



Oxford Cambridge and RSA

A Level Economics

H460/03 Themes in Economics

MARK SCHEME

Duration: 2 hours

MAXIMUM MARK 80

This document consists of 30 pages

MARKING INSTRUCTIONS

PREPARATION FOR MARKING

1. Make sure that you have accessed and completed the relevant training packages for on–screen marking: *RM assessor 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 RM assessor and mark the **required number** of practice responses (“scripts”) and the **required number** of standardisation responses.

YOU MUST MARK 5 PRACTICE AND 10 STANDARDISATION RESPONSES BEFORE YOU CAN BE APPROVED TO MARK LIVE SCRIPTS.

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 RM assessor 50% and 100% deadlines. If you experience problems, you must contact your Team Leader without delay.
4. If you are in any doubt about applying the mark scheme, consult your Team Leader by telephone or the RM assessor messaging system, or by email.
5. **Crossed Out Responses**
Where a candidate has crossed out a response and provided a clear alternative then the crossed out response is not marked. Where no alternative response has been provided, examiners may give candidates the benefit of the doubt and mark the crossed out response where legible.

Rubric Error Responses – Optional Questions

Where candidates have a choice of question across a whole paper or a whole section and have provided more answers than required, then all responses are marked and the highest mark allowable within the rubric is given. Enter a mark for each question answered into RM assessor, which will select the highest mark from those awarded. *(The underlying assumption is that the candidate has penalised themselves by attempting more questions than necessary in the time allowed.)*

Multiple Choice Question Responses

When a multiple choice question has only a single, correct response and a candidate provides two responses (even if one of these responses is correct), then no mark should be awarded (as it is not possible to determine which was the first response selected by the candidate).

When a question requires candidates to select more than one option/multiple options, then local marking arrangements need to ensure consistency of approach.

Contradictory Responses

When a candidate provides contradictory responses, then no mark should be awarded, even if one of the answers is correct.

Short Answer Questions (requiring only a list by way of a response, usually worth only **one mark per response**)

Where candidates are required to provide a set number of short answer responses then only the set number of responses should be marked. The response space should be marked from left to right on each line and then line by line until the required number of responses have been considered. The remaining responses should not then be marked. Examiners will have to apply judgement as to whether a 'second response' on a line is a development of the 'first response', rather than a separate, discrete response. *(The underlying assumption is that the candidate is attempting to hedge their bets and therefore getting undue benefit rather than engaging with the question and giving the most relevant/correct responses.)*

Short Answer Questions (requiring a more developed response, worth **two or more marks**)

If the candidates are required to provide a description of, say, three items or factors and four items or factors are provided, then mark on a similar basis – that is downwards (as it is unlikely in this situation that a candidate will provide more than one response in each section of the response space.)

Longer Answer Questions (requiring a developed response)

Where candidates have provided two (or more) responses to a medium or high tariff question which only required a single (developed) response and not crossed out the first response, then only the first response should be marked. Examiners will need to apply professional judgement as to whether the second (or a subsequent) response is a 'new start' or simply a poorly expressed continuation of the first response.

6. Always check the additional 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. The 'link page' check box should be used on RM assessor to link candidate responses in additional objects to the corresponding question number.
 - Where additional objects are present, all pages must contain an annotation, or RM assessor will not allow you to submit the script. Where no response is given by a candidate on a whole page the 'BP' annotation **must** be applied.
 - Where generic answer booklets are used, all pages must contain an annotation, or RM assessor will not allow you to submit the script. Where no response is given by a candidate on a whole page the 'BP' annotation **must** be applied.
 - Where structured answer booklets are used, the 'BP' annotation **must** be applied to all pages where no response is given by a candidate.

7. Award No Response (NR) if:

- there is nothing written in the answer space

Award Zero '0' if:

- anything is written in the answer space and is not worthy of credit (this includes text and symbols).

Team Leaders must confirm the correct use of the NR button with their markers before live marking commences and should check this when reviewing scripts.

8. The RM assessor **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 RM assessor messaging system, or e-mail.

9. Assistant Examiners will send a brief report on the performance of candidates to their Team Leader 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
Consistently meets the criteria for this level	At top of level
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)
Meets most of the criteria with some inconsistencies	Middle 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)
On the borderline of this level and the one below	At bottom of level

11. Annotations

Annotation	Meaning
	Blank Page – this annotation must be used on all blank pages within an answer booklet (structured or unstructured) and on each page of an additional object where there is no candidate response.
	Tick
	Cross
	Confused
	Benefit of doubt
	AO1 – Knowledge and understanding
	AO2 – Apply knowledge and understanding
	AO3 - Analyse
	AO4 - Evaluation
	Omission
	Not answered question
	Noted but no credit given
	Too vague
	Own figure rule

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.

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.

Levels of response / Level descriptors	Knowledge and understanding/ Application	Analysis	Evaluation
Strong	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, fully developing the links in the chain of argument.	A conclusion is drawn weighing up both sides, and reaches a supported judgement.
Good		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.

