

GCSE

Geography A

Unit **A731/02**: Contemporary themes in geography (Higher Tier)

General Certificate of Secondary Education

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

These are the annotations, (including abbreviations), including those used in scoris, which are used when marking

Annotation	Meaning
	Correct response (use only to credit in point-marked questions).
	Incorrect response (use only to indicate incorrect in point marked questions).
	Information omitted.
	Unclear.
	Irrelevant.
	Development.
	Place specific.
	Two statements are linked.
	Highlighting an issue eg irrelevant paragraph. Use in conjunction with another stamp eg  or 
	Level one.
	Level two.
	Level three.
	Point has been seen and noted.
	Benefit of doubt given.
	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.


MARK SCHEME

Answer/Indicative content			Mark	Guidance
1	(a)	<p>Indicative content:</p> <ul style="list-style-type: none"> • Landscape looks remote/ isolated. (✓) • Smoke/ ash rising. (✓) • Landscape is barren/ lacking vegetation. (✓) • Landscape is rocky/ uneven. (✓) • Snow suggests cold/ freezing temperatures. (✓) • High altitude. (✓) • The volcano is active. (✓) 	2	<p>2 x 1 mark.</p> <p>No credit for just 'volcano', 'cold' or 'snow' unless qualified.</p>
1	(b)	<p>Indicative content:</p> <p>Explanation of why the environment is challenging, which might include;</p> <p>Temperatures become cold with altitude. (✓)</p> <p>High winds/more snow as altitude increases (✓) therefore people need special equipment to adapt. (dev)</p> <p>Less oxygen in air at altitude. (✓) People are not used to this and might develop altitude sickness. (dev)</p> <p>Steep gradients means there is little infrastructure (✓) so settlements can be very isolated. (dev)</p> <p>Very sparse vegetation at higher altitudes (✓) this makes it challenging to grow crops. (dev)</p> <p>Remote/ barren landscape leads to lack of resources. (✓)</p>	4	<p>4 x 1 mark. Credit developed explanations.</p> <p>Reserve one mark for landscape and one mark for climate.</p>


Answer/Indicative content			Mark	Guidance
1	(c)	<p>Indicative content:</p> <ul style="list-style-type: none"> • Air picks up moisture/ evaporation over the sea. (✓) • Clouds approach from windward side of mountain. (✓) • Prevailing winds. (✓) • Mountain forces air to rise. (✓) • Air cools as it rises. (✓) • Air/vapour condenses/ clouds form. (✓) • Air mass reaches saturation/ water droplets join together to produce rainfall. (✓) 	4	<p>4 x 1 mark</p> <p>No credit for rainshadow or rainfall/precipitation.</p>
1	(d)	(i) <p>Indicative content:</p> <p>A terminal moraine is an accumulation of boulders, stones, or other debris. (✓)</p> <p>A terminal moraine marks the maximum/ furthest advance of the glacier/ end of glacier. (✓)</p>	2	<p>2 x 1 mark</p> <p>No credit for 'bottom/ end of the mountain'.</p>
1	(d)	(ii) <p>Indicative content:</p> <p>Freeze thaw action weakens the rock. (✓)</p> <p>As a glacier moves down a valley it erodes the landscape through abrasion and picks up material. (✓)</p> <p>More sediment is added by abrasion and plucking, (✓) which is carried/transported along inside the ice. (✓)</p> <p>Where the glacier stops and melts. (✓)</p> <p>The material trapped in the ice is deposited at the end of the glacier. (✓)</p>	4	<p>4 x 1 mark</p> <p>Maximum of 2 marks for processes leading to the gathering of material.</p>


