

**OXFORD**

INTERNATIONAL  
AQA EXAMINATIONS

---

# INTERNATIONAL A-LEVEL **ECONOMICS** **EC03**

Unit 3 The Economics of Business Behaviour and the Distribution of  
Income

---

Mark scheme

January 2023

---

Version: 1.0 Final



Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts. Alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

Further copies of this mark scheme are available from [oxfordaqaexams.org.uk](http://oxfordaqaexams.org.uk)

#### **Copyright information**

OxfordAQA retains the copyright on all its publications. However, registered schools/colleges for OxfordAQA are permitted to copy material from this booklet for their own internal use, with the following important exception: OxfordAQA cannot give permission to schools/colleges to photocopy any material that is acknowledged to a third party even for internal use within the centre.

Copyright © 2023 Oxford International AQA Examinations and its licensors. All rights reserved.

## International A-level Economics mark scheme

### How to mark

#### Aims

When you are marking your allocation of scripts your main aims should be to:

- recognise and identify the achievements of students
- place students in the appropriate mark band and in the appropriate part of that mark band (high, low, middle)
- record your judgements with brief notes, annotations and comments that are relevant to the mark scheme and make it clear to other examiners how you have arrived at the numerical mark awarded
- put into a rank order the achievements of students (not to grade them – that is done later using the rank order that your marking has produced)
- ensure comparability of assessment for all students, regardless of question or examiner.

#### Approach

It is important to be **open-minded** and **positive** when marking scripts.

The specification recognises the variety of experiences and knowledge that students will have. It encourages them to study Economics in a way that is relevant to them. The questions have been designed to give them opportunities to discuss what they have found out about Economics. It is important to assess the quality of **what the student offers**.

#### Assessment Objectives

This component requires students to:

AO1	Demonstrate knowledge of terms/concepts and theories/models to show an understanding of the behaviour of economic agents and how they are affected by and respond to economic issues.
AO2	Apply knowledge and understanding to various economic contexts to show how economic agents are affected by and respond to economic issues.
AO3	Analyse issues within economics, showing an understanding of their impact on economic agents.
AO4	Evaluate economic arguments and use qualitative and quantitative evidence to support informed judgements relating to economic issues.

#### The marking grids

The marking grids cover all the Assessment Objectives indicated as being assessed in each question, followed by indicative content for individual tasks. These have been designed to allow assessment of the range of knowledge, understanding and skills that the specification demands.

The indicative content gives examples of the kind of things students might cover in their responses. They are neither exhaustive nor required – they are simply indicative of what could appear. Other valid content presented in student responses should always be credited.

## Using the grids

These levels of response mark schemes are broken down into levels, each of which has descriptors. The descriptors for the level show the performance characteristics of the level. There is the same number of marks in each level. The number of marks per level varies depending upon the total number of marks allocated to the question.

Having familiarised yourself with the descriptors and indicative content, read through the answer and annotate it to identify the qualities that are being looked for and that it shows. You can now check the levels and award a mark.

### Step 1 Determine a level

Start at the lowest level of the mark scheme and use it as a ladder to see whether the answer meets the descriptors for that level. The descriptors for the level indicate the different qualities that might be seen in the student's answer for that level.

When assigning a level, you should look at the overall quality of the answer and not look to pick holes in small and specific parts of the answer where the student has not performed quite as well as the rest. If the answer covers different aspects of different levels of the mark scheme you should use a best-fit approach for defining the level and then use the variability of the response to help decide the mark within the level; ie if the response fulfils most but not all of level 3 with a small amount of level 4 material, it would be placed in level 3 but be awarded a mark near the top of the level because of the level 4 content.

### Step 2 Determine a mark

Once you have assigned a level you need to decide on the mark.

It is often best to start in the middle of the level's mark range and then check and adjust.

The exemplar materials used during standardisation should be referred to. There will be an answer in the standardising materials that will correspond with each level of the mark scheme. This answer will have been awarded a mark by the Lead Examiner. You can compare the student's answer with the example to determine if it is of the same standard, better or worse. You can then use this to allocate a mark for the answer based on the Lead Examiner's mark on the example.

You may well need to read back through the answer as you apply the mark scheme to clarify points and assure yourself that the level and the mark are appropriate.

An answer that contains nothing of relevance to the question must be awarded no marks.

Examiners are required to assign each of the students' responses to the most appropriate level according to its overall quality, then allocate a single mark within the level. When deciding upon a mark in a level, examiners should bear in mind the relative weightings of the Assessment Objectives and be careful not to over/under-credit a particular skill. For example, in question 13 more weight should be given to AO3 than to AO1 and AO2. This will be exemplified and reinforced as part of examiner training.

## Annotating scripts

Annotating scripts will help you with making accurate judgements and it will help any subsequent markers to identify how you are thinking. Please do not write negative comments about students' work; this is unprofessional and it impedes a positive marking approach.

Section A

Total for this section: 10 marks

Question	Part	Marking guidance	Total marks												
01		<table border="1"> <thead> <tr> <th>Firm</th> <th>Type of competition</th> <th>Degree of product differentiation</th> <th>Barriers to entry</th> </tr> </thead> <tbody> <tr> <td>M</td> <td>Price</td> <td>None</td> <td>None</td> </tr> <tr> <td>N</td> <td>Non-price</td> <td>Significant</td> <td>High</td> </tr> </tbody> </table> <p>Which one of the following combinations identifies the market structures in which firms <b>M</b> and <b>N</b> are most likely to operate?</p> <p>Answer: <b>D</b> (Perfect competition Oligopoly)</p>	Firm	Type of competition	Degree of product differentiation	Barriers to entry	M	Price	None	None	N	Non-price	Significant	High	<p>1</p> <p>AO1 = 1</p>
Firm	Type of competition	Degree of product differentiation	Barriers to entry												
M	Price	None	None												
N	Non-price	Significant	High												

