

# ADVANCED General Certificate of Education

### **Economics**

Assessment Unit A2 1

assessing

**Business Economics** 

[AEC11]

## **Assessment**

## MARK SCHEME

Users are strongly recommended to study the General Marking Instructions at the beginning. Particular attention to guidance on levels of response, making calculations and quality of written communication will make the mark scheme easier to understand and apply.

#### **General Marking Instructions**

This mark scheme is intended to ensure that the A2 examinations are marked consistently and fairly. The mark scheme provides examiners with an indication of the nature and range of candidate responses likely to be worthy of credit. It also sets out the criteria which they should apply in allocating marks to candidates' responses. The mark schemes should be read in conjunction with these general marking instructions which apply to all papers.

#### Quality of candidates' responses

In marking the examination paper, examiners will be looking for a quality of response reflecting the level of maturity which may reasonably be expected of 18-year-olds, which is the age at which the majority of candidates sit their A2 examinations.

#### Flexibility in marking

The mark scheme is not intended to be totally prescriptive. For many questions, there may be a number of equally legitimate responses and different methods by which the candidates may achieve good marks. No mark scheme can cover all the answers which candidates may produce. In the event of unanticipated answers, examiners are expected to use their professional judgement to assess the validity of answers. If an answer is particularly problematic, then examiners should seek the guidance of the Supervising Examiner for the paper concerned.

#### Positive marking

Examiners are encouraged to be positive in their marking, giving appropriate credit for valid responses rather than penalising candidates for errors or omissions. Examiners should make use of the whole of the available mark range for any particular question and be prepared to award full marks for a response which is as good as might reasonably be expected for 18-year-old candidates. Conversely, marks should only be awarded for valid responses and not given for an attempt which is completely incorrect and inappropriate.

#### Types of mark schemes

Mark schemes for questions which require candidates to respond in extended written form are marked on the basis of levels of response which take account of the quality of written communication. These questions are indicated on the cover of the examination paper. Other questions which require only short answers are marked on a point for point basis with marks awarded for each valid piece of information provided. Some material may be included in the mark scheme for the benefit of teachers and pupils preparing for future examinations. Candidates are not expected to have provided this information. Such material is printed in the mark scheme in italics.

#### Levels of response

Questions requiring candidates to respond in extended writing are marked in terms of levels of response. In deciding which level of response to award, examiners should look for the "best fit" bearing in mind that weakness in one area may be compensated for by strength in another. In deciding which mark within a particular level to award to any response, examiners are expected to use their professional judgement. The following guidance is provided to assist examiners.

**Threshold performance:** Response which just merits inclusion in the level and should be awarded a mark at or near the bottom of the range.

**Intermediate performance:** Response which clearly merits inclusion in the level and should be awarded a mark at or near the middle of the range.

**High performance:** Response which fully satisfies the level description and should be awarded a mark at or near the top of the range.

#### **Marking calculations**

In marking answers involving calculations, examiners should apply the "own figure rule" so that candidates are not penalised more than once for a computational error.

As an example, a candidate might be given information that a firm's average variable cost of production at 10 units of output is £80 per unit, and be asked to interpret from a supporting diagram that total fixed costs are £200 [1 mark]. The question goes on to ask for a calculation of total cost [1], and ATC [1] at output level 10 units. Correct answers for full marks would therefore be: (FC) £200, (TC) £1000 and (ATC) £100.

If the candidate had misinterpreted average fixed cost (as shown on the diagram) as total FC, the first answer of £20 would be incorrect, but answers of (TC) £820 and (AC/ATC) £82 would attract credit as deriving correctly from the candidate's own figure.

#### **Quality of written communication**

Quality of written communication is taken into account in assessing candidates' responses to all questions that require them to respond in extended written form. These questions are marked on the basis of levels of response. The description for each level of response includes reference to the quality of written communication. Where the quality of candidates' economics is not matched by the quality of written communication, marks awarded will not exceed the maximum for Level 2 in questions which have three levels of response or the maximum for Level 3 in those which have four levels of response.

For conciseness, quality of written communication is distinguished within levels of response as follows:

- Level 1: Quality of written communication is limited.
- Level 2: Quality of written communication is satisfactory.
- Level 3: Quality of written communication is of a high standard.
- Level 4: Quality of written communication is excellent.

