



Rewarding Learning

ADVANCED
General Certificate of Education
2023

Economics

Assessment Unit A2 1

assessing

Business Economics

[AEC11]

TUESDAY 23 MAY, MORNING

MARK
SCHEME

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.

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.

Section A

**AVAILABLE
MARKS**

- 1 (a) For calculation of fixed costs as £1000 [2]
For correct methodology but error in calculation or presentation [1] [2]
- (b) For calculation of average variable cost as £135
(1540 – 1000 = 540/4 = £135) [2]
For correct methodology but error in calculation or presentation [1] [2]
- (c) For identification of 6 tonnes as the productively efficient level of output. [2]

Quantity of Apples (tonnes)	Total cost (£)	Average Cost (£)
0	1000	
1	1150	1150
2	1300	650
3	1440	480
4	1540	385
5	1690	338
6	1940	323.33
7	2350	335.71
8	2800	350

For correct methodology but error in calculation or presentation [1]

6

- 2 Price competition occurs whenever firms use price as the primary method of attracting or retaining customers. Sports Direct compete primarily through price competition as they offer last season’s lines at discounted prices. Non-price competition refers to all form of competition other than through the price mechanism. JD Sports competes primarily via non price competition through offering the most recent exclusive lines at premium prices.

For explanation of difference between price competition and non-price competition. [2]

For appropriate examples in each case. [2]

[4]

4

- 3 (a) For calculation of the size of the UK folding bike market as £85.53 million.
(32.5/38 × 100) [2]
For correct methodology but error in calculation or presentation. [1] [2]
- (b) The fact that sales revenue has increased by 15% while the volume of sales has remained flat means that Brompton Bicycle must have increased the selling price of its folding bikes by around 15% on average.

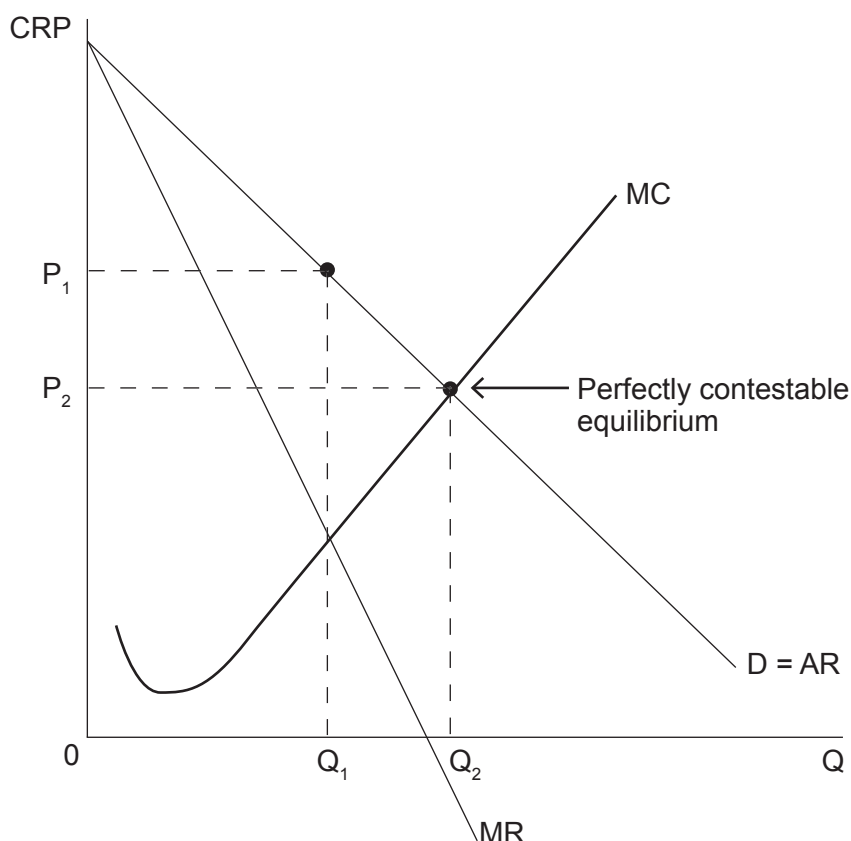
For comprehensive explanation. [2]

