

# **Geography**

Advanced Subsidiary GCE

Unit **F761**: Managing Physical Environments

## **Mark Scheme for January 2013**

---

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 2013

## Annotations

Annotation	Meaning
	Correct point (only to be used in the Standardisation sample and on point-marked questions).
	Omission mark. Further development needed, missing point or link between points.
	Level one – to be used on the final, 9 mark part of Section A questions only.
	Level two – to be used on the final, 9 mark part of Section A questions only.
	Level three – to be used on the final, 9 mark part of Section A questions only.
The level stamp is to be placed in the left hand margin adjacent to an example of evidence to justify the award of that level.	
	Unclear, inaccurate, dubious validity.
	Irrelevant, a significant amount of material that does not answer the question.
	No example(s) used or provided.
	Rubric error (place at start of Question not being counted).
	Highlighting an issue eg irrelevant paragraph. Use in conjunction with another stamp eg  or  .
Highlighter tool	Highlighting a particularly creditworthy part of the response. Can be used in conjunction with another stamp eg  .
	Point has been seen and noted.

Examiners **must** include annotations on each response to Section A questions unless awarding full marks.

In Section B, each page of writing **must** have some annotation.

Question			Answer	Marks	Guidance	
					Content	Levels of response
1	(a)	(i)	<b>Indicative content:</b> overall slight increase, very variable, many anomalies.	4		<p><b>Level 2 (3–4 marks)</b> Recognises overall trend (direction and/or strength), significance of max/min differences and/or other variation, uses data as evidence.</p> <p><b>Level 1 (0–2 marks)</b> Either - description of changes but without general trend or max/min. Or - recognises trend or max/min but no reference to variation or use of data as evidence.</p>
		(ii)	<b>Indicative content:</b> physical factors such as available energy (linked to volume, velocity, gradient), resistance of bed/bank rock type, available abrasive load, tributaries, acidity of water, human factors such as dams, bed/bank protection, abstraction/addition of water.	6		<p><b>Level 2 (5–6 marks)</b> Suggests two factors. Causal links to erosion clearly explained. Good use of technical language.</p> <p><b>Level 1 (0–4 marks)</b> Suggests at least one factor. Links may be stated rather than explained. Gaps in technical language. One explained well may reach the top of this level.</p>
	(b)		<b>Indicative content:</b> processes include various weathering (eg freeze-thaw, exfoliation/insolation, hydration), mass movement (eg slumping, slides, creep, rain splash), wind processes and hydrological processes (eg percolation, surface run-off, throughflow). No credit for channel processes.	6	Links to landforms are not required. An outline only is required.	<p><b>Level 2 (5–6 marks)</b> Two relevant processes clearly outlined.</p> <p><b>Level 1 (0–4 marks)</b> One relevant process outlined or two stated. One outlined well may reach the top of this level.</p>

Question		Answer	Marks	Guidance	
				Content	Levels of response
	(c)	<p><b>Indicative content:</b> human activities likely to include transportation, industry, leisure/recreation, settlement, tourism, conservation, energy development, flood defences. Reasons for growth and development may include flat land, attractive scenery, access to water, raw material availability, government policies/investment, river/valley characteristics, risks of flooding.</p>	9	<p>Growth and/or development acceptable. Flood protection could be a reason why an activity has been able to grow/develop.</p> <p><b>Exemplars:</b> Level 3 – HEP has developed as the steep relief provides a high head of water providing more energy to drive turbines and generate electricity.</p> <p>Level 2 – HEP has developed as the river provides a regular supply of water for the turbines.</p> <p>Level 1 – HEP has developed due to the presence of the river.</p>	<p><b>Level 3 (8–9 marks)</b> Uses a clearly identified example(s) to describe and explain the growth and development of two activities. Cause-effect links are stated and clearly explained. Answer is well structured with accurate grammar and spelling. Good use of appropriate geographical terminology.</p> <p><b>Level 2 (5–7 marks)</b> Gives a clearly identified example(s) to describe and explain the growth and development of at least one human activity. Cause-effect links are stated but explanation may not be clear. Answer has sound structure but may have some errors in grammar and spelling. Some use of appropriate geographical terminology.</p> <p><b>Level 1 (0–4 marks)</b> Limited or no example. Descriptive observations of human activities. There may be little or no reference to cause-effect links. Answer has little structure and has some errors in grammar and spelling. Little use of appropriate geographical terminology.</p> <p>If no located example then top of Level 1 Max.</p>

