

**GCE**

**Economics**

Unit **F581**: Markets in Action

Advanced Subsidiary GCE

**Mark Scheme for June 2015**

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.

OCR will not enter into any discussion or correspondence in connection with this mark scheme.

© OCR 2015

**Annotations**

Please annotate **every** response, even if no credit is given.

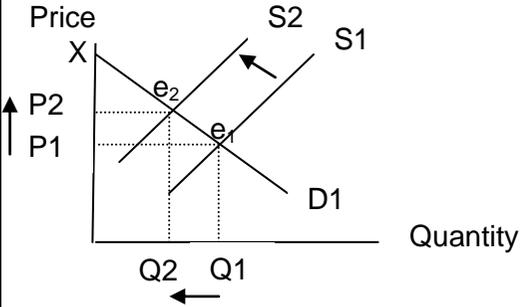
<b>Annotation</b>	<b>Meaning</b>
	Blank Page – this annotation must be used on all blank pages within an answer booklet (structured or unstructured) and on each page of an additional object where there is no candidate response.
	Tick
	Cross
	Comment
	Benefit of doubt
	Level 1
	Level 2
	Level 3
	Level 4
	Effective evaluation
	Omission
	Not answered question
	Noted but no credit given
	Too vague
	Own figure rule

Highlighting is also available, to highlight any particular points on the script.

'BP' to be inserted on every blank page.

Question	Answer	Marks	Guidance
1	<p><b>With reference to the case study, describe what is meant by ‘the economic problem’.</b></p> <p><i>Up to two marks for an understanding of the economic problem:</i></p> <p>Resources are scarce/limited (1) and wants are infinite (1) therefore choices have to be made over how to allocate these resources (1)</p> <p>How to allocate scarce resources amongst alternative uses (2)</p> <p><i>Up to two marks for application:</i></p> <ul style="list-style-type: none"> <li>• Example of the limited/scarce resource (1)</li> <li>• Example of the competing wants/choice that has to be made (1)</li> </ul>	4	<p>Wants exceed resources = 2 marks.  <b>Do not award</b> a mark for “unlimited demand” or “limited supply”.</p> <p>Examples of relevant application include:</p> <ul style="list-style-type: none"> <li>○ There is insufficient water (1) to both irrigate the rice fields and grow biofuel crops (1)</li> <li>○ Choices have to be made over how to allocate land (eg. For growing either maize for biofuel or rice) (1) because there is insufficient land (1)</li> </ul>

Question	Answer	Marks	Guidance
2	<p><b>Using a demand and supply diagram, explain why the price of an agricultural product may increase by a significant amount.</b></p> <p>Award up to <b>three marks</b> for a supply and demand diagram illustrating:</p> <ul style="list-style-type: none"> <li>• Correct supply and demand curves, labelled (1)</li> <li>• Shift of supply to left and/or demand to right (1)</li> <li>• Price increases from p to p1 (1)</li> </ul> <p>Award a further <b>one mark</b> for explaining the reason for the shift. For example:</p> <ul style="list-style-type: none"> <li>• Costs of production increasing cause the supply curve to shift to the left (1)</li> <li>• Income increasing causes the demand for agricultural products to increase. (1)</li> </ul> <p>Reserve the final <b>two marks</b> for an application of why price may have increased by a 'significant amount'. For example:</p> <ul style="list-style-type: none"> <li>• If demand/supply shifts by a significant amount there will be a significant increase in price (2)</li> <li>• If there are shifts in both the supply and demand curve there is likely to be a significant increase in price (2)</li> <li>• If the demand curve is inelastic when the supply curve shifts there will be a significant increase in price (2)</li> <li>• If the supply curve is inelastic when the demand curve shifts there will be a significant increase in price (2)</li> </ul>	6	<p>Supply and demand curves must be labelled S and D. Award no credit for candidates using macro labels or QD and QS.</p> <p>Note – the mark for the increase in price can still be accessed with incorrect labels on curves.</p>

