

# INTERNATIONAL AS ECONOMICS

## EC01

Unit 1 The Operation of Markets, Market Failure and the Role of  
Government

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Mark scheme

January 2024

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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 [www.oxfordaqa.com](http://www.oxfordaqa.com)

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## International AS 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 21 more weight should be given to AO4 than to AO1, AO2 and AO3. 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: 15 marks

Question	Part	Marking guidance	Total marks
01		When a good has more than one use, this is known as  Answer: <b>B</b> (composite demand.)	1  AO1 = 1

Question	Part	Marking guidance	Total marks												
02		<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Year</th> <th>Price index</th> </tr> </thead> <tbody> <tr> <td>2018</td> <td>100</td> </tr> <tr> <td>2019</td> <td>105</td> </tr> <tr> <td>2020</td> <td>120</td> </tr> <tr> <td>2021</td> <td>125</td> </tr> <tr> <td>2022</td> <td>140</td> </tr> </tbody> </table> <p>Which one of the following can be concluded from the data?  Answer: <b>A</b> (The price of grain rose by 12% between 2021 and 2022.)</p>	Year	Price index	2018	100	2019	105	2020	120	2021	125	2022	140	1  AO2 = 1
Year	Price index														
2018	100														
2019	105														
2020	120														
2021	125														
2022	140														

Question	Part	Marking guidance	Total marks
03		Which one of the following statements describes the rationing function of the price mechanism?  Answer: <b>D</b> (Quantity demanded rises when prices fall)	1  AO1 = 1

Question	Part	Marking guidance	Total marks										
04		<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Good</th> <th>Income elasticity of demand</th> </tr> </thead> <tbody> <tr> <td>W</td> <td>+2.0</td> </tr> <tr> <td>X</td> <td>+0.5</td> </tr> <tr> <td>Y</td> <td>-0.5</td> </tr> <tr> <td>Z</td> <td>-2.0</td> </tr> </tbody> </table> <p>Which one of the following may be concluded from the data?</p> <p>Answer: <b>D</b> (As income rises, the demand for Good Z will fall by a larger percentage.)</p>	Good	Income elasticity of demand	W	+2.0	X	+0.5	Y	-0.5	Z	-2.0	<p>1</p> <p>AO2 = 1</p>
Good	Income elasticity of demand												
W	+2.0												
X	+0.5												
Y	-0.5												
Z	-2.0												

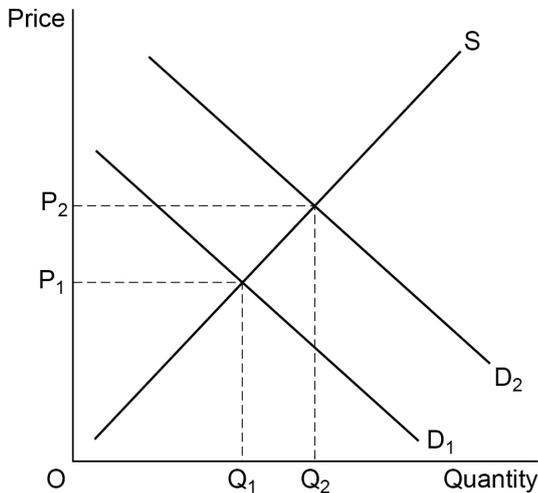
Question	Part	Marking guidance	Total marks						
05		<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Total fixed costs (\$)</th> <th>Average variable cost (\$)</th> <th>Output</th> </tr> </thead> <tbody> <tr> <td>5520</td> <td>120</td> <td>240</td> </tr> </tbody> </table> <p>What is the average total cost of producing 240 units of output?</p> <p>Answer: <b>D</b> (\$143.00)</p>	Total fixed costs (\$)	Average variable cost (\$)	Output	5520	120	240	<p>1</p> <p>AO3 = 1</p>
Total fixed costs (\$)	Average variable cost (\$)	Output							
5520	120	240							

