



...day June 20XX – Morning/Afternoon

A Level in Economics

H460/03 Themes in economics

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.

Levels of response – Level descriptors

	Knowledge and understanding/ Application	Analysis	Evaluation
Strong		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.
Good	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.
Reasonable	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.
Limited	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.

Q	Key	Rationale	AO	Quantitative skills
1	C	<p>A Distractor as this is the participation rate.</p> <p>B Distractor as this is the unemployment rate.</p> <p>C Correct: This is a definition of the dependency ratio.</p> <p>D This is the replacement ratio, despite being related to income it should still be active as it still a ratio and has plausible links to the notion of dependency.</p>	AO1	
2	B	<p>A A decrease in the average propensity to consume will cause aggregate demand to fall and real GDP levels to fall.</p> <p>B Correct: A decrease in the marginal propensity to save suggest that consumption levels will begin to rise and this will cause aggregate demand to increase and real GDP levels to rise.</p> <p>C An increase in the marginal propensity to import will cause aggregate demand to fall and real GDP levels to fall.</p> <p>D An increase in the marginal rate of tax will cause aggregate demand to fall and real GDP levels to fall.</p>	AO3	✓
3	D	<p>A A fiscal policy measure.</p> <p>B A fiscal policy measure.</p> <p>C Set by the government.</p> <p>D Correct: A monetary policy measure and so within the remit of the central bank.</p>	AO1	
4	B	<p>A Movement along the demand curve.</p> <p>B Correct: causes a shift to the right.</p> <p>C Would cause a shift to the left.</p> <p>D Would cause a shift to the left.</p>	AO1	
5	A	<p>A Correct: productive efficiency occurs when a firm produces at the minimum efficient scale and it's at the bottom of the long run average cost curve.</p> <p>B It should be average costs rather than marginal costs.</p> <p>C This describes pareto efficiency rather than productive efficiency.</p> <p>D This is the level of output at which a firm profit maximised.</p>	AO1	
6	D	<p>A PED for exports + PED for imports = less than 1.</p> <p>B PED for exports + PED for imports = less than 1.</p> <p>C PED for exports + PED for imports = less than 1.</p>	AO1	✓

Q	Key	Rationale	AO	Quantitative skills
		D Correct: PED for exports + PED for imports = greater than 1.		
7	B	A A high capital–output ratio means physical capital isn't very productive resulting in a lower rate of economic growth. B Correct: A high savings ratio provides banks with funding to lend to finance capital investment and a low capital–output ratio means more productive physical capital. C Low savings means banks cannot lend to fund capital investment. D Low savings means banks cannot lend to fund capital investment.	AO1	
8	A	A Correct: Would result in an increase in output since it would lead to resources having greater productivity. B Has the potential to increase demand but with all resources fully employed output cannot be increased to meet the higher demand. C Has the potential to increase demand but with all resources fully employed output cannot be increased to meet the higher demand. D Has the potential to increase demand but with all resources fully employed output cannot be increased to meet the higher demand.	AO3	
9	A	A Correct: Social greater than private. Based on benefit. B Negative externalities of production. C Negative externalities of consumption. D Positive externalities of production.	AO1	
10	C	A t is to the left of the intersection of MC and AC and therefore not productively efficient. B $rpst = \text{profit}$ ie revenue minus cost. C Correct: x is the point where PED = 1 since at w MR = 0 and s is to the left of x so elastic. D Identifying area of total cost only.	AO3	✓
11	B	A An incorrect economic term. B Correct: There is more than one use for Chinese land and so it is composite. C The stem describes competition for the use of Chinese land rather than demand increasing as a result of demand for another good. D Joint demand is when complementary goods are purchased together.	AO1	