Question	Part	Marking guidance	Total marks
02		<p>Which one of the following is most likely to cause the divorce of ownership from control in a firm?</p> <p>Answer: <b>B</b> (A small firm being taken over by a much larger one)</p>	<p>1</p> <p>AO1 = 1</p>

Question	Part	Marking guidance	Total marks
03		<p>Which one of the following biases is most likely to explain why Bao may sell more holidays than Ang?</p> <p>Answer: <b>B</b> (Anchoring)</p>	<p>1</p> <p>AO2 = 1</p>

Question	Part	Marking guidance	Total marks
04		<div style="text-align: center;"> <p>The graph shows a coordinate system with a vertical axis labeled 'Wage rate (\$)' and a horizontal axis labeled 'Quantity of labour'. Two parallel, downward-sloping lines are plotted. The outer line is labeled 'D<sub>1</sub>' and the inner line is labeled 'D<sub>2</sub>', indicating a leftward shift in the demand curve.</p> </div> <p>Which one of the following is the most likely reason for the firm's demand curve for labour shifting from D<sub>1</sub> to D<sub>2</sub>?</p> <p>Answer: <b>A</b> (A decrease in the price of a substitute good)</p>	<p><b>1</b></p> <p><b>AO2 = 1</b></p>

Question	Part	Marking guidance	Total marks
05		<p>Which one of the following reasons is most likely to cause firms <b>not</b> to produce where marginal cost equals price?</p> <p>Answer: <b>B</b> (Firms have a significant degree of market power.)</p>	<p><b>1</b></p> <p><b>AO1 = 1</b></p>

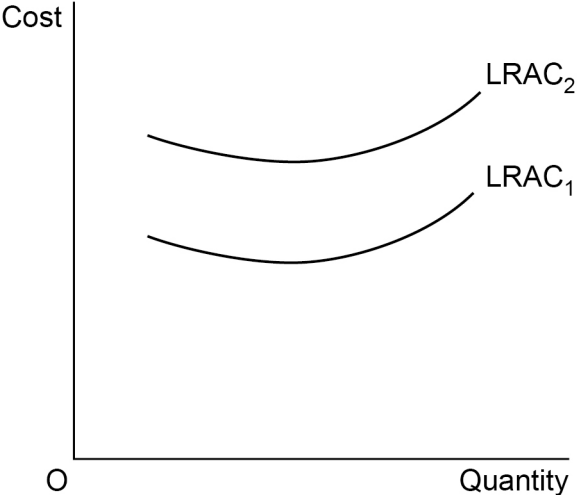
Question	Part	Marking guidance	Total marks												
06		<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Sales (units)</th> <th>Total revenue (\$)</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>4200</td> </tr> <tr> <td>5</td> <td>4400</td> </tr> <tr> <td>6</td> <td>4500</td> </tr> <tr> <td>7</td> <td>4200</td> </tr> <tr> <td>8</td> <td>3600</td> </tr> </tbody> </table> <p>Which one of the following can be concluded from the information in <b>Table 2</b>?</p> <p>Answer: <b>B</b> (Demand is inelastic when the firm sells 7 or more units.)</p>	Sales (units)	Total revenue (\$)	4	4200	5	4400	6	4500	7	4200	8	3600	<p><b>1</b></p> <p><b>AO2 = 1</b></p>
Sales (units)	Total revenue (\$)														
4	4200														
5	4400														
6	4500														
7	4200														
8	3600														

Question	Part	Marking guidance	Total marks
07		<p>The employer agrees to recognise a trade union. As part of the agreement, the firm now has to pay the wage rate that would exist in a perfectly competitive labour market.</p> <p>What is the most likely change in the firm's hourly labour costs after the change in wage rates?</p> <p>Answer: <b>C</b> (\$12 100)</p>	<p><b>1</b></p> <p><b>AO3 = 1</b></p>

Question	Part	Marking guidance	Total marks						
08		<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Year</th> <th>Gini coefficient</th> </tr> </thead> <tbody> <tr> <td>2020</td> <td>0.36</td> </tr> <tr> <td>2021</td> <td>0.40</td> </tr> </tbody> </table> <p>Which one of the following is a normative statement about the data in <b>Table 3</b>?</p> <p>Answer: <b>C</b> (The best way to reduce income inequality in Country Q is to reform the country’s regressive tax system.)</p>	Year	Gini coefficient	2020	0.36	2021	0.40	<p><b>1</b></p> <p><b>AO1 = 1</b></p>
Year	Gini coefficient								
2020	0.36								
2021	0.40								

Question	Part	Marking guidance	Total marks												
09		<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Cinema visits</th> <th>Marginal utility (in units)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>14</td> </tr> <tr> <td>2</td> <td>10</td> </tr> <tr> <td>3</td> <td>6</td> </tr> <tr> <td>4</td> <td>3</td> </tr> <tr> <td>5</td> <td>-1</td> </tr> </tbody> </table> <p>What is the total utility (in units) that Daria will receive if she behaves rationally?</p> <p>Answer: <b>D</b> (33)</p>	Cinema visits	Marginal utility (in units)	1	14	2	10	3	6	4	3	5	-1	<p><b>1</b></p> <p><b>AO2 = 1</b></p>
Cinema visits	Marginal utility (in units)														
1	14														
2	10														
3	6														
4	3														
5	-1														