Question			Answer	Marks	Guidance	
					Content	Levels of response
2	(a)	(i)	<b>Indicative content:</b> overall decrease or max/min identified, very variable, many anomalies.	4	Increase/decrease depends on which end of the coastline is used as the starting point.	<p><b>Level 2 (3–4 marks)</b> Recognises overall trend (direction and/or strength), significance of max/min differences and/or other variation, uses data as evidence.</p> <p><b>Level 1 (0–2 marks)</b> Either - description of changes but without general trend or max/min. Or - recognises trend or max/min but no reference to variation or use of data as evidence.</p>
		(ii)	<b>Indicative content:</b> physical factors such as variations in wave energy (linked to wave height, wind speed, length of fetch, wave refraction), resistance of rock type, available abrasive load, longshore drift, acidity of water; human factors such as groynes, sea walls, rip rap, gabions.	6		<p><b>Level 2 (5–6 marks)</b> Suggests two factors. Causal links to erosion clearly explained. Good use of technical language.</p> <p><b>Level 1 (0–4 marks)</b> Suggests at least one factor. Links may be stated rather than explained. Gaps in technical language. One explained well may reach the top of this level.</p>
	(b)		<b>Indicative content:</b> processes include various weathering (eg freeze-thaw, exfoliation/insolation, salt crystallisation, hydration), mass movement (eg slumping, slides, creep, rain splash), wind processes and hydrological processes (eg percolation, surface run-off, throughflow). No credit for wave action.	6	Links to landforms are not required. An outline only is required.	<p><b>Level 2 (5–6 marks)</b> Two relevant processes clearly outlined.</p> <p><b>Level 1 (0–4 marks)</b> One process outlined or two stated. One outlined well may reach the top of this level.</p>

Question		Answer	Marks	Guidance	
				Content	Levels of response
	(c)	<p><b>Indicative content:</b> human activities likely to include transportation, industry, conservation, energy development, leisure/recreation, settlement, tourism, coastal protection. Reasons for growth and development may include flat land, attractive scenery, access to water, raw material availability, government policies/investment, high erosion rates/land and property values.</p>	9	<p>Growth and/or development acceptable. Coastal protection could be a reason why an activity has been able to grow/develop.</p> <p><b>Exemplars:</b> Level 3 – tourism has developed due to wide sandy beaches and shallow, safe water for swimming which attracts families.</p> <p>Level 2 – tourism has developed due to attractive scenery and sea views that visitors can enjoy.</p> <p>Level 1 – tourism has developed due to the scenery.</p>	<p><b>Level 3 (8–9 marks)</b> Uses a clearly identified example(s) to describe and explain the growth and development of two activities. Cause-effect links are stated and clearly explained. Answer is well structured with accurate grammar and spelling. Good use of appropriate geographical terminology.</p> <p><b>Level 2 (5–7 marks)</b> Gives a clearly identified example(s) to describe and explain the growth and development of at least one human activity. Cause-effect links are stated but explanation may not be clear. Answer has sound structure but may have some errors in grammar and spelling. Some use of appropriate geographical terminology.</p> <p><b>Level 1 (0–4 marks)</b> Limited or no example. Descriptive observations of human activities. There may be little or no reference to cause-effect links. Answer has little structure and has some errors in grammar and spelling. Little use of appropriate geographical terminology.</p> <p>If no located example then top of Level 1 Max.</p>

Question			Answer	Marks	Guidance	
					Content	Levels of response
3	(a)	(i)	<p><b>Socio-economic:</b> local people can use sports centre, jobs created, increased spending.</p> <p><b>Environmental:</b> tree planting scheme.</p>	2	Point mark 2 x 1.	
		(ii)	<p>Because socio-economic and environmental needs are being met (1) in a balanced way/at the same time or using one benefit to create another (1). Or It is meeting the needs of the present (1) without compromising the ability of future generations to meet their own needs (1).</p>	2	<p>Point mark 2 x 1.</p> <p>Answers may combine the two ideas. Accept other relevant interpretations eg meeting needs of both local people and the tourism industry. Replanting of trees as a way of future-proofing timber supply. The key is that there is understanding of the concept in this context.</p>	
	(b)		<p><b>Indicative content:</b> adaptations include prostrate/dwarfism to reduce wind damage, evergreen to photosynthesise immediately at the start of the growing season, flexible/downward sloping branches to bend not break under snow weight, cones to protect seeds, thin leaves/needles to reduce transpiration, dark colour to absorb sunlight, perennial, parabolic flowers to maximise direct sunlight, short life-cycle due to short growing season, shallow roots due to permafrost.</p>	6		<p><b>Level 2 (5–6 marks)</b> Clear explanation of two adaptations with links to the environmental conditions.</p> <p><b>Level 1 (0–4 marks)</b> Relevant adaptation(s) identified but links to the environmental conditions may be stated rather than explained One explained well may reach the top of this level.</p>

