

# GCE

# **Economics**

## H460/01: Microeconomics

A Level

## Mark Scheme for June 2022

OCR (Oxford Cambridge and RSA) is a leading UK awarding body, providing a wide range of qualifications to meet the needs of candidates of all ages and abilities. OCR qualifications include AS/A Levels, Diplomas, GCSEs, Cambridge Nationals, Cambridge Technicals, Functional Skills, Key Skills, Entry Level qualifications, NVQs and vocational qualifications in areas such as IT, business, languages, teaching/training, administration and secretarial skills.

It is also responsible for developing new specifications to meet national requirements and the needs of students and teachers. OCR is a not-for-profit organisation; any surplus made is invested back into the establishment to help towards the development of qualifications and support, which keep pace with the changing needs of today's society.

This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by examiners. It does not indicate the details of the discussions which took place at an examiners' meeting before marking commenced.

All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the report on the examination.

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### PREPARATION FOR MARKING RM ASSESSOR

- 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 <u>http://www.rm.com/support/ca</u>
- 3. Log-in to RM Assessor and mark the **required number** of practice responses ("scripts") and the **number of required** standardisation responses.

YOU MUST MARK 10 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% (traditional 40% 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 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,

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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 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. 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.

- 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 (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: Not applicable in F501

- a. To determine the level start at the highest level and work down until you reach the level that matches the answer
- b. 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
BP	Blank Page – this annotation must be used on all blank pages within an answer booklet and on each page of an additional object where there is no candidate response.
<b>N</b>	Correct – mark awarded
×	Incorrect
BOD	Benefit of doubt
KU	AO1 – Knowledge and understanding
APP	AO2 – Apply knowledge and understanding
AN	AO3 - Analyse
EVAL	AO4 - Evaluation
NAQ	Not answering question
SEEN	Noted but no credit given
TV	Too vague
OFR	Own figure rule
CON	Confused
?	Unclear

### M12. Subject-specific Marking Instructions

## INTRODUCTION

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

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

You should ensure that you have copies of these materials.

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

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

## **Rubric Infringement**

Candidates may infringe the rubric in the following way:

• answering two questions from Section B or C.

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

## 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	rong Precision in the use of the 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	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 An explanation of causes	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.

Qı	estion	Answer	Marks	Guidance
1	a	Explain what is meant by the term 'subsidy'. A payment to producers (1) which will reduce their production costs (1) and increase / encourage more production / supply / shift supply curve to the right (1).	<b>2</b> (AO1*2)	Annotate with 1 mark for reference to it being a payment to a producer (accept grant) 1 mark for explanation in terms of production costs or production / supply

Q	lestion	Answer	Marks	Guidance
1	b	"more taxes may be imposed on the marginal private cost of using petrol driven cars, so that the price paid is closer to the marginal pastal pasta inflicted on pasiaty." Lines 26,28	<b>4</b> (AO1*2)	Annotate with
		marginal social costs inflicted on society." Lines 36-38	(AO2*2)	Up to 2 marks for a diagram which shows:
		Explain, using an appropriate diagram, how this could be achieved.		<ul> <li>original demand and supply (1)</li> <li>MSC &gt; S (MPC + current tax) (1)</li> </ul>
		Price MSC S <sup>1</sup> (MPC + additional tax)		If a Candidate uses a negative consumption externality award diagram marks as follows
		S (MPC + current		<ul> <li>original demand and supply (1)</li> <li>MSB &lt; D (MPB) (1)</li> </ul>
				Up to 2 marks for explaining how this is achieved:
		P <sup>1</sup> P B Demand		<ul> <li>Size of tax required = AB – in words or on diagram (1)</li> <li>Tax increases production costs (1)</li> <li>Leftward shift of S (MPC) towards MSC (1)</li> <li>Increase in price from P towards the socially optimum of P* (1)</li> </ul>
		Quantity		

Questi	ion	Answer	Marks	Guidance
1 c		Calculate the percentage change in price required to achieve a 6.5% fall in demand for petrol in the short run. PED = % change in demand / % change in price - 0.26 = - 6.5/X X = - 6.5/- 0.26 = 25% (increase in price)	<b>2</b> (AO2*2)	Annotate with Award 2 marks for an answer of 25% or 25 Accept 25% <i>change in price</i> without reference to <i>increase in price</i> Award 1 mark for evidence of correct working Award 1 mark for an answer of -25%
				Award 1 mark for an answer of -25%