INSTRUCTIONS TO EXAMINERS:

The indicative content indicates the expected parameters for candidates' answers, but be prepared to recognise and credit unexpected approaches where they show relevance.

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.

Be prepared to use the full range of marks. Do not reserve (e.g.) high 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.

Multiple Choice Questions	Answer
1	A
2	D
3	C
4	A
5	D
6	A
7	C
8	B
9	C
10	A
11	B
12	C
13	B
14	D
15	C

Multiple Choice Questions	Answer
16	A
17	A
18	C
19	D
20	C
21	D
22	A
23	B
24	A
25	B
26	D
27	A
28	A
29	A
30	B

Q	Key	Rationale	AO	Quantitative skills
1	A	<p>A Correct: there is no scarcity associated with the provision of free goods as they are unlimited.</p> <p>B This is a public good.</p> <p>C Receiving a good for free does not mean it is a free good – for example, healthcare in the UK is provided for free but there is an economic cost in terms of choices over how the government allocates its budget.</p> <p>D This is an economic good.</p>	AO1	
2	D	<p>A This is a component of the Genuine Progress Indicator.</p> <p>B This is a component of the Genuine Progress Indicator.</p> <p>C This is a component of the Genuine Progress Indicator.</p> <p>D Correct: this is a proxy for health, which is one of three components of the HDI.</p>	AO1	
3	C	<p>A This area would represent consumer surplus in a goods market diagram.</p> <p>B This is economic rent.</p> <p>C Correct: this represents the opportunity cost of undertaking the current employment.</p> <p>D Transfer earnings are shown on the labour supply rather than labour demand curve.</p>	AO1	✓
4	A	<p>A Correct: the UK economy recovered in 2010-2014 but growth started to slow down in 2015-2016.</p> <p>B 2008-2009 was a period of recession.</p> <p>C Growth in 1998-2007 was much stronger than the growth seen in 2010-14.</p> <p>D Growth in 2015-1016 was slower than in 2010-14.</p>	AO1	
5	D	<p>A Occurs when price does not equal marginal cost.</p> <p>B Occurs when firms are not investing in research and development.</p> <p>C Occurs when firms are producing at a level of output that does not enable them to achieve the lowest possible average cost – ie. they are not operating at the MES on the LRAC curve.</p> <p>D Correct: firms are essentially operating on an LRAC curve above the lowest attainable LRAC curve.</p>	AO3	

Q	Key	Rationale	AO	Quantitative skills
6	A	<p>A Correct: this will reduce the geographical mobility of labour, increasing structural unemployment and therefore increasing the gap between the aggregate supply of labour and the labour force.</p> <p>B The natural rate of unemployment is concerned with problems on the supply side rather than the demand side.</p> <p>C This should reduce the natural rate as individuals will become more occupationally mobile, reducing structural unemployment.</p> <p>D This should reduce the natural rate as frictional unemployment will fall, as the opportunity cost of being unemployed increases.</p>	AO1	
7	C	<p>A Tax revenue will be more obviously affected by fiscal policy, but if anything tax revenue may rise as consumption increases.</p> <p>B Aggregate demand will increase, increasing inflationary pressures.</p> <p>C Correct: hot money will flow out of the UK as foreign investors get a better return abroad.</p> <p>D MPS will fall as the return from saving falls.</p>	AO3	
8	B	<p>A Whilst the shareholders are incentivised by profit there are many other stakeholders motivated by different objectives, meaning this is unlikely.</p> <p>B Correct: Danielle will most likely aim to achieve a level of profit that satisfies the shareholders whilst also pursuing other objectives such as revenue maximisation to boost her bonus.</p> <p>C Danielle is answerable to shareholders so is unlikely to pursue revenue maximisation at all costs for fear of losing her job.</p> <p>D Utility maximisation is more likely to be seen in the public or voluntary sector.</p>	AO2	
9	C	<p>A This is the reduction in domestic production.</p> <p>B This is the original level of imports.</p> <p>C Correct: Q_5 units are demanded and Q_3 is the level of domestic production – the difference is the quantity imported.</p> <p>D This is the increase in consumption.</p>	AO3	✓