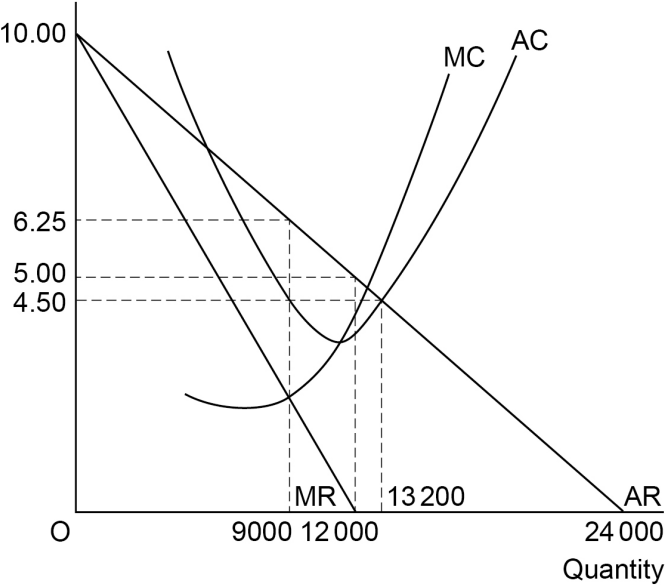


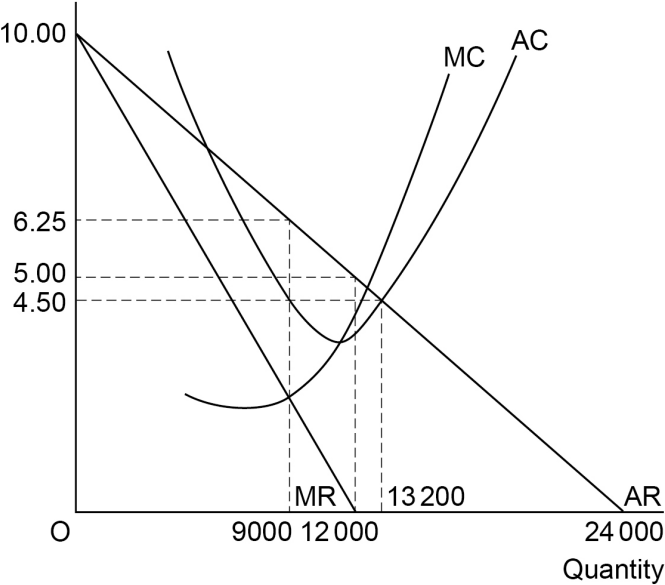
Question	Part	Marking guidance	Total marks
10		<div style="text-align: center;">  </div> <p data-bbox="368 891 1190 958">Which one of the following is most likely to cause the shift from LRAC<sub>1</sub> to LRAC<sub>2</sub> shown in <b>Figure 3</b>?</p> <p data-bbox="368 999 991 1032">Answer: <b>C</b> (Rising costs of rent for the factory)</p>	<p data-bbox="1310 309 1334 338"><b>1</b></p> <p data-bbox="1310 383 1426 416"><b>AO2 = 1</b></p>

**Section B**

**Total for this section: 10 marks**

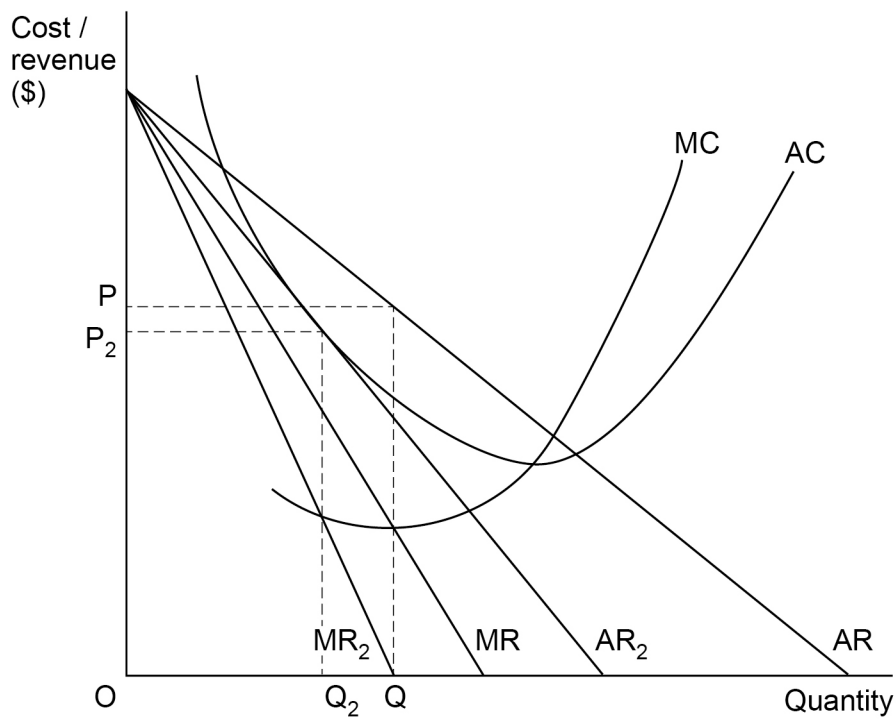
Question	Part	Marking guidance	Total marks
11	1	<p>Profit maximisation is one objective of a firm.</p> <p>Identify <b>two</b> other objectives.</p> <p>Award 1 mark for each suitable example identified:</p> <ul style="list-style-type: none"> <li>• revenue maximisation</li> <li>• sales (volume) maximisation</li> <li>• profit satisficing</li> <li>• survival</li> <li>• growth</li> <li>• quality</li> <li>• increasing market share</li> <li>• environmental stewardship</li> <li>• achieving social or political change.</li> </ul> <p>Credit valid alternative content.</p>	<p><b>2</b></p> <p><b>AO1 = 2</b></p>