In interpreting these level descriptions, examiners should refer to the more detailed guidance provided below:

**Level 1 (Limited):** The candidate makes only a limited attempt to select and use an appropriate form and style of writing. The organisation of material may lack clarity and coherence. There is little use of specialist vocabulary. Presentation, spelling, punctuation and grammar may be such that intended meaning is not clear.

**Level 2 (Satisfactory):** The candidate makes a reasonable attempt to select and use an appropriate form and style of writing, supported with appropriate use of diagrams as required. Relevant material is organised with some clarity and coherence. There is some use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are sufficiently competent to make meaning evident.

**Level 3 (High Standard):** The candidate successfully selects and uses an appropriate form and style of writing, supported with the effective use of diagrams where appropriate. Relevant material is organised with a high degree of clarity and coherence. There is widespread use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are of a sufficiently high standard to make meaning clear.

**Level 4 (Excellent):** The candidate successfully selects and uses the most appropriate form and style of writing, supported with precise and accurate use of diagrams where appropriate. Relevant material is extremely well organised with the highest degree of clarity and coherence. There is extensive and accurate use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are of the highest standard and ensure that meaning is absolutely clear.

1 Allow [1] mark for correct definition of horizontal integration, [1] mark for correct definition of vertical integration, [1] mark for correctly identifying supermarket as horizontal and brewery as vertical.

To achieve full marks the candidate would have to get both definitions correct and give correct identification of both. Both definitions and only 1 identification would only gain 2 marks. One definition with the correct identification would only gain 1 mark.

3

2 (a) At 1 tonne of output the firms ATC is £210 and the AVC is £90. This gives an AFC of £120. Multiplying that by total output of 1 gives a TFC of £120. [Accept correct calculation for any other level of output]

Award [3] marks for calculating TFC of £120; for incorrect answer but correct methodology, up to [2]

A candidate who produces the correct answer without any evidence of how they arrived at that answer would receive the full 3 marks. An incorrect answer without any evidence of how it was arrived at would receive 0 marks even if an examiner could guess at where the error was made. A candidate who supplies the correct formula but fails to identify AFC correctly would earn 1 mark. A candidate who calculates at a level of output other than 1, correctly identifies AFC, but then fails to multiply by output, would also earn 1 mark. A candidate who uses the correct formula, identifies AFC correctly, but makes an inputting error should earn 2 marks.

(b) In the short run the firm will continue to produce as long as it is covering its variable costs as fixed costs will have to be paid even if output is zero. This means that as long as price is above AVC, the firm will continue to produce in the short run. In this case the lowest price at which production will take place is £55 so the firm will continue to produce at a price of £70 even though it is making a loss.

For identifying that the firm should continue to produce in the short run [1] and for appropriate explanation, up to [3]

This question is testing the concept of the shutdown price. A candidate who simply gives a definition of the shutdown price but makes no reference to the data, would earn 2 marks. A candidate who simply states "yes" would only be awarded 1 mark as the question requires explanation. A candidate who stated that production would continue as the shutdown price was £5.50 but provided no further explanation would earn 2 marks. A complete explanation for the three marks available will clarify that it is in the firm's interests to stay in production as long as price is greater than AVC, since fixed costs still have to be paid even if the firm shuts down.

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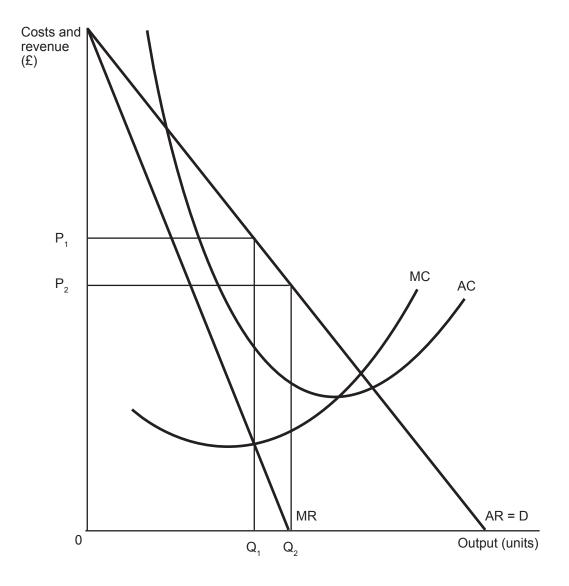
AVAILABLE MARKS

- 3 The best choice for Eazee Drug regardless of what BR Laboratories decides to do is known as the dominant strategy. In this case the dominant strategy is to invest. If the other firm does not invest then the firm will gain £60 million, even if the other firm does invest it will gain £10 million.
  - Award [2] marks for correctly identifying that the best strategy for Eazee Drug is to invest, and [2] marks for explanation. [4] The terminology "dominant strategy" is not necessary element of a fully correct

The terminology "dominant strategy" is not necessary element of a fully correct answer.