Question		Answer	Marks	Guidance	
				Content	Levels of response
	(c)	<p><b>Indicative content:</b> pipeline construction can obstruct migration routes, deforestation can cause loss of habitat, oil spills can contaminate food chains, enhanced global warming can create different conditions and so different species. Positive impacts, such as creation of nature reserves, also valid.</p>	6	<p>An outline only is required.</p> <p>Generic links likely to be reference to death/destruction.</p>	<p><b>Level 2 (5–6 marks)</b> Appropriate human activities considered, with links made to their specific impact on ecosystems.</p> <p><b>Level 1 (0–4 marks)</b> Appropriate human activity(ies) identified, but with generic or no links to their impact on ecosystems.</p>

Question		Answer	Marks	Guidance	
				Content	Levels of response
	(d)	<p><b>Indicative content:</b> landforms include cirques, U-shaped valleys, arêtes, truncated spurs, hanging valleys. Ice acts by erosion via plucking and abrasion. Deposition by ice leading to the formation of various moraines is also valid. Freeze-thaw/frost shattering may also be relevant. Some periglacial landforms, such as pingo and patterned ground, are also acceptable.</p>	9	<p>No located example(s) required. Explanation of erosion/deposition expected for L3.</p> <p><b>Exemplars:</b>            Level 3 – The cirque is deepened by abrasion as the ice moves in a rotational manner under gravity and debris in the ice is dragged across the surface.</p> <p>Level 2 – The cirque is deepened by erosion and ice moves in a rotational manner under gravity.</p> <p>Level 1 – The cirque is deepened by erosion as the ice moves downslope.</p>	<p><b>Level 3 (8–9 marks)</b>            Uses two appropriate landforms to explain the influence of ice on their shaping. Cause-effect links are clearly explained. Answer is well structured with accurate grammar and spelling. Good use of appropriate geographical terminology.</p> <p><b>Level 2 (5–7 marks)</b>            Uses at least one appropriate landform to explain the influence of ice on its shaping. Cause-effect links are stated but not clearly explained. Answer has sound structure but may have some errors in grammar and spelling. Some use of appropriate geographical terminology.</p> <p><b>Level 1 (0–4 marks)</b>            Descriptive statement(s) about landform(s). There may be little or no reference to cause-effect links. Answer has little structure and has some errors in grammar and spelling. Little use of appropriate geographical terminology.</p> <p>No credit for names of landforms only.</p>

Question			Answer	Marks	Guidance	
					Content	Levels of response
4	(a)	(i)	<p><b>Socio-economic:</b> more reliable food supply/increased drinking water availability, surplus wheat to sell.</p> <p><b>Environmental:</b> reduced soil waterlogging and salinization, reduced water extraction/consumption.</p>	2	Point mark 2 x 1.	
		(ii)	<p>Because socio-economic and environmental needs are being met (1) in a balanced way (1).</p> <p>Or</p> <p>It is meeting the needs of the present (1) without compromising the ability of future generations to meet their own needs (1).</p>	2	<p>Point mark 2 x 1.</p> <p>Answers may combine the two ideas. Accept other relevant interpretations eg producing food for local people as well as selling it commercially.</p> <p>Efficient irrigation to future-proof soil fertility.</p> <p>The key is that there is understanding of the concept in this context.</p>	
	(b)		<p><b>Indicative content:</b> adaptations include storing water in stem/trunk to cope with drought, small leaves to reduce transpiration losses in high temperatures, deep roots to reach water table, umbrella canopy to shade roots from high temperatures, halophytic to tolerate saline soils from evaporation, short life cycle due to dry season.</p>	6		<p><b>Level 2 (5–6 marks)</b> Clear explanation of two adaptations with links to the environmental conditions.</p> <p><b>Level 1 (0–4 marks)</b> Relevant adaptation(s) identified but links to the environmental conditions may be stated rather than explained. One explained well may reach the top of this level.</p>

Question		Answer	Marks	Guidance	
				Content	Levels of response
	(c)	<p><b>Indicative content:</b> urbanisation/ deforestation can cause loss of habitat, mineral extraction can contaminate food chains, abstraction of water can lead to water shortages, gas pipelines can obstruct migration routes, introduction of domesticated animals altering food chains, overgrazing/cultivation causing desertification, enhanced global warming can create different conditions and so different species. Positive impacts, such as creation of nature reserves, also valid.</p>	6	<p>An outline only is required.</p> <p>Generic links likely to be reference to death/destruction.</p>	<p><b>Level 2 (5–6 marks)</b> Appropriate human activities considered, with links made to their specific impact on ecosystems.</p> <p><b>Level 1 (0–4 marks)</b> Appropriate human activity(ies) identified, but with generic or no links to their impact on ecosystems.</p>

