

**OCR**

Oxford Cambridge and RSA

**...day June 20XX – Morning/Afternoon**

**A Level in Economics**

**H460/01 Microeconomics**

**SAMPLE MARK SCHEME**

**Duration: 2 hours**

**MAXIMUM MARK 80**

**This document consists of 24 pages**

**MARKING INSTRUCTIONS****PREPARATION FOR MARKING  
SCORIS**

1. Make sure that you have accessed and completed the relevant training packages for on-screen marking: *scoris assessor Online Training*; *OCR Essential Guide to Marking*.
2. Make sure that you have read and understood the mark scheme and the question paper for this unit. These are posted on the RM Cambridge Assessment Support Portal <http://www.rm.com/support/ca>
3. Log-in to scoris and mark the **required number** of practice responses (“scripts”) and the **required number** of standardisation responses.

YOU MUST MARK 10 PRACTICE AND 10 STANDARDISATION RESPONSES BEFORE YOU CAN BE APPROVED TO MARK LIVE SCRIPTS.

**TRADITIONAL**

Before the Standardisation meeting you must mark at least 10 scripts from several centres. For this preliminary marking you should use **pencil** and follow the **mark scheme**. Bring these **marked scripts** to the meeting.

**MARKING**

1. Mark strictly to the mark scheme.
2. Marks awarded must relate directly to the marking criteria.
3. The schedule of dates is very important. It is essential that you meet the scoris 50% and 100% (traditional 50% Batch 1 and 100% Batch 2) deadlines. If you experience problems, you must contact your Team Leader (Supervisor) without delay.
4. If you are in any doubt about applying the mark scheme, consult your Team Leader by telephone, email or via the scoris messaging system.

5. Work crossed out:
- where a candidate crosses out an answer and provides an alternative response, the crossed out response is not marked and gains no marks
  - if a candidate crosses out an answer to a whole question and makes no second attempt, and if the inclusion of the answer does not cause a rubric infringement, the assessor should attempt to mark the crossed out answer and award marks appropriately.
6. Always check the pages (and additional objects if present) at the end of the response in case any answers have been continued there. If the candidate has continued an answer there then add a tick to confirm that the work has been seen.
7. There is a NR (No Response) option. Award NR (No Response)
- if there is nothing written at all in the answer space
  - OR if there is a comment which does not in any way relate to the question (e.g. 'can't do', 'don't know')
  - OR if there is a mark (e.g. a dash, a question mark) which isn't an attempt at the question.
- Note: Award 0 marks – for an attempt that earns no credit (including copying out the question).
8. The scoris **comments box** is used by your Team Leader to explain the marking of the practice responses. Please refer to these comments when checking your practice responses. **Do not use the comments box for any other reason.**  
If you have any questions or comments for your Team Leader, use the phone, the scoris messaging system, or e-mail.
9. Assistant Examiners will send a brief report on the performance of candidates to their Team Leader (Supervisor) via email by the end of the marking period. The report should contain notes on particular strengths displayed as well as common errors or weaknesses. Constructive criticism of the question paper/mark scheme is also appreciated.
10. For answers marked by levels of response:
- To determine the level** – start at the highest level and work down until you reach the level that matches the answer
  - To determine the mark within the level**, consider the following:

| Descriptor  | Award mark  |
|---|---|
| On the borderline of this level and the one below     | At bottom of level  |
| Just enough achievement on balance for this level     | Above bottom and either below middle or at middle of level (depending on number of marks available)       |
| Meets the criteria but with some slight inconsistency | Above middle and either below top of level or at middle of level (depending on number of marks available) |
| Consistently meets the criteria for this level        | At top of level   |

## 11. Annotations

| Annotation | Meaning |
|------------|---------|
|            |         |
|            |         |
|            |         |
|            |         |

## 12. Subject-specific Marking Instructions

**INTRODUCTION**

Your first task as an Examiner is to become thoroughly familiar with the material on which the examination depends. This material includes:

- the specification, especially the assessment objectives
- the question paper and its rubrics
- the mark scheme.

You should ensure that you have copies of these materials.

You should ensure also that you are familiar with the administrative procedures related to the marking process. These are set out in the OCR booklet **Instructions for Examiners**. If you are examining for the first time, please read carefully **Appendix 5 Introduction to Script Marking: Notes for New Examiners**.

Please ask for help or guidance whenever you need it. Your first point of contact is your Team Leader.

**Rubric Infringement**

Candidates may infringe the rubric in the following way:

- answering two questions from Section B and Section C.

If a candidate has written two answers for Section B and Section C, mark both answers and award the highest mark achieved.