Question	Part	Marking guidance	Total marks						
11	2	<p data-bbox="373 331 478 421">Cost / revenue (\$)</p>  <p data-bbox="373 958 1228 1025">Use <b>Figure 4</b> to calculate the maximum amount of profit Lin’s firm can make.</p> <p data-bbox="373 1061 526 1093">Calculation:</p> <p data-bbox="373 1128 1125 1160">Firstly, the profit-maximising output needs to be identified.</p> <p data-bbox="373 1196 683 1227">MC = MR at 9000 units.</p> <p data-bbox="373 1263 1018 1294">At this level of output AC = \$4.50 and AR = \$6.25</p> <p data-bbox="373 1330 885 1361"><math>(\\$6.25 - \\$4.50) \times 9000 \text{ units} = \\$15\,750</math></p> <table border="1" data-bbox="373 1397 1292 2024"> <thead> <tr> <th data-bbox="373 1397 1134 1487">Response</th> <th data-bbox="1139 1397 1292 1487">Max 2 marks</th> </tr> </thead> <tbody> <tr> <td data-bbox="373 1494 1134 1599">For the correct answer: \$15 750 (With or without working shown)</td> <td data-bbox="1139 1494 1292 1599">2 marks</td> </tr> <tr> <td data-bbox="373 1606 1134 2024">                     For the correct answer but with missing/incorrect units:                      15 750 for example  <b>OR</b>                      For the correct identification of <b>two</b> of the following:                     <ul style="list-style-type: none"> <li>• profit-maximising output of 9000</li> <li>• average cost at this output: \$4.50</li> <li>• average revenue at this output: \$6.25</li> </ul> <b>OR</b>                      For the correct method but with the wrong answer                 </td> <td data-bbox="1139 1606 1292 2024">1 mark</td> </tr> </tbody> </table>	Response	Max 2 marks	For the correct answer: \$15 750 (With or without working shown)	2 marks	For the correct answer but with missing/incorrect units: 15 750 for example <b>OR</b> For the correct identification of <b>two</b> of the following: <ul style="list-style-type: none"> <li>• profit-maximising output of 9000</li> <li>• average cost at this output: \$4.50</li> <li>• average revenue at this output: \$6.25</li> </ul> <b>OR</b> For the correct method but with the wrong answer	1 mark	<p data-bbox="1321 309 1343 340">2</p> <p data-bbox="1321 376 1433 443">AO1 = 1 AO2 = 1</p>
Response	Max 2 marks								
For the correct answer: \$15 750 (With or without working shown)	2 marks								
For the correct answer but with missing/incorrect units: 15 750 for example <b>OR</b> For the correct identification of <b>two</b> of the following: <ul style="list-style-type: none"> <li>• profit-maximising output of 9000</li> <li>• average cost at this output: \$4.50</li> <li>• average revenue at this output: \$6.25</li> </ul> <b>OR</b> For the correct method but with the wrong answer	1 mark								

Question	Part	Marking guidance	Total marks						
11	3	<p data-bbox="373 331 478 421">Cost / revenue (\$)</p>  <p data-bbox="373 965 1270 1032">Use <b>Figure 4</b> to calculate the maximum amount of revenue Lin's firm can make.</p> <p data-bbox="373 1070 528 1099">Calculation:</p> <p data-bbox="373 1137 1166 1167">Firstly, the revenue-maximising output needs to be identified.</p> <p data-bbox="373 1205 671 1234">MR = 0 at 12 000 units</p> <p data-bbox="373 1272 804 1301">At this level of output AR = \$5.00</p> <p data-bbox="373 1339 783 1368"><math>\\$5.00 \times 12\,000</math> units = \$60 000</p> <table border="1" data-bbox="373 1406 1294 1973"> <thead> <tr> <th data-bbox="373 1406 1134 1503">Response</th> <th data-bbox="1139 1406 1294 1503">Max marks</th> </tr> </thead> <tbody> <tr> <td data-bbox="373 1509 1134 1621">For the correct answer: \$60 000 (With or without working shown)</td> <td data-bbox="1139 1509 1294 1621">2 marks</td> </tr> <tr> <td data-bbox="373 1628 1134 1973">For the correct answer but with missing/incorrect units: 60 000 for example <b>OR</b> For the correct identification of the output at MR = 0: 12 000 <b>OR</b> For the correct method but with the wrong answer</td> <td data-bbox="1139 1628 1294 1973">1 mark</td> </tr> </tbody> </table>	Response	Max marks	For the correct answer: \$60 000 (With or without working shown)	2 marks	For the correct answer but with missing/incorrect units: 60 000 for example <b>OR</b> For the correct identification of the output at MR = 0: 12 000 <b>OR</b> For the correct method but with the wrong answer	1 mark	<p data-bbox="1321 309 1342 338">2</p> <p data-bbox="1321 376 1433 434">AO1 = 1 AO2 = 1</p>
Response	Max marks								
For the correct answer: \$60 000 (With or without working shown)	2 marks								
For the correct answer but with missing/incorrect units: 60 000 for example <b>OR</b> For the correct identification of the output at MR = 0: 12 000 <b>OR</b> For the correct method but with the wrong answer	1 mark								

Question	Part	Marking guidance	Total marks
11	4	<p><b>Figure 5</b> shows the short-run equilibrium position for Lin's firm.</p> <p>Add to <b>Figure 5</b> to show the long-run equilibrium position.</p> <p>The finished diagram should show:</p> <ul style="list-style-type: none"> <li>• the changes to the cost and/or revenue curves</li> <li>• the new price and quantity.</li> </ul>	<p><b>4</b></p> <p><b>AO1 = 2</b></p> <p><b>AO2 = 2</b></p>

An example of an acceptable diagram:



Response	Max 4 marks
Diagram showing AR and MR curves shifted inwards with correct equilibrium output identified where both new $MR = MC$ and new AR curve is tangential to AC and with new price showing no supernormal profit or loss.	<b>4 marks</b>
Diagram showing AR and MR curves shifted inwards with correct equilibrium output identified where both new $MR = MC$ and new AR is tangential to AC and with new price showing no supernormal profit or loss. One axis or other label will be missing or inappropriate.  <b>OR</b>  A correctly labelled diagram showing AR and MR curves shifted inwards and a correct new equilibrium output with new $MR = MC$ , but the new AR curve is not tangential to AC at that level of output.	<b>3 marks</b>
Diagram showing AR and MR curves which have been shifted inwards and show AR as tangential to AC but not at the correct level of output.  <b>OR</b>  A correctly labelled diagram with AR and MR curves shifted inwards. Cost curve(s) have also been shifted to show a new profit-maximising output at $MR = MC$ where $AC = AR$ .	<b>2 marks</b>
Diagram showing AR and MR curves which have both been shifted inwards.  <b>OR</b>  AR and/or AC curves shifted so that they are tangential and that level of output and price is identified as profit-maximising.  <b>OR</b>  Diagram showing AC and MC curves which have been shifted upwards and identify a new equilibrium at $MC = MR$ .	<b>1 mark</b>

**Indicative content:**

The expected diagram shows average and marginal revenue curves which have been shifted inwards and may or may not originate from a lower price than the original curves. The new profit-maximising level of output should be indicated where the AC curve is tangential to the AR curve. The price/AR equilibrium should be marked and labelled on the y-axis (for example,  $P_2$ ).

**MAXIMUM FOR QUESTION 11: 10 MARKS**

**Section C**

**Total for this section: 45 marks**

Question	Part	Marking guidance	Total marks
12	1	<p><b>Extract B</b> (lines 17–18) states: ‘firms have left the industry due to increased losses’.</p> <p>Explain why the level of profit or loss may influence the number of firms in an industry.</p>	<p><b>4</b></p> <p><b>AO1 = 1</b> <b>AO2 = 1</b> <b>AO3 = 2</b></p>

Examiners are reminded that AO1, AO2 and AO3 are regarded as interdependent. When deciding on a mark all should be considered together using the best fit approach. In doing so, examiners should bear in mind the relative weightings of the Assessment Objectives in this question.

Level	Marks	Descriptor
2	3–4	<ul style="list-style-type: none"> <li>Shows sound knowledge and understanding of relevant economic terminology, concepts and principles.</li> <li>Includes reasonable application of relevant economic principles to support the response.</li> <li>Includes well-focused analysis with a clear, logical chain of reasoning.</li> </ul>
1	1–2	<ul style="list-style-type: none"> <li>Shows some limited knowledge and understanding of relevant economic terminology, concepts and principles.</li> <li>May include some application of relevant economic principles to the question.</li> <li>May include some attempted analysis but the analysis is not adequately developed and/or may be confused.</li> </ul>
	0	No creditworthy material

**Indicative content:**

- definitions of profit/loss
- explanation that economic theory suggests firms will seek to maximise profits
- higher profits will attract new entrants
- the role of profits in signalling to firms and influencing their actions
- firms incurring losses will leave the market
- the length of time that firms can sustain short-run losses for
- the time lag between firms receiving information about profit/loss and being able to act upon it and join or leave a market
- the importance of accurate information
- expectations about future profits and losses.

**Note:** Some students may support their answer with a diagram, but this is not needed for full marks.

Credit valid alternative content.

Question	Part	Marking guidance	Total marks
12	2	<p>To what extent do the data suggest that the level of profit or loss influenced the number of firms in the UK energy industry between 2009 and 2020?</p> <p>Use the data in <b>Extract A</b> to support your answer.</p>	<p><b>4</b></p> <p><b>AO1 = 1</b> <b>AO2 = 1</b> <b>AO4 = 2</b></p>

Examiners are reminded that AO1, AO2 and AO4 are regarded as interdependent. When deciding on a mark all should be considered together using the best fit approach. In doing so, examiners should bear in mind the relative weightings of the Assessment Objectives in this question.

Level	Marks	Descriptor
2	3–4	<ul style="list-style-type: none"> <li>Includes sound evidence that indicates the extent to which the level of profit or loss influences the number of firms in the UK energy industry.</li> <li>Includes a supported judgement concerning the extent to which the level of profit or loss influences the number of firms in the UK energy industry.</li> </ul>
1	1–2	<ul style="list-style-type: none"> <li>Includes some limited evidence that indicates the extent to which the level of profit or loss influences the number of firms in the UK energy industry.</li> <li>May attempt a judgement concerning the extent to which the level of profit or loss influences the number of firms in the UK energy industry but this is not adequately supported by the data.</li> </ul>
	0	No creditworthy material

#### Indicative content:

- profits rose from 2009–2013 (£221m to £1151m) and so did the number of firms (12 to 21)
- there was a slight downward trend in profits between 2013 and 2017 (falling from £1151m to £924m) but during this time the number of firms continued to increase (from 21 to 68)
- the number of firms reached a maximum of 68 in 2017 (when profits were third highest at £924m)
- there were considerable losses in 2019 and 2020 and the number of firms in the market fell from 68 in 2017 to 48 in 2020
- profits in 2009 were £221m when 12 firms existed, but in 2020 there were losses of £173m and 48 firms
- the data only shows the profits for the largest six firms in the industry and in later years this may not be representative of the entire market (as the market share of the six largest firms fell from nearly 100% to 70%)
- there is no indication about the composition of the industry and whether the market is dynamic with many entrants and exits in each year or much more stable
- it is not apparent from the data which direction any causal relationship may take, so the number of firms could be influencing the level of profit that is earned, rather than vice versa
- data is not presented for every year during the period 2009–2020 so may not be fully representative of the trends over this period
- there appears to be a time lag between firms earning profits/losses and a change in the number of firms in the industry
- the likely conclusion is that, on balance, there appears to be some evidence of an inverse relationship between the profits earned and the number of firms, but that this relationship is weak.