Question		Answer	Marks	Guidance	
				Content	Levels of response
	(d)	<p><b>Indicative content:</b> landforms include various types of sand dune and sculptured rocks (pedestals, yardangs, zeugens, ventifacts) as well as desert pavements). Wind modification of water formed landforms, such as the sides of canyons, mesas, is also valid. Wind acts by deposition as well as by erosion via abrasion.</p>	9	<p>No located example(s) required.</p> <p>Explanation of erosion/deposition expected for L3.</p> <p><b>Exemplars:</b>                      Level 3 – Sand dunes form when the wind loses energy as it slows down due to friction. It therefore has less energy to transport sand grains and they are deposited.</p> <p>Level 2 – Sand dunes form when the wind slows down and deposits the sand grains that it was transporting.</p> <p>Level 1 – Sand dunes form when sand grains being carried by the wind are deposited.</p>	<p><b>Level 3 (8–9 marks)</b>                      Uses two appropriate landforms to explain the influence of wind on their shaping. Cause-effect links are clearly explained. Answer is well structured with accurate grammar and spelling. Good use of appropriate geographical terminology.</p> <p><b>Level 2 (5–7 marks)</b>                      Uses at least one appropriate landform to explain the influence of wind on its shaping. Cause-effect links are stated but not clearly explained. Answer has sound structure but may have some errors in grammar and spelling. Some use of appropriate geographical terminology.</p> <p><b>Level 1 (0–4 marks)</b>                      Descriptive statement(s) about landform(s). There may be little or no reference to cause-effect links. Answer has little structure and has some errors in grammar and spelling. Little use of appropriate geographical terminology.</p> <p>No credit for names of landforms only.</p>

Question		Answer	Marks	Guidance	
				Content	Levels of response
5		<p><b>Indicative content:</b> Land uses might include industry, residential, recreation, transportation, resource extraction, conservation. Conflicts occur when different users are looking to occupy the same/adjacent land. Views and opinions of different groups are relevant.</p> <p>Flood/erosion protection strategies may lead to conflict between the different land uses affected.</p> <p>Management strategies include land use zoning, education, environmental protection legislation.</p>	25	<p>The conflicts themselves do not need to be explained.</p> <p><b>Exemplars:</b>                      Level 3 – Heavy industries cause water pollution when toxic waste leaks into the river which has a negative impact on recreational fishing. This can be resolved with careful monitoring and governmental legislation with offending companies being prosecuted and fined.</p> <p>Level 2 – Waste from industries causes water pollution which affects recreational fishing. Laws can be made to stop this happening.</p> <p>Level 1 – Industries cause pollution of the river and so this has to be stopped.</p>	<p><b>AO1 Knowledge and understanding Level 3 (11–13 marks)</b>                      Detailed knowledge of the conflicts and understanding of their management. Cause-effect links are clearly explained. There is effective use of detailed exemplification with conflicts being explicitly linked to management strategies.</p> <p><b>Level 2 (7–10 marks)</b>                      Some knowledge of the conflicts and understanding of their management. Cause-effect links are stated but not clearly explained. There is use of exemplification with some linkages made between conflicts and management, even if knowledge of conflicts is quite detailed.</p> <p><b>Level 1 (0–6 marks)</b>                      Limited knowledge of conflicts and understanding of their management. No cause-effect links are stated. There is limited exemplification of conflict-management linkages, even if knowledge of the conflicts is sound.</p> <p>If no located example then top of Level 1 Max.</p>

Question			Answer	Marks	Guidance	
					Content	Levels of response
					<p>Analysis could include comments on success of the strategies, their sustainability, different scales of conflicts and strategies, different contexts eg LEDC/MEDC, large/small basins, identify land uses/activities that conflict more than others. This should be explicit for Level 3.</p>	<p><b>AO2 Analysis and application Level 3 (5 marks)</b>                      Clear analysis and application of knowledge and understanding of conflicts and their management.</p> <p><b>Level 2 (3–4 marks)</b>                      Some analysis and application of knowledge and understanding of conflicts and their management.</p> <p><b>Level 1 (0–2 marks)</b>                      Limited analysis and application of knowledge and understanding of conflicts and their management.</p> <p><b>AO3 Skills and communication Level 3 (6–7 marks)</b>                      Answer is well structured with accurate grammar and spelling. Good use of appropriate geographical terminology. Clear conclusion(s) are drawn.</p> <p><b>Level 2 (4–5 marks)</b>                      Answer has sound structure but may have some errors in grammar and spelling. Some use of appropriate geographical terminology. Conclusion(s) are attempted.</p> <p><b>Level 1 (0–3 marks)</b>                      Answer has little structure and has some errors in grammar and spelling. Little use of appropriate geographical terminology. No conclusion(s) are attempted.</p>