Question	Answer	Marks	Guidance
3 (a)	<p><b>Define consumer surplus.</b></p> <p>Up to two marks for a clear definition such as:</p> <p>The difference between the market price and the price that consumers are willing to pay. (2)</p> <p>The extra amount a consumer is willing to pay for a product above the price that is actually paid. (2)</p> <p>The difference between the value a consumer places on the good/service purchased and the equilibrium price in the market. (2)</p>	2	<p>Award one mark for an imprecise understanding that this is the area under the demand curve but above the market price. (1)</p> <p>If there is no clear sense of the ‘difference’ no marks can be awarded – eg. “the price a consumer is willing to pay compared to the market price” or “the price a consumer pays and the market price”</p>
3 (b)	<p><b>Using a supply and demand diagram, show how consumer surplus would change if the supply of a product decreased.</b></p> <ul style="list-style-type: none"> <li>• Supply and demand curves with shift left of supply (1)</li> <li>• Area of original consumer surplus clearly labelled (1) e.g. (P1,e<sub>1</sub>,X)</li> <li>• Area of new consumer surplus clearly labelled (1) e.g. (P2,e<sub>2</sub>,X)</li> <li>• Consumer surplus has fallen (1)</li> </ul>	4	<p>Note – zero marks awarded to an answer where a demand curve is not labelled.</p> 

Question		Answer	Marks	Guidance
4	(a)	<p><b>What is meant by price elasticity of supply?</b></p> <p>Up to two marks for a clear definition such as:</p> <p>The responsiveness of (quantity) supplied to a change in the price of a product (2).</p> <p>A measure of the sensitivity of (quantity) supplied of a good or service to a change in the price of that good or service (2).</p> <p>Correct formula <math>\frac{\% \text{ change in (quantity) supplied}}{\% \text{ change in price}}</math> or <math>\frac{\% \Delta(Q)S}{\% \Delta P}</math> (2)</p>	2	<p>Accept 'supply' for 'quantity supplied'</p> <p>For "the responsiveness of a change in supply" award zero.</p>
	(b)	<p>Up to <b>two marks</b> for calculations of PES</p> <p><b>Wine PES = 0.2 (1)</b></p> <p><b>Rice PES = 0.7 (1)</b></p>	2	PES expressed as a percentage e.g. 0.7% - award zero.

Question	Answer	Marks	Guidance
(c)	<p><b>Comment on the significance of the figures you have calculated in part (b).</b></p> <p>Award up to <b>two marks</b> for analysis:</p> <ul style="list-style-type: none"> <li>• Supply is (price) inelastic for rice and/or wine (1)</li> <li>• Quantity supplied responds less than proportionally to a change in price (1)</li> <li>• PES for wine is more inelastic (1) <b>or</b> PES for rice is more elastic (1)</li> </ul> <p>Up to <b>four marks</b> for relevant comment based on explanation such as:</p> <ul style="list-style-type: none"> <li>• These figures are only estimates (1) so may be inaccurate (1) or may be outdated (1) Max of 2 marks for estimates related points</li> <li>• Both figures are positive as expected (1) because of the law of supply (1)</li> <li>• Supply is inelastic because:                             <ul style="list-style-type: none"> <li>○ There are time lags involved (1)</li> <li>○ It takes time to grow wine grapes (1)</li> </ul> </li> <li>• PES becomes more elastic in the long run (1)</li> <li>• Other factors affect supply (1) example of how supply might respond differently (1) or ceteris paribus may not apply (1)</li> <li>• Businesses aim to make PES as elastic as possible (1) so they can respond to price changes to maximise profits (1)</li> <li>• Businesses may not take into account PES (1) as elasticities of demand are more useful (1)</li> </ul>	6	<p>OFR can be awarded if calculations to (a) and (b) are incorrect.</p> <p>To be awarded comment marks candidates must have gained <b>at least one analysis mark</b>.</p> <p>Use <span style="border: 1px solid red; padding: 0 2px;">E</span> for comment marks</p>