Answer/Indicative content			Mark	Guidance
1	(d)	(iii)	6	<p>The response is to be marked holistically. Examiners to label overall level awarded at the end of the response. The following examples are indicative of statements at each level:</p> <p>Level 3 Corries are deep hollows in the mountain side with a steep back wall and a raised lip. The deep bottom is caused by abrasion, where rocks in the glacier act like sandpaper and wear away the ground.</p> <p>Level 2 A corrie is formed when ice collects in a hollow on the side of a mountain. Over time it is eroded by the processes of plucking and freeze thaw, leaving a bowl shaped feature.</p> <p>Level 1 A corrie is a hollow on the side of a mountain. It was eroded by the glacier.</p> <p>If the quality of written communication criteria is not fully met then full marks must not be awarded.</p> <p>Mark text first and then mark the diagram. Diagram box should be annotated (SEEN). Candidate does not have to include a diagram for L3 - 6 marks</p>
1	(e)		4	<p>2 x 2 marks for developed statements.</p> <p>Max 2 for simple explanation e.g. steep slopes.</p>

Answer/Indicative content			Mark	Guidance
		<p>can fill the reservoirs which are needed for HEP. (dev) Mountain areas have a large amount of open space (✓) which allows room for the building of dams. (dev) Mountains are remote (✓) so the development of HEP doesn't affect people. (dev)</p>		
1	(f)	<p>Level 3 [5 – 6 marks] Comprehensive explanation of the possible future impacts of climate change on the named mountain area with developed statements. Accurate reference to place specific detail related to the named mountain area. Written work is legible and spelling, punctuation and grammar are accurate. Meaning is communicated very clearly.</p> <p>Level 2 [3 – 4 marks] Sound explanation of the possible future impacts of climate change on a named mountain area with some developed statements. Some evidence of place detail. Written work is legible and spelling, punctuation and grammar are mostly accurate. Meaning is communicated clearly.</p> <p>Level 1 [1 – 2 marks] Basic statements that describe the possible impacts of climate change. Written work contains mistakes in spelling, punctuation and grammar, which sometimes hinders communication.</p> <p>0 marks No response worthy of credit.</p>	6	<p>The response is to be marked holistically. Examiners to label overall level awarded at the end of the response. The following examples are indicative of statements at each level:</p> <p>Level 3 The average temperature in the Andes has risen by about 0.7 degrees in the last 50 years and this warming is likely to continue in the future. Due to this climatic change it is likely that glaciers such as the Pastoruri glacier in Peru will melt which could threaten the water supply of people who live in places such as the Santa river valley.</p> <p>Level 2 In the Andes the glaciers will start to retreat, this will increase the risk of flooding for farmers living on the lower slopes and they may have to move.</p> <p>Level 1 In the Andes farmers may have to change the types of crops they grow.</p> <p>If the quality of written communication criteria is not fully met then full marks must not be awarded. Level 2 (4 marks) maximum for a UK mountain area. Level 2 (4 marks) maximum for non- mountain environment. Level 2 (4 max) to be awarded if the candidate writes only about a past or current impacts of climate change.</p>


Answer/Indicative content			Mark	Guidance
		 Spelling, punctuation and grammar (SPaG) are assessed using the separate marking grid on page 20.	3	
2	(a)	<p>Indicative content:</p> <ul style="list-style-type: none"> • Iceland is situated on a plate boundary/ Mid-Atlantic ridge. (✓) • North American and Eurasian plates are moving apart/ constructive margin. (✓) • As plates move apart there can be a build-up of pressure. (✓) • Earthquakes occur when pressure is released along fault lines as seismic energy. (✓) • Some of the earthquakes are associated with volcanic eruptions. (✓) 	4	<p>4 x 1 mark</p> <p>Maximum 2 marks if candidate has written appropriate statements about volcanoes.</p>
2	(b)	(i) <p>Indicative content:</p> <ul style="list-style-type: none"> • Mercalli scale measures the effects of an earthquake (✓) by describing its effects on people. (dev) • Richter scale measures the magnitude/strength/energy/power of an earthquake (✓) through the strength of seismic waves. (dev) • The Richter scale is recorded at the time of the earthquake. (✓) The Mercalli scale is a subsequent evaluation of the damage. (✓) • Mercalli is a linear scale. (✓) The Richter scale is logarithmic. (✓) • Mercalli measured by observation. (✓) The Richter scale is measured by a seismograph. (✓) 	4	<p>4 x 1 mark or credit development.</p> <p>1 mark reserve for both Richter and Mercalli scale.</p> <p>No upper numerical limit to the Richter scale</p>