In the case of Looking Glass Windows Susan will seek to maximise profit to maximise her income. She will want the firm to produce where MR = MC giving a price of P1 and output of Q1 as shown in the diagram below. Eric will want to maximise his own income, and this will happen at the highest possible level of sales revenue. Consequently he will want the firm to produce where MR=0 giving a price of P2 and an output of Q2. Eric will want a lower price and higher output than Susan.

The key to this is understanding that the owner wants to produce at a profit maximising output as this will maximise her income whilst the sales representative will want to produce at the revenue maximising output as this will maximise his.



6

#### Level 1 ([1]-[2])

A basic response provides an answer that demonstrates:

- Basic knowledge and understanding of relevant terminology, concepts, principles and models.
- Basic application of relevant economic principles, terminology, concepts and models to the context of the question; limited use of relevant data, and diagrams where relevant, to address the issues in the question.
- Basic analysis; may lack focus.
- A low quality of written communication.

At this level the candidate would vaguely identify the differing preferences of the owner and sales representative without clear development.

#### Level 2 ([3]-[4])

A good response provides an answer that demonstrates:

- Good knowledge and understanding of relevant terminology, concepts, principles and models.
- Good application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant, data and diagrams are used reasonably to address the issues in the question.
- Good analysis in relation to the impact on economic agents; analysis may not be developed fully or may have some inaccuracy at times.
- A good quality of written communication.

At this level the candidate would develop the explanation to outline that revenue is maximised when MR=0 and profit is maximised when MR=MC.

#### Level 3 ([5]-[6])

An excellent response provides an answer that demonstrates:

- Excellent accurate knowledge and understanding of relevant terminology, concepts, principles and models.
- Excellent application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant, data and diagrams are used effectively to address the issues in the question.
- Well focused, relevant analysis used accurately and appropriately in relation to the impact on economic agents.
- An excellent quality of written communication.

At this level the candidate would identify that Susan Donnelly wants a price of P1 and output of Q1 and that Eric Magee seeks a price of P2 and output of Q2.

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[6]

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6 (a) One way to calculate the real increase in train fares is by subtracting the rate of inflation from the increase in rail fares. Over the period, train fares have increased by more than inflation as measured by the Consumer Price Index (CPI). For example at the start of 2011 CPI inflation was 4% whilst train fares increased by 6%, a real increase of 2%. By contrast, at the start of 2018 both the increases in train fares and in CPI were very similar, at just over and just under 3%, meaning there was only a small change in real train fares. As a consequence, there has been an increase in the real price of train fares over this time period.

Award [2] for identifying that rail fares have increased in real terms. Award [2] for use of data.

[4]

A candidate who states that train fares in real terms have increased would gain 1 mark; if they state this is because the increase in train fares is greater than the CPI this would gain a second mark. To obtain the next 2 marks, specific use would have to be made of the data – for example, in 2011 train fares increased by 6% but the increase in the CPI was only 4%.

#### **(b)** Answers may include:

- A natural monopoly occurs when long run average cost falls continuously over the feasible range of output. As a result, the market can only support one firm which is able to obtain the lowest possible average cost available.
- Given the cost structure of the industry it is only possible for one company to achieve the Minimum Efficient Scale.
- Natural monopoly arises due to economies of scale. In particular, the
  existence of high fixed costs can mean that a natural monopoly will
  occur. This is often found in industries which require networks such
  as railways. Here the provision of track, signalling etc will lead to high
  fixed costs. The data refers to 20,000 miles of track and 30,000 bridges,
  viaducts and tunnels.
- Competition in a natural monopoly will lead to a loss of efficiency so from the point of view of society monopoly is the most desirable outcome. it would be inefficient for competing train companies to run several railway tracks between Liverpool and Manchester for example.
- As a consequence, the operation of the railway lines and signals is the responsibility of a single company, Network Rail. This is owned by government.