## Levels of response – Level descriptors

|                   | <b>Knowledge and understanding/<br/>Application</b>  | <b>Analysis</b>   | <b>Evaluation</b>  |
|-------------------|--|---|--|
| <b>Strong</b>     |  | An explanation of causes and consequences, fully developing the links in the chain of argument.   | A conclusion is drawn weighing up both sides, and reaches a supported judgement.               |
| <b>Good</b>       | Precision in the use of the terms in the question and applied in a focused way to the context of the question. | An explanation of causes and consequences, developing most of the links in the chain of argument. | A conclusion is drawn weighing up both sides, but without reaching a supported judgement.      |
| <b>Reasonable</b> | Awareness of the meaning of the terms in the question and applied to the context of the question.              | An explanation of causes and consequences, which omit some key links in the chain of argument.    | Some attempt to come to a conclusion, which shows some recognition of the influencing factors. |
| <b>Limited</b>    | Awareness of the meaning of the terms in the question.   | Simple statement(s) of cause and consequence.   | An unsupported assertion.  |

**USING THE MARK SCHEME**

Please study this Mark Scheme carefully. The Mark Scheme is an integral part of the process that begins with the setting of the question paper and ends with the awarding of grades. Question papers and Mark Schemes are developed in association with each other so that issues of differentiation and positive achievement can be addressed from the very start.

This Mark Scheme is a working document; it is not exhaustive; it does not provide ‘correct’ answers. The Mark Scheme can only provide ‘best guesses’ about how the question will work out, and it is subject to revision after we have looked at a wide range of scripts.

The Examiners’ Standardisation Meeting will ensure that the Mark Scheme covers the range of candidates’ responses to the questions, and that all Examiners understand and apply the Mark Scheme in the same way. The Mark Scheme will be discussed and amended at the meeting, and administrative procedures will be confirmed. Co-ordination scripts will be issued at the meeting to exemplify aspects of

candidates' responses and achievements; the co-ordination scripts then become part of this Mark Scheme.

Before the Standardisation Meeting, you should read and mark in pencil a number of scripts, in order to gain an impression of the range of responses and achievement that may be expected.

In your marking, you will encounter valid responses which are not covered by the Mark Scheme: these responses must be credited. You will encounter answers which fall outside the 'target range' of Bands for the paper which you are marking. Please mark these answers according to the marking criteria.

Please read carefully all the scripts in your allocation and make every effort to look positively for achievement throughout the ability range. Always be prepared to use the full range of marks.

#### **INSTRUCTIONS TO EXAMINERS:**

##### **A INDIVIDUAL ANSWERS**

- 1 The indicative content indicates the expected parameters for candidates' answers, but be prepared to recognise and credit unexpected approaches where they show relevance.
- 2 Using 'best-fit', decide first which set of BAND DESCRIPTORS best describes the overall quality of the answer. Once the band is located, adjust the mark concentrating on features of the answer which make it stronger or weaker following the guidelines for refinement.
  - **Highest mark:** If clear evidence of all the qualities in the band descriptors is shown, the HIGHEST Mark should be awarded.
  - **Lowest mark:** If the answer shows the candidate to be borderline (i.e. they have achieved all the qualities of the bands below and show limited evidence of meeting the criteria of the band in question) the LOWEST mark should be awarded.
  - **Middle mark:** This mark should be used for candidates who are secure in the band. They are not 'borderline' but they have only achieved some of the qualities in the band descriptors.
- 3 Be prepared to use the full range of marks. Do not reserve (e.g.) high Band 6 marks 'in case' something turns up of a quality you have not yet seen. If an answer gives clear evidence of the qualities described in the band descriptors, reward appropriately.

**B TOTAL MARKS**

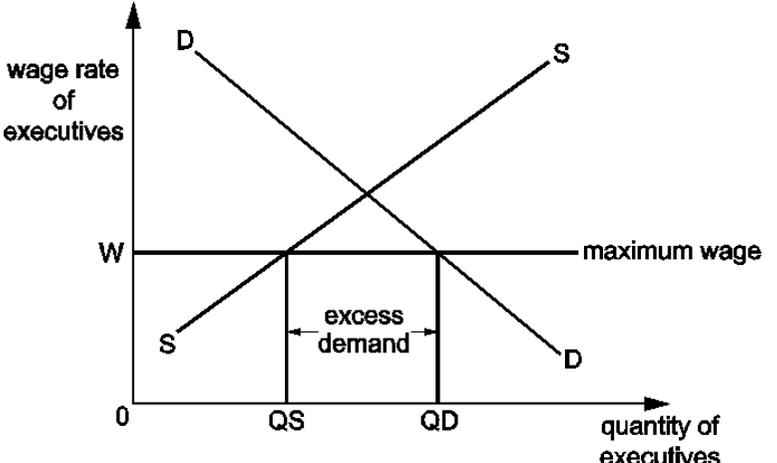
- 1 Transfer the mark awarded to the front of the script.
- 2 The maximum mark for the paper is **80**.
- 3 The quality of the extended response is assessed on the parts of the question paper which are identified with the use of an asterisk (\*). The assessment of this skill is embedded within each of the levels of response and it must be considered when determining the mark to be awarded within the appropriate level.