For partial explanation. [1]

[2]

4

- 4 Under the original contractual arrangement Delicious Dinners had significant monopoly power and as such it is highly likely that they would have set price and output at the profit maximising level (Q_1P_1) as shown in the diagram below. The lack of competitive pressure is also likely to have led to a reduction in the quality of service provided. The new strategy, whereby the contract is reviewed and tenders invited every year is likely to result in the firm pricing down the demand curve which results in lower prices and higher output levels. It is also likely that the quality of service would increase as the market has become significantly more contestable. While the new strategy may not result in the firm producing at the perfectly contestable output and price level it would certainly move the firm closer to that point.



Issues and areas for analysis include:

- Definition/explanation of monopoly.
- Definition/explanation of a contestable market.
- Discussion of impact of the new strategy on price and output.
- Discussion of impact of the new strategy on quality.
- Appropriate diagrams.
- Appropriate examples.

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.

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.

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.

[6]

Section A

**AVAILABLE
MARKS**

6

20

Section B

**AVAILABLE
MARKS**

- 5 (a) The S&P500 has increased by 83% over the period shown. The increase in Facebook’s share price has been almost twice this at 163%, while the increase in Apple’s, Amazon’s and Netflix’s share price has been more than 4 times the increase of the S&P500 at 360%, 375% and 346% respectively. The average increase of the FAANGs has been 274% which is more than 3 times more than the S&P500.

[2] for comparison of trends in absolute terms.

[2] for appropriate manipulation of data.

[4]

- (b) Source 2 identifies a number of reasons why firms would wish to grow rapidly through acquisition and takeover.

These include:

- To bring essential ancillary and auxiliary services in house.
- To increase market share.
- To reduce the threat of competition and increase market power – Facebook’s acquisition of rival Instagram.
- To avail of economies of scale and synergies.
- To acquire talented employees – Facebook’s \$16bn acquisition of WhatsApp was reportedly more about acquiring their talented staff than about acquiring a profitable company.

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.
- A low quality of written communication.

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.

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]

(c) Personalised pricing as used by the large online retailers is an example of what economists refer to as perfect (or first degree) price discrimination. It occurs when a firm uses the information mined from a customer's online presence to charge that consumer the maximum price that he or she is willing to pay for each unit. If successful, the firm can extract the entire consumer surplus and turn it into extra revenue or producer surplus. This increase in revenue should in turn allow the firm to gain a greater level of profit.

For those consumers who end up paying a higher price this form of price discrimination clearly reduces their welfare. However, some consumers may actually be priced into the market if their search history leads to them being offered a lower price.

It could also be argued that since the firm can sell more goods by discriminating, it will have more scope to exploit economies of scale. These economies of scale would lead to lower costs for the firm and therefore potentially lower prices for all customers.

Finally, some economists point out that much of the criticism of price discrimination is based on static analysis. They argue that because firms are able to earn additional profits from price discrimination, they may reinvest these additional profits in research and development which in turn can lead to product and process innovation and dynamic efficiency.

Areas for analysis and discussion include:

- Definition or explanation of price discrimination.
- Reference to conditions necessary for price discrimination.
- Reference to different types of price discrimination – 1st, 2nd and 3rd degree.
- Impact of price discrimination on consumer and producer surplus.
- Impact of price discrimination on profits.
- Impact of price discrimination on dynamic efficiency.
- Impact of price discrimination on economies of scale.
- Appropriate diagrams.
- Appropriate examples.

Level 1 ([1]–[4])

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 diagrams where relevant, in relation to the context of the question.
- Basic analysis and evaluation however this may lack focus.
- Judgement(s) unsupported.
- A low quality of written communication.