Question	Answer	Marks	Guidance
5	<p><b>Explain two reasons why the demand for some agricultural products is more price elastic than other products.</b></p> <p>Award <b>one mark</b> for recognising a determinant of PED and a <b>further mark</b> for explaining why this means demand for <b>agricultural products</b> may be more price elastic/inelastic. Two marks maximum for each of two reasons. For example:</p> <ul style="list-style-type: none"> <li>• Availability of substitutes (1) for example when there many substitute agricultural goods available demand will be price elastic (1)</li> <li>• Proportion of disposable income the product accounts for (1) as rice takes up a low proportion of disposable income so demand is price inelastic (1)</li> <li>• Time period (1) as in the long run demand for agricultural products will be more price elastic (1)</li> <li>• If products are addictive/habit forming (1) then demand for the agricultural products will be price inelastic (1)</li> <li>• The nature of the good <ul style="list-style-type: none"> <li>○ If products are luxury goods (1) for example strawberries demand will be price elastic (1)</li> </ul> </li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>○ If products are necessity (essential) goods (1) for example wheat demand will be price inelastic (1)</li> </ul>		<p>The explanation mark should not be awarded unless there is clear reference to agriculture.</p> <p>Do not award marks to a second response which is the opposite of the first, e.g. if 1. many substitutes = price-elastic demand, then do not award 2. few substitutes = price-inelastic demand.</p>

Question	Answer	Marks	Guidance
6	<p><b>Comment on whether the agricultural market in the Po Valley is becoming more allocatively efficient.</b></p> <p>Up to <b>four marks</b> for <b>explanation</b>:</p> <ul style="list-style-type: none"> <li>• Demand for biofuels is increasing (1)</li> <li>• Farmers are responding to this increase in demand by increasing supply (1)</li> <li>• Meaning the market clears/supply equals demand (1)</li> <li>• Ensuring there is no excess demand/supply (1)</li> <li>• Resources are being reallocated to meet consumer wants (1)</li> <li>• The fall in price satisfies consumers (1)</li> </ul> <p>Award up to <b>two marks</b> for <b>comment, e.g.</b></p> <ul style="list-style-type: none"> <li>• Negative Externalities may apply (e.g. change to landscape, loss of leisure space, negative consequences for water supply)</li> <li>• Some claim any gain is short-run – long-run negative consequences for the region will cancel out short-run gains</li> <li>• The market is being distorted by EU incentives</li> <li>• Less land available for leisure purposes, worsening consumer satisfaction</li> <li>• Allocative efficiency will not be achieved immediately as it takes time for producers to respond to changes in demand</li> </ul>	6	<p>Only award one mark for '<i>farmers are switching to growing biofuels to meet consumer demand</i>' as this is a direct quote from the case study and does not clearly address the idea that supply/production is increasing.</p> <p>Do not award 'and therefore consumer satisfaction is maximised' unless this is clearly linked to resources being reallocated (ie. Resources are now allocated in a way which means consumer wants).</p> <p>Award up to two marks for an appropriately labelled diagram (demand curve shifting to the right and a new equilibrium being reached).</p> <p>Candidates can only be awarded comment marks once one explanation mark has been awarded.</p> <p>Use <span style="border: 1px solid red; padding: 0 2px;">C</span> for comment marks</p> <p>Award up to two marks for a developed comment.</p>

Question	Answer	Marks	Guidance
7	<p><b>Comment on whether open spaces, rivers and lakes such as those in the Po Valley would always be considered to be a public good.</b></p> <p>Award up to <b>two marks</b> for characteristics of a public good:</p> <ul style="list-style-type: none"> <li>• Non-excludable (1)</li> <li>• Non-rivalrous (1)</li> <li>• Has free-riders (1) <b>or</b> the free-rider problem (1)</li> </ul> <p>Award up to <b>two marks</b> for explanation of why open spaces are or are not a public good:</p> <ul style="list-style-type: none"> <li>○ <b>It is non-excludable</b> because this is on open land which anyone can access (1)</li> <li>○ <b>It is non-rival</b> because one person using the countryside does not stop someone else using it (1)</li> <li>○ It is possible to free-ride as individuals can use open spaces without paying for it (1)</li> <li>○ There are <b>elements of rivalry</b> because spaces can become congested/the land could be used for other things (1)</li> <li>○ There are <b>elements of excludability</b> because land could be privately owned/there could be fences around it. (1)</li> </ul> <p>Award up to <b>two marks</b> for comment, for example:</p> <ul style="list-style-type: none"> <li>• A two sided approach (2)</li> <li>• It is a quasi-public good (1) because it has elements of non-rivalry and non-excludability (1)</li> </ul>	6	<p>Also accept un-diminishable and collectively consumed.</p> <p>Explanations must be clearly linked to non-rivalry, non-excludability, rivalry or excludability or free-riders to be awarded credit.</p> <p>Candidates can only be awarded comment marks once one <b>explanation</b> mark has been awarded.</p> <p>Use <span style="border: 1px solid red; padding: 0 2px;">C</span> for comment mark</p>