Question	Part	Marking guidance	Total marks															
06		<table border="1"> <thead> <tr> <th>Price of a bicycle (\$)</th> <th>Quantity demanded (per month)</th> <th>Quantity supplied (per month)</th> </tr> </thead> <tbody> <tr> <td>250</td> <td>36 000</td> <td>30 000</td> </tr> <tr> <td>300</td> <td>33 000</td> <td>33 000</td> </tr> <tr> <td>350</td> <td>29 000</td> <td>35 000</td> </tr> <tr> <td>400</td> <td>25 000</td> <td>40 000</td> </tr> </tbody> </table>	Price of a bicycle (\$)	Quantity demanded (per month)	Quantity supplied (per month)	250	36 000	30 000	300	33 000	33 000	350	29 000	35 000	400	25 000	40 000	1 AO2 = 1
		Price of a bicycle (\$)	Quantity demanded (per month)	Quantity supplied (per month)														
		250	36 000	30 000														
		300	33 000	33 000														
		350	29 000	35 000														
		400	25 000	40 000														
<p>After a rise in production costs, supply falls by 6000 at each price. What is the new equilibrium price?</p>																		
<p>Answer: <b>C</b> (\$350)</p>																		

Question	Part	Marking guidance	Total marks
07		<p>In a free market economy, merit goods</p> <p>Answer: <b>B</b> (are underproduced.)</p>	1 AO1 = 1

Question	Part	Marking guidance	Total marks
08		<p>Which one of the following is an example of capital as a factor of production?</p> <p>Answer: <b>A</b> (Delivery lorries)</p>	1 AO1 = 1

Question	Part	Marking guidance	Total marks																
09		<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Car producer</th> <th>Car sales (thousands)</th> </tr> </thead> <tbody> <tr> <td>Ford</td> <td>5 386</td> </tr> <tr> <td>General Motors</td> <td>7 718</td> </tr> <tr> <td>Nissan</td> <td>5 176</td> </tr> <tr> <td>Toyota</td> <td>10 742</td> </tr> <tr> <td>Volkswagen</td> <td>10 975</td> </tr> <tr> <td>Other producers</td> <td>9 599</td> </tr> <tr> <td><b>Total</b></td> <td><b>49 596</b></td> </tr> </tbody> </table> <p>What is the three-firm concentration ratio, to the nearest whole number?</p> <p>Answer: <b>B</b> (59%)</p>	Car producer	Car sales (thousands)	Ford	5 386	General Motors	7 718	Nissan	5 176	Toyota	10 742	Volkswagen	10 975	Other producers	9 599	<b>Total</b>	<b>49 596</b>	<p><b>1</b></p> <p><b>AO3 = 1</b></p>
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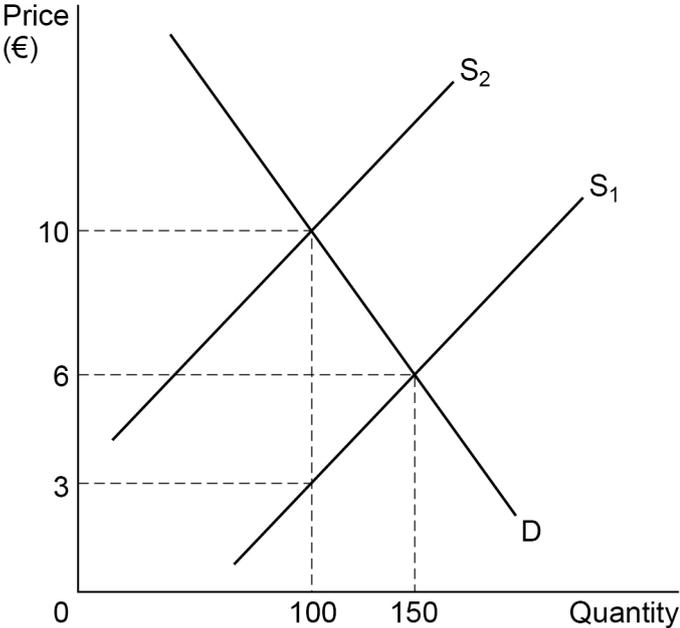
Question	Part	Marking guidance	Total marks
10		 <p>Which one of the following is most likely to cause the demand curve for chocolate to shift from <math>D_1</math> to <math>D_2</math>?</p> <p>An increase in</p> <p>Answer: <b>C</b> (the price of a substitute good.)</p>	<p><b>1</b></p> <p><b>AO2 = 1</b></p>