| Question |     | Answer  | Marks                            | Guidance   |
|----------|-----|---|----------------------------------|--|
| 1        | (a) | One mark for the identification of a piece of evidence and one mark for an explanation of why it is an example of vertical integration.   | <b>2</b><br>(AO2 x 2)            | The stimulus material refers to: <ul style="list-style-type: none"> <li>merger of firms producing cement and ready-mix concrete</li> <li>a cement firm buying a ready-mix concrete firm or a ready-mix concrete firm buying a cement firm</li> <li>a quarry buying a factory or a factory buying a quarry</li> </ul> Each is an example of vertical integration forwards/backwards and ensures either a source of supply or a market for the product(s)  |
| 1        | (b) | Up to four marks:<br><br>One mark for recognising it was more concentrated.<br><br>One mark for explaining this is because the three firm market concentration ratio was higher/three largest firms account for greater % share of total sales.<br><br>One mark for supporting evidence on the cement market.<br><br>One mark for supporting evidence on the ready-mix concrete industry. | <b>4</b><br>(AO1 x 2<br>AO2 x 2) | Supporting evidence: <ul style="list-style-type: none"> <li>three firm market concentration ratio in cement was 78.95% (6m/7.6m). Accept 79%</li> <li>three firm market concentration ratio in ready-mix concrete was 54% (19% + 18% + 17%).</li> </ul>  |
| 1        | (c) | Up to four marks: up to two marks for each of Figs 2 and 3.<br><br>Up to two marks for explanation in relation to Fig. 2.<br><br>Up to two marks for explanation in relation to Fig. 3.   | <b>4</b><br>(AO1 x 2<br>AO2 x 2) | Explanation of Fig. 2: <ul style="list-style-type: none"> <li>it shows the prices of cement rising although costs were relatively stable</li> <li>profits were increasing as the gap between average revenue and average cost was rising numerically, e.g. profit per unit averaging approximately £14 in 2007 and 2008 but approximately £25 in 2009–10</li> </ul> Explanation of Fig. 3: <ul style="list-style-type: none"> <li>it shows profit margins fell in 2009 and 2010</li> <li>losses were experienced in June 09–July 10</li> </ul> |

| Question |     | Answer  | Marks   | Guidance   |
|----------|-----|---|---|--|
|          |     |   |   | <ul style="list-style-type: none"> <li>higher profit was earned in 2008 than in 2007.</li> </ul> <p>Accept candidate use of references to normal and supernormal profit for both Figs 2 and 3.</p>   |
| 1        | (d) | <p><b>Level 2 (5–8 marks)</b><br/> <b>Good</b> knowledge and understanding of economies of scale in relation to specialisation in the context of a narrow range of products.</p> <p><b>Strong</b> analysis of the link between the range of products produced and the ability to take advantage of economies of scale.</p> <p><b>Strong</b> evaluation including a supported judgement of whether or not firms which specialise in a narrow range of products can take advantage of economies of scale.</p> <p><b>Level 1 (1–4 marks)</b><br/> <b>Reasonable</b> knowledge and understanding of economies of scale.</p> <p><b>Reasonable</b> analysis of the link between the range of products produced and the ability to take advantage of economies of scale.</p> <p><b>Limited or no</b> evaluation of whether or not firms which specialise in a narrow range of products can take advantage of economies of scale.</p> <p><b>0 marks</b> no response or no response worthy of credit.</p> <p><b>Note:</b> although a diagram is <b>not</b> required, it may enhance the quality of the answer and should be rewarded at the appropriate level.</p> | <p><b>8</b></p> <p>(AO1 x 1<br/> AO2 x 1<br/> AO3 x 3<br/> AO4 x 3)</p> | <p><i>Indicative content</i></p> <p>Those internal economies dependent on specialisation, e.g.:</p> <ul style="list-style-type: none"> <li>buying/purchasing economies – discounts on the purchase of raw materials, e.g. cement</li> <li>technical economies – larger, more efficient and specialised equipment</li> <li>selling economies – e.g. transport in specialised vehicles</li> <li>division of labour economies – production workers specialising in particular parts of the production process</li> <li>research and development economies – developing new and improved versions of the product.</li> </ul> <p>External economies of scale dependent on specialisation, e.g.:</p> <ul style="list-style-type: none"> <li>specialist courses for workers put on by colleges and universities</li> <li>disintegration – firms specialising in a particular process</li> <li>ancillary industries providing services and raw materials.</li> </ul> <p>Those internal economies not dependent on specialisation, e.g.:</p> <ul style="list-style-type: none"> <li>risk bearing – depends on producing a range of products in order to spread risks</li> <li>financial economies – borrowing more easily and at cheaper rates</li> <li>managerial economies – some specialist staff, such as accountants, work across a range of products</li> <li>advertising economies – advertising the firm's name across a range of products</li> </ul> |