#### Level 1 ([1]-[3])

A basic response provides an answer that demonstrates:

- Basic knowledge and understanding of relevant terminology, concepts, principles and models.
- Basic application of relevant economic principles, terminology, concepts and models to the context of the question; limited use of relevant data, and diagrams where relevant, to address the issues in the question.
- Basic analysis; may lack focus.

At this level a candidate would show some understanding of the idea of a natural monopoly, but the explanation would be on a superficial level. Some of the data may be reproduced to support this.

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#### Level 2 ([4]-[6])

A good response provides an answer that demonstrates:

- Good knowledge and understanding of relevant terminology, concepts, principles and models.
- Good application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant, data and diagrams are used reasonably to address the issues in the question.
- Good analysis in relation to the impact on economic agents; analysis may not be developed fully or may have some inaccuracy at times.
- A good quality of written communication.

At this level a candidate would show good understanding of a natural monopoly and the factors which give rise to it. Examples might be taken from the data, or the candidate's own knowledge, and developed. The candidate might draw a diagram to illustrate a natural monopoly; however, the diagram may contain errors or lack accompanying explanation. There will be analysis of a natural monopoly – for example, the constantly falling LRAC means that it is only feasible for one firm to operate in the industry.

#### Level 3 ([7]-[9])

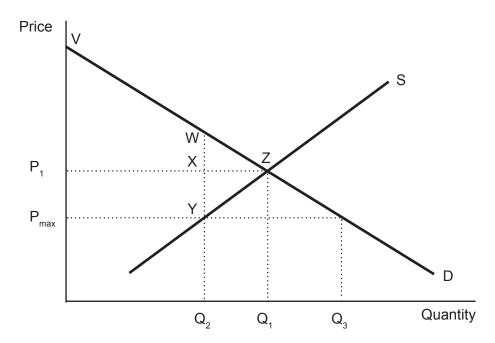
An excellent response provides an answer that demonstrates:

- Excellent accurate knowledge and understanding of relevant terminology, concepts, principles and models.
- Excellent application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant, data and diagrams are used effectively to address the issues in the question.
- Excellent, relevant analysis used accurately and appropriately in relation to the impact on economic agents.
- An excellent quality of written communication. [9] At this level a candidate would show excellent understanding of a natural monopoly. Relevant examples might be used and a clearly labelled and explained diagram could support this. There would be a well-developed

analysis of why a natural monopoly exists – for example, high fixed costs as in the case of a rail network would require the firm to produce a high level of output to achieve a low average cost.

9

- A maximum price would prevent the train operating companies from raising their fares above a certain level. To be effective the maximum price would have to be below the market equilibrium. A maximum price above this level would have no impact on the market.
- In the diagram below the maximum price would lead to quantity supplied falling to Q2 and quantity demanded rising to Q3. There could be a shortage of train journeys.



- A maximum price would boost consumer surplus increasing overall consumer welfare. However, some consumers will no longer have access to train services.
- There is a welfare loss of WZY.
- The increase in consumer welfare is shown by the rectangle P<sub>1</sub>XYP<sub>max</sub>.
- A maximum price would mean less revenue for the rail companies who
  are using it to fund investment. As government subsidy is also falling
  this would mean the companies could not afford that investment. In
  the long run this could lead to inefficiency and a poorer quality service
  which would disadvantage consumers.
- A maximum price could distort the operation of the market generating inefficiency not only in the rail market but possibly other sectors of the economy.
- As the train operating companies have price setting power they may be setting a price above free market equilibrium, in this case a maximum price might restore price to the free market equilibrium level.
- The exact impact of the maximum price would depend on a range of factors, including the difference between the original and maximum price, price elasticity of demand, price elasticity of supply.
- There will be a fall in profits of trains operating companies.
- There may be a reduction in services.
- Train operators are likely to investigate cost-saving measures, which may include redundancies.

#### Level 1 ([1]-[4])

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A basic response provides an answer that demonstrates:

Basic knowledge and understanding of relevant terminology, concepts,

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- principles and models.
- Basic application of relevant economic principles, terminology, concepts and models to the context of the question; some limited use of data and, where relevant, diagrams in relation to the context of the question.
- Basic analysis; may lack focus.
- Basic evaluation; may lack focus.
- A low quality of written communication.

At this level a candidate would show some understanding of how a maximum price might work. However, the answer would lack detailed knowledge or analysis and might fall back on simple assertions.