Answer/Indicative content			Mark	Guidance
2	(b)	(ii)	2	2 x 1 mark No marks for stating method. Both marks for reasoning. Either two separate reasons, or one developed reason. No credit for simple opposites e.g. Richter scale is scientific and Mercalli scale is less scientific.
2	(c)	(i)	2	2 x 1 mark
	(c)	(ii)	6	The response is to be marked holistically. Examiners to label overall level awarded at the end of the response. The following examples are indicative of statements at each level: Level 3 In Christchurch a full emergency management structure was in place within two hours of the earthquake, with the police organising search and rescue teams of over 500 people. This was a highly successful strategy as the speed of response meant that many lives were saved. Level 2 A good thing about the response in Christchurch was the emergency services were well organised and this undoubtedly saved peoples' lives as they were rescued

Answer/Indicative content			Mark	Guidance
		<p>Level 1 [1 – 2 marks] Basic statements that describe some responses to an earthquake event. Written work contains mistakes in spelling, punctuation and grammar, which sometimes hinders communication.</p> <p>0 marks No response worthy of credit.</p>		<p>quickly.</p> <p>Level 1 After the earthquake rescue services managed to get to people trapped in the rubble.</p> <p>If the quality of written communication criteria is not fully met then full marks must not be awarded. Level 2 (max 4) if no evaluation. Level 2 (max 4) if candidate has not used same example for 2ci).</p>
		 Spelling, punctuation and grammar (SPaG) are assessed using the separate marking grid on page 20.	3	
3	(a)	(i) Primary industry is any industry that involves obtaining natural resources from the land or sea.	1	1 x 1 mark for accurate definition. No credit for naming examples.
3	(a)	(ii) Uganda. Iceland.	2	2 x 1 mark Annotate with ticks or crosses.
3	(a)	(iii) Indicative content: The graph shows a negative correlation. (✓) As the percentage of GDP from agriculture increases, the GDP per person decreases. (dev) This is likely to be the case as agriculture in MEDCs uses more machinery (✓) whilst MEDCs also tend to gain more money from tertiary/service industries. (dev)	3	<p>3 x 1 mark 1 mark reserve for description of relationship 1 mark reserve for explanation of relationship Final mark can be achieved by developing either description or explanation.</p> <p>Candidates may use accurate data with units to develop their response.</p>
3	(b)	<p>Level 3 [5 – 6 marks] Comprehensive explanation of how their chosen product creates jobs in different economic sectors with developed statements that make accurate reference to specific detail related to their chosen product. Reference to at least 3 employment sectors. Written work is legible and spelling, punctuation and grammar are accurate. Meaning is communicated very clearly.</p> <p>Level 2 [3 – 4 marks] Sound explanation of how their chosen product creates jobs in different economic sectors. Some evidence of</p>	6	<p>The response is to be marked holistically. Examiners to label overall level awarded at the end of the response. The following examples are indicative of statements at each level:</p> <p>Level 3: Coltan miners in the DRC work in the primary sector mining coltan that is used to extend the battery life of mobile phones. An assembly plant such as Foxconn in Shenzhen, China, is where the mobile phones are manufactured by secondary workers, who work long</p>