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 and evaluation in relation to the impact on economic agents; however, this may not be developed fully or may have inaccuracies at times.
- Reasonable judgement(s) building on analysis.
- A good quality of written communication.

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 and 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 analysis.
- An excellent quality of written communication. [12]

- (d) Competition authorities (in the EU and US) have a range of policies available to them when attempting to deal with market dominance and the abuse of market power. Regulators in the US in particular have a long history of breaking firms up if they feel they have become too powerful. *They broke up Standard Oil in 1911, AT&T in 1982, and went after Microsoft in the 1990s, though in the case of Microsoft they were ultimately unsuccessful.* The argument in favor of breaking up large firms is that it reduces their market power and creates greater competition in the market which in turn should benefit consumers through lower prices and improved quality. A particular concern around Big Tech is the amount of data these firms hold on their users and how this data is used to generate income. Breaking these firms up might reduce the power these big social media giants have to influence society in general.

Those opposed to the forced break-up of the FAANGS argue that it stems from an irrational dislike of large business. They argue that breaking up large firms can actually reduce efficiency and lead to higher prices if the firm is a natural monopoly. They also argue that large firms are often more innovative and hence breaking them up might lead to a loss in innovation. They also argue that breaking these firms up leaves them vulnerable to competition from foreign firms and could ultimately cost jobs in the US and the EU.

Areas for analysis and discussion include:

- Impact of breaking firms up on consumer welfare – price, quality community surplus.
- Impact of breaking firms up on efficiency – productive, allocative, dynamic.

- Impact of breaking firms up on profits and resultant dividend payments and tax revenues.
- Impact of breaking firms up on jobs and growth.
- Reference to the fact that the competition authorities allowed these firms to grow large by permitting acquisitions – only to now force their break up.
- Difficulty in actually breaking firms up and keeping their operations separate.
- Reference to the costs and benefits of alternative policies to deal with market dominance.
 - Fines for anticompetitive behaviour.
 - Windfall taxation.
 - Encouraging competition through forcing firms to open their platforms up to third party users.
 - Prohibiting growth by not allowing acquisitions in the first instance.
 - Regulation and price controls.
- Appropriate examples.
- Appropriate diagrams.

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 diagrams where relevant, in relation to the context of the question.
- Basic analysis and evaluation; this may lack focus.
- Judgement(s) unsupported.
- A low quality of written communication.

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 analysis and evaluation in relation to the impact on economic agents; however this may not be developed fully or may have inaccuracies at times.
- Reasonable judgement(s) building on analysis.
- A good quality of written communication.

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, data and diagrams are used effectively to address the issues in the question.
- Well focused, relevant analysis and 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 analysis.
- An excellent quality of written communication.

[15]

Section B

AVAILABLE MARKS
40
40

- 6 Like all economic models the model of contestable markets requires the existence of a number of highly abstract and unrealistic assumptions.

Clearly these assumptions, particularly the assumption of perfect knowledge and no sunk costs, are unlikely to be replicated in reality. Indeed, Baumol himself stated “perfectly contestable markets do not populate the world of reality any more than perfectly competitive markets do”.

As a result, some have argued that the model is of little benefit to modern economists, businesses or regulators since it is no more realistic than the traditional models of firms’ behaviour.

These economists argue that the other models in the traditional theory of the firm are more realistic and therefore they are of greater use in predicting the behaviour of modern firms. They point particularly to modern theories of oligopoly which take account of the potential for collusive behaviour as models of best practice.

Critics of the contestable markets model also argue that the rationale it provides for deregulation is fundamentally flawed and point to the consolidation and inefficiency that can occur when markets are deregulated in the mistaken belief that contestability will lead to efficient outcomes.

However other economists argue that the theory of contestable markets provides a useful framework for analysing the behaviour of firms in the real world since it does not require specific assumptions with regard to product homogeneity nor the number of firms in the industry as is the case in the traditional theories of the firm. They argue that globalisation, the deregulation of markets, and the pace of technological change have combined to make markets more contestable. They point to the successful deregulation of telecommunication and energy markets as clear evidence that greater contestability brings benefits to consumers. Indeed, it is also clear from recent decisions by the Competition and Markets Authority that the theory of contestable markets continues to play a significant role in their decision making.