Q	Key	Rationale	AO	Quantitative skills
10	A	<p>A Correct: $M = PQ / V = 1200 / 4 = \text{£}300\text{bn.}$</p> <p>B Assumes the money supply is equal to real GDP.</p> <p>C $M = QV / P$</p> <p>D $M = Q \times P$</p>	AO3	✓
11	B	<p>A Reduces quantity demanded by 28.125% rather than increasing it.</p> <p>B Correct: % change in price = $(\text{£}5 - \text{£}8) / \text{£}8 \times 100 = -37.5\%$. % change in QD = 28.125%. Quantity consumed = $600 \times 1.28125 = 768.75 = 769$.</p> <p>C Calculates % change in price as $(\text{£}8 - \text{£}5) / \text{£}5 \times 100$.</p> <p>D Specifies price as falling to £3 instead of falling by £3.</p>	AO2	✓
12	C	<p>A This is the ratio of dependents to the total population.</p> <p>B This is the proportion of the working age population in employment.</p> <p>C Correct: the proportion of those of working age in the labour force (employed + unemployed).</p> <p>D The ratio of unemployment benefits to labour market earnings.</p>	AO1	
13	B	<p>A Whilst the distribution of income has worsened it is impossible to know what has happened to absolute poverty – in a growing economy those at the bottom of the income distribution may be receiving a smaller proportion of national income but not be in absolute poverty as a result.</p> <p>B Correct: Those at the bottom of the income distribution now receive a smaller proportion of national income.</p> <p>C Relative poverty is likely to have increased.</p> <p>D The Gini coefficient has increased as the Lorenz curve has moved further away from the line of equality.</p>	AO3	✓
14	D	<p>A Collusion is a consequence of an oligopoly; all market structures have the potential to be contestable.</p> <p>B Firms will only make a normal profit in the long run to prevent hit and run.</p> <p>C The theory of contestable markets dictates there is a high level of potential competition, not</p>	AO1	

Q	Key	Rationale	AO	Quantitative skills
		necessarily significant actual competition. D Correct: the lack of barriers to entry is what provides the threat of competition that makes the market contestable.		
15	C	A Interest rates are likely to be very high on this form of borrowing as there is a strong chance of default with limited security for the lender. B Banks will charge a higher interest rate because there is a greater probability of defaulting. C Correct: banks do not expect borrowers to default and even if they did they could recover the money owed as the loan is secured. D Low security means the bank stands to lose the investment if the borrower defaults on loan repayments.	AO1	
16	A	A Correct: a negative output gap is when an economy is producing below its trend rate of output. B This is a microeconomic concept of market failure. C This suggests a positive output gap. D This is the definition of a recession.	AO1	
17	A	A Correct: this is a demerit good case. If consumers were aware of the harms they would consume less. B The consumers have imperfect information causing market failure to exist on the consumption rather than production side. C Consumers would optimally consume less if they understood the harms of red meat consumption. D The consumers have imperfect information causing market failure to exist on the consumption rather than production side.	AO2	
18	C	A A decrease in unemployment will move production closer to the PPF rather than shift it. B This could decrease the stock of land or capital, causing the PPF to shift inwards. C Correct: immigration increases the size of the labour force, causing productive capacity to increase.	AO3	✓

Q	Key	Rationale	AO	Quantitative skills
		D This represents a movement along the PPF.		
19	D	<p>A Investment will be affected by increases in income, as firms expect rising demand and therefore better returns to investment.</p> <p>B Government spending will also be affected because it is likely to lead to a rise in tax revenue.</p> <p>C Net exports will also be affected as the demand for imports will rise.</p> <p>D Correct: all components of AD could be affected by an increase in income.</p>	AO1	
20	C	<p>A There is only free trade within the EU – members are still subject to tariffs around the world except when the EU has a free trade deal with the country.</p> <p>B The European Central Bank sets interest rates for all members of the Eurozone whilst there are restrictions on fiscal policy set out by the EU.</p> <p>C Correct: being part of the EU entitles members to free trade within the single market.</p> <p>D Not all member states are members of the Eurozone.</p>	AO1	
21	D	<p>A This is only true in the later stages of economic development.</p> <p>B This is only true in the early stages of economic development.</p> <p>C More advanced economies tend to have the technology to be more environmentally friendly, which is why degradation falls as countries become fully developed.</p> <p>D Correct: as industrial output expands the environment initially suffers, but this changes as deindustrialisation and technological progress occurs.</p>	AO1	
22	A	<p>A Correct: $0.31 + 0.19 = 0.5$ and $1/0.5 = 2$. $0.24 + 0.16 = 0.4$ and $1/0.4 = 2.5$</p> <p>B This is the change in the marginal propensity to withdraw.</p> <p>C $1 - 0.31$ and $1 - 0.24$</p> <p>D $2 - 0.31$ and $2.5 - 0.24$.</p>	AO2	✓
23	B	<p>A This is where price does not equal marginal cost.</p> <p>B Correct: This is a short run concept where firms experience rising average costs because of a fixed factor of production.</p>	AO2	✓