Qı	lest	ion	Answer	Marks	Guidance
1	d	i	Explain how Fig. 2 can be used to show that economies of scale may be achieved. Unit costs have fallen from \$175 to \$80 / by \$95 (1) as output has increased from 5m to 38m / by 33m (1)	<b>2</b> (AO2*2)	Annotate with 1 mark for recognising that unit costs have fallen as output has increased in the long-run 1 mark for correct use of unit costs <b>and</b> output data from Fig. 2 Accept data comparing any two date points

Question	Answer	Marks	Guidance
1 d ii	<ul> <li>Evaluate whether it is a disadvantage if the market for car battery production is a natural monopoly.</li> <li>Level 2 (5–8 marks)</li> <li>Good knowledge and understanding of the concept of natural monopoly and disadvantages which affect it in the context of the market for car battery production</li> <li>Good – Strong analysis of the disadvantages of natural monopoly.</li> <li>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.</li> <li>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.</li> <li>Reasonable – Strong evaluation of whether natural monopoly is a disadvantage, considering both sides and underpinned by appropriate theoretical analysis.</li> <li>Good evaluation will weigh up both sides but without reaching a supported judgement.</li> <li>Strong evaluation should include a supported judgement.</li> </ul>	<b>8</b> (A01 x 1 A02 x 1 A03 x 3 A04 x 3)	<ul> <li>Knowledge and understanding</li> <li>a natural monopoly is characterised by a market with substantial economies of scale.</li> <li>this is often due to very high fixed costs of production but low marginal costs.</li> <li>Context</li> <li>Fig. 2 suggests significant economies of scale over a long period of time</li> <li>unit costs have fallen by more than half over 12 years as output has increased</li> <li>Analysis of disadvantages</li> <li>incumbent firm will be able to price a new entrant out of the market because they are likely to enjoy economies of scale</li> <li>incumbent firm has market power which, if it profit maximises, would lead higher prices and lower output and allocative inefficiency</li> <li>lack of competition may mean that product development is slow</li> <li>there may be a need for government regulation which may be costly and inefficient.</li> </ul>
	10		

	Level 1 (1–4 marks)	Evaluation of disadvantages
	<ul> <li>Limited – Reasonable knowledge and understanding of the concept of natural monopoly and disadvantages which affect it in a context provided by the candidate.</li> <li>Limited – Reasonable analysis of the disadvantages of natural monopoly.</li> <li>Limited analysis will have little evidence of reasoning that addresses the question asked. There is a lack of a clear structure.</li> <li>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.</li> <li>Limited evaluation of the disadvantages of natural monopoly in the form of an unsupported statement or no evaluation.</li> <li>0 marks no response or no response worthy of credit.</li> </ul>	<ul> <li>experts say that battery-powered cars can only be price competitive if batteries cost &lt; \$100 per kWh – this may only be possible with a natural monopoly with large EoS</li> <li>lowers unit costs may lead to lower prices which makes the uptake of battery-powered cars more likely</li> <li>lower unit costs leads to increased productive efficiency</li> <li>government regulation may prevent natural monopoly raising price – ie marginal or average cost price regulation</li> <li>Judgements may include:</li> <li>whether the disadvantages are significant for firms in the UK energy market</li> <li>which disadvantage(s) is most significant</li> <li>a comparison between the gains from productive efficiency.</li> </ul>
	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)
	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

Question	Answer	Marks	Guidance
Question 1 e *	<ul> <li>Answer</li> <li>Evaluate, using evidence from the stimulus material, the factors which may influence the choice of objectives for a firm such as Shell.</li> <li>Level 3 (9–12 marks)</li> <li>Good knowledge and understanding of factors affecting the choice of objectives, supported by the evidence in the stimulus material and / or the candidate's own knowledge and understanding.</li> <li>Good – Strong analysis of how factors affect the choice of objectives.</li> <li>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.</li> <li>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.</li> </ul>	Marks 12 (AO1 x 1 AO2 x 1 AO3 x 5 AO4 x 5)	Guidance         For a mark at the top of each level evidence must be provided from the stimulus material and / or the candidate's own knowledge.         Knowledge and understanding of objectives         • maximisation objectives         • profit, sales revenue, sales volume, growth and utility         • non-maximising objectives         • profit satisficing, social welfare, corporate social responsibility (CSR)         Knowledge and understanding of factors         • ownership         • managers         • market environment         • government policy         • pressure groups
	<ul> <li>Good – Strong evaluation of factors affecting objectives, weighing up points of view/comparing alternatives.</li> <li>Strong evaluation should include a supported judgment.</li> <li>There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</li> </ul>		