Question		Answer	Marks	Guidance	
				Content	Levels of response
8		<p><b>Discuss whether subsidies to producers always correct market failure.</b></p> <p><b>Level 4 16-18 Marks</b> The stated judgement must address the question – ie. Subsidies do or do not correct market failure. Do not credit judgements which simply conclude that ‘subsidies are an effective/ the most effective solution’.</p> <p><b>Level 4 13-15 Marks</b> Evaluation of the extent to which subsidies may or may not correct market failure, which must be based on correct analysis of market failure:</p> <ul style="list-style-type: none"> <li>• Subsidies do not solve market failure in the case of negative externalities or demerit goods.</li> <li>• Subsidies may allow inefficiency to continue.</li> <li>• The effectiveness will depend on PED.</li> <li>• The opportunity cost of subsidies may outweigh the benefits.</li> <li>• The financial cost of subsidies may be prohibitive.</li> <li>• The effectiveness of subsidies applied to substitutes will depend on cross-price elasticity of demand.</li> </ul>	18	<p>18 marks: More thorough justification or elaboration of the statement.</p> <p>17 marks: Some justification or elaboration of the statement.</p> <p><b>Use second <span style="border: 1px solid red; padding: 0 2px;">EE</span> annotation to indicate elaboration.</b></p> <p>16 marks: A statement that subsidies do or do not always correct market failure.</p> <p><b>Use one <span style="border: 1px solid red; padding: 0 2px;">EE</span> to show where this statement appears in the answer.</b></p> <p>Max. of three <span style="border: 1px solid red; padding: 0 2px;">L4</span> annotations should appear on the script.</p> <p>15 marks: Three evaluative points with some development.</p> <p>14 marks: Two evaluative points with some development.</p> <p>13 marks: One evaluative point with some development <b>OR</b> a number of evaluative statements lacking depth.</p> <p><b>Candidates cannot progress above 13 marks if either the analysis or evaluation is limited.</b></p> <p>Explanations of alternative forms of correction to market failure in themselves <b>receive no credit.</b></p>	<p><b>Level 4 (13–18)</b> <b>For a discussion of whether subsidies to producers correct market failure.</b></p> <p>All answers at this level must be underpinned with appropriate theoretical concepts.</p> <p>16–18 marks – There must be a supported judgment based on the preceding analysis and it should reflect the strength of the analysis and the evaluation. This is likely to address the fact that many market failures will not be corrected by subsidies to producers.</p> <p>13–15 marks – There must be a discussion of points for and against the statement. There may be relevant comparison with how other methods are <b>more effective</b> than subsidies.</p> <p><i>Complex ideas have been expressed clearly and fluently using a style of writing appropriate to complex subject matter. Sentences and paragraphs, consistently relevant, have been well structured using appropriate terminology. There may be few, if any, errors of spelling, punctuation and grammar.</i></p>

Question		Answer	Marks	Guidance	
				Content	Levels of response
		<p><b>Level 3 Band 2</b> <b>11-12 marks</b></p> <ul style="list-style-type: none"> <li>• This increases consumption and production which <b>either</b> <ul style="list-style-type: none"> <li>○ Solves the market failure of underconsumption or underproduction (in the positive externalities or merit good case)</li> </ul> </li> <li><b>or</b></li> <li>○ Worsens the market failure of overconsumption or overproduction (in the negative externalities or demerit good case)</li> <li><b>or</b></li> <li>○ Solves the overconsumption or overproduction problem in a related market by encouraging consumers/producers to switch to a substitute</li> </ul> <ul style="list-style-type: none"> <li>• The market becomes more allocatively efficient</li> </ul> <p><i>Reward but do not expect marginal social cost/benefit diagrams.</i></p> <p><b>An answer cannot progress from L3 B1 to L3 B2 without explaining how a subsidy resolves market failure.</b></p>		<p>An explicit and relevant <b>comparison between subsidies and an alternative policy</b> can receive Level 4 marks.</p> <p><b>Max. of two <span style="border: 1px solid red; padding: 0 2px;">L3</span> annotations</b></p> <p><b>Place second <span style="border: 1px solid red; padding: 0 2px;">L3</span> annotation where L3 B2 is awarded.</b></p> <p>12 marks: this makes the market more efficient.</p> <p>11 marks: explanation of how the market failure is solved.</p>	<p><b>Level 3 (9–12 marks)</b> <b>For an analysis of the way in which the application of subsidies to producers can correct market failure</b></p> <p>11–12 marks – there is likely to be at least one developed analytical point.</p> <p>9–10 marks – there are likely to be only one/two undeveloped analytical points, or one analytical point which is somewhat developed; such as an explanation of a subsidy leading to a fall in price – the impact upon the market is unclear.</p> <p><i>Relatively straightforward ideas have been expressed with clarity and fluency. Arguments are generally relevant, though may stray from the point of the question. There will be some errors of spelling, punctuation and grammar, but these are unlikely to be intrusive or obscure meaning.</i></p>