Q	Key	Rationale	AO	Quantitative skills
		C This is a long run concept that is shown by movements up the LRAC curve. D This is a long run concept that is shown by movements down the LRAC curve.		
24	A	A Correct: a disadvantage of specialisation is that firms are dependent on each worker to carry out the task they are specialised in. B Workers do not have to move locations or switch tools, increasing efficiency. C Repetition means workers become better at the task, increasing skill and productivity. D Workers can concentrate on doing what they are best at, increasing quality.	AO1	
25	B	A This is the negative externalities of consumption case. B Correct: Production brings benefits to third parties, meaning social cost is below private cost. C This is the positive externalities of consumption case. D This is the negative externalities of production case.	AO1	
26	D	A The government sets the inflation target. B The reverse is true. C The government and Bank of England operate separately and carry out different functions. D Correct: the Bank of England sets the interest rate to meet the government's inflation target.	AO1	
27	A	A Correct: quantity demanded will decrease more than proportionally when the price increases. B Quantity demanded will decrease less than proportionally to the increase in price. C The tax will cause no change in consumption. D Quantity demanded will only decrease proportionally to the increase in price resulting from the tax.	AO3	✓
28	A	A Correct: Keynesians argue an economy could operate with spare capacity in the long run. B It is the classical approach that argues the inelastic LRAS curve means fiscal policy will simply be inflationary. C Keynes argued prices and wages are sometimes 'sticky'.	AO1	

Q	Key	Rationale	AO	Quantitative skills
		D Keynes proposed demand deficient unemployment could be addressed through fiscal stimulus.		
29	A	<p>A Correct: Nominal GDP in 2014 = £800bn x 1.05 = £840bn. Real GDP = £840bn x 100/120</p> <p>B £840bn - £120bn. Price index in 2014 = 120.</p> <p>C £812bn. This is 2014 real GDP in 2013 prices (£840bn x 116/120).</p> <p>D This is nominal GDP in 2014 (£800bn x 1.05).</p>	AO2	✓
30	B	<p>A This is the increase in total consumer surplus, including that enjoyed by both the initial consumers and the new consumers.</p> <p>B Correct: This area shows the extra amount that the new consumers would have been willing and able to pay above that which they did pay.</p> <p>C This is the total expenditure of the new consumers and the total revenue received from the new consumers.</p> <p>D This would be the rise in consumer surplus if price were to fall from P_2 and zero.</p>	AO3	✓

Question	Answer	Marks	Guidance
31	<p>Using Fig. 1.1, compare the profitability of hosting the Vancouver and London Olympic Games.</p> <p><i>Award up to 2 marks for use of the data:</i></p> <ul style="list-style-type: none"> • Vancouver profit = \$ 1,578m - \$7,556m = -\$5,978m (1) • London profit = \$3,270m - \$11,401m = -\$8,131m (1) <p><i>Award up to 2 marks for explanation:</i></p> <ul style="list-style-type: none"> • The London Games made a bigger loss than the Vancouver Games (2) • Both Games made a loss (1) • The Vancouver Games was more profitable than the London Games (1) 	<p>4</p> <p>AO1 x 1 AO2 x 3</p>	<p>1 data mark can be awarded where both numbers are correct but there is only one of the following types of error:</p> <ul style="list-style-type: none"> • Missing a \$ sign • Incorrect units (e.g. missing millions) • Use of a double negative (London made a loss of -\$8,131m and Vancouver made a loss of -\$5,978m.) <p>Where there is more than one type of error, no marks should be awarded for the calculations.</p> <p>No calculation marks can be awarded to answers without a minus sign, unless the candidate clearly identifies that a loss is being made.</p>

Question	Answer	Marks	Guidance
32	<p>Evaluate, using the information in Extract 1, whether expenditure on the Olympic Games represents sustainable investment.</p> <p>Level 2 (5–8 marks)</p> <p>Good knowledge and understanding of the concept of sustainability applied to the Olympic Games.</p> <p>Good – strong analysis of how expenditure on the Olympic Games may represent sustainable investment. Good analysis will be in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis. Strong analysis will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis.</p> <p>Reasonable – strong evaluation of whether expenditure on the Olympic Games represents sustainable investment, considering both sides/comparing alternatives. Good evaluation will weigh up both sides/comparing alternatives but without reaching a supported judgement. Strong evaluation should include a supported judgement.</p> <p>Level 1 (1–4 marks)</p> <p>Limited – reasonable knowledge and understanding of the concept of sustainability applied to the Olympic Games.</p> <p>Limited – reasonable analysis of how expenditure on the</p>	<p>8</p> <p>AO1 x 1 AO2 x 1 AO3 x 2 AO4 x 4</p>	<p>Guidance:</p> <ul style="list-style-type: none"> • Whilst most candidates will start their answers explaining how hosting the Olympics represents sustainable development, the reverse approach is equally valid – reasons why Olympics expenditure does not represent sustainable investment can be credited as Analysis if presented first. • A number of limited analytical/evaluative points can be awarded up to Reasonable, but to be awarded Good or Strong there needs to be greater depth of explanation. • Strong evaluation requires an explained judgement. An explained judgement without Good evaluation can be credited as evaluation. <p>Knowledge & Understanding:</p> <p>Knowledge & Understanding marks should be awarded for an understanding of sustainability and reference to the material in Extract 1. Application to the case study is required for Knowledge & Understanding to be Reasonable:</p> <ul style="list-style-type: none"> ○ Fig 1.1 shows hosts make losses ○ Losses made by previous hosts suggest evidence of wasteful expenditure ○ Significant proportion of Olympics revenue goes to the IOC ○ Benefits will be felt for generations to come ○ Improves in transport infrastructure can enhance productivity ○ Regenerates areas such as East London ○ Long run benefits lower than those that would come from alternative projects ○ Severe overcapacity once the event is over – e.g. weed infested cycling racetrack <p>Analysis and Evaluation requires candidates to go</p>