Credit valid alternative content.

**MAXIMUM FOR QUESTION 12: 8 MARKS**



Question	Part	Marking guidance	Total marks
13		<p><b>Extract C</b> (line 16) states: ‘the government is keen to encourage new firms to enter the market.’</p> <p>Explain how <b>both</b> strategic <b>and</b> innocent barriers may prevent new firms from entering the energy supply market.</p>	<p><b>12</b></p> <p><b>AO1 = 3</b>  <b>AO2 = 3</b>  <b>AO3 = 6</b></p>

Examiners are reminded that AO1, AO2 and AO3 are regarded as interdependent. When deciding on a mark all should be considered together using the best fit approach. In doing so, examiners should bear in mind the relative weightings of the Assessment Objectives in this question. More weight should therefore be given to AO3 than AO1 and AO2.

Level	Marks	Descriptor
3	9–12	<ul style="list-style-type: none"> <li>Is well organised and develops one or more of the key issues that are relevant to the question.</li> <li>Shows sound knowledge and understanding of relevant economic terminology, concepts and principles.</li> <li>Includes good application of relevant economic principles and/or good use of data to support the response.</li> <li>Includes well-focused analysis with a clear, logical chain of reasoning.</li> <li>May include a relevant diagram that is accurate and used appropriately to support their explanation.</li> </ul>
2	5–8	<ul style="list-style-type: none"> <li>Includes one or more issues that are relevant to the question.</li> <li>Shows reasonable knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present.</li> <li>Includes reasonable application of relevant economic principles and/or data to the question.</li> <li>Includes some reasonable analysis but it might not be adequately developed and may be confused in places.</li> <li>May include a relevant diagram to support their explanation.</li> </ul>
1	1–4	<ul style="list-style-type: none"> <li>Is very brief and/or lacks coherence.</li> <li>Shows some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely.</li> <li>Demonstrates very limited ability to apply relevant economic principles and/or data to the question.</li> <li>May include some very limited analysis but the analysis lacks focus and/or becomes confused.</li> <li>May include a diagram but the diagram is likely to be inaccurate in some respects or is inappropriate.</li> </ul>
	0	No creditworthy material

**Indicative content:**

- definition of barriers to entry
- explanation of the difference between strategic and innocent barriers to entry
- how barriers to entry prevent firms from joining a market
- strategic barriers to entry, such as:
  - the branding of large existing companies
  - retained profits or creditworthiness enabling expensive promotions and advertising
  - tools which promote consumer inertia eg automatic contract renewal
  - pricing strategies designed to deter new entrants
  - vertically-integrated firms owning networks/generating capability
- innocent barriers to entry, such as:
  - the economies of scale which large firms experience
  - sunk costs, such as investment in IT and customer service infrastructure
  - start-up costs, such as licensing and regulatory approval
  - statutory/regulatory requirements eg 'investment and financial stability'
- acknowledgement that, regardless of category, the impact of barriers is to deter new entrants and reduce contestability.

Credit valid alternative content.

Question	Part	Marking guidance	Total marks
14		<p><b>Extract B</b> (lines 11–12) states: ‘in the long run, a competitive market is the best way to keep prices low and improve quality of service.’</p> <p>Evaluate the likely effectiveness of measures that could be used to increase competition and protect consumers in the energy supply market.</p>	<p><b>25</b></p> <p><b>AO1 = 4</b>  <b>AO2 = 3</b>  <b>AO3 = 9</b>  <b>AO4 = 9</b></p>

Examiners are reminded that AO1, AO2, AO3 and AO4 are regarded as interdependent. When deciding on a mark all should be considered together using the best fit approach. In doing so, examiners should bear in mind the relative weightings of the Assessment Objectives in this question. More weight should therefore be given to AO4 and AO3 than AO1 and AO2.

Level	Marks	Descriptor
5	21–25	<p><b>Sound, focused analysis and well-supported evaluation that:</b></p> <ul style="list-style-type: none"> <li>• is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors</li> <li>• includes good application of relevant economic principles to the given context and, where appropriate, good use of data to support the response</li> <li>• includes well-focused analysis with clear, logical chains of reasoning</li> <li>• includes supported evaluation throughout the response and in a final conclusion.</li> </ul>
4	16–20	<p><b>Sound, focused analysis and some supported evaluation that:</b></p> <ul style="list-style-type: none"> <li>• is organised, showing sound knowledge and understanding of economic terminology, concepts and principles but some minor errors may be present</li> <li>• includes some good application of relevant economic principles to the given context and, where appropriate, some good use of data to support the response</li> <li>• includes some well-focused analysis with clear, logical chains of reasoning</li> <li>• includes some reasonable, supported evaluation.</li> </ul>
3	11–15	<p><b>Some reasonable analysis but generally unsupported evaluation that:</b></p> <ul style="list-style-type: none"> <li>• focuses on issues that are relevant to the question, showing satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present</li> <li>• includes reasonable application of relevant economic principles to the given context and, where appropriate, some use of data to support the response</li> <li>• includes some reasonable analysis but which might not be adequately developed or becomes confused in places</li> <li>• includes fairly superficial evaluation; there is likely to be some attempt to make relevant judgements but these aren't well-supported by arguments and/or data.</li> </ul>
2	6–10	<p><b>A fairly weak response with some understanding that:</b></p> <ul style="list-style-type: none"> <li>• includes some limited knowledge and understanding of economic terminology, concepts and principles is shown but some errors are likely</li> <li>• includes some limited application of relevant economic principles to the given context and/or data to the question</li> <li>• includes some limited analysis but it may lack focus and/or become confused</li> <li>• includes some evaluation which is weak and unsupported.</li> </ul>
1	1–5	<p><b>A very weak response that:</b></p> <ul style="list-style-type: none"> <li>• includes little relevant knowledge and understanding of economic terminology, concepts and principles</li> <li>• includes application to the given context which is, at best, very weak</li> <li>• includes attempted analysis which is weak and unsupported.</li> </ul>
	0	No creditworthy material