Question	Part	Marking guidance	Total marks
11		Which one of the following combinations is most likely to give a firm a high degree of monopoly power?  Answer: <b>B</b> (High, Low, High)	1  <b>AO2 = 1</b>

Question	Part	Marking guidance	Total marks
12		The price of a product falls from \$17 to \$15, resulting in a fall in total revenue from \$170 to \$150.  What is the price elasticity of demand for this change in price?  Answer: <b>C</b> (0)	1  <b>AO3 = 1</b>

Question	Part	Marking guidance	Total marks
13		Which one of the following is most likely to increase labour productivity in an industry?  An increase in  Answer: <b>A</b> (capital.)	1  <b>AO1 = 1</b>

Question	Part	Marking guidance	Total marks
14		In the short run, when output rises, average fixed costs  Answer: <b>A</b> (decrease.)	1  <b>AO1 = 1</b>

Question	Part	Marking guidance	Total marks
15		 <p data-bbox="368 1025 1171 1059">How much of the total tax revenue is paid by the consumers?</p> <p data-bbox="368 1093 619 1126">Answer: <b>B</b> (€400)</p>	<p data-bbox="1318 309 1337 342"><b>1</b></p> <p data-bbox="1318 383 1430 416"><b>A03 = 1</b></p>

Section B

Total for this section: 65 marks

Question	Part	Marking guidance	Total marks
16	1	<p>Define 'free market economy' (<b>Extract C</b>, line 17).</p> <p><b>A full and precise definition is given (3 marks)</b></p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• where decisions about what to produce, how to produce it and who should benefit are taken by buyers and sellers, (with no involvement by government)</li> <li>• where prices of goods and services are determined by the interaction of demand and supply (price mechanism).</li> <li>• where resource allocation depends on sellers and people's preferences</li> </ul> <p><b>The substantive content of the definition is correct, but there may be some imprecision or inaccuracy (2 marks)</b></p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• where demand and supply determine what is produced</li> <li>• where resource allocation depends on people's preferences.</li> </ul> <p><b>Fragmented points only (1 mark)</b></p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• no government involvement/intervention</li> <li>• capitalist or laissez-faire economy.</li> </ul>	<p><b>3</b></p> <p><b>AO1 = 3</b></p>

Question	Part	Marking guidance	Total marks
16	2	<p>Define 'imperfect information' (<b>Extract B</b>, line 6).</p> <p><b>A full and precise definition is given (3 marks)</b></p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• when buyers and/or sellers do not have all the necessary information (to make the correct decision about a product)</li> <li>• incomplete <b>and</b> inaccurate information.</li> </ul> <p><b>The substantive content of the definition is correct, but there may be some imprecision or inaccuracy (2 marks)</b></p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• not having all the information</li> <li>• incorrect information</li> <li>• where the buyer has more information than the seller (or vice versa).</li> <li>• incomplete <b>or</b> inaccurate information</li> </ul> <p><b>Fragmented points only (1 mark)</b></p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• where the information is difficult to understand/process</li> <li>• a type of information failure.</li> </ul>	<p><b>3</b></p> <p><b>AO1 = 3</b></p>