Q	Key	Rationale	AO	Quantitative skills
12	C	<p>A This is the first time the increase in MP diminishes.</p> <p>B Even though MP does not rise, it is a case of constant returns.</p> <p>C Correct: at this point MP falls for the first time.</p> <p>D This is a case of negative returns.</p>	AO2	✓
13	C	<p>A This is a factor affecting elasticity of supply of labour.</p> <p>B This is a factor affecting elasticity of supply of labour.</p> <p>C Correct: this is a factor affecting elasticity of demand of labour.</p> <p>D This is a factor affecting both elasticity of supply of labour and elasticity of demand of labour. Since the question asks which factor does not affect supply, the candidate should eliminate this option.</p>	AO1	
14	C	<p>A Although a possible secondary goal, unlikely to be the focus for the majority of shareholders.</p> <p>B The divorce of ownership and control allows management to run the business to their mutual advantage. Beneficial pension schemes, top spec company cars, lavish corporate entertainment etc will reduce overall profit potential away from the maximum position.</p> <p>C Correct: Whilst running a business to their satisfaction, managers are still aware that they must make sufficient profit in order to pay the dividends that will keep shareholders happy.</p> <p>D Least likely option but a distracter especially for the less well prepared candidates.</p>	AO2	
15	C	<p>A Based on a multiplier of 10, which might be thought to be the correct answer if $1/mps$ is used</p> <p>B Based on a multiplier of 2.5 which might be thought to be the correct answer if $1/mrt + mpm$ is used</p> <p>C Correct: The multiplier is $1.0/0.5 = 2$. The government wants to raise GDP by \$150bn and so it has to increase its spending by $\\$150bn/2 = \\$75bn$.</p> <p>D The gap between current and desired GDP.</p>	AO3	✓
16	C	<p>A May face an economy at any particular time, but will not necessarily be a problem.</p> <p>B May face an economy at any particular time, but will not necessarily be a problem.</p> <p>C Correct: it is a problem that any economy will face at all times.</p> <p>D May face an economy at any particular time, but will not necessarily be a problem.</p>	AO1	
17	C	<p>A $5000 \times 8\%$</p> <p>B Taken change in price over the new price and not the original, so $16\% / 20\% = 0.8$ ($16\% \times 5000 = 800$).</p> <p>C Correct: $? / 25\% = 0.8$, so % change in quantity supplied = 20% ($20\% \times 5000 = 1000$).</p>	AO2	✓

Q	Key	Rationale	AO	Quantitative skills
		D Based on the view that PES =% change in price / % change in quantity supplied so that % change in quantity supplied = 25% (25% x 5000 = 1250).		
18	B	A A lack of information is not a key characteristic. B Correct: private sector firms will not have a financial incentive to produce public goods. C The problem is under-production. D This may occur, but is not the reason.	AO1	✓
19	B	A This sometimes happens as with some EU countries but it is not necessarily a feature of either a customs union or a free trade area. B Correct: Distinguishes a customs union from a free trade area. C This will give effectively the same result as a. It isn't necessarily a feature of either a customs union or a free trade area. D This is a characteristic of both customs unions and free trade areas.	AO1	
20	C	A With a perfectly inelastic supply curve all income is Economic Rent so a parallel shift in the LS curve will alter the economic rent, statement 1 is therefore untrue and with a perfectly inelastic supply curve labour will be supplied whether the wage rate is 0 or infinity so statement 2 is true. B With a perfectly inelastic supply curve all income is Economic Rent so a parallel shift in the LS curve will alter the economic rent, statement 1 is therefore untrue and for statement 2 to be true the labour supply curve would need to be perfectly elastic, it isn't so statement 2 is therefore also untrue. C Correct: With a perfectly inelastic supply curve no income is Transfer Earnings so a parallel shift in the LS curve will not alter the Transfer Earnings, statement 1 is therefore true and with a perfectly inelastic supply curve labour will be supplied whether the wage rate is 0 or infinity so statement 2 is also true. D With a perfectly inelastic supply curve no income is Transfer Earnings so a parallel shift in the LS curve will not alter the Transfer Earnings, statement 1 is therefore true and for statement 2 to be true the labour supply curve would need to be perfectly elastic, it isn't so statement 2 is therefore untrue.	AO2	✓
21	C	A Based on demand falling by 30, rather than rising by 30. B The reference to the unchanged sterling r=price might make candidates think that demand will remain unchanged.	AO3	✓