#### Level 2 ([5]-[8])

A good response provides an answer that demonstrates:

- Good knowledge and understanding of relevant terminology, concepts, principles and models.
- Good application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant some reasonable use of data and diagrams in relation to the context of the question.
- Good analysis in relation to the impact on economic agents; analysis may not be developed fully or may have some inaccuracy at times.
- Good evaluation in relation to the impact on economic agents; evaluation may not be developed fully or may have inaccuracies at times.
- A good quality of written communication.

At this level a candidate would show good understanding of how a maximum price might work. This could be supported with a diagram illustrating the impact of a maximum price. However, the diagrams may contain errors or lack accompanying explanation and would not be fully developed. There would be some analysis and evaluation for example a maximum price would lower the fares consumers have to pay but might lead to a reduction in services.

#### Level 3 ([9]-[12])

An excellent response provides an answer that demonstrates:

- Excellent accurate knowledge and understanding of relevant terminology, concepts, principles and models.
- Excellent application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant data and diagrams are used effectively to address the issues in the question.
- Well focused, relevant analysis used accurately and appropriately in relation to the impact on economic agents.
- Well focused, relevant evaluation used accurately and appropriately in relation to the impact on economic agents.
- An excellent quality of written communication.

At this level a candidate would show an excellent understanding of the impact of a maximum price. There would be a good use of appropriate diagram which is properly labelled and explained. The diagram might be developed to illustrate impact on community surplus. There would be clear analysis and relevant evaluation. For example, a maximum price would reduce the train companies' revenue and so, in order to increase profit, the companies would have to reduce their costs by becoming more efficient though this could lead to the loss of jobs. Other relevant examples could be used.

All other valid responses will be given credit.

[12]

- Reference to the problems faced by the railway network at present including: consumer unhappiness; fares increasing in real terms; lack of investment in services to match increase in passenger numbers; subsidy paid by government.
- Discussion of the fragmentation of the service into the train operating companies (TOCs) and Network Rail. The problems this may give rise to such as co-ordination problems, e.g. the new timetable; problems of accountability.
- A single unified rail company might benefit from economies of scale.
   Lower costs might be gained from larger orders for locomotives and rolling stock. Advertising and ticketing costs might be lower.
- The fact that the East Coast mainline has been inefficient in private ownership and the government has had to step in on 2 occasions to take it into public ownership.
- A recognition that railway services in other countries are run as part of the state sector, e.g. SNCF in France, larnród Eireann in the Republic of Ireland.
- A single railway company would allow for greater co-ordination between the different parts of the network improving efficiency and providing greater customer satisfaction.
- The government is already paying a subsidy to the rail companies, nationalisation would allow for greater accountability in the spending of that money.
- A nationalised rail company would be able to fund its investment through government borrowing thus benefitting from lower rates of interest and possibly leading to a higher level of investment.
- The government may have to pay compensation to the shareholders of the TOCs. This could lead to an opportunity cost as the money could have been spent elsewhere; alternatively, the government may have to increase taxes or borrowing. (This could be avoided by the government simply taking over the TOC services as their franchise lapses).
- A nationalised company would not have the profit motive, and this could remove incentives for efficiency.
- Political pressure to keep fares down might generate higher losses
  which the government would have to finance via an increased subsidy.
  This could lead to higher taxes or reduced spending elsewhere. The
  data points out that many rail users are wealthy commuters in the South
  East of England who would be subsidised by tax payers who may not
  have access to a rail service issuing guestions of equity.
- Rail nationalisation in Britain in the past did not lead to a popular or high quality service.
- A discussion of alternatives to nationalisation. A single private company could be set up and subject to government regulation. However, this could lead to exploitation of consumers. Even with a regulator, problems of regulatory capture and asymmetric information would arise.
- Government could set tougher price and quality controls for companies.
   They could enforce higher fines on companies who fail to meet high standards of service.
- The government could offer higher subsidy to the rail companies in order to keep fares low.
- The government could encourage greater competition between TOC on routes, though this could be difficult it would not be impossible.

#### Level 1 ([1]-[5])

A basic response provides an answer that demonstrates:

- Basic knowledge and understanding of relevant terminology, concepts, principles and models.
- Basic application of relevant economic principles, terminology, concepts and models to the context of the question; some limited use of data and, where relevant, diagrams in relation to the context of the question.
- Basic examination of the issues; examination may lack focus.
- Judgement(s) unsupported.
- A low quality of written communication.