**MAXIMUM FOR QUESTION 16: 6 MARKS**

Question	Part	Marking guidance	Total marks						
17	1	<p>Use <b>Extract A (i)</b> to calculate single-use plastic waste per person in Australia as a percentage of single-use plastic waste per person in Spain in 2019.</p> <p>Give your answer to the <b>nearest whole number</b>.</p> <p>Calculation:</p> $\frac{59}{34} \times 100 = 173.52941\%$ <p>Correct answer is 174%</p> <table border="1" data-bbox="376 734 1291 1453"> <thead> <tr> <th data-bbox="376 734 1078 770">Response</th> <th data-bbox="1083 734 1291 770">Max 2 marks</th> </tr> </thead> <tbody> <tr> <td data-bbox="376 777 1078 875">For the correct answer: 174% (with or without working shown)</td> <td data-bbox="1083 777 1291 875"><b>2 marks</b></td> </tr> <tr> <td data-bbox="376 882 1078 1453"> <p>For the correct answer but not rounded to the nearest whole number: eg 173.5%</p> <p><b>OR</b></p> <p>For the correct answer rounded the wrong way: 173%</p> <p><b>OR</b></p> <p>For the correct answer but with missing/incorrect unit: eg 174</p> <p><b>OR</b></p> <p>For the correct method but with the wrong answer</p> </td> <td data-bbox="1083 882 1291 1453"><b>1 mark</b></td> </tr> </tbody> </table>	Response	Max 2 marks	For the correct answer: 174% (with or without working shown)	<b>2 marks</b>	<p>For the correct answer but not rounded to the nearest whole number: eg 173.5%</p> <p><b>OR</b></p> <p>For the correct answer rounded the wrong way: 173%</p> <p><b>OR</b></p> <p>For the correct answer but with missing/incorrect unit: eg 174</p> <p><b>OR</b></p> <p>For the correct method but with the wrong answer</p>	<b>1 mark</b>	<p><b>2</b></p> <p><b>AO1 = 1</b> <b>AO2 = 1</b></p>
Response	Max 2 marks								
For the correct answer: 174% (with or without working shown)	<b>2 marks</b>								
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Question	Part	Marking guidance	Total marks										
17	2	Calculate the price elasticity of demand for plastic bags between 2020 and 2021.	4  AO1 = 1 AO2 = 3										
		Give your answer to <b>two</b> decimal places.											
		Calculation:											
		$\text{QD change} = \frac{(496 \text{ million} - 627 \text{ million})}{627 \text{ million}} \times 100 = -20.89314\dots\%$											
		$\text{Price change} = \frac{(0.10 - 0.05)}{0.05} \times 100 = 100\%$											
		$\text{PED} = \frac{-20.89314\dots}{100} = -0.2089314\dots = -0.21 \text{ (2dp)}$											
		<table border="1"> <thead> <tr> <th>Response</th> <th>Max 4 marks</th> </tr> </thead> <tbody> <tr> <td>For the correct answer: -0.21 (with or without working shown)</td> <td>4 marks</td> </tr> <tr> <td>For the correct answer but not to two decimal places: eg -0.2  <b>OR</b>  For the correct answer rounded the wrong way: -0.20  <b>OR</b>  For the correct answer but with added/incorrect unit <b>or</b> the wrong sign: eg -0.21% or 0.21</td> <td>3 marks</td> </tr> <tr> <td>For the correct answer but with two errors from 'not to two decimal places', 'with added/incorrect unit' and 'wrong sign': eg -0.2%  <b>OR</b>  For the correct percentage changes for both QD and price: -20.89% <b>and</b> 100% (with or without sign or %)  <b>OR</b>  For the correct working throughout but the wrong answer</td> <td>2 marks</td> </tr> <tr> <td>For the correct percentage change of either QD or price: -20.89% or 100% (with or without sign or %)  <b>OR</b></td> <td>1 mark</td> </tr> </tbody> </table>	Response	Max 4 marks	For the correct answer: -0.21 (with or without working shown)	4 marks	For the correct answer but not to two decimal places: eg -0.2  <b>OR</b>  For the correct answer rounded the wrong way: -0.20  <b>OR</b>  For the correct answer but with added/incorrect unit <b>or</b> the wrong sign: eg -0.21% or 0.21	3 marks	For the correct answer but with two errors from 'not to two decimal places', 'with added/incorrect unit' and 'wrong sign': eg -0.2%  <b>OR</b>  For the correct percentage changes for both QD and price: -20.89% <b>and</b> 100% (with or without sign or %)  <b>OR</b>  For the correct working throughout but the wrong answer	2 marks	For the correct percentage change of either QD or price: -20.89% or 100% (with or without sign or %)  <b>OR</b>	1 mark	
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For the correct percentage change of either QD or price: -20.89% or 100% (with or without sign or %)  <b>OR</b>	1 mark												