Level 2 (5–8 marks)	Analysis of factors in the stimulus material
<ul> <li>Good knowledge and understanding of factors affecting the choice of objectives, supported by the evidence in the stimulus material and / or the candidate's own knowledge and understanding.</li> <li>Reasonable analysis of how factors affect the choice of 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</li> <li>Reasonable evaluation of factors affecting objectives.</li> <li>There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.</li> </ul>	<ul> <li>Owners         <ul> <li>Shell is a multinational company with international shareholders</li> <li>shareholders will expect a return on their investment via annual dividends and an increase in the share price.</li> <li>this is best achieved by maximising profit</li> </ul> </li> <li>Managers         <ul> <li>managers are making 'big decisions' – buying company making EV charging points</li> <li>requires investment which will reduce profits in the short run</li> <li>profit maximisation less likely as an objective and long-run growth objective more likely</li> </ul> </li> </ul>
<ul> <li>Level 1 (1–4 marks)</li> <li>Limited – Reasonable knowledge and understanding of factors affecting the choice of objectives, supported by the evidence in the stimulus material and / or the candidate's own knowledge and understanding.</li> <li>Limited analysis of how factors affect the choice of objectives. Little evidence of reasoning that addresses the question asked. There is a lack of a clear structure.</li> </ul>	<ul> <li>Market environment         <ul> <li>Shell are only the third largest in the UK, behind Tesco and BP</li> <li>these factors may result in Shell pursuing a growth or sales revenue objective</li> </ul> </li> <li>Government policy         <ul> <li>Government policy is to reduce emissions – new climate change targets, the 'Road to Zero' strategy and increased taxation</li> <li>these will limit Shell's ability to profit or</li> </ul> </li> </ul>
Limited evaluation of factors affecting objectives in the form of an unsupported statement or <b>no</b> evaluation. 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.	<ul> <li>revenue maximise and may result in CSR objectives</li> <li>Pressure groups         <ul> <li>climate change targets and significant switch</li> </ul> </li> </ul>
<ul> <li>0 marks no response or no response worthy of credit.</li> <li>Note: although a diagram is not required, it may enhance the quality of the answer and should be rewarded at the appropriate level.</li> </ul>	<ul> <li>climate change targets and significant switch in electricity generation to renewables have all partly come from climate change activists</li> <li>this may result in Shell adopting CSR objectives</li> </ul>

	Evaluation and judgement(s) of factors
	<ul> <li>which factor will have the most influence.</li> <li>the extent are shareholders able to influence the behaviour of managers, especially in such a large multinational firm.</li> <li>principal-agent problem</li> <li>managerial (non-maximising) objectives may have become more important.</li> <li>given the nature of much of what Shell produces, CSR objectives may be most important, as it may want to embrace of the 'green agenda'</li> <li>ultimately, profit is still the most important as if Shell does not adapt to changing market conditions profit will fall</li> <li>for a PLC, short term issues may outweigh long term issues (i.e. to keep the shareholders on board) so profit or growth is necessary as an objective. Ultimately, managers are clearly trying to juggle the investment needed in the future (e.g. EV charging points) against the need for profit/growth from shareholders, leading to a satisficing approach.</li> </ul>
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)
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

Question	Answer	Marks	Guidance
2 *	In 2018, the French bank, BNP Paribus, was found guilty of eliminating competition and fixing prices with rival firms between 2011 and 2013. It was the sixth major bank to face criminal charges as part of the same investigation in the USA and agreed to pay a fine of \$90m. Evaluate, using an appropriate diagram(s), whether such collusion is the most significant disadvantage of an oligopolistic market. Level 5 (21–25 marks) Good – Strong knowledge and understanding of collusion in the context of oligopolistic markets. Strong analysis of disadvantages of an oligopolistic market. It 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. Strong evaluation of whether collusion is a significant disadvantage of an oligopolistic market. There is a well-developed and sustained line of reasoning which is coherent and logically structured. The information presented is entirely relevant and substantiated.	<b>25</b> (AO1 x 6 AO2 x 6 AO3 x 6 AO4 x 7)	<ul> <li>For a mark at the top of each level the response should be in context.</li> <li>Knowledge and understanding</li> <li>characteristics of an oligopolistic market <ul> <li>large number of small firms</li> <li>a high degree of market concentration</li> <li>differentiated products</li> <li>high entry barriers</li> <li>each firm must take account of its rivals' behaviour and reactions</li> <li>each firm must act strategically in reacting to, and anticipating, a rival firm's decisions</li> <li>a tendency for non-price competition leading to price rigidity</li> <li>significant economies of scale</li> <li>a potential for collusion</li> </ul> </li> <li>collusion occurs when firms act together to influence production and/or price levels, preventing fair competition.</li> <li>types of collusion</li> <li>overt – price fixing and market sharing agreements</li> <li>tacit – avoidance of price competition, price leadership</li> <li>others - loose strategic alliances, joint research projects or technology swaps.</li> </ul>
			<ul> <li>pharmaceuticals companies agreed not to compete when selling drugs to the NHS 2020</li> <li>concrete firms found to have agreed to fix prices and share UK market 2020</li> <li>modelling agencies in the UK colluded to fix fees for modelling services 2016</li> </ul>