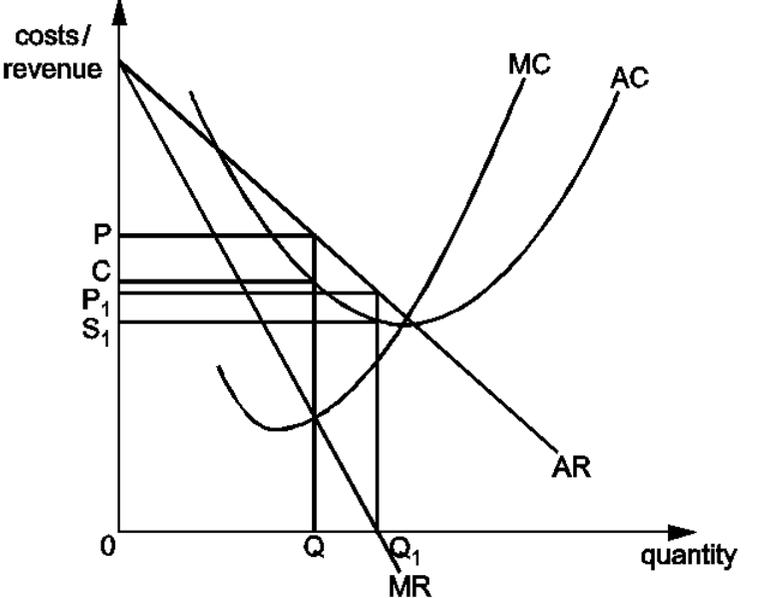
| Question |   |   | Answer   | Marks  | Guidance   |
|----------|---|---|--|--|--|
|          |   |   |  |  | <ul style="list-style-type: none"> <li>• staff facilities economies – such as staff canteens.</li> </ul> <p>External economies of scale, e.g. in the form of transport facilities, such as an airport being set up close to the industry, are not dependent on specialisation.</p> <p>Credit, where appropriate, knowledge/analysis of other, relevant factors.</p> <p>Possible routes into evaluation:</p> <ul style="list-style-type: none"> <li>• not all economies of scale are dependent on specialisation</li> <li>• it will depend on the nature of the product; e.g. in the case of concrete and cement, technical economies of scale are likely to be very important</li> <li>• a firm may be able to enjoy all types of economies of scale by having large branches producing different types of products.</li> </ul> <p>External economies of scale tend to be more dependent on specialisation than internal economies of scale.</p> |
| 1        | e | * | <p><b>Level 3 (9–12 marks)</b><br/> <b>Good</b> knowledge and understanding of collusion in an oligopolistic market.</p> <p><b>Strong</b> analysis of the reasons why collusion occurred in the cement market.</p> <p><b>Strong</b> evaluation including a supported judgement on the extent to which collusion occurred in the cement market.</p> | <p><b>12</b></p> <p>(AO1 x 1<br/>                     AO2 x 1<br/>                     AO3 x 5<br/>                     AO4 x 5)</p> | <p><i>Indicative content</i></p> <p>Reasons why the chances of collusion might have been high:</p> <ul style="list-style-type: none"> <li>• small number of dominant firms so it is an oligopolistic market and collusion is relatively common in an oligopoly</li> <li>• the product produced by the different firms is very similar/virtually homogeneous, so firms face similar cost conditions. This makes it easier to agree on a price that will benefit all of the firms</li> <li>• firms know a considerable amount about each other and so know whether they can trust each other and what would be the appropriate strategies to follow</li> </ul>   |

| Question | Answer  | Marks | Guidance   |
|----------|---|-------|--|
|          | <p><i>There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</i></p> <p><b>Level 2 (5–8 marks)</b><br/> <b>Good</b> knowledge and understanding of collusion in an oligopolistic market.</p> <p><b>Good</b> analysis of the reasons why collusion occurred in the cement market.</p> <p><b>Reasonable</b> evaluation of the extent to which collusion occurred in the cement without considering the extent.</p> <p><i>There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.</i></p> <p><b>Level 1 (1–4 marks)</b><br/> <b>Reasonable</b> knowledge and understanding of collusion.</p> <p><b>Reasonable</b> analysis of the reasons why collusion occurred in the cement market.</p> <p><b>Limited or no</b> evaluation of the extent to which collusion occurred in the cement market.</p> <p><i>The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.</i></p> <p><b>0 marks</b> no response or no response worthy of credit.</p> |       | <ul style="list-style-type: none"> <li>• there are significant barriers to entry and exit so any arrangements are less likely to be undermined by the entry of new firms</li> <li>• collusion can be used to drive out smaller rivals by e.g. predatory pricing.</li> </ul> <p>Reasons why chances of collusion might not have been so high:</p> <ul style="list-style-type: none"> <li>• a firm with a large market share may seek to gain a competitive advantage by breaking/not agreeing to a collusive agreement</li> <li>• the entry of a new firm into the market may threaten collusive agreements/make collusive agreements less likely</li> <li>• collusion carries the risk of investigation and possible penalties/requirement to sell off assets.</li> </ul> <p>Credit, where appropriate, knowledge/analysis of other, relevant factors.</p> <p>Possible routes into evaluation:</p> <ul style="list-style-type: none"> <li>• the information suggests that the conditions needed for collusion are mostly met</li> <li>• the outcome will be influenced by the future number of firms in the industry/actions of the OFT and Competition Commission.</li> </ul> <p>Other information would be useful, e.g. what are the objectives of the firms/are there any reasons why their cost conditions may change in the future.</p> |