Answer/Indicative content			Mark	Guidance
		<p>specific detail. Reference to at least 2 employment sectors. Written work is legible and spelling, punctuation and grammar are mostly accurate. Meaning is communicated clearly.</p> <p>Level 1 [1 – 2 marks] Basic statements that refer to different types of jobs relating to their chosen product. Written work contains mistakes in spelling, punctuation and grammar, which sometimes hinders communication.</p> <p>0 marks No response worthy of credit.</p>		<p>hours in difficult factory conditions. The mobile phones are then transported to shops in MEDCs such as the UK where people are employed in the tertiary sector to sell the phones in stores such as Carphone Warehouse.</p> <p>Level 2: Mobile phones are made in factories in countries such as China using secondary workers. They are then sold in shops in countries such as the UK by people employed in the tertiary sector.</p> <p>Level 1: Mobile phones create jobs for people because they are made by people in factories.</p> <p>If the quality of written communication criteria is not fully met then full marks must not be awarded.</p>
		 Spelling, punctuation and grammar (SPaG) are assessed using the separate marking grid on page 20.	3	
3	(c)	<p>Indicative content:</p> <p>Lack of funding to invest/ expensive to set up. (✓) Lack of available technology. (✓) Historical reliance on fossil fuels. (✓) Government policy. (✓) Unsuitable physical conditions for solar/ wind/ geothermal/ HEP/ tidal. (✓) 2 MAX Produces less energy than fossil fuels. (✓) There is competition for available land suitable for renewable energy. (✓)</p>	3	<p>3 x 1 mark or credit development.</p> <p>No credit for 'destroy habitats' or 'local pressure groups'.</p> <p>2 mark max for unsuitable physical conditions.</p>
3	(d)	<p>Indicative content:</p> <p>Whether it might damage the environment / cause air, water, noise pollution. (✓)</p>	2	<p>Question asks for factors, award 2 x 1 mark.</p> <p>No credit for cost of energy for the consumer.</p>

Answer/Indicative content			Mark	Guidance
		<p>Whether the energy provider considers working conditions/ fair pay. (✓)</p> <p>Whether it reduces their carbon footprint. (✓)</p> <p>Whether it is from a renewable or non-renewable source. (✓)</p> <p>Whether the price of investing in renewable energy will lead to cheaper energy in long term (solar). (✓)</p> <p>Who benefits from the income made from generating the energy. (✓)</p>		Type of pollution must be qualified e.g. 'air pollution' or 'polluting the environment'.
3	(e)	<p>Level 3 [5 – 6 marks] Demonstrates comprehensive knowledge and understanding with developed statements that explain how their chosen service affects both people and the environment. Accurate reference to specific detail. Written work is legible and spelling, punctuation and grammar are accurate. Meaning is communicated very clearly.</p> <p>Level 2 [3 – 4 marks] Demonstrates sound knowledge and understanding with some developed statements which describe the effects of providing their chosen service on people and/or the environment. Some evidence of specific detail. Written work is legible and spelling, punctuation and grammar are mostly accurate. Meaning is communicated clearly.</p> <p>Level 1 [1 – 2 marks] Demonstrates limited knowledge and understanding with simple statements about effects of chosen service on people or environment. Written work contains mistakes in spelling, punctuation and grammar, which sometimes hinders communication.</p> <p>0 marks No response worthy of credit.</p>	6	<p>The response is to be marked holistically. Examiners to label overall level awarded at the end of the response. The following examples are indicative of statements at each level.</p> <p>Level 3: Service studied: Tourism The tourist industry has grown in many LEDCs around the world such as in Peru; this has provided local people with new job opportunities as guides for the climbers and trekkers visiting locations such as the Inca trail. This has enabled local people to have a reliable income and therefore be able to pay for their children's education.</p> <p>Level 2: Service studied: Tourism Tourism has damaged the environment in some locations around the world. In places such as the Masai Mara game reserve mini bus tours have damaged the ground and frightened animals.</p> <p>Level 1: Service studied: Tourism Tourism lets people visit other places around the world and can create jobs for locals.</p>