At this level a candidate might have some understanding of the impact of nationalisation, but this would be on a superficial level. There might be unsupported assertions or political polemic – for example, "the railway companies are greedy"; "the state is always inefficient".

#### Level 2 ([6]-[10])

A good response provides an answer that demonstrates:

- Good knowledge and understanding of relevant terminology, concepts, principles and models.
- Good application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant some reasonable use of data and diagrams in relation to the context of the question.
- Good critical examination in relation to the impact on economic agents; examination may not be developed fully or may have some inaccuracy at times.
- Reasonably valid judgements linked to the issues in the question and partially reasoned conclusions.
- A good quality of written communication.

At this level a candidate would show a good understanding of the impact of nationalisation. Relevant data and diagrams could be used; however, these may contain errors and/or lack proper explanation. There would be some analysis and explanation – for example, nationalisation might allow for greater economies of scale in areas such as marketing or purchasing rolling stock, and this could lead to reduced costs which could be passed on to the consumer in the form of lower fares.

#### Level 3 ([11]-[15])

An excellent response provides an answer that demonstrates:

- Excellent accurate knowledge and understanding of relevant terminology, concepts, principles and models.
- Excellent application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant of data and diagrams are used effectively to address the issues in the question.
- Well focused, relevant critical examination of the issues, used accurately and appropriately in relation to the impact on economic agents.
- Well focused, relevant evaluation used accurately and appropriately in relation to the impact on economic agents.
- Informed judgements that directly address the issues in the question and reach clear conclusions built on sound critical examination.
- An excellent quality of written communication.

At this level a candidate would show an excellent understanding of the impact of nationalisation. There might be excellent use of relevant diagrams

| and data. Diagrams would be clearly drawn, correctly labelled and explained. |
|------------------------------------------------------------------------------|
| There would be clear analysis and evaluation, understanding the nuances      |
| and complexities of nationalisation. For example, the private companies      |
| would be unhappy, but the consumers might be happy if the new service        |
| were cheaper and more reliable.                                              |

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All other valid responses will be given credit.

[15]

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- A recognition that with over 25% of the market both firms have monopolies in their own markets.
- The growth of the firm may give rise to diseconomies of scale through co-ordination and communication difficulties, for example. This can lead to higher inefficiency and higher costs.
- Larger firms can have increased market power. This might lead to the firm charging higher prices and reducing output; both will disadvantage the consumer.
- Competitive firms are more likely to achieve allocative efficiency by having price equal to marginal cost. If a larger firm raises price, then allocative efficiency will decrease.
- A rise in price can redistribute economic welfare by increasing producer surplus at the expense of consumer surplus. A fall in output can lead to a deadweight loss of economic welfare.
- A larger firm may decide to try and drive other firms out of the business for example, the new firm may restrict the supply of lenses to rivals.
- If a firm becomes too large it may be unduly able to influence government policy to give it an unfair advantage.
- A larger firm may benefit from economies of scale, which will allow it to lower costs and possibly prices.
- Lower prices will lead to an increase in consumer surplus which will benefit consumers.
- If costs fall, then the firm will be able to lower prices and still make abnormal profit. The price might be lower than was the case in a more competitive market.
- A larger firm might be able to raise finance for investment more cheaply. This additional investment could allow for improved dynamic efficiency.
- A larger firm might make abnormal profit which could be invested in new capital equipment and the development of new products, further improving dynamic efficiency.
- In line with Schumpeter's theory of creative destruction, firms will have an incentive to invest to prevent rivals from developing new products or production methods which make them redundant.
- A recognition that it is not simply a case that competition is good, and monopoly is bad.
- A realisation that decisions may have to be made on a case by case basis.
- Some discussion of the public interest what if it benefits producers but not consumers? Might that, on balance, be in the public interest?
- Appropriate examples.
- Appropriate diagrams.

#### Level 1 ([1]-[7])

A basic response provides an answer that demonstrates:

- Basic knowledge and understanding of relevant terminology, concepts, principles and models.
- Basic application of relevant economic principles, terminology, concepts and models to the context of the question; some limited use of data and, where relevant, diagrams in relation to the context of the question.
- Basic analysis; may lack focus.
- Basic evaluation; may lack focus.
- A low quality of written communication.