| Question | Answer   | Marks  | Guidance  |
|----------|--|--|---|
|          | <p><b>Note:</b> although a diagram is <b>not</b> required, it may enhance the quality of the answer and should be rewarded at the appropriate level.</p>   |  |   |
| <p>2</p> | <p><b>Level 5 (21–25 marks)</b><br/> <b>Good</b> knowledge and understanding of a maximum wage in relation to executive pay in the UK.</p> <p><b>Strong</b> analysis of the impact of setting a maximum wage on executive pay. A relevant and accurately labelled diagram is provided and is linked to the analysis.</p> <p><b>Strong</b> evaluation of both sides of the argument with a supported judgement being made as to whether a maximum wage should be imposed on executive pay.</p> <p><i>There is a well-developed and sustained line of reasoning which is coherent and logically structured. The information presented is entirely relevant and substantiated.</i></p> <p><b>Level 4 (16–20 marks)</b><br/> <b>Good</b> knowledge and understanding of a maximum wage in relation to executive pay in the UK.</p> <p><b>Strong</b> analysis of the impact of setting a maximum wage on executive pay. A relevant and accurately labelled diagram is provided and is linked to the analysis.</p> <p><b>Good</b> evaluation of both sides of the argument but without a judgement being made as to whether a maximum wage should be imposed on executive pay.</p> | <p><b>25</b></p> <p>(AO1 x 6<br/> AO2 x 6<br/> AO3 x 6<br/> AO4 x 7)</p> | <p><i>Indicative content</i></p> <p>To have any effect, a maximum wage would have to be set below the current market equilibrium wage.</p>  <p>Reasons why it should not be imposed:</p> <ul style="list-style-type: none"> <li>• a maximum wage set below the market equilibrium wage may create labour market failure by causing a shortage of executives with demand exceeding supply. Some executives may move overseas in search of higher wages</li> <li>• reducing the pay of executives will reduce incentives and may reduce the quality of entrepreneurship. Risk taking may be discouraged which can reduce dynamic efficiency. Price and quality competitiveness may fall,</li> </ul> |

| Question | Answer  | Marks | Guidance   |
|----------|---|-------|--|
|          | <p><i>There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and in the most part substantiated.</i></p> <p><b>Level 3 (11–15 marks)</b><br/> <b>Good</b> knowledge and understanding of a maximum wage in relation to executive pay in the UK.</p> <p><b>Good</b> analysis of the impact of setting a maximum wage on executive pay. A relevant diagram is provided and is linked to the analysis.</p> <p><b>Reasonable</b> evaluation of both sides of the argument but without a judgement being made as to whether a maximum wage should be imposed on executive pay.</p> <p><i>There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.</i></p> <p><b>Level 2 (6–10 marks)</b><br/> <b>Good</b> knowledge and understanding of a maximum wage in relation to executive pay in the UK.</p> <p><b>Reasonable</b> analysis of the impact of setting a maximum wage on executive pay. A relevant diagram is provided, which is less than perfect.</p> <p><b>Reasonable</b> evaluation of both sides of the argument but without a judgement being made as to whether a maximum wage should be imposed on executive pay.</p> <p><i>The information has some relevance, but is communicated in an unstructured way. The information is</i></p> |       | <p>reducing output. This may reduce employment opportunities and the wages of workers</p> <ul style="list-style-type: none"> <li>• shareholders will reward executives who make a significant contribution to the performance of their firm</li> <li>• in practice, it would be difficult to know where to set a maximum wage limit – too high and it may not have much of an effect, too low and it would significantly reduce the number of people willing to be executives</li> <li>• there would be a cost of monitoring a maximum wage and some firms may seek ways of getting round it</li> </ul> <p>Reasons why it should be imposed:</p> <ul style="list-style-type: none"> <li>• very high pay may reduce the drive of some executives</li> <li>• some executives may be motivated more by non-monetary factors such as job security</li> <li>• in practice, executives are much less likely to face redundancy than other workers</li> <li>• a maximum wage which is linked to the pay of workers in the firm, e.g. 12 times the average pay of workers may motivate executives to increase the pay of the low paid workers</li> <li>• shareholders are not usually an effective constraint on executive pay. Some executives have significant pay rises despite the performance of the firms they run declining</li> <li>• governments recognise labour market failure at the other end of the wage spectrum. A maximum wage may reduce the resentment and increase the motivation of workers</li> <li>• the pay of executives may be above the market equilibrium level/above their marginal revenue productivity with executives exerting their power to drive up their pay</li> <li>• credit, where appropriate, knowledge/analysis of other, relevant factors.</li> </ul> |

| Question | Answer  | Marks  | Guidance   |
|----------|---|--|--|
|          | <p><i>supported by limited evidence, the relationship to the evidence may not be clear.</i></p> <p><b>Level 1 (1–5 marks)</b><br/> <b>Reasonable</b> knowledge and understanding of a maximum wage.</p> <p><b>Limited</b> analysis of the impact of setting a maximum wage. The diagram may not be relevant, may be inaccurate or may be missing.</p> <p><b>Limited or no</b> evaluation.</p> <p><i>Information presented is basic and may be ambiguous or unstructured. The information is supported by limited evidence.</i></p> <p><b>0 marks</b> no response or no response worthy of credit.</p>   |  | <p>Possible routes into evaluation:</p> <ul style="list-style-type: none"> <li>• decisions will be influenced by the demand and supply of the labour provided by executives</li> <li>• less likely to be imposed/effective if executives are geographically mobile</li> <li>• more likely to be imposed/effective if other countries impose a maximum wage</li> <li>• impact will depend on where the market wage rate lies in relation to the equilibrium level.</li> </ul> |
| 3        | <p><b>Level 5 (21–25 marks)</b><br/> <b>Good</b> knowledge and understanding of monopoly in the context of moving from profit maximisation to sales revenue maximisation.</p> <p><b>Strong</b> analysis of the effect on consumers of a monopolist changing objectives. A relevant and accurately labelled diagram is provided and is linked to the analysis.</p> <p><b>Strong</b> evaluation of both why consumers may or may not benefit with a supported judgement being made as to the extent to which consumers might benefit.</p> <p><i>There is a well-developed and sustained line of reasoning which is coherent and logically structured. The</i></p> | <p><b>25</b></p> <p>(AO1 x 6<br/> AO2 x 6<br/> AO3 x 6<br/> AO4 x 7)</p> | <p><i>Indicative content:</i></p>  |