Areas for analysis and discussion include:

- discussion of the need for simplifying assumptions in all models.
- discussion of unrealistic assumptions of contestable markets.
 - Freedom of entry and exit
 - Absence of collusion
 - Perfect knowledge
 - Absence of externalities
- discussion of recent developments in the theory of the firm and particularly in the model of oligopoly.
- discussion of the uncompetitive behaviour of markets believed to be contestable.
- discussion of unrealistic assumptions of the other models in the traditional theory of the firm.
- discussion of external factors making markets more contestable – technological advances, globalisation.
- discussion of economic models being used only as a framework or benchmark.

- discussion of how these models are likely to be used as a tool for decision making in modern firms.
- appropriate diagrams.
- appropriate examples.

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 diagrams where relevant, in relation to the context of the question.
- Basic analysis and evaluation; this may lack focus.
- Judgement(s) unsupported.
- A low quality of written communication.

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; some reasonable use of data, and diagrams where relevant, in relation to the context of the question.
- Reasonable analysis and evaluation in relation to the impact on economic agents; however, this may not be developed fully or may have inaccuracies at times.
- Reasonable judgement(s) building on analysis.
- A reasonable quality of written communication.

Level 3 ([16]–[23])

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; some reasonable use of data, and diagrams where relevant, in relation to the context of the question.
- Good analysis and evaluation in relation to the impact on economic agents; however, this may not be developed fully or may have inaccuracies at times.
- Reasonable judgement(s) building on analysis.
- A good quality of written communication.

Level 4 ([24]–[30])

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 and 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 analysis.
- An excellent quality of written communication.

[30]

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- 7 Traditional economic theory suggests that highly competitive industries are more likely to be economically efficient than those where there is less competition. Theory suggests that intense competition would force firms to charge a price which is equal to their marginal cost of production and hence allocative efficiency would occur. This pressure on price would in turn force firms to minimise the average cost of each unit produced and so productive efficiency would also be achieved.

However, it could be argued that firms which operate in less competitive markets are more likely to invest in research and development and therefore these industries are more likely to achieve dynamic efficiency.

It could also be argued that firms which face little competition can grow large enough to avail of economies of scale which would reduce average costs and so lead to greater productive efficiency.

In some industries where the fixed costs of production are high, it may only be possible for a few firms to reach the scale required to produce efficiently.

Finally, it has been suggested that it is not the actual level of competition a firm faces which forces it to be efficient but the level of potential competition.

Issues for discussion and evaluation include:

- Explanation of different measures of efficiency – allocative, productive, dynamic, etc.
- Comparison of monopoly/oligopoly with perfect competition/monopolistic competition.
- Reference to minimum efficient scale of production.
- Reference to natural monopoly/oligopoly.
- Reference to economies of scale.
- Reference to contestability.
- Reference to measures of concentration.
- 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 diagrams where relevant, in relation to the context of the question.
- Basic analysis and evaluation; this may lack focus.
- Judgement(s) unsupported.
- A low quality of written communication.

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; some reasonable use of data, and diagrams where relevant, in relation to the context of the question.

- Reasonable analysis and evaluation in relation to the impact on economic agents; however, this may not be developed fully or may have inaccuracies at times.
- Reasonable judgement(s) building on analysis.
- A reasonable quality of written communication.

Level 3 ([16]–[23])

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; some reasonable use of data, and diagrams where relevant, in relation to the context of the question.
- Good analysis and evaluation in relation to the impact on economic agents; however, this may not be developed fully or may have inaccuracies at times.
- Reasonable judgement(s) building on analysis.
- A good quality of written communication.

Level 4 ([24]–[30])

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 and 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 analysis.
- An excellent quality of written communication. [30]

Section C

Total

**AVAILABLE
MARKS**

30

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90