Question		Answer	Marks	Guidance	
				Content	
				Levels of response	
		<p><b>Level 3 Band 1</b>  <b>9-10 marks</b></p> <ul style="list-style-type: none"> <li>Quantity increases (from q to q1)</li> <li>Price falls (from p to p1)</li> </ul> <p><b>Level 2</b> responses may present an unexplained diagram or offer the pros and cons of subsidies without sufficient analysis:</p> <ul style="list-style-type: none"> <li>Subsidies will increase supply</li> <li>Subsidies will reduce the market price</li> <li>Producer costs will decrease</li> <li>Subsidies make demands on government funds</li> <li>Subsidies may be used in the case of merit goods/positive externalities.</li> <li>Subsidies shift the supply curve to the right</li> <li>Comparison of a relevant alternative policy with a subsidy (award a maximum of one L2 mark for this)</li> </ul>		<p>Place one <b>L3</b> annotation where L3 B1 is awarded.</p> <p>10 marks: more than one Band 1 point made.</p> <p>9 marks: one Band 1 point made.</p> <p>Use one <b>L2</b> per mark awarded</p> <p>8 marks: More than one well developed applied point.</p> <p>7 marks: Several applied points.</p> <p>6 marks: Two applied points.</p> <p>5 marks: Unexplained subsidy diagram <b>OR</b> one point on subsidy.</p>	<p><b>Level 2 (5–8 marks)</b>  <b>For an application of knowledge and understanding of subsidies.</b></p> <p>This sort of response will include unsupported/unsubstantiated statements as to how subsidies can/cannot be used to solve market failure.</p> <p><i>Some simple ideas have been expressed in an appropriate context. There are likely to be some errors of spelling, punctuation and grammar of which some may be noticeable and intrusive.</i></p>

Question			Answer	Marks	Guidance	
					Content	Levels of response
			<p><b>Level 1</b> responses may demonstrate knowledge of the following:</p> <p>3-4 marks: knowledge of subsidy <b>and</b> of market failure</p> <p>1-2 marks: knowledge of subsidy <b>or</b> of market failure</p> <p>0 marks: no understanding of subsidy shown, even if knowledge of market failure is present.</p>			<p><b>Level 1 (1–4 marks)</b>  <b>For knowledge only of a subsidy and/or the impact on market failure.</b>  <i>Some simple ideas have been expressed. There will be some errors of spelling, punctuation and grammar that will be noticeable and intrusive. Writing may also lack legibility.</i></p>

**OCR (Oxford Cambridge and RSA Examinations)**  
1 Hills Road  
Cambridge  
CB1 2EU

**OCR Customer Contact Centre**

**Education and Learning**

Telephone: 01223 553998

Facsimile: 01223 552627

Email: [general.qualifications@ocr.org.uk](mailto:general.qualifications@ocr.org.uk)

[www.ocr.org.uk](http://www.ocr.org.uk)

For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored

**Oxford Cambridge and RSA Examinations**  
is a Company Limited by Guarantee  
Registered in England  
Registered Office; 1 Hills Road, Cambridge, CB1 2EU  
Registered Company Number: 3484466  
OCR is an exempt Charity

**OCR (Oxford Cambridge and RSA Examinations)**  
Head office  
Telephone: 01223 552552  
Facsimile: 01223 552553

© OCR 2015