Answer/Indicative content			Mark	Guidance
				If the quality of written communication criteria is not fully met then full marks must not be awarded. Candidates writing about primary or secondary industries Level 2 (4 marks) maximum. Credit energy provision to the consumer as a service.
		 Spelling, punctuation and grammar (SPaG) are assessed using the separate marking grid on page 20.	3	
4	(a)	<p>Indicative content:</p> <p>Disadvantages:</p> <ul style="list-style-type: none"> • Can cause tremors/earthquakes (✓) as a result local people would have concerns about damage to their houses. (dev) • Concerns about air/water pollution. (✓) This is created when chemicals are pumped into the ground. (dev) 	2	<p>1 mark + development.</p> <p>First mark for identification, second mark for explanation of disadvantage.</p> <p>Disadvantage must come from Fig.5</p> <p>Candidate may explain why it is a disadvantage or explain how the disadvantage is created.</p>
4	(b)	<p>Indicative content:</p> <p>Supply</p> <ul style="list-style-type: none"> • North Sea gas reserves are running out. (✓) • Less reliance on foreign imports. (✓) this may occur due to conflict/ war in other countries. (dev) • Increased use of renewable energy sources. (✓) • New sources of energy such as shale gas. (✓) <p>Demand</p> <ul style="list-style-type: none"> • Rising population requires more energy. (✓) • Increased use of electrical goods. (✓) • Expansion of industrial/ leisure use of energy. (✓) • People want to reduce their carbon footprint. (✓) more individuals invest in solar panels on their houses. (dev) 	3	<p>3 x 1 mark or credit development.</p> <p>Credit each relevant point of explanation</p> <p>Reserve one mark for supply.</p> <p>Reserve one mark for demand.</p>

Answer/Indicative content			Mark	Guidance
4	(c)	<p>Level 3 [5 – 6 marks] Comprehensive explanation with developed statements of how the chosen energy issue might develop in the future. Accurate reference to specific detail. Written work is legible and spelling, punctuation and grammar are accurate. Meaning is communicated very clearly.</p> <p>Level 2 [3 – 4 marks] Sound explanation with some developed statements. Some evidence of specific detail. Written work is legible and spelling, punctuation and grammar are mostly accurate. Meaning is communicated clearly.</p> <p>Level 1 [1 – 2 marks] Basic statements about how the issue might develop in the future. Written work contains mistakes in spelling, punctuation and grammar, which sometimes hinders communication.</p> <p>0 marks No response worthy of credit.</p>	6	<p>The response is to be marked holistically. Examiners to label overall level awarded at the end of the response. The following examples are indicative of statements at each level:</p> <p>Level 3: Nuclear power may develop into a key energy resource for the UK as the supply of fossil fuels declines; the UK government has indicated that it wants new nuclear stations built at five sites across the country by 2025. This will be managed at a government level as they can provide incentives for companies to build nuclear power stations.</p> <p>Level 2: The UK will need more nuclear power in the future as North sea gas is running out and we should not be relying on imports from other countries as they are unreliable.</p> <p>Level 1: Nuclear power may develop further in the future; however people living nearby the sites will not like it.</p> <p>If the quality of written communication criteria is not fully met then full marks must not be awarded.</p>
5	(a)	(i) <ul style="list-style-type: none"> • Schools • Car parking • Hotels/leisure facilities • Motorways/Main roads/ Service station • Housing/residential areas • Woodland • Factory/ commercial • Fields 	2	<p>2 x 1 mark</p> <p>No credit for 'Ayton'/ buildings/ built-up/ urban/ rural.</p> <p>Annotate with a tick or cross.</p>

Answer/Indicative content			Mark	Guidance
5	(a)	(ii)	2	2 x 1 mark No credit for features not found in the CBD e.g. In the CBD there is no housing.
5	(a)	(iii)	4	4 x 1 mark. Allow development. Candidates who state that Fig 6 is a CBD = 0 marks
5	(b)		2	1 + development One mark for identification of change from the resource. Second mark for suggested reason for this change. Evidence must come from the resource.
5	(c)		6	The response is to be marked holistically. Examiners to label overall level awarded at the end of the response. The following examples are indicative of statements at each level: Level 3: Extension of tram system in Nottingham – The NET system is expanding into Beeston and should be opened by September 2015 which will bring positive benefits to commuters who will have an alternative way of reaching the centre of Nottingham, but local residents such as