Level 4 (16–20 marks)	Analysis of disadvantages of collusion				
<ul> <li>Good knowledge and understanding of collusion in the context of oligopolistic markets.</li> <li>Strong analysis of disadvantages of an oligopolistic market. It 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.</li> <li>Good evaluation will weigh up both sides/comparing alternatives but without reaching a supported judgment.</li> <li>There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and in the most part substantiated.</li> </ul>	<ul> <li>by colluding, firms in an oligopolistic market could work together to maximise their joint profits – use of game theory / pay-off matrix</li> <li>this could be done by agreeing to fix prices</li> <li>collusion would restrict output to Q<sub>1</sub> and increase price to P<sub>1</sub> in the diagram below</li> <li>collusion can lead to higher prices for the consumer (and a lower consumer surplus) and less choice</li> <li>reduced efficiency (x-inefficiency and loss of dynamic efficiency)</li> <li>reinforces monopoly power, creating barriers to entry and lower contestability</li> <li>alternative diagrams can be credited – kinked demand curve, game theory / pay-off matrix</li> </ul>				
Level 3 (11–15 marks)	£ Supernormal MC				
<b>Good knowledge and understanding</b> of collusion in the context of oligopolistic markets.	Pi V				
<b>Good analysis</b> of disadvantages of an oligopolistic market. There is correct analysis 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.	P <sub>a</sub> AC AR AR				
<b>Reasonable evaluation</b> of the significance of collusion in an oligopolistic market without considering extent and alternatives.					
There is a line of reasoning presented with some structure. The	Firm A				
information presented is in the most-part relevant and supported by some evidence.	High price Low price				
	High price£8m£10mFirm B£8m£2m				
	Low price £2m £4m £10m £4m				

<ul> <li>Collusion may be short-lived</li> <li>collusion may not be a serious disadvantage</li> </ul>
<ul> <li>as collusive agreements are unstable – incentive to cheat</li> <li>Competition and Markets Authority (CMA) may incentivise firms to report involvement in collusive agreements by giving immunity from fines so they are likely to be discovere</li> </ul>
<ul> <li>use of game theory / pay-off matrix – not required but should be credited if used</li> </ul>
<ul> <li>Price wars</li> <li>often started if one firm sees the opportunity to drive out a weaker competitor which may then lead to a near-monopoly position,</li> </ul>
reducing consumer choice
<ul> <li>price wars may also be initiated by new entrants trying to break into a market, e.g. Aldi &amp; Lidl</li> </ul>
<ul> <li>although prices may be driven down in the short-run, prices return to high (or higher) levels</li> </ul>
<ul> <li>Limit pricing         <ul> <li>an incumbent can choose to charge a price below the average cost of potential entrants</li> </ul> </li> </ul>
<ul> <li>prevents new firms from entering the industry, so that the incumbent can then</li> </ul>
<ul> <li>return to a profit-maximising price</li> <li>the consumer may benefit from lower prices in the short-run but less choice in the long- run</li> </ul>

	<ul> <li>Judgement(s)</li> <li>consideration of the most significant disadvantage in an oligopolistic market</li> <li>depends on the type of collusion – overt vs tacit</li> <li>joint research projects might lead to greater dynamic efficiency and lower unit costs</li> <li>higher profits from collusion may create welfare benefits if used for capital investment or higher wages</li> </ul>		
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)		
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		