| Question | Answer   | Marks | Guidance  |
|----------|--|-------|---|
|          | <p><i>information presented is entirely relevant and substantiated.</i></p> <p><b>Level 4 (16–20 marks)</b><br/> <b>Good</b> knowledge and understanding of monopoly in the context of moving from profit maximisation to sales revenue maximisation.</p> <p><b>Strong</b> analysis of the effect on consumers of a monopolist changing objectives. A relevant and accurately labelled diagram is provided and is linked to the analysis.</p> <p><b>Good</b> evaluation of both why consumers may or may not benefit but without a judgement being made as to the extent to which consumers might benefit.</p> <p><i>There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and in the most part substantiated.</i></p> <p><b>Level 3 (11–15 marks)</b><br/> <b>Good</b> knowledge and understanding of monopoly in the context of moving from profit maximisation to sales revenue maximisation.</p> <p><b>Good</b> analysis of the effect on consumers of a monopolist changing objectives. A relevant diagram is provided and is linked to the analysis.</p> <p><b>Some</b> evaluation of both why consumers may or may not benefit but without a judgement being made as to the extent to which consumers might benefit.</p> |       |  <p>Profit maximisation means producing where <math>MC = MR</math> whereas sales revenue maximisation means producing where <math>MR</math> is zero.</p> <p>Reasons why it may benefit consumers:</p> <ul style="list-style-type: none"> <li>• as shown in the diagram, the change in the objective is likely to mean that the quantity sold will increase and the price will fall. Lower price will increase consumer surplus</li> <li>• increasing the quantity sold will be likely to increase firms' output. Higher output will enable a firm to take greater advantage of economies of scale. This would lower average costs and may lead to even lower prices in the future.</li> </ul> <p>Reasons why it may not benefit consumers:</p> |

| Question | Answer   | Marks | Guidance  |
|----------|--|-------|---|
|          | <p><i>There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.</i></p> <p><b>Level 2 (6–10 marks)</b><br/> <b>Good</b> knowledge and understanding of monopoly in the context of profit maximisation and/or sales revenue maximisation.</p> <p><b>Some</b> analysis of the effect on consumers of a monopolist changing objectives. A relevant diagram is provided, which is less than perfect.</p> <p><b>Some</b> evaluation of both why consumers may or may not benefit but without a judgement being made as to the extent to which consumers might benefit.</p> <p><i>The information has some relevance, but is communicated in an unstructured way. The information is supported by limited evidence, the relationship to the evidence may not be clear.</i></p> <p><b>Level 1 (1–5 marks)</b><br/> <b>Some</b> knowledge and understanding of monopoly or profit maximisation or sales revenue maximisation.</p> <p><b>Limited</b> analysis of the effect on consumers of a monopolist changing objectives. The diagram may not be relevant, may be inaccurate or may be missing.</p> <p><b>Limited or no</b> evaluation.</p> <p><i>Information presented is basic and may be ambiguous or unstructured. The information is supported by limited evidence.</i></p> |       | <ul style="list-style-type: none"> <li>• supernormal profits are likely to fall. This may reduce investment and innovation which may reduce the quality of products produced</li> <li>• charging a lower price may make it more difficult for new firms to enter the industry. New firms are likely to have higher costs and so may not be able to compete against a firm charging lower prices. Keeping firms out of the industry will reduce the potential choice facing consumers.</li> </ul> <p>Credit, where appropriate, knowledge/analysis of other, relevant factors.</p> <p>Possible routes into evaluation:</p> <ul style="list-style-type: none"> <li>• changing the objective is likely to benefit consumers in the short run but not necessarily in the long run</li> <li>• it might also not benefit consumers as much as, for example, producing where <math>MC = AR</math> (allocative efficiency)</li> <li>• the impact on consumers will be influenced by the price elasticity of demand of the product.</li> </ul> |