Answer/Indicative content			Mark	Guidance
		<p>accurate. Meaning is communicated clearly.</p> <p>Level 1 [1 – 2 marks] Basic statements about the change stated. Written work contains mistakes in spelling, punctuation and grammar, which sometimes hinders communication.</p> <p>0 marks No response worthy of credit.</p>		<p>those on Cator Lane will be unhappy with noise that a tram line will bring.</p> <p>Level 2: Extension of tram system in Nottingham – The new tram line to the south and south west of Nottingham will join the city centre to Beeston; this will allow people from this area to travel easily into the city.</p> <p>Level 1: The building of the new tram line continues to cause a lot of disruption and noise.</p> <p>If the quality of written communication criteria is not fully met then full marks must not be awarded.</p> <p>Highlight the change.</p> <p>Level 2 (4 max) to be awarded if the candidate writes only about a past or current change.</p> <p>Level 1 (2 max) if the candidate uses a non-UK based place e.g. Mumbai.</p>

Awarding Spelling, Punctuation and Grammar to scripts with a scribe coversheet

- a. If a script has a **scribe cover sheet** it is vital to check which boxes are ticked and award as per the instructions and grid below:
- i. Assess the work for SPaG in accordance with the normal marking criteria. The initial assessment must be made as if the candidate had not used a scribe (or word processor) and was eligible for all the SPaG marks.
 - ii. Check the cover sheet to see what has been dictated (or what facilities were disabled on the word processor) and therefore what proportion of marks is available to the candidate.
 - iii. Convert the SPaG mark to reflect the correct proportion using the conversion table given below.

SPaG mark awarded	Mark if candidate eligible for one third (e.g. grammar only)	Mark if candidate eligible for two thirds (e.g. grammar and punctuation only)
0	0	0
1	0	1
2	1	1
3	1	2
4	1	3
5	2	3
6	2	4
7	2	5
8	3	5
9	3	6

- b. If a script has a **word processor cover sheet** attached to it the candidate **can** still access SPaG marks (see point a. above) unless the cover sheet states that the checking functionality is enabled, in which case no SPaG marks are available.
- c. If a script has a **word processor cover sheet AND a scribe cover sheet** attached to it, see point a. above.

- d. If you come across a typewritten script **without** a cover sheet please check with the OCR Special Requirements Team at specialrequirements@ocr.org.uk who can check what access arrangements were agreed.
- e. If the script has a **transcript, Oral Language Modifier, Sign Language Interpreter or a Practical Assistant cover sheet**, award SPaG as normal.

APPENDIX 1

Spelling, punctuation and grammar (SPaG) assessment grid

<i>High performance 3 marks</i>
Candidates spell, punctuate and use rules of grammar with consistent accuracy and effective control of meaning in the context of the demands of the question. Where required, they use a wide range of specialist terms adeptly and with precision.
<i>Intermediate performance 2 marks</i>
Candidates spell, punctuate and use rules of grammar with considerable accuracy and general control of meaning in the context of the demands of the question. Where required, they use a good range of specialist terms with facility.
<i>Threshold performance 1 mark</i>
Candidates spell, punctuate and use rules of grammar with reasonable accuracy in the context of the demands of the question. Any errors do not hinder meaning in the response. Where required, they use a limited range of specialist terms appropriately.
<i>0 marks</i>
The use of zero (0) marks. 0 marks should be awarded when <ul style="list-style-type: none"> - The candidate writes nothing; - The candidate's response bears no relation to the question; - The candidate's achievement in SPaG does not reach the threshold performance level, for example errors in spelling, punctuation and grammar severely hinder meaning.

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

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