Question	Answer	Marks	Guidance
	<p>Olympics represents sustainable investment. Limited analysis will have little evidence of reasoning that addresses the question asked. There is a lack of a clear structure. Reasonable analysis will have correct analysis largely in the form of single links. These address the question but are not developed into a clear chain of reasoning. Any relevant diagram(s) may be imperfectly labelled or not linked to the analysis.</p> <p>Limited evaluation of whether expenditure on the Olympics represents sustainable investment in the form of an unsupported statement or no evaluation.</p> <p>0 marks no response or no response worthy of credit.</p>		<p>beyond what is given in the case study.</p> <p>Analysis may include:</p> <ul style="list-style-type: none"> • Increasing the capital stock will increase productive capacity, shifting LRAS out, enabling future generations to enjoy non-inflationary economic growth. • Improved transport infrastructure can increase labour mobility, increasing the productive capacity of the economy. • Improved transport reduces commuting times, increasing productivity and contributing to long run growth, which could be further enhanced by increased investment resulting from lower costs of production. • Facilities can be used by future generations, meaning expenditure today still benefits future citizens. For example, the Olympic village may be used for housing in the future. • If facilities are used in the future, they can continue to generate revenue for the government that could be spent on supply side improvements. <p>Evaluation may include:</p> <ul style="list-style-type: none"> • Opportunity cost of Olympics expenditure – money spent on Olympics could be better spent on other supply side policies that have a greater impact on productive capacity. • Olympics expenditure may only generate short run growth if facilities are not used in the future and if it doesn't create a long run increase in tourism. • If the government has to borrow money to pay for the Olympics, this reduces money available to spend in the future. • Government borrowing could crowd out private sector investment, harming productive capacity in the future. • It depends upon whether there is a plan in place to make

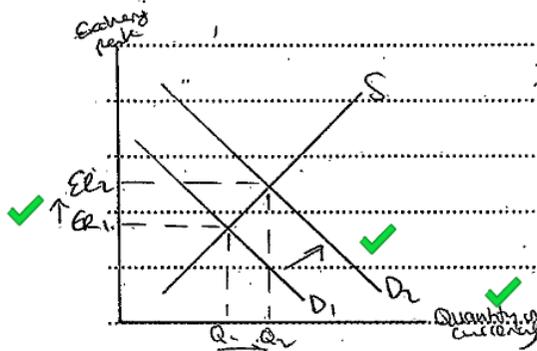
Question	Answer	Marks	Guidance
			<p>use of facilities post-Olympics.</p> <ul style="list-style-type: none"> Expenditure may be more beneficial to a developing nation that doesn't have much infrastructure to start with, or conversely less beneficial to a developing nation because there are more important spending priorities such as health and education.
<p>33</p>	<p>Using the data in Extract 2, explain what is meant by the multiplier effect of Olympics expenditure.</p> <p><i>Award 1 mark for applying understanding of the multiplier effect:</i></p> <p>Olympics expenditure leads to a greater final change in (real) GDP/output/expenditure/income.</p> <p><i>Award 1 mark for appropriate use of the data:</i></p> <p>A multiplier of 1.7 means for every £1 spent on the Olympics real GDP will increase by £1.70</p>	<p>2</p> <p>AO2 x 2</p>	<p>Award answers that calculate the multiplier for Vancouver or London:</p> <p>Vancouver - \$7,556m x 1.7 = \$12,845m</p> <p>London - \$11,401 x 1.7 = \$19,382m</p> <p><i>NB – this is not required for full marks.</i></p>