**Indicative content:**

- explanation that government intervention may be necessary to protect consumers in non-competitive markets and/or essential product markets
- explanation of the link between increased competition and improved consumer welfare
- understanding that reduced competition may increase prices, reduce quantity and choice for consumers as well as reducing quality of service
- the impact of a lack of competition on efficiency and the allocation of resources
- measures that a government can use that would increase competition or protect consumers:
  - privatisation of state-owned energy suppliers
  - price or profit controls (UK's price cap)
  - deregulation of markets to encourage new entrants (licence and financial exemptions for small firms)
  - regulation of mergers and takeovers
  - giving regulators stronger powers to prevent restrictive practices (fines and preventing them from operating)
  - performance targets or quality standards
  - providing support to small firms (Ofgem's support for new entrants on how to join the energy market)
  - subsidising energy for low-income households
  - regulatory support for new, innovative business models
  - establishment of 'switching services'
  - provision of information about energy prices and alternative suppliers and their tariffs
- the advantages and disadvantages of different measures, eg impact on income inequality, government finances, externalities
- the significance of contestability for industry performance and consumer protection
- considering whether increasing competition is the best way to protect consumers, through discussion of alternative measures such as renationalising energy supply
- considering the extent to which governments should intervene in free markets
- evaluation of the relative effectiveness of different types of measures in protecting energy consumers
- considering whether government failure and/or regulatory capture may limit the effectiveness of any government intervention.

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

Credit valid alternative content.

## Section D

Total for this section: 25 marks

Question	Part	Marking guidance	Total marks
15		<p>According to the US Bureau of Labour Statistics, 4.4 million workers chose to leave their jobs in September 2021 – the highest number ever recorded. The technology and healthcare sectors were affected most. At the same time, wages grew at the fastest rate in more than 20 years.</p> <p>Assess the importance of non-monetary influences on the supply of labour to different occupations.</p>	<p>25</p> <p>AO1 = 4 AO2 = 3 AO3 = 9 AO4 = 9</p>

Examiners are reminded that AO1, AO2, AO3 and AO4 are regarded as interdependent. When deciding on a mark all should be considered together using the best fit approach. In doing so, examiners should bear in mind the relative weightings of the Assessment Objectives in this question. More weight should therefore be given to AO4 and AO3 than AO1 and AO2.

Level	Marks	Descriptor
5	21–25	<p><b>Sound, focused analysis and well-supported evaluation that:</b></p> <ul style="list-style-type: none"> <li>is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors</li> <li>includes good application of relevant economic principles to the given context and, where appropriate, good use of data to support the response</li> <li>includes well-focused analysis with clear, logical chains of reasoning</li> <li>includes supported evaluation throughout the response and in a final conclusion.</li> </ul>
4	16–20	<p><b>Sound, focused analysis and some supported evaluation that:</b></p> <ul style="list-style-type: none"> <li>is organised, showing sound knowledge and understanding of economic terminology, concepts and principles but some minor errors may be present</li> <li>includes some good application of relevant economic principles to the given context and, where appropriate, some good use of data to support the response</li> <li>includes some well-focused analysis with clear, logical chains of reasoning</li> <li>includes some reasonable, supported evaluation.</li> </ul>
3	11–15	<p><b>Some reasonable analysis but generally unsupported evaluation that:</b></p> <ul style="list-style-type: none"> <li>focuses on issues that are relevant to the question, showing satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present</li> <li>includes reasonable application of relevant economic principles to the given context and, where appropriate, some use of data to support the response</li> <li>includes some reasonable analysis but which might not be adequately developed or becomes confused in places</li> <li>includes fairly superficial evaluation; there is likely to be some attempt to make relevant judgements but these aren't well-supported by arguments and/or data.</li> </ul>
2	6–10	<p><b>A fairly weak response with some understanding that:</b></p> <ul style="list-style-type: none"> <li>includes some limited knowledge and understanding of economic terminology, concepts and principles is shown but some errors are likely</li> <li>includes some limited application of relevant economic principles to the given context and/or data to the question</li> <li>includes some limited analysis but it may lack focus and/or become confused</li> <li>includes some evaluation which is weak and unsupported.</li> </ul>

<b>1</b>	1–5	<p><b>A very weak response that:</b></p> <ul style="list-style-type: none"> <li>• includes little relevant knowledge and understanding of economic terminology, concepts and principles</li> <li>• includes application to the given context which is, at best, very weak</li> <li>• includes attempted analysis which is weak and unsupported.</li> </ul>
	0	No creditworthy material

**Indicative content:**

- defining non-monetary influences and supply of labour
- explaining the difference between monetary and non-monetary influences
- analysing how those non-monetary factors may influence labour supply and therefore equilibrium employment and wage rates in a labour market
- comparing the importance of different influences on labour supply to particular occupations
- non-monetary influences include:
  - working conditions/hours
  - job satisfaction
  - education, skills and experience
  - social status of the job
  - promotion prospects
  - job security
  - the immobility of labour
- analysis of the extent to which different occupations offer differing non-monetary incentives to labour
- behavioural influences on individual decision making, such as social norms in relation to what is perceived as a desirable occupation
- the degree to which a non-monetary influence may affect labour supply and therefore the wage rate and so an interaction between non-monetary and monetary influences
- analysing the role of employers in promoting non-monetary aspects of their industry/occupation to workers and therefore influencing the labour supply
- evaluation as to whether monetary considerations must be satisfied before non-monetary ones can play a significant role in workers' decision making
- the role of altruism in individuals' decisions about the occupations to which they wish to supply their labour
- evidence about specific occupations which may afford greater importance to non-monetary influences
- an overall assessment of the importance of non-monetary influences on the supply of labour to different occupations.

