2 marks per diagram (1 mark for labelling, 1 mark for information shown) to a total of 4 marks.**
Relevant real world examples and/or relevant reference to the UK and/or other economies.	**1 mark per reference to a maximum of 2 marks**

[15]

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22. C

[1]

23. C

[1]

24. C

[1]

25. **Areas for discussion include:**

- features of monopolistically competitive market including differentiated products, spare capacity, some influence over price, good information, no barriers to entry or exit, many producers and consumers
- pricing decisions are made independently of rivals' strategies
- short-run analysis explaining how firms set quantity by profit maximising (MC=MR), and the price they charge can be worked out from the AR curve. This leads to a degree of abnormal profit assuming AC<AR
- in the long run rival firms have an opportunity to enter the market, given absence of barriers to entry. This results in the existing firm's demand curve shifting left. The firms still profit maximise, but this is now at a lower level of output, where abnormal profit is likely to be lower/eliminated

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the candidate's response to the question.

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Level of response	Response	Max 15 marks
3	**A good response provides an answer that:** • is well organised and develops a selection of the key issues that are relevant to the question • shows sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles to the given context and, where appropriate, good use of data to support the response • includes well-focused analysis with clear, logical chains of reasoning.	**11 – 15 marks**
2	**A reasonable response provides an answer that:** • focuses on issues that are relevant to the question • shows satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles to the given context and, where appropriate, some use of data to support the response • includes some reasonable analysis but which might not be adequately developed or becomes confused in places.	**6 – 10 marks**
1	**A weak response provides an answer that:** • has identified one or more relevant issues • has some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely • has very limited application of relevant economic principles to the given context **and/or** data to the question • might have some limited analysis but it may lack focus **and/or** become confused.	**1 – 5 marks**

[15]

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