Question	Answer	Marks	Guidance
34	<p>Evaluate, using the information in Extract 2, the extent to which hosting an Olympic Games has a positive impact on the government’s macroeconomic policy objectives.</p> <p>Level 3 (11–15 marks)</p> <p>Good knowledge and understanding of macroeconomic policy objectives applied to the Olympic Games.</p> <p>Good – strong analysis of the impact of hosting an Olympics on the government’s macroeconomic policy objectives. Good analysis will be in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis. Strong analysis will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis.</p> <p>Good - strong evaluation of the extent to which hosting the Olympic Games helps the government achieve its macroeconomic policy objectives, weighing up both sides/comparing alternatives. Strong evaluation should include a supported judgement.</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>15</p> <p>(AO1 x 2 AO2 x 3 AO3 x 4 AO4 x 6)</p>	<p>Guidance:</p> <ul style="list-style-type: none"> • <i>Limited Analysis – Undeveloped analysis of one macroeconomic objective (economic growth, price stability, low unemployment, satisfactory balance of payments position, fair distribution of income)</i> • <i>Reasonable Analysis – Undeveloped analysis of two objectives or developed analysis of one objective</i> • <i>Good Analysis – Developed analysis of one objective and undeveloped analysis of another objective or highly developed analysis of one objective</i> • <i>Strong Analysis – Developed analysis of two objectives</i> • <i>Generic macroeconomic analysis using AD/AS that is not directly linked to the hosting of the Olympic Games cannot be credited.</i> • <i>Whilst most candidates will start their answers with the positive impact hosting the Olympics has on the government’s macroeconomic policy objectives, the reverse approach is equally valid – the harms of hosting the Olympics can be credited as analysis if presented first.</i> • <i>A number of limited analytical/evaluative points can be awarded up to Reasonable, but to be awarded Good or Strong there needs to be greater depth of explanation.</i> • <i>Strong evaluation requires an explained judgement. An explained judgement without Good evaluation can be credited as evaluation.</i> <p>Knowledge & Understanding:</p> <p>Knowledge & Understanding marks should be awarded for recognition of the costs or benefits of hosting the Olympic Games that are mentioned in the case study:</p> <ul style="list-style-type: none"> ○ Japanese economy could be boosted by \$249bn from hosting Tokyo 2020 ○ Olympics expenditure represents expansionary

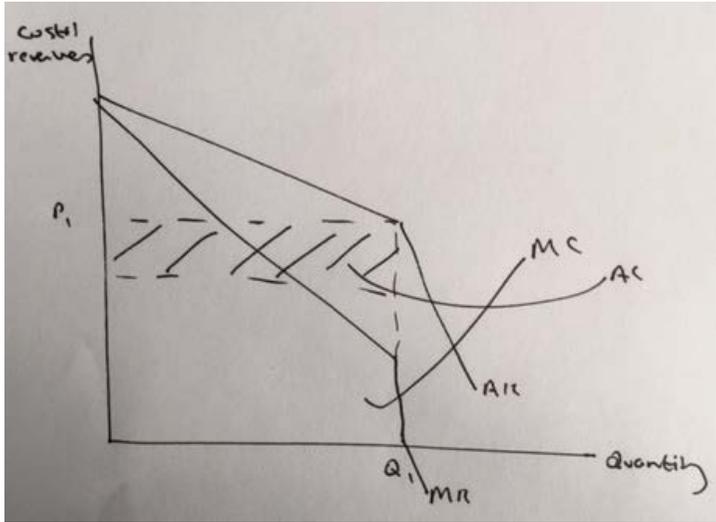
Question	Answer	Marks	Guidance
	<p>Level 2 (6–10 marks)</p> <p>Good knowledge and understanding of the macroeconomic policy objectives applied to the Olympic Games.</p> <p>Reasonable analysis of the impact of hosting an Olympics on the government’s macroeconomic policy objectives. There is correct analysis largely in the form of single links. These address the question but are not developed into a clear chain of reasoning. Any relevant diagram(s) may be imperfectly labelled or not linked to the analysis.</p> <p>Reasonable evaluation of the extent to which hosting the Olympic Games helps the government achieve its macroeconomic policy objectives.</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)</p> <p>Limited – reasonable knowledge and understanding of at least one macroeconomic policy objective applied to the Olympic Games.</p> <p>Limited analysis of the impact of hosting an Olympics on the government’s macroeconomic policy objectives. There is little evidence of reasoning that addresses the question asked. There is a lack of a clear structure.</p> <p>Limited evaluation of the extent to which hosting the Olympic Games helps the government achieve its macroeconomic policy objectives in the form of an unsupported statement or no evaluation.</p> <p><i>The information is basic and communicated in an</i></p>		<p>fiscal policy</p> <ul style="list-style-type: none"> ○ Unemployment falls because of job creation in construction ○ Balance of payments improves in the short run because of tourist expenditure and in the long run because of FDI ○ Multiplier generated from Olympics expenditure ○ Size of injection will depend on the stage of the economic cycle the economy is at ○ Impact overstated because of the substitution effect associated with Olympics expenditure/employment/tourism ○ Consumer confidence and propensity to consume increases because of feel good factor ○ The impact will depend upon how well known/popular the country was to start with <p>Analysis and Evaluation requires candidates to go beyond what is given in the case study.</p> <p>Analysis may include:</p> <ul style="list-style-type: none"> ● Infrastructure spending increases the derived demand for labour, reducing unemployment ● Hosting the Olympics can generate indirect employment – e.g. more jobs working for airlines/in restaurants ● Increased employment increases consumption, which increases aggregate demand and causes economic growth ● Increased employment reduces income inequality, particularly if those employed in construction were previously unemployed ● Lower unemployment reduces government expenditure on welfare payments, improving fiscal position ● Increased government revenue from tax revenue generated from Olympics can provide the funds for the