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

Credit valid alternative content.

Question	Part	Marking guidance	Total marks
16		<p>Spain has a progressive wealth tax on both residents and non-residents. Data from the World Bank show that inequality in Spain has fallen over the last 10 years.</p> <p>Evaluate whether a wealth tax is the best way to reduce inequality in an economy.</p>	<p><b>25</b></p> <p><b>AO1 = 4</b>  <b>AO2 = 3</b>  <b>AO3 = 9</b>  <b>AO4 = 9</b></p>

Examiners are reminded that AO1, AO2, AO3 and AO4 are regarded as interdependent. When deciding on a mark all should be considered together using the best fit approach. In doing so, examiners should bear in mind the relative weightings of the Assessment Objectives in this question. More weight should therefore be given to AO4 and AO3 than AO1 and AO2.

Level	Marks	Descriptor
5	21–25	<p><b>Sound, focused analysis and well-supported evaluation that:</b></p> <ul style="list-style-type: none"> <li>• is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors</li> <li>• includes good application of relevant economic principles to the given context and, where appropriate, good use of data to support the response</li> <li>• includes well-focused analysis with clear, logical chains of reasoning</li> <li>• includes supported evaluation throughout the response and in a final conclusion.</li> </ul>
4	16–20	<p><b>Sound, focused analysis and some supported evaluation that:</b></p> <ul style="list-style-type: none"> <li>• is organised, showing sound knowledge and understanding of economic terminology, concepts and principles but some minor errors may be present</li> <li>• includes some good application of relevant economic principles to the given context and, where appropriate, some good use of data to support the response</li> <li>• includes some well-focused analysis with clear, logical chains of reasoning</li> <li>• includes some reasonable, supported evaluation.</li> </ul>
3	11–15	<p><b>Some reasonable analysis but generally unsupported evaluation that:</b></p> <ul style="list-style-type: none"> <li>• focuses on issues that are relevant to the question, showing satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present</li> <li>• includes reasonable application of relevant economic principles to the given context and, where appropriate, some use of data to support the response</li> <li>• includes some reasonable analysis but which might not be adequately developed or becomes confused in places</li> <li>• includes fairly superficial evaluation; there is likely to be some attempt to make relevant judgements but these aren't well-supported by arguments and/or data.</li> </ul>
2	6–10	<p><b>A fairly weak response with some understanding that:</b></p> <ul style="list-style-type: none"> <li>• includes some limited knowledge and understanding of economic terminology, concepts and principles is shown but some errors are likely</li> <li>• includes some limited application of relevant economic principles to the given context and/or data to the question</li> <li>• includes some limited analysis but it may lack focus and/or become confused</li> <li>• includes some evaluation which is weak and unsupported.</li> </ul>
1	1–5	<p><b>A very weak response that:</b></p> <ul style="list-style-type: none"> <li>• includes little relevant knowledge and understanding of economic terminology, concepts and principles</li> <li>• includes application to the given context which is, at best, very weak</li> <li>• includes attempted analysis which is weak and unsupported.</li> </ul>
	0	No creditworthy material

**Indicative content:**

- definition of inequality
- explaining the difference between wealth and income inequality (valid arguments relating to either form should be rewarded throughout)
- income as a ‘flow’ in comparison to wealth as a ‘stock’
- discussion of a causal relationship between wealth and income inequality
- explanation and examples of wealth taxes and their impacts, such as property taxes, capital gains, inheritance taxes
- the progressive role of wealth taxes and their redistributive impact
- analysis of the role of government in redistributing wealth, such as efficiency and equity arguments
- the significance of the rate and starting point of a wealth tax
- the ability to increase the progressive impact via the use of different rates of tax at higher wealth thresholds
- the difficulty of discovering and assessing households’ assets and/or values
- the problems some asset-rich households face in accessing income to pay wealth taxes
- whether wealth taxes are easier/more difficult to avoid (or evade) than other forms of taxation
- whether any national wealth tax can effectively address global and/or national inequality without international coordination/agreement (eg a global wealth tax)
- the relative merits of other forms of direct taxation in reducing inequality
- consideration of other, non-taxation, methods of reducing inequality
- evaluation of whether inequality is (un)desirable within economies and the degree to which this is the case
- evidence of the effects of a wealth tax in a particular country
- an overall assessment of whether a wealth tax is the best method of reducing inequality.

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

Credit valid alternative content.



**Assessment Objectives Grid**

	<b>AO1</b>	<b>AO2</b>	<b>AO3</b>	<b>AO4</b>	<b>Total</b>
<b>Section A</b>					
01	1				<b>1</b>
02	1				<b>1</b>
03		1			<b>1</b>
04		1			<b>1</b>
05	1				<b>1</b>
06		1			<b>1</b>
07			1		<b>1</b>
08	1				<b>1</b>
09		1			<b>1</b>
10		1			<b>1</b>
<b>Section B</b>					
11.1	2				<b>2</b>
11.2	1	1			<b>2</b>
11.3	1	1			<b>2</b>
11.4	2	2			<b>4</b>
<b>Section C</b>					
12.1	1	1	2		<b>4</b>
12.2	1	1		2	<b>4</b>
13	3	3	6		<b>12</b>
14	4	3	9	9	<b>25</b>
<b>Section D</b>					
15 and 16	4	3	9	9	<b>25</b>
<b>Unit total</b>	<b>23</b>	<b>20</b>	<b>27</b>	<b>20</b>	<b>90</b>