Question	Answer	Marks	Guidance	
Question 3 *	Answer The education sector has the highest level of trade union membership in the UK, with over 50% of full-time teachers in a trade union. Approximately 90% of all teachers work in the state sector. Evaluate, using an appropriate diagram(s), the impact of a bilateral monopoly on equilibrium in the labour market. Level 5 (21–25 marks) Good – Strong knowledge and understanding of a bilateral monopoly in the labour market. Strong analysis of how a bilateral monopoly may affect equilibrium in the labor market. It 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. Strong evaluation of how a bilateral monopoly may affect the labour market, weighing up both sides/comparing alternatives and reaching a supported judgment. There is a well-developed and sustained line of reasoning which is coherent and logically structured. The information presented is entirely relevant and substantiated.	<b>Marks</b> <b>25</b> (AO1 x 6 AO2 x 6 AO3 x 6 AO4 x 7)	<ul> <li>For a mark at the top of each level the response should be in context.</li> <li>Knowledge and understanding         <ul> <li>bilateral monopoly exists when a monopoly seller of labour (typically represented by a trade union where union density is high) faces a firm that is a monopoly buyer of labour.</li> </ul> </li> <li>Context(s)         <ul> <li>90% of teachers employed in the state sector</li> <li>50% of full-time teachers belong to a trade union</li> </ul> </li> <li>Analysis         <ul> <li>Real wage rate</li> <li>0</li> <li>0</li> <li>a monopsonistic labour market, the firm will employ labour up to the point where MC=MRP</li> <li>this will lead to Q<sup>e</sup> workers employed at a wage W<sup>e</sup> which is below the free market wage of W<sup>t</sup>.</li> </ul> </li> </ul>	

<ul> <li>Good knowledge and understanding of a bilateral monopoly in the labour market.</li> <li>Strong analysis of how a bilateral monopoly may affect equilibrium in the labour market. It 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.</li> <li>Good evaluation of how a bilateral monopoly may affect the labour market, weighing up both sides/comparing alternatives but without reaching a supported judgment.</li> <li>There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and in the most part substantiated.</li> <li>Level 3 (11–15 marks)</li> <li>Good analysis of how a bilateral monopoly may affect equilibrium in the labour market. There is correct analysis 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 links to the analysis.</li> <li>Reasonable evaluation of how a bilateral monopoly may affect the labour market.</li> <li>Reasonable evaluation of how a bilateral monopoly a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and links to the analysis.</li> <li>Reasonable evaluation of how a bilateral monopoly may affect the labour market, considering both sides/comparing alternatives.</li> <li>There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.</li> </ul>	<ul> <li>Real wage rate wage rate wage rate of the monopsonist employer to hire more workers at a higher wage rate, both of which are closer to the perfectly competitive levels where S=D.</li> </ul>
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Level 2 (6–10 marks)	Evaluation
<b>Good knowledge and understanding</b> of a bilateral monopoly in the labour market.	The degree to which bilateral monopoly affects equilibrium will depend on a number of factors:
<b>Reasonable analysis</b> of how a bilateral monopoly may affect equilibrium in the labour market. There is correct analysis largely in the form of single links. These address the question <b>but</b> are not developed into a clear chain of reasoning. Any relevant diagram(s) may be imperfectly labelled or not linked to the analysis.	<ul> <li>the level of union density and militancy – teaching or railway unions are more powerful than unions representing shop workers.</li> <li>nowadays, unions are more likely to focus on the wider aspects of working conditions, rather</li> </ul>
<b>Reasonable evaluation</b> of how a bilateral monopoly may affect the labour market, considering both sides/comparing alternatives.	<ul> <li>than just wage levels alone</li> <li>the demand curve for labour – if the demand for labour is relatively inelastic, any increase in</li> </ul>
The information has some relevance, but is communicated in an unstructured way. The information is supported by limited evidence, the relationship to the evidence may not be clear.	<ul> <li>wage rates will have less of an impact on employment.</li> <li>profits of the employer – a union is unlikely to strike for higher wages if a firm is not profitable.</li> </ul>
Level 1 (1–5 marks)	<ul> <li>firms making large profits, or where profit is irrelevant (e.g. the public sector), are more</li> </ul>
<b>Reasonable knowledge and understanding</b> of a bilateral monopoly in the labour market.	prone to demands for higher wages. Judgement(s)
Limited or no analysis of how a bilateral monopoly may affect equilibrium in the labour market. There is little evidence of reasoning that addresses the question asked. There is a lack of a clear structure. The relevant diagram(s) may not be present or are incorrectly labelled.	<ul> <li>ultimately, it is impossible to predict where the market will end up</li> <li>it will depend on the relative strengths and negotiating skills of the employer and the union.</li> <li>given the long-term decline in union</li> </ul>
<b>Limited evaluation</b> of a bilateral monopoly in the labour market in the form of an unsupported statement or <b>no</b> evaluation.	membership, it may well be that the firm will have the upper hand in many industries.
Information presented is basic and may be ambiguous or unstructured. The information is supported by limited evidence.	
<b>0 marks</b> no response or no response worthy of credit.	