Question	Answer	Marks	Guidance
	<p><i>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>		<p>government to increase expenditure.</p> <ul style="list-style-type: none"> • Government spending is a component of AD, so will increase economic growth • Infrastructure spending shifts LRAS to the right, increasing the productive capacity of the economy and causing economic growth and reducing inflationary pressures • Improvements in infrastructure, such as better transport links, may increase occupational mobility and therefore reduce unemployment/increase economic growth • In the short run an appreciation of the exchange rate improves the balance of payments because of the J-curve effect • Improved balance of payments can contribute to AD increasing, causing economic growth • Tourism expenditure represents an export, so improves the current account of the balance of payments • FDI improves the financial account of the balance of payments <p>Evaluation may include:</p> <ul style="list-style-type: none"> • Demand pull inflation caused from increases in AD resulting from rising consumption/balance of payments improvement • Employment may only be temporary, meaning individuals will be unemployed again when the Olympics ends • The host city may benefit more than the country as a whole • Exchange rate appreciation will worsen the balance of payments in the long run – Figure 2.2 shows hosts experience an appreciating exchange rate. • Opportunity cost of infrastructure spending on wasted infrastructure could harm long run growth, as could the

Question	Answer	Marks	Guidance
			<p>increased government debt that results</p> <ul style="list-style-type: none"> • If infrastructure development is not in areas of need then the spending does not contribute to non-inflationary growth, as it doesn't meaningfully add to productive capacity • Financial crowding out – government borrowing for the Olympics raises interest rates decreasing private sector investment • The data in Figure 2.1 suggests that growth does not increase significantly in host countries
35	<p>Explain, using an appropriate diagram, why the changes in the Olympics index, illustrated in Fig. 2.2, may occur as a result of a country hosting the Olympic Games.</p>	<p>4</p> <p>AO1 x 1 AO2 x 1</p>	<p>Accept axes labels focusing on the price of one host country (eg. price of £). Do not award axes labels mark when it is not clear the diagram refers to an exchange rate – eg. <i>price</i> alone should not be credited.</p> <p>No marks should be awarded for diagrams with AD/AS labels</p>

Question	Answer	Marks	Guidance
	<p><i>Award up to 3 marks for a diagram:</i></p> <ul style="list-style-type: none"> • Axes (exchange rate/price of currency and quantity) and curves (supply and demand) labelled (1) • Demand curve shifting right (1) • Original and new equilibrium exchange rate clearly labelled on y-axis (1) <p><i>Award up to 2 marks for associated explanation:</i></p> <ul style="list-style-type: none"> • Tourists visiting the host city/foreign firms wanting to invest in the country will increase demand for the currency (1) • This will cause the exchange rate to rise/appreciate from e_1 to e_2 (1) 	<p>AO3 x 2</p>	<p>on curves.</p>  <p>First explanation mark requires clear understanding of why demand for the currency increases – simply saying demand increasing causing a shift in the demand curve to the right is not sufficient.</p> <p>Second explanation mark requires clear reference to diagram – simply saying that the exchange rate appreciates is not sufficient.</p>
<p>36</p>	<p>Using Fig. 3.1, explain what happened to bicycle prices in the period 2007–2015.</p> <ul style="list-style-type: none"> • (Nominal) Bicycle prices increased over the period (1) 	<p>2</p> <p>AO1 x 1</p>	<p>Do not credit answers that simply describe the data year by year.</p>

Question	Answer	Marks	Guidance
	<ul style="list-style-type: none"> Generally the real price of bicycles was falling (because the rate of inflation was higher than nominal bicycle price growth in five out of eight years) (1) 	AO2 x 1	Award the second mark for an alternative explanation that the real price has stayed roughly constant (ie. in 2015 the real price was similar to the real price in 2007, because of the large increase in real prices in 2009).
37	<p>Evaluate, using an appropriate diagram, the extent to which consumer welfare is harmed as a result of the bicycle industry being an oligopoly.</p> <p>Level 3 (11–15 marks)</p> <p>Good knowledge and understanding of the oligopoly model.</p> <p>Good – strong analysis of the way in which oligopolies harm consumer welfare. Good analysis will be in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis. Strong analysis will have consistently well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis.</p> <p>Good - strong evaluation of whether oligopolies harm consumer welfare, weighing up both sides/comparing alternatives. Strong evaluation should include a supported judgement.</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>15</p> <p>AO1 x 2 AO2 x 3 AO3 x 4 AO4 x 6</p>	<p>Guidance:</p> <ul style="list-style-type: none"> For Knowledge & Understanding to be Good, there must be both an accurate diagram and application to the bicycle industry A monopoly diagram is an acceptable alternative to the KDC, providing it is explained in the context of oligopolists colluding to act as one firm. Analysis and Evaluation cannot be awarded beyond Reasonable unless the answer includes a diagram and there is application to the bicycle industry within the answer. In depth analysis of one harm of an oligopoly can be awarded up to Good analysis. For example: <ul style="list-style-type: none"> Oligopolists collude to charge consumers high prices (Limited) Oligopolists collude to charge consumers high prices, explicitly explained using KDC theory (Reasonable) Oligopolists collude to charge consumers high prices, clearly explained using KDC theory, leading to reduced consumer surplus/high prices explained using game theory/consumers charged a price above marginal cost (Good) Analysis of at least two different harms must be offered