Q	Key	Rationale	AO	Quantitative skills
		<p>C Correct. The price in the USA is initially \$400 000 and total revenue earned is $90 \times \\$400\,000 = \\36m. When the exchange rate changes, the price in the USA falls to \$300 000. As $PED = 1$, revenue will stay the same at \$36m. So now the number of cars sold in the USA is $\\$36\text{m}/\\$300\,000 = 120$ cars.</p> <p>D Based on demand rising by 60 on the basis of $436\text{m}/\\$240\,000$ as some candidates may think that the US price will fall by 40%.</p>		
22	C	<p>A 20p = increase in wage.</p> <p>B £20.20 = new average wage.</p> <p>C Correct. Total cost of 50 workers = £1,000. Total cost of 51 workers = $51 \times £20.20 = £1030.20$ Marginal cost = $£1030.20 - £1000 = £30.20$.</p> <p>D £1030.20 = Total cost of employing 101 workers.</p>	AO3	✓
23	D	<p>A Not a characteristic and there may be more pressure for greater harmonisation.</p> <p>B With more open economies, national economies are more subject to external shocks.</p> <p>C Transnational organisations tend to become more powerful, given the greater interdependency of economies.</p> <p>D Correct. Globalisation involves greater mobility of products and capital with barriers to their free movement between national economies being reduced.</p>	AO1	
24	A	<p>A Correct. Belgium – highest proportion of foreign trade and FDI as % of GDP.</p> <p>B Denmark – only country with a surplus of inward FDI but foreign trade and FDI accounting for smaller % of GDP than Belgium.</p> <p>C Germany – largest trade surplus but foreign trade and FDI accounting for smaller % of GDP than Belgium.</p> <p>D USA – largest values of foreign trade and FDI but they account for smaller % of GDP than Belgium.</p>	AO3	✓
25	B	<p>A This may reduce current account surplus but it would increase unemployment as the skills of workers would be reduced making them less employable.</p> <p>B Correct. a decrease in interest rates would be expected to stimulate demand. Higher demand would reduce cyclical unemployment and would be likely to lead to higher imports which would reduce the current account surplus.</p>	AO3	

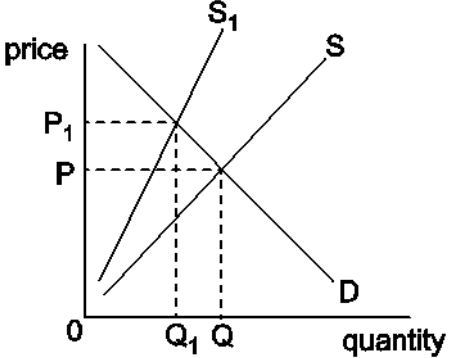
Q	Key	Rationale	AO	Quantitative skills
		<p>C This may reduce current account surplus but it would be likely to increase unemployment as firms are likely to reduce their output.</p> <p>D This may reduce current account surplus but it would be likely to increase unemployment as exports are likely to fall and imports rise so domestic firms will reduce output.</p>		
26	A	<p>A Correct: As individuals do adapt their expectations of inflation as the price level changes.</p> <p>B This is an assumption required for the Phillips Curve relationship to hold. The opposite of the correct answer A.</p> <p>C The Phillips Curve shows money wages.</p> <p>D This explains the traditional Phillips Curve relationship.</p>	AO1	
27	C	<p>A Strong complements.</p> <p>B Weak complements.</p> <p>C Correct: Weak substitutes.</p> <p>D Strong substitutes.</p>	AO1	
28	B	<p>A $49 / 104 \times 100 = 47\%$</p> <p>B Correct: $118 / 112 \times 100 = \underline{105\%}$</p> <p>C $105 / 105 \times 100 = 100\%$</p> <p>D $120 / 140 \times 100 = 86\%$</p>	AO2	✓
29	C	<p>A Incorrectly multiply $V \times 100$ and then divide by M. This option also provides 'balance' with the same number of choices above 100 as below.</p> <p>B Incorrectly multiply $V \times T$ and then divide by M.</p> <p>C Correct: correctly multiply $M \times V$ and divide by T.</p> <p>D Incorrectly multiply $M \times T$ and then divide by V.</p>	AO2	
30	B	<p>A International trade will be reduced and limit globalisation.</p> <p>B Correct: The provision of fuller information has encouraged globalisation.</p> <p>C Capital will be less mobile and limit globalisation.</p> <p>D Labour will be less mobile and limit globalisation.</p>	AO1	