		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)
		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

Question	Answer	Marks	Guidance
4 *	"A £1.4bn bailout has been announced for Crossrail, as Europe's biggest infrastructure project to build a new underground line across London is once again over budget and delayed. This is yet another example of a failed government-financed and managed project." Evaluate whether governments should finance large infrastructure projects such as Crossrail.	<b>25</b> (AO1 x 6 AO2 x 6 AO3 x 6 AO4 x 7)	<ul> <li>For a mark at the top of each level the response should be in context.</li> <li>Knowledge and understanding</li> <li>external benefits</li> <li>external costs</li> <li>causes of government failure</li> </ul>
	<ul> <li>Level 5 (21–25 marks)</li> <li>Good – Strong knowledge and understanding of the consequences of government failure as a result of government intervention.</li> <li>Strong analysis of the consequences of government failure. It 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.</li> <li>Strong evaluation of whether government failure is an acceptable consequence of government intervention, weighing up both sides/comparing alternatives and reaching a supported judgment.</li> <li>There is a well-developed and sustained line of reasoning which is coherent and logically structured. The information presented is entirely relevant and substantiated.</li> </ul>		<ul> <li>Context(s)</li> <li>Crossrail</li> <li>HS2</li> <li>Hinkley Point C</li> <li>Thames Barrage</li> </ul> Analysis – case for government financing <ul> <li>the private costs of large infrastructure projects are significant and occur over a long period of time</li> <li>the private costs of large infrastructure projects include the acquisition of land and the construction costs</li> <li>they are subject to uncertainty and are always likely to be larger than expected</li> <li>they occur before the projects deliver private benefits in the form of revenue</li> <li>the government is better placed than the private sector to raise finance at lower rates of interest and to bear risk because of the</li> </ul>

## Level 4 (16–20 marks)

**Good knowledge and understanding** of the consequences of government failure as a result of government intervention.

**Strong analysis** of the consequences of government failure. It 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.

**Good evaluation** will weigh up both sides/comparing alternatives but without reaching a supported judgment.

There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and in the most part substantiated.

## Level 3 (11–15 marks)

**Good knowledge and understanding** of the consequences of government failure as a result of government intervention.

**Good analysis** of the consequences of government failure. There is correct analysis 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.

**Reasonable evaluation** of the consequences of government failure.

There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.

large infi	rast	ruc	ctu	re p	oroje	ects i	ncl	ude	sig	nifica	ant
external	ber	nef	its								

- these include the benefits to the local and national economy and to businesses
- examples in the case of Crossrail might include the benefits of greater labour mobility
- these benefits would be ignored by the private sector since the PMB < PMC</li>
- some large infrastructure projects could be considered to be public goods
  - examples include flood defences
  - public goods are non-excludable and nonrivalrous
  - they are subject to the free-rider problem, therefore the private sector would not finance them because they would not be able to charge for them
- large infrastructure projects may involve external costs
  - examples include construction noise, disruption to traffic, dust and air quality, rights of those affected (compulsory purchase of land and property), impact on water resources
  - this results in the SMC > PMC
  - governments are best placed to balance social costs against social benefits in deciding on and, ultimately, financing large infrastructure projects