| Question |   | Answer  | Marks  | Guidance  |
|----------|---|---|--|---|
|          |   | <b>0 marks</b> no response or no response worthy of credit.   |  |   |
| 4        | * | <p><b>Level 5 (21–25 marks)</b><br/> <b>Good</b> knowledge and understanding of market forces in the context of education as a merit good.</p> <p><b>Strong</b> analysis of how education can be provided by market forces and why there are arguments for state provision.</p> <p><b>Strong</b> evaluation of whether education should or should not be provided by market forces with a supported judgement being made as to whether it is more beneficial to be provided by the private sector, the public sector or a combination of the two.</p> <p><i>There is a well-developed and sustained line of reasoning which is coherent and logically structured. The information presented is entirely relevant and substantiated.</i></p> <p><b>Level 4 (16–20 marks)</b><br/> <b>Good</b> knowledge and understanding of market forces in the context of education as a merit good.</p> <p><b>Strong</b> analysis of how education can be provided by market forces and why there are arguments for state provision.</p> <p><b>Good</b> evaluation of whether education should or should not be provided by market forces but without a judgement being made as to whether it is more beneficial to be</p> | <p><b>25</b></p> <p>(AO1 x 6<br/> AO2 x 6<br/> AO3 x 6<br/> AO4 x 7)</p> | <p><i>Indicative content</i></p> <p>Reasons why it should be left to market forces:</p> <ul style="list-style-type: none"> <li>• competition in the provision of education can increase choice. Different types of education may be provided</li> <li>• it may increase allocative and productive efficiency. The profit incentive may mean that the private sector will be more responsive to the demands of parents and may be more innovative. The schools will also be encouraged to keep costs low</li> <li>• some economists suggest that paying for a product makes consumers appreciate it more and become more discerning. For example, some university students, paying higher tuition fees for their courses, are questioning the quality of the tuition they receive, with complaints about poor teaching rising.</li> </ul> <p>Reasons why it should not be left to market forces:</p> <ul style="list-style-type: none"> <li>• education is a merit good. If left to market forces, there may be under-consumption with parents and students not recognising the full benefits of education – information failure</li> <li>• education provides positive externalities which again means that if left to market forces, it will be under-consumed and so under-produced</li> <li>• there is the issue of equity. Education is an essential service which most people think everyone should have access to. If the poor cannot afford to pay for the education of their children or for many years of education, the children's future job prospects are likely to be reduced</li> </ul> |

| Question | Answer   | Marks | Guidance  |
|----------|--|-------|---|
|          | <p>provided by the private sector, the public sector or a combination of the two.</p> <p><i>There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and in the most part substantiated.</i></p> <p><b>Level 3 (11–15 marks)</b><br/> <b>Good</b> knowledge and understanding of market forces in the context of education as a merit good.</p> <p><b>Good</b> analysis of how education can be provided by market forces and why there are arguments for state provision.</p> <p><b>Reasonable</b> evaluation of whether education should or should not be provided by market forces but without a judgement being made as to whether it is more beneficial to be provided by the private sector, the public sector or a combination of the two.</p> <p><i>There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.</i></p> <p><b>Level 2 (6–10 marks)</b><br/> <b>Good</b> knowledge and understanding of market forces and/or the nature of education as a merit good.</p> <p><b>Reasonable</b> analysis of how education can be provided by market forces and/or why there are arguments for state provision.</p> <p><b>Reasonable</b> evaluation of whether education should or should not be provided by market forces but without a</p> |       | <ul style="list-style-type: none"> <li>• with greater purchasing power, the rich will have more influence over the type of education provided.</li> </ul> <p>Credit, where appropriate, knowledge/analysis of other, relevant factors.</p> <p>Possible routes into evaluation:</p> <ul style="list-style-type: none"> <li>• the merit good nature of education means that most governments and economists do not think that education can be entirely or largely left to market forces</li> <li>• some economists suggest introducing an element of market pressure into the state system, e.g. by using voucher schemes to give parents purchasing power.</li> </ul> |

| Question |   | Answer  | Marks  | Guidance   |
|----------|---|---|--|--|
|          |   | <p>judgement being made as to whether it is more beneficial to be provided by the private sector, the public sector or a combination of the two.</p> <p><i>The information has some relevance, but is communicated in an unstructured way. The information is supported by limited evidence, the relationship to the evidence may not be clear.</i></p> <p><b>Level 1 (1–5 marks)</b><br/> <b>Reasonable</b> knowledge and understanding of market forces and/or the nature of education as a merit good.</p> <p><b>Limited</b> analysis of how education can be provided by market forces or why there are arguments for state provision.</p> <p><b>Limited or no</b> evaluation.</p> <p><i>Information presented is basic and may be ambiguous or unstructured. The information is supported by limited evidence.</i></p> <p><b>0 marks</b> no response or no response worthy of credit.</p> <p><b>Note:</b> although a diagram is <b>not</b> required, it may enhance the quality of the answer and should be rewarded at the appropriate level.</p> |  |  |
| 5        | * | <p><b>Level 5 (21–25 marks)</b><br/> <b>Good</b> knowledge and understanding of the factors influencing price in the context of both the price of food and the price of air travel in the future.</p>   | <p><b>25</b></p> <p>(AO1 x 6<br/> AO2 x 6<br/> AO3 x 6<br/> AO4 x 7)</p> | <p><i>Indicative content</i></p> <p>Reasons why it might:</p> <ul style="list-style-type: none"> <li>demand for food may rise by a greater proportion than the demand for air travel. This would put upward pressure on the relative price of food. A rise in</li> </ul> |