Question	Answer	Marks	Guidance
31	One mark for each function, up to a maximum of two marks.	<p>2</p> <p>(AO1 x 2)</p>	<p><i>Indicative content</i></p> <p>The environment performs three functions; candidates must give two of the following:</p> <ul style="list-style-type: none"> • provides resources • offers amenities • absorbs waste. <p>NB These terms are not explicitly incorporated within the stimulus material, so drawing on that material is not expected.</p>
32	<p>Up to two marks:</p> <p>One mark for a relevant description which does not make reference to specific figures.</p> <p>For second mark, must be comparative and use % rate.</p>	<p>2</p> <p>(AO2 x 2)</p>	<p><i>Indicative content</i></p> <p>In 1998 environmental taxation was 9.6% of total taxation revenue but it fell to 8.1% in 2012.</p> <p>There is a downward trend in environmental taxation as a percentage of total taxation revenue from 9.6% in 1998 to 8.1% in 2012.</p> <p>Environmental taxation as a percentage of total taxation revenue was at its highest in 1998 at 9.6% but the lowest percentage was in 2006 at 7.4%.</p>
33	<p>Up to four marks:</p> <p>Up to two marks for the diagram.</p> <p>Up to two marks for an explanation.</p> <p>Two marks for a correct and relevant diagram.</p> <p>Accept price rather than costs/benefits and output or quantity.</p> <p>One mark for a relevant diagram with some omission(s), or a diagram that uses demand and supply labelling.</p>	<p>4</p> <p>(AO1 x 1 AO2 x 1 AO3 x 2)</p>	<p><i>Indicative content</i></p> <p>NB Candidates may draw on the material incorporated within the stimulus material, but this is not required in order to access the full mark range.</p>

Question	Answer	Marks	Guidance
	<p>Up to a further two marks for a correct explanation. One mark for any of the following, up to a maximum of two marks:</p> <ul style="list-style-type: none"> external costs are not taken into account in production decisions/there will be a divergence between MPC and MSC quantity will be above and price will be below the allocatively efficient levels/there will be overproduction and overconsumption there will be a deadweight loss/loss of economic welfare. 		
<p>34</p>	<p>Level 2 (5–8 marks) Good knowledge and understanding of the value of using Cost Benefit Analysis (CBA) for deciding whether or not to build flood defences.</p> <p>Strong analysis of how a government could use CBA to make the decision about whether or not to build flood defences.</p> <p>Strong evaluation including a supported judgement of the usefulness of CBA to a government when making a decision whether or not to build flood defences.</p> <p>Level 1 (1–4 marks) Reasonable knowledge and understanding of CBA.</p> <p>Reasonable analysis of how a government could use CBA to make the decision about whether or not to build flood defences.</p> <p>Limited or no evaluation.</p>	<p>8</p> <p>(AO1 x 1 AO2 x 1 AO3 x 2 AO4 x 4)</p>	<p><i>Indicative content</i></p> <ul style="list-style-type: none"> Definition of CBA and basic understanding that it identifies social costs and benefits, making comparisons between them to assess whether the social benefits outweigh the social costs. Long and wide view of CBA. External costs — the disruption while the flood defences are being built, noise pollution, congestion from work-traffic, loss of habitats and rare species, opportunity-cost. External benefits — improved health and productivity, businesses not lost, do not lose transport links or rare habitats, do not need to give relief aid to regions affected by flooding — opportunity cost <p>Reasons why it may:</p> <ul style="list-style-type: none"> effective use of scarce resources — a more rational way of evaluating an important investment project than relying on projections of private profit or even having no/few facts or figures to consider