At this level a candidate is likely to show some understanding of mergers, competition and monopoly. There may be some examples or attempts at

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diagrams, but these may be inappropriate or inaccurate. Effective analysis of how mergers would impact on various economic agents – through changes in economic efficiency or community surplus, for example – will be lacking.

#### Level 2 ([8]-[15])

A reasonable response provides an answer that demonstrates:

- Reasonable knowledge and understanding of relevant terminology, concepts, principles and models.
- Reasonable application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant some reasonable use of data and diagrams in relation to the context of the question.
- Reasonable critical examination of the issues in relation to the impact on economic agents; critical examination may not be developed fully or may have inaccuracies at times.
- Reasonably valid judgements linked to the issues in the question and partially reasoned conclusions.
- A reasonable quality of written communication.

At this level a candidate would show a reasonable knowledge of the impact of a merger. There will be some use of diagrams illustrating changes in price, output and community surplus, though these may contain inaccuracies and/or be incomplete. There will be a developed analysis of the impact of the merger – for example, the merged firm may increase price and reduce output or there may be less consumer choice. This is not an exhaustive list and other features may be analysed. There will be some limited judgement of these factors.

#### Level 3 ([16]-[23])

A good response provides an answer that demonstrates:

- Good accurate knowledge and understanding of relevant terminology, concepts, principles and models.
- Good application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant data and diagrams are used effectively to address the issues in the question.
- Relevant critical examination of the issues used accurately and appropriately in relation to the impact on economic agents.
- Informed judgements that directly address the issues in the question and reach clear conclusions built on critical examination.
- A good quality of written communication.

At this level a candidate will show a good knowledge of the impact of a merger. "Theory of the firm" diagrams and appropriate examples may be used to support this. There will be good, well developed and clearly structured analysis of the impact the merger may have, though this may contain some inaccuracies. There will also be good judgements made on some of these. The fact the merger could lead to economies of scale which would lower costs and possibly prices, or the scope to invest high profits in Research and Development, thus improving dynamic efficiency might be discussed. This is not an exhaustive list and other features may be evaluated.

#### Level 4 ([24]-[30])

An excellent response provides an answer that demonstrates:

- Comprehensive knowledge and understanding of relevant terminology, concepts, principles and models.
- Comprehensive application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant of data

and diagrams are used effectively to address the issues in the question.

- Well focused, relevant analysis used accurately and appropriately in relation to the impact on economic agents.
- Well informed judgements that directly address the issues in the question and reach clear conclusions built on analysis.
- An excellent quality of written communication.

At this level a candidate will show an excellent knowledge of the impact of a merger. There will be well focused and well developed analysis which clearly identifies the effect on the various types of economic efficiency. This will be supported with accurate and well explained diagrams. Concepts such as creative destruction and community surplus may be evaluated in detail. There will be judgements made as to the desirability of the various impacts of the merger and a nuanced understanding that different economic agents may have different views as to what the public interest is – for example, the firm's shareholders may enjoy higher profits but consumers may face higher prices and less choice. Other similar issues may be explored. The complexity of some of the issues will be recognised – for example, the firm may have more profit to invest in research and development – but why should it do that with a consequence of lower dividends? Other issues may be similarly explored.

All other valid responses will be given credit.

[30]

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- A definition of monopolistic competition including the idea that it is like perfect competition. However, firms are able to differentiate their product giving them a degree of pricing power.
- As a consequence of this, monopolistically competitive firms will face a downward sloping demand curve. They will also be profit maximisers and will produce where MR=MC.
- However, in this market structure firms can sell differentiated products. This allows for greater consumer choice.
- The freedom of entry also prevents firms from having too much price setting power, so they cannot exploit consumers.
- In monopolistic competition the price will always be greater than marginal cost so allocative efficiency cannot be achieved.
- Due to the downward sloping demand curve the firm's long run equilibrium position can never be at the lowest point on the long run average cost curve so productive efficiency cannot be achieved.
- Perfectly competitive firms produce homogeneous products, so they will
  not waste resources on packaging, branding, and so on, to differentiate
  their products. Perfectly competitive firms will always produce where P=MC
  and so they always achieve allocative efficiency. In the long run, perfectly
  competitive firms cannot make abnormal profit and so they always produce
  at the lowest point of the long run average cost curve achieving productive
  efficiency.
- Monopoly involves a single firm which has price setting power and is able to use barriers to entry to keep rival firms from entering the industry. Consumers may have to pay a higher price and quality of product and service may be poor due to lack of competition. Price will be higher than Marginal Cost so allocative efficiency will not be achieved. However, the firm may achieve economies of scale leading to greater productive efficiency than monopolistic competition; furthermore, lower costs may mean lower prices. The profit earned by the firm may be reinvested leading to greater dynamic efficiency.
- Oligopoly involves a small number of firms in competition. Price will be stable, and firms will engage in non-price competition which may lead to higher quality of goods. In order to compete there may also be more investment in Research and Development, leading to greater dynamic efficiency. However, firms in oligopoly may collude to restrict output and raise price, thereby disadvantaging consumers.
- Appropriate examples.
- Appropriate diagrams.