Level 2 (6–10 marks)	Evaluation – case against government financing
<b>Good knowledge and understanding</b> of the consequences of government failure as a result of government intervention.	<ul> <li>government financing of large infrastructure projects are often subject to cost overruns</li> </ul>
<b>Reasonable analysis</b> of the consequences of government failure. There is correct analysis largely in the form of single links. These address the question <b>but</b> are not developed into a clear chain of reasoning. Any relevant diagram(s) may be imperfectly labelled or not linked to the analysis.	<ul> <li>Crossrail has had to be 'bailed out' by an additional £1.4bn of government financing</li> <li>SMC could be &gt; SMB</li> <li>the private and external benefits of large infrastructure projects are difficult to estimate</li> <li>difficulties of estimating future revenue</li> </ul>
<b>Reasonable evaluation</b> of the consequences of government failure.	<ul> <li>governments may have to finance these projects on an on-going basis</li> </ul>
The information has some relevance, but is communicated in an unstructured way. The information is supported by limited evidence, the relationship to the evidence may not be clear.	<ul> <li>government financing of large infrastructure projects adds to the national debt</li> <li>paying the interest on this debt involves an opportunity cost</li> <li>taxpayers pay for the infrastructure</li> </ul>
Level 1 (1–5 marks)	regardless of whether they use it
<b>Reasonable knowledge and understanding</b> of the causes/ consequences of government failure.	Judgement(s)
<b>Limited or no analysis</b> of government failure. There is little evidence of reasoning that addresses the question asked. There is a lack of a clear structure. The relevant diagram(s) may not be present or are incorrectly labelled.	<ul> <li>governments should finance large infrastructure projects where there are clear and significant external benefits</li> </ul>
<b>Limited evaluation</b> of the consequences of government failure, in the form of an unsupported statement, or <b>no</b> evaluation.	<ul> <li>governments should finance large infrastructure projects where the private sector cannot</li> <li>whether governments should finance large</li> </ul>
Information presented is basic and may be ambiguous or unstructured. The information is supported by limited evidence.	<ul> <li>infrastructure projects depends on whether the private sector can monetise the private benefits</li> <li>private benefits cannot be monetised where the</li> </ul>
0 marks no response or no response worthy of credit.	infrastructure is a public good – governments
<b>Note:</b> although a diagram is <b>not</b> required, it may enhance the quality of the answer and should be rewarded at the appropriate level.	<ul> <li>fund 100% of flood defence</li> <li>where private benefits can be monetised, the private sector should finance at least some part of the project – power stations can be financed by the private sector, Crossrail can be part-financed by a levy on businesses</li> </ul>

		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)
		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

Question	Answer	Marks	Guidance
5 *	<ul> <li>Supporters of a centrally planned economic system believe a central government can achieve social and national objectives more efficiently. For example, they highlight the increase in income inequality in China since it has introduced market-based reforms.</li> <li>Evaluate whether it is possible to allocate resources efficiently in a centrally planned economic system.</li> <li>Level 5 (21–25 marks)</li> <li>Good – Strong knowledge and understanding of how resources are allocated in a centrally planned economic system.</li> <li>Strong analysis of how resources are allocated in a centrally planned economic system.</li> <li>Strong analysis of how resources are allocated in a centrally planned economic system. It 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.</li> <li>Strong evaluation of resource allocation in a centrally planned economic system, weighing up both sides/comparing alternatives and reaching a supported judgment.</li> <li>There is a well-developed and sustained line of reasoning which is coherent and logically structured. The information presented is entirely relevant and substantiated.</li> </ul>	<b>25</b> (AO1 x 6 AO2 x 6 AO3 x 6 AO4 x 7)	<ul> <li>For a mark at the top of each level the response should be in context.</li> <li>Knowledge and understanding <ul> <li>the process of resource allocation involves choices about how to deploy society's available resources across their different uses in relation to society's productive assets <ul> <li>What? How? For whom?</li> </ul> </li> <li>a centrally planned economy is an economic system where most resources are allocated by the state with the market mechanism having no (or a very small) part to play.</li> <li>the government undertakes the coordination role, planning and directing the allocation of resources.</li> <li>it owns most or all of the industries producing goods and services</li> <li>there are some privately owned firms but these are closely directed by the state</li> <li>it decides the goods to produce according to what it believes is most socially optimum</li> <li>it decides what to produce through 5 or 10 year plans</li> <li>it sets prices or directly rations goods and services</li> </ul> </li> <li>Keference to historical or current examples of centrally planned economies</li> <li>Soviet Union 1917-1991 and Soviet Bloc</li> <li>China until the late 70s</li> <li>Cuba</li> <li>North Korea</li> </ul>