Question	Answer	Marks	Guidance
	<p>0 marks no response or no response worthy of credit</p> <p>Note: although a diagram is not required, it may enhance the quality of the answer and should be rewarded at the appropriate level.</p>		<ul style="list-style-type: none"> • weigh up social benefits against social costs, not just private benefits against private costs • provision of more information to make more informed choices • the Environment Agency uses a CBR of £1:£8 set by the Treasury • because financial resources are scarce, CBA usually allows projects to be ranked according to those which provide the highest welfare — especially if there are limitations on government spending • hard to place a monetary value on the external costs and external benefits from flood defences • the results will depend upon the rate of discount of future costs and the government will use shadow pricing and this may not reflect the true benefits and costs • the costs of undertaking the CBA might be greater than the usefulness of the information that it provides • there may be bias in the collection of data to construct CBA because of a lack of skills or a preference for a particular outcome, or there may be bias in the attitude taken to risk • hidden costs may exist because of future costs which can't be accounted for. <p>Credit, where appropriate, knowledge/analysis of other, relevant factors.</p> <p>Possible routes into evaluation:</p> <ul style="list-style-type: none"> • the value of CBA will depend upon the accuracy of the data gathered on social costs and social benefits. In order to achieve this, the assumptions made in the CBA should be explicit. Ideally a range of CBA results should be given showing the impact when different assumptions are made

Question		Answer	Marks	Guidance
				<ul style="list-style-type: none"> social costs and benefits that cannot be expressed in monetary terms should be clearly stated the investment project decision may be influenced by other factors, such as political or social considerations are more important more useful in a comparison with other projects (opportunity cost) the longer the time involved, the less reliable the technique costs tend to be experienced at the start, benefits come later, and this can distort the decision.
35	*	<p>Level 3 (11–15 marks) Good knowledge and understanding of indirect taxation as a method of reducing environmental damage.</p> <p>Strong analysis of how indirect taxation can reduce environmental damage. A relevant and accurately drawn and labelled diagram is provided and is linked to the analysis.</p> <p>Strong evaluation including a supported judgement on the extent to which indirect taxation is the best method of reducing environmental damage.</p> <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>Level 2 (6–10 marks) Good knowledge and understanding of indirect taxation as a method of reducing environmental damage.</p>	<p>15</p> <p>(AO1 x 2 AO2 x 3 AO3 x 4 AO4 x 6)</p>	<p><i>Indicative content</i></p> <p>NB Candidates may draw on the material incorporated within the stimulus material, but this is not required in order to access the full mark range.</p> <ul style="list-style-type: none"> Taxation is used to reduce the production of goods which cause negative externalities. The government hopes that by intervening in the market it will reduce production to the socially optimum level of output/allocatively efficient. Candidates may reference Fig. 2.1 and describe how environmental taxation has changed in the UK between 1998 and 2012. <p>Reasons why it may be the best:</p> <ul style="list-style-type: none"> taxation will increase a firm's costs of production, causing the supply curve to shift to the left. This will result in a fall in quantity of units produced and therefore a reduction in business activity and environmental damage.