#### Level 1 ([1]–[7])

A basic response provides an answer that demonstrates:

- Basic knowledge and understanding of relevant terminology, concepts, principles and models.
- Basic application of relevant economic principles, terminology, concepts and models to the context of the question; some limited use of data and, where relevant, diagrams in relation to the context of the question.
- Basic analysis; may lack focus.
- Basic evaluation; may lack focus.
- A low quality of written communication.

At this level a candidate is likely to show some understanding of monopolistic competition. There may be some examples or attempts at diagrams, but these will contain inaccuracies. Analysis of the key features of monopolistic competition will be lacking.

18

#### Level 2 ([8]-[15])

A reasonable response provides an answer that demonstrates:

- Reasonable knowledge and understanding of relevant terminology, concepts, principles and models.
- Reasonable application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant some reasonable use of data and diagrams in relation to the context of the question.
- Reasonable critical examination of the issues in relation to the impact on economic agents; critical examination may not be developed fully or may have inaccuracies at times.
- Reasonably valid judgements linked to the issues in the question and partially reasoned conclusions.
- A reasonable quality of written communication.

At this level a candidate would show reasonable knowledge of the theory of monopolistic competition. There will be some use of diagrams though these may contain inaccuracies and/or be incomplete. There will be a developed analysis of the features of monopolistic competition regarding differentiated products, the long run equilibrium and the impact on profit and efficiency. This is not an exhaustive list and other features may be analysed. There will be some limited comparison of monopolistic competition with other forms of market structure.

#### Level 3 ([16]-[23])

A good response provides an answer that demonstrates:

- Good accurate knowledge and understanding of relevant terminology, concepts, principles and models.
- Good application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant data and diagrams are used effectively to address the issues in the question.
- Relevant critical examination of the issues used accurately and appropriately in relation to the impact on economic agents.
- Informed judgements that directly address the issues in the question and reach clear conclusions built on critical examination.
- A good quality of written communication.

At this level a candidate will show good knowledge of monopolistic competition and how it compares to other forms of market structure. "Theory of the firm" diagrams and appropriate examples may be used to support this. There will be good well developed and clearly structured analysis of a monopolistically competitive firm and a discussion of how it compares with other forms of market structure, though this may contain some inaccuracies. There will also be good judgements made on some of these. Ideas that monopolistically competitive firms cannot achieve productive efficiency, or earn supernormal profit, in the long run will probably be discussed. This is not an exhaustive list and other features may be evaluated.

#### Level 4 ([24]-[30])

An excellent response provides an answer that demonstrates:

- Comprehensive knowledge and understanding of relevant terminology, concepts, principles and models.
- Comprehensive application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant of data and diagrams are used effectively to address the issues in the question.
- Well focused, relevant analysis used accurately and appropriately in relation to the impact on economic agents.

 Well informed judgements that directly address the issues in the question and reach clear conclusions built on analysis.

• An excellent quality of written communication.

At this level a candidate will show excellent knowledge of monopolistic competition and how it compares with other types of market structure. There will be well focused and well developed analysis of the features of monopolistic competition. This will be supported with accurate and well explained diagrams. Complexity of some of the issues will be recognised. Candidates may speculate as to how well informed consumers really are about firms' costs and profit levels, and for example, question whether consumers might prefer it to perfect competition even though it is less efficient. There will be judgements made as to the benefits of monopolistic competition compared to other types of market structure – for example, consumers will have the benefit of differentiated products, although firms may not grow large enough to achieve economies of scale. Other issues may be similarly explored.

All other valid responses will be given credit.

[30]

30

AVAILABLE MARKS

Total

90