		<p>For the correct equation for PED: % change in QD/% change in P (or equivalent)</p>		
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**MAXIMUM FOR QUESTION 17: 6 MARKS**

Question	Part	Marking guidance	Total marks
18	1	<p><b>Extract A</b> shows single-use plastic waste and income per person for selected countries in 2019.</p> <p>Explain how higher income per person may lead to more single-use plastic waste.</p>	<p><b>6</b></p> <p><b>AO1 = 2</b>  <b>AO2 = 2</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
3	5–6	<ul style="list-style-type: none"> <li>Shows sound knowledge and understanding of relevant economic terminology, concepts and principles.</li> <li>Includes good application of relevant economic principles to support the response.</li> <li>Includes well-focused analysis with a clear, logical chain of reasoning.</li> </ul>
2	3–4	<ul style="list-style-type: none"> <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 to the question.</li> <li>Includes some reasonable analysis but it might not be adequately developed and may be confused in places.</li> </ul>
1	1–2	<ul style="list-style-type: none"> <li>Shows limited knowledge and understanding of relevant economic terminology, concepts and principles.</li> <li>Includes limited application of relevant economic principles to the question.</li> <li>May include some limited analysis but the analysis lacks focus and/or becomes confused.</li> </ul>
	0	No creditworthy material

#### Indicative content:

- meaning of higher income per person
- identification of items bought that would generate more single-use plastic, eg bottles and containers for food
- recognition that higher income per person will enable people to buy/consume more
- recognition that the demand for single-use plastic is derived from the production and/or consumption of other goods
- explanation of how higher demand for many products could lead to larger quantities of single-use plastic waste
- identification/explanation of many of these products as normal goods, ie as income rises, so does demand
- recognition that changing habits due to higher incomes could lead to larger quantities of single-use plastic waste, eg from food delivery market
- use of demand and supply analysis.

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

Credit valid alternative content.

Question	Part	Marking guidance	Total marks
18	2	<p>To what extent do the data suggest that higher income per person leads to more single-use plastic waste?</p> <p>Use the data in <b>Extract A</b> to help support your answer.</p>	<p>6</p> <p>AO2 = 1 AO3 = 1 AO4 = 4</p>

Examiners are reminded that 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.

Level	Marks	Descriptor
3	5–6	<ul style="list-style-type: none"> <li>Includes sound evidence that indicates the extent to which higher income per person leads to more single-use plastic waste.</li> <li>Includes a supported overall judgement concerning the extent to which higher income per person leads to more single-use plastic waste.</li> </ul>
2	3–4	<ul style="list-style-type: none"> <li>Includes limited evidence that indicates the extent to which higher income per person leads to more single-use plastic waste.</li> <li>Attempts a judgement concerning the extent to which higher income per person leads to more single-use plastic waste.</li> </ul>
1	1–2	<ul style="list-style-type: none"> <li>Includes evidence that does not clearly indicate the extent to which higher income per person leads to more single-use plastic waste.</li> <li>May include an unsupported judgement concerning the extent to which higher income per person leads to more single-use plastic waste.</li> </ul>
	0	No creditworthy material