Question	Answer	Marks	Guidance
	<p>Good analysis of how indirect taxation can reduce environmental damage. A relevant diagram is provided and is linked to the analysis.</p> <p>Reasonable evaluation of whether indirect taxation is the best method of reducing environmental damage but 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>Level 1 (1–5 marks) Reasonable knowledge and understanding of indirect taxation and/or environmental damage.</p> <p>Reasonable analysis of how indirect taxation can reduce environmental damage. The diagram may not be relevant, may be inaccurate or may be missing.</p> <p>Limited or no evaluation.</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>0 marks no response or no response worthy of credit.</p>		 <ul style="list-style-type: none"> • this will reduce the divergence between MSC and MPC (this may be shown and labelled on the diagram). • taxation is consistent with the Polluter Pays Principle; because it will internalise the negative externality firms will realise the external cost caused through their production as their costs of production rise • the tax revenue could be used by the government to fund expenditure on merit goods and/or into flood defences resulting in an increase in job creation and an improvement in the productive potential of the economy. This may be shown by an AD/AS diagram linked to the national income multiplier. <p>Reasons why it may not be the best:</p> <ul style="list-style-type: none"> • there are questions over how taxation should be implemented; flat or ad valorem? • indirect taxation may be regressive and so the poor bear the main burden of reducing environmental damage • it is hard to place an accurate monetary value on the external cost and so the indirect tax may not fully internalise the externality • government failure may result from a lack of information, which leads to the value of the external

Question	Answer	Marks	Guidance
			<p>cost being misinterpreted and placing too high or too low a tax on industries that cause environmental damage</p> <ul style="list-style-type: none"> • indirect taxation will be less effective in the case of goods that have price inelastic demand • if only one government imposes an indirect tax, it may result in a loss international price competitiveness, which can lead to lower aggregate demand and so lower economic growth and raise unemployment • it could discourage multinational companies from setting up in the country, and therefore leading to less inwards FDI • if the tax affects a significant number of industries, there will be a reduction in short run aggregate supply • it may not be the best in all circumstances • benefits of other relevant methods of reducing environmental damage, which may include an appropriate diagram. <p>Credit, where appropriate, knowledge/analysis of other, relevant factors.</p> <p>Possible routes into evaluation: Alternative methods of government intervention should be compared to indirect taxation in terms of relative effectiveness, e.g.:</p> <ul style="list-style-type: none"> • pollution permits provide both a reward and a penalty, and this combination is more likely to be effective than just indirect taxation • indirect taxation may be more effective if the limit in a pollution permit scheme is set too high so the behaviour is not affected • the price of pollution permits may be affected by the economic cycle so that it falls so low that the reward for

Question		Answer	Marks	Guidance
				<p>reducing pollution is less than the benefits of polluting, thus making taxation more effective</p> <ul style="list-style-type: none"> • in a situation where a government is trying to reduce the budget deficit, the government's view of the best method would be indirect taxation rather than subsidies • the provision of information may be a better long term method than taxation because it alters behaviour and allows for free markets to more truly reflect costs and benefits • impact of price elasticity of demand.
36		<p>Up to four marks: Up to two marks for changes in total water demand. Up to two marks for changes in manufacturing water demand.</p> <p>Two marks for a relevant comparison of total water demand between the two types of economy.</p> <p>One mark for a relevant discrete statement about just one type of economy.</p> <p>Two marks for a relevant comparison of manufacturing water demand between the two types of economy.</p> <p>One mark for a relevant discrete statement about just one type of economy.</p>	<p>4</p> <p>(AO2 x 4)</p>	<p><i>Indicative content</i></p> <p>Total water demand in developed economies is forecast to fall, whereas in emerging economies it is forecast to rise.</p> <p>Manufacturing water demand in both developed and emerging economies is forecast to rise, but the rise is forecast to be greater in emerging economies.</p>
37	*	<p>Level 3 (11–15 marks) Good knowledge and understanding of the structure of an economy in the context of sustainable development.</p> <p>Strong analysis of how changes in the structure of an economy can influence its ability to achieve sustainable development.</p>	<p>15</p> <p>(AO1 x 2 AO2 x 3 AO3 x 4 AO4 x 6)</p>	<p><i>Indicative content</i></p> <p>NB Candidates may draw on the material incorporated within the stimulus material, but this is not required in order to access the full mark range.</p>