| Question | Answer  | Marks | Guidance   |
|----------|---|-------|--|
|          | <p><b>Strong</b> analysis of the factors influencing the prices of food and air travel.</p> <p><b>Strong</b> evaluation of the key influences on the prices of both products with a supported judgement being made as to the extent to which food is more likely to rise in price than air travel.</p> <p><i>There is a well-developed and sustained line of reasoning which is coherent and logically structured. The information presented is entirely relevant and substantiated.</i></p> <p><b>Level 4 (16–20 marks)</b><br/> <b>Good</b> knowledge and understanding of the factors influencing price in the context of both the price of food and the price of air travel in the future.</p> <p><b>Strong</b> analysis of the factors influencing the prices of food and air travel.</p> <p><b>Good</b> evaluation of the key influences on the prices of both products but without a judgement being made as to the extent to which food is more likely to rise in price than air travel.</p> <p><i>There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and in the most part substantiated.</i></p> <p><b>Level 3 (11–15 marks)</b><br/> <b>Good</b> knowledge and understanding of the factors influencing price in the context of both the price of food and the price of air travel in the future.</p> |       | <p>population, for instance, may increase the demand for food</p> <ul style="list-style-type: none"> <li>• the supply of food may decrease due to e.g. adverse changes in climate, diseases amongst crops and farm animals, switch between growing crops for food and for fuel</li> <li>• sales tax/VAT might be imposed on food in the future and government/EU support for firms may be reduced</li> <li>• food does not have a substitute but some air travel does and a fall in e.g. train fares may reduce demand for some air travel</li> <li>• advances in technology may reduce the cost of air travel.</li> </ul> <p>Reasons why it might not:</p> <ul style="list-style-type: none"> <li>• demand for food is relatively income inelastic whereas demand for air travel is income elastic. If incomes rise, demand for air travel is likely to rise by more than food.</li> <li>• demand for air travel may increase by more than supply. There may be supply constraints in connection with air travel such as a shortage of airport capacity. Price elasticity of supply of air travel tends to be more inelastic than the PES of food</li> <li>• taxes on air travel, including air passenger duty, may increase. There may also be increases in the cost of providing air travel, in particular, increases in the price of fuel</li> <li>• the introduction of GM foods might reduce the price of food</li> <li>• price of air travel might be pushed up significantly by increases in costs of production, particularly fuel.</li> </ul> <p>Credit, where appropriate, knowledge/analysis of other, relevant factors.</p> |

| Question | Answer   | Marks | Guidance  |
|----------|--|-------|---|
|          | <p><b>Good</b> analysis of the factors influencing the prices of food and air travel.</p> <p><b>Reasonable</b> evaluation of the key influences on the prices of both products but without a judgement being made as to the extent to which food is more likely to rise in price than air travel.</p> <p><i>There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.</i></p> <p><b>Level 2 (6–10 marks)</b><br/> <b>Good</b> knowledge and understanding of the factors influencing price in the context of the price of food and/or the price of air travel in the future.</p> <p><b>Reasonable</b> analysis of the factors influencing the prices of food and/or air travel.</p> <p><b>Reasonable</b> evaluation of the key influences on the prices of both products but without a judgement being made as to the extent to which food is more likely to rise in price than air travel.</p> <p><i>The information has some relevance, but is communicated in an unstructured way. The information is supported by limited evidence, the relationship to the evidence may not be clear.</i></p> <p><b>Level 1 (1–5 marks)</b><br/> <b>Reasonable</b> knowledge and understanding of the factors influencing price.</p> |       | <p>Possible routes into evaluation:</p> <ul style="list-style-type: none"> <li>• the price of food tends to be more volatile than the price of air travel</li> <li>• whether food prices will rise by more than air travel will be influenced largely by supply conditions</li> <li>• the outcome will be influenced by the extent of changes to barriers to entry/exit and regulation in both markets</li> <li>• in the cases of both food and air travel, there are submarkets so the price of particular types of food may rise by more than air travel to certain destinations whilst the price of other types of food may rise by less.</li> </ul> |

| Question | Answer   | Marks | Guidance |
|----------|--|-------|----------|
|          | <p><b>Limited</b> analysis of the factors influencing the prices of food and/or air travel.</p> <p><b>Limited or no</b> evaluation.</p> <p><i>Information presented is basic and may be ambiguous or unstructured. The information is supported by limited evidence.</i></p> <p><b>0 marks</b> no response or no response worthy of credit.</p> <p><b>Note:</b> although a diagram is <b>not</b> required, it may enhance the quality of the answer and should be rewarded at the appropriate level.</p> |       |          |

## Assessment Objectives Grid

| Question     | AO1           | AO2           | AO3           | AO4           | TOTAL     | (Quantitative Skills) |
|--------------|---------------|---------------|---------------|---------------|-----------|-----------------------|
| 1(a)         |               | 2             |               |               | 2         |                       |
| 1(b)         | 2 (2)         | 2 (2)         |               |               | 4         | (4)                   |
| 1(c)         | 2 (2)         | 2 (2)         |               |               | 4         | (4)                   |
| 1(d)         | 1             | 1             | 3             | 3             | 8         |                       |
| 1(e)         | 1             | 1             | 5             | 5             | 12        |                       |
| 2/3          | 6 (2)         | 6 (2)         | 6 (2)         | 7 (2)         | 25        | (8)                   |
| 4/5          | 6             | 6             | 6             | 7             | 25        |                       |
| <b>TOTAL</b> | <b>18 (6)</b> | <b>20 (6)</b> | <b>20 (2)</b> | <b>22 (2)</b> | <b>80</b> | <b>(16)</b>           |

Summary of Updates

| Date       | Version | Change   |
|------------|---------|--|
| March 2019 | 2       | Removal of some content following an OCR review. |