#### Indicative content:

- China has both the lowest income per person (\$16 652) and the lowest single-use plastic waste per person (18kg), which suggests a direct relationship
- also, Australia has the second highest income per person (\$51 909) and the highest single-use plastic waste per person (59kg)
- similarly, USA has the highest income per person (\$65 095) and the second highest single-use plastic waste per person (53kg)
- however, South Korea and the United Kingdom have the same single-use plastic waste per person (44kg) but the UK's income per person is higher than that of South Korea (\$49 661 to \$43 410)
- similarly, France has a slightly higher single-use plastic waste per person than Spain (36kg to 34kg) but France has a much higher income per person (\$50 501 to \$43 069)
- overall, the income per person of the country with the highest income (USA) is 3.9 times that of the income per person of the country with the lowest income (China) but the waste per person in the USA is only 2.9 times the waste per person in China
- recognition that the data for both income per person and waste are only for one year and selected countries
- other factors include that not all items bought generate single-use plastic waste and the movement away from single-use plastic packaging for environmental reasons, which may be happening more in some countries than others
- the likely conclusion is that higher income per person leads to more single-use plastic waste but it is not the only factor.

Credit valid alternative content.

**MAXIMUM FOR QUESTION 18: 12 MARKS**

Question	Part	Marking guidance	Total marks
19		<p><b>Extract B</b> (lines 4–5) states: ‘Each year, there are 300 million tonnes of plastic waste produced around the world, half of which comes from single-use items.’</p> <p>With the help of a diagram, explain why the free market output for single-use plastic may be different from the socially optimum output if there are environmental costs that result from consumption.</p>	<p><b>9</b></p> <p><b>AO1 = 2</b>  <b>AO2 = 4</b>  <b>AO3 = 3</b></p>

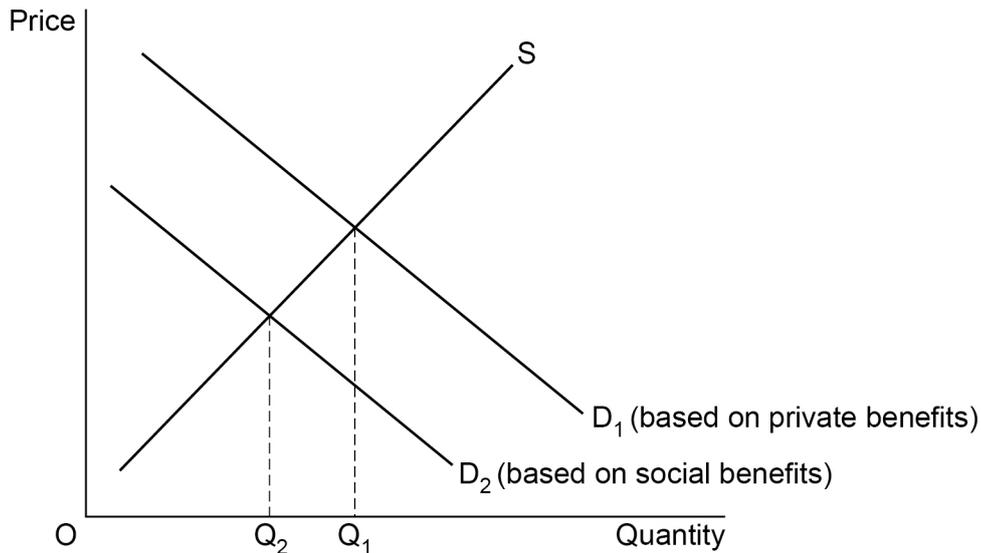
Examiners are reminded that AO1, AO2 and AO3 are regarded as interdependent. When deciding on a mark all should be considered together using the best-fit approach. In doing so, examiners should bear in mind the relative weightings of the Assessment Objectives in this question.

Level	Marks	Descriptor
3	7–9	<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>Includes a relevant diagram, that will, at the top of this level, be accurate and used appropriately to support their explanation.</li> </ul>
2	4–6	<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	1–3	<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 inappropriate or inaccurate in some respects, or not used.</li> </ul>
	0	No creditworthy material

**Indicative content**

The expected diagram involves two demand curves resulting in two potential equilibrium quantities –  $Q_1$ , the free market output, only taking into account the private benefits of consumption and  $Q_2$ , the socially optimum output, taking into account the social benefits of consumption.