Question	Answer	Marks	Guidance
	<p>Strong evaluation including a supported judgement on the extent to which the structure of an economy can influence its ability to achieve sustainable development.</p> <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>Level 2 (6–10 marks) Good knowledge and understanding of the structure of an economy in the context of sustainable development.</p> <p>Good analysis of how changes in the structure of an economy can influence its ability to achieve sustainable development.</p> <p>Reasonable evaluation of how the structure of an economy can influence its ability to achieve sustainable development but 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>Level 1 (1–5 marks) Reasonable knowledge and understanding of the structure of an economy and/or sustainable development.</p> <p>Reasonable analysis of how changes in the structure of an economy can influence its ability to achieve sustainable development.</p> <p>Limited or no evaluation.</p>		<ul style="list-style-type: none"> • The structure of an economy is the balance between the primary, secondary and tertiary sectors. • Sustainable development involves meeting the needs of the current generation without compromising the ability of future generations to meet their needs. <p>Reasons why it may compromise:</p> <ul style="list-style-type: none"> • an increase in the secondary sector may increase demand for water and create negative spill-over effects in the form of chemical discharges into water systems, increase in waste and other pollutants • an increase in the primary and/or secondary sector may result in natural resources being over-exploited • an increase in the primary sector may result in greater extraction in raw materials causing harm to natural environment • changes in the structure of an economy may lead to faster economic growth which will result in rising GDP per capita resulting in changing diets and greater demand for meat which puts greater pressure on land and the need for water • also increase in demand for income elastic products such as cars leading to greater congestion and rise in carbon emissions • increased rural to urban migration leading to higher urbanisation • going from primary to secondary is likely to increase total water demand • if there is a movement from the primary/secondary sectors to the tertiary sector, industrial production may experience a relative decline and less use of natural resources and less pollution • an increase in the tertiary sector resulting from an increase in tourism may lead to greater protection of natural habitats and cultural heritage

Question	Answer	Marks	Guidance
	<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>0 marks no response or no response worthy of credit.</p>		<ul style="list-style-type: none"> • an increase in firms' profits which can be invested into greener technologies and alternative ways of generating energy or extracting resources • an increase in the secondary sector resulting from an expansion of green production can reduce pollution • as the structure of an economy changes, it has an impact on income which can reduce pollution (an environmental Kuznets curve can be used to show this) • an increase in the tertiary sector resulting from more education may lead to a reduction in information failure and people will be more aware of how to modify their behaviour to reduce environmental damage • an increase in the tertiary sector resulting from more healthcare being provided and improved diets will lead to a more productive labour force and may cause less environmental damage. <p>Credit, where appropriate, knowledge/analysis of other, relevant factors.</p> <p>Possible routes into evaluation:</p> <ul style="list-style-type: none"> • depends on what is being produced in the various sectors, e.g. oil production may cause pollution but might generate more income and tax revenue than agriculture • the rate of change from one sector to another will influence an economy's ability to develop in a sustainable way • it will depend on the government policy measures put in place to make any change more sustainable. • direction of change • extent to which sustainability maybe compromised as a result of globalisation.

Question	AO1	AO2	AO3	AO4	TOTAL	(Quantitative skills)
SECTION A TOTAL	16	6	8		30	(12)
31	2				2	
32		2 (2)			2	(2)
33	1	1 (1)	2 (1)		4	(2)
34	1	1	2	4	8	
35	2 (2)	3 (2)	4 (2)	6 (2)	15	(8)
36		4 (2)			4	(2)
37	2	3	4	6	15	
SECTION B TOTAL	8	14	12	16	50	(14)
PAPER TOTAL	24	20	20	16	80	(26)

Summary of Updates

Date	Version	Change
March 2019	2	Removal of some content following an OCR review.
May 2020	2.1	Updated copyright acknowledgements.
May 2020	2.2	Removal of some content following an OCR review.