Level 4 (16–20 marks)	Analysis – efficient allocation of resources
<ul> <li>Good knowledge and understanding of how resources are allocated in a centrally planned economic system.</li> <li>Strong analysis of how resources are allocated in a centrally planned economic system. It 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.</li> </ul>	<ul> <li>Production of the 'right' goods and services         <ul> <li>price mechanism does not allocate resources so no chance of market failure</li> <li>the state decides the 'right' amount of the 'right' goods and services to be produced</li> <li>these are goods / services which maximise social benefit / minimise social costs</li> </ul> </li> </ul>
Good evaluation will weigh up both sides/comparing alternatives but without reaching a supported judgment. There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and in the most part substantiated.	<ul> <li>Efficient use of resources         <ul> <li>instead of using resources for the same product made by different companies, there is one state-owned enterprise</li> <li>resources are not diverted to wasteful production – ie no need for 'wasteful' expenditure on marketing / promotion / advertising</li> </ul> </li> </ul>
<ul> <li>Good knowledge and understanding of how resources are allocated in a centrally planned economic system.</li> <li>Good analysis of how resources are allocated in a centrally planned economic system. There is correct analysis 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.</li> <li>Reasonable evaluation of how resources are allocated in a centrally planned economic system, considering both sides/comparing alternatives.</li> <li>There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.</li> </ul>	<ul> <li>Resource allocation better reflects needs         <ul> <li>government dictates prices</li> <li>consumers are not priced out of consumption by market prices which may reflect market power rather than scarcity</li> <li>price levels are set at a level where average consumer can afford what they need</li> </ul> </li> <li>Reduced 'rent seeking' behaviour         <ul> <li>the use of the resources to gain profit without providing benefits to society</li> <li>in market economies firms lobby governments for subsidies, looser regulation</li> <li>this is a waste of scarce resources as there is no socially valuable production</li> <li>resources are, therefore, better allocated in a command economy as rent-seeking is avoided</li> </ul> </li> </ul>

<ul> <li>Level 2 (6–10 marks)</li> <li>Good knowledge and understanding of how resources are allocated in a centrally planned economic system.</li> <li>Reasonable analysis of how resources are allocated in a centrally planned economic system. 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.</li> <li>Reasonable evaluation of how resources are allocated in a</li> </ul>	<ul> <li>Resource allocation is not distorted by inequalities of income and wealth         <ul> <li>inequality of income and wealth is considerably lower than in a free market system</li> <li>this is because private ownership of resources is removed and incomes are decided by the state</li> <li>'what is produced' and 'for whom' is not distorted by the spending decisions of the rich and wealthy as it is in a market</li> </ul> </li> </ul>		
centrally planned economic system, considering both sides/comparing alternatives. <i>The information has some relevance, but is communicated in an</i>	economy		
unstructured way. The information is supported by limited evidence, the relationship to the evidence may not be clear.	<ul> <li>Evaluation – inefficient allocation of resources</li> <li>absence of profit motive results in X-inefficience</li> <li>absence of competition results in productive inefficiency</li> </ul>		
Level 1 (1–5 marks)			
<b>Reasonable knowledge and understanding</b> of how resources are allocated <b>or</b> a centrally planned economic system.	<ul> <li>absence of a price mechanism results in allocative inefficiency</li> <li>typically command economies produce inferior</li> </ul>		
<b>Limited or no analysis</b> of resource allocation. There is little evidence of reasoning that addresses the question asked. There is a lack of a clear structure. The relevant diagram(s) may not be present or are incorrectly labelled.	<ul> <li>quality consumer goods at a higher cost</li> <li>in the absence of the price mechanism, goods services are rationed by persistent shortages</li> <li>consumers are unable to express their</li> </ul>		
<b>Limited evaluation</b> of the process of resource allocation in the form of an unsupported statement or <b>no</b> evaluation.	<ul> <li>preferences for how resources are allocated</li> <li>countries which are centrally planned are towards the bottom end of any measure of</li> </ul>		
Information presented is basic and may be ambiguous or unstructured. The information is supported by limited evidence.	international output and prosperity suggesting large inefficiencies in the allocation of resource		
<b>0 marks</b> no response or no response worthy of credit.	<ul> <li>'rent seeking' activity still exists in favour of th</li> </ul>		
<b>Note:</b> although a diagram is <b>not</b> required, it may enhance the quality of the answer and should be rewarded at the appropriate level.	ruling elites		

	<ul> <li>Judgement</li> <li>the command economy approach to resource allocation has been abandoned in Eastern Europe, Russia and China</li> <li>this suggests that resource allocation has been found in practice to be inefficient rather than efficient</li> <li>living standards have risen and poverty has fallen as a result, especially in China, suggesting improvements in resource allocation</li> </ul>
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)
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

## Assessment Objectives Grid

Question	A01	AO2	AO3	AO4	TOTAL	(Quantitative Skills)
1(a)	2				2	
1(b)	2(2)	2(2)			4	(4)
1(c)		2(2)			2	(2)
1(d)(i)		2(2)			2	(2)
1(d)(ii)	1	1	3	3	8	
1(e)	1	1	5	5	12	
2/3	6 (2)	6 (2)	6 (2)	7 (2)	25	(8)
4/5	6	6	6	7	25	
TOTAL	18 (5)	20 (7)	20 (2)	22 (2)	80	(16)

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