Alternative valid diagrams should be credited.



**Relevant issues include:**

- meanings of free market and socially optimum output
- examples of the environmental costs resulting from single-use plastics
- differences between private, external and social benefits (and/or costs)
- how the free market and socially optimum outputs are determined
- why the socially optimum output is lower than the free market output
- why the existence of negative externalities is likely to result in overconsumption/overproduction.
- Imperfect information/failure

Credit valid alternative content.

Question	Part	Marking guidance	Total marks
20		<p><b>Extract B</b> (lines 14–16) states: ‘In countries such as the USA and South Korea, where food is generally cheap relative to people’s incomes, the price elasticity of demand for having food delivered is low.’</p> <p>Analyse reasons why the price elasticity of demand for having food delivered is likely to be inelastic.</p>	<p><b>12</b></p> <p><b>AO1 = 3</b>  <b>AO2 = 4</b>  <b>AO3 = 5</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

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:

- the meaning of price elasticity of demand
- explanation of what is meant by price inelastic demand
- analysis of significance of the availability of substitutes for having food delivered
- consumer habits changing around food delivery eg as a result of the pandemic, changing work patterns, possibly seeing food delivery as a necessity
- technological advancements which make having food delivered easier
- percentage of income spent on food delivery
- analysis of factors that apply to a particular country that could lead to the demand for food deliveries being price inelastic in that country.

Some students may support their answer with a diagram(s), but this is not needed for full marks.

Credit valid alternative content.

Question	Part	Marking guidance	Total marks
21		<p><b>Extract C</b> (line 1) states: ‘Governments across the world are looking at ways to reduce waste from single-use plastic.’</p> <p>Use the extracts and your knowledge of economics to assess policies governments could use to reduce waste from single-use plastic.</p>	<p><b>20</b></p> <p><b>AO1 = 3</b>  <b>AO2 = 4</b>  <b>AO3 = 5</b>  <b>AO4 = 8</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 than AO1, AO2 and AO3.

Level	Marks	Descriptor
5	17–20	<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	13–16	<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	9–12	<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	5–8	<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	1–4	<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:**

- knowledge of recent trends in the production, use and disposal of plastic
- how markets and prices allocate resources
- the determinants of demand and supply of single-use plastic waste and the significance of elasticities
- discussion of possible market failures – negative externalities in consumption and production, market imperfections eg imperfect information
- analysis and evaluation of alternative government policies:
  - plastic bag bans
  - plastic bag charges
  - deposit schemes
  - production restrictions
  - subsidising plastic alternatives
  - recycling targets
  - government funding for recycling
  - bans on importing plastic waste
  - indirect taxation
  - education and information provision
  - support to encourage technological change
- impact on tax revenues of governments
- cost and opportunity cost of government intervention
- significance of data included in the extracts, eg comparisons in **Extract A**, reasons for the rise of single-use plastics in **Extract B**
- market failure versus government failure
- tragedy of the commons and the desirability and difficulties of achieving international cooperation
- evaluation of whether governments should intervene in the market for single-use plastic waste, given different situations and priorities of different countries
- knowledge of experience of different countries
- an overall assessment of policies governments could use to reduce waste from single-use plastic.

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>
11		1			<b>1</b>
12			1		<b>1</b>
13	1				<b>1</b>
14	1				<b>1</b>
15			1		<b>1</b>
<b>Section B</b>					
16.1	3				<b>3</b>
16.2	3				<b>3</b>
17.1	1	1			<b>2</b>
17.2	1	3			<b>4</b>
18.1	2	2	2		<b>6</b>
18.2		1	1	4	<b>6</b>
19	2	4	3		<b>9</b>
20	3	4	5		<b>12</b>
21	3	4	5	8	<b>20</b>
<b>Unit total</b>	<b>24</b>	<b>24</b>	<b>20</b>	<b>12</b>	<b>80</b>