Question	Answer	Marks	Guidance
	<p>Level 2 (6–10 marks)</p> <p>Good knowledge and understanding of the oligopoly model.</p> <p>Reasonable analysis of the way in which oligopolies harm consumer welfare. There is correct analysis largely in the form of single links. These address the question but are not developed into a clear chain of reasoning. Any relevant diagram(s) may be imperfectly labelled or not linked to the analysis.</p> <p>Reasonable evaluation of whether oligopolies harm consumer welfare, considering both sides/comparing alternatives.</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)</p> <p>Limited – reasonable knowledge and understanding of the oligopoly model.</p> <p>Limited analysis of the way in which oligopolies harm consumer welfare. There is little evidence of reasoning that addresses the question asked. There is a lack of a clear structure.</p> <p>Limited evaluation of whether oligopolies harm consumer welfare, in the form of an unsupported statement 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</i></p>		<p><i>for Strong analysis.</i></p> <ul style="list-style-type: none"> <i>Whilst most candidates will start their answers with the harms of oligopoly to consumers, the reverse approach is equally valid – benefits of oligopolies to consumers can be credited as Analysis if presented first.</i> <i>A number of limited analytical/evaluative points can be awarded up to Reasonable, but to be awarded Good or Strong there needs to be greater depth of explanation.</i> <i>Strong evaluation requires an explained judgement. An explained judgement without Good evaluation can be credited as evaluation.</i>  <p>Analysis may include:</p> <ul style="list-style-type: none"> As profit maximising firms, oligopolists collude to use their market power to set prices high. The incentive to

Question	Answer	Marks	Guidance
	<p><i>clear.</i></p> <p>0 marks no response or no response worthy of credit.</p>		<p>collude occurs because firms will lose revenue if they raise price (elastic demand) or lower price (inelastic demand), meaning they do not compete on price. This can be further explained using the Prisoners Dilemma, where firms can maximise joint welfare by colluding at High, High. This means consumers suffer from reduced consumer surplus.</p> <ul style="list-style-type: none"> • Prices may rise even further over time as the lack of competitive pressure can lead to firms being X-inefficient, producing above their lowest attainable average cost. • Firms deliberately restrict output to keep prices high - this means consumers suffer from allocative inefficiency, with too few resources allocated to the bicycle market. • Consumers suffer from poor quality bicycles as the lack of competition means firms have no incentive to be dynamically efficient and invest in R&D. • The interdependent nature of firms means there is little product differentiation - consumers therefore have little choice as firms are selling very similar bicycles. <p>Evaluation may include:</p> <ul style="list-style-type: none"> • If collusion breaks down consumers can benefit from price wars. The Prisoners Dilemma shows us the Nash equilibrium is at Low, Low. • Price rigidity can benefit consumers who appreciate stable bicycle prices. Even if costs increase consumers may not experience price rises.

Question	Answer	Marks	Guidance
			<ul style="list-style-type: none"> • Supernormal profit can be reinvested into R&D, with firms being dynamically efficient. Firms in oligopoly compete on non-price factors, which can drive improvements in quality. Extract 3 illustrates the significant development of bicycles that have come as a result of this. • The data in Figure 3.1 suggests consumers haven't been exploited, with prices generally falling in real terms. The exception was in 2009, but this sudden spike suggests another factor caused the price rise in this year rather than oligopolies abusing their market power. • The entry of new firms to the bicycle market suggests it is contestable. This benefits consumers as they get greater choice and are not exploited with high prices, as oligopolists will charge a price equal to AC to avoid hit and run competition. In these circumstances consumers benefit from the economies of scale enjoyed by large firms without being exploited. • If firms are not profit maximising but pursuing an alternative objective then consumer welfare may not be harmed to the same extent. • The CMA often intervenes to prevent collusion – regulation can therefore reduce the harm caused by oligopoly firms.

Question	AO1	AO2	AO3	AO4	TOTAL	(Quantitative skills)
SECTION A TOTAL	16	6	8		30	(11)
31	1	3 (2)			4	(2)
32	1	1	2	4	8	
33		2 (1)			2	(1)
34	2	3	4	6	15	
35	1 (1)	1 (1)	2		4	(2)
36	1 (1)	1			2	(1)
37	2 (2)	3 (2)	4 (2)	6 (2)	15	(8)
SECTION B TOTAL	8	14	12	16	50	(14)
PAPER TOTAL	24	20	20	16	80	(25)