Question		Answer	Marks	Guidance	
				Content	Levels of response
6		<p><b>Indicative content:</b> Human activities might include industry, settlement, recreation, transportation, resource extraction, conservation. Conflicts occur due to shortage of suitable locations or incompatibility of human activities. Coastal protection strategies may lead to conflict between the different activities affected. Management strategies include land use zoning, education, environmental protection legislation.</p>	25	<p>The conflicts themselves do not need to be explained.</p> <p><b>Exemplars:</b>                      Level 3 – Heavy industries cause water pollution when toxic waste leaks into the sea which has a negative impact on recreational fishing. This can be resolved with careful monitoring and governmental legislation with offending companies being prosecuted and fined.</p> <p>Level 2 – Waste from industries causes water pollution which affects recreational fishing. Laws can be made to stop this happening</p> <p>Level 1 – Industries cause pollution of the sea and so this has to be stopped.</p>	<p><b>AO1 Knowledge and understanding Level 3 (11–13 marks)</b>                      Detailed knowledge of the conflicts and understanding of their management. Cause-effect links are clearly explained. There is effective use of detailed exemplification with conflicts being explicitly linked to management strategies.</p> <p><b>Level 2 (7–10 marks)</b>                      Some knowledge of the conflicts and understanding of their management. Cause-effect links are stated but not clearly explained. There is use of exemplification with some linkages made between conflicts and management, even if knowledge of conflicts is quite detailed.</p> <p><b>Level 1 (0–6 marks)</b>                      Limited knowledge of conflicts and understanding of their management. No cause-effect links are stated. There is limited exemplification of conflict-management linkages, even if knowledge of the conflicts is sound.</p> <p>If no located example then top of Level 1 Max.</p>

Question			Answer	Marks	Guidance	
					Content	Levels of response
					<p>Analysis could include comments on success of the strategies, their sustainability, different scales of conflicts and strategies, different contexts eg LEDC/MEDC, large/small coastlines, identify land uses/activities that conflict more than others. This should be explicit for Level 3.</p>	<p><b>AO2 Analysis and application Level 3 (5 marks)</b> Clear analysis and application of knowledge and understanding of conflicts and their management.</p> <p><b>Level 2 (3–4 marks)</b> Some analysis and application of knowledge and understanding of conflicts and their management.</p> <p><b>Level 1 (0–2 marks)</b> Limited analysis and application of knowledge and understanding of conflicts and their management.</p> <p><b>AO3 Skills and communication Level 3 (6–7 marks)</b> Answer is well structured with accurate grammar and spelling. Good use of appropriate geographical terminology. Clear conclusion(s) are drawn.</p> <p><b>Level 2 (4–5 marks)</b> Answer has sound structure but may have some errors in grammar and spelling. Some use of appropriate geographical terminology. Conclusion(s) are attempted.</p> <p><b>Level 1 (0–3 marks)</b> Answer has little structure and has some errors in grammar and spelling. Little use of appropriate geographical terminology. No conclusion(s) are attempted.</p>

Question		Answer	Marks	Guidance	
				Content	Levels of response
7		<p><b>Indicative content:</b> Social challenges include conflicts with indigenous populations; economic challenges include high costs of development in overcoming remoteness and climatic problems; environmental challenges include the fragility of ecosystems, climate, ground conditions, avalanches, avoiding migration routes.</p>	25	<p>Focus is on <b>for</b> development rather than <b>from</b> development.</p> <p>Different challenges may be exemplified by different examples.</p> <p><b>Exemplars:</b>            Level 3 – Ecosystems are fragile and recovery rates are very slow. Any damage to vegetation cover by human activity can cause long-term disruption to short food chains.</p> <p>Level 2 – Ecosystems are fragile and so can be easily damaged by human activities such as driving vehicles off-road.</p> <p>Level 1 – Development can damage ecosystems by vehicles squashing plants as they drive off-road.</p>	<p><b>AO1 Knowledge and understanding Level 3 (11–13 marks)</b>            Detailed knowledge and understanding of the concept of all three types of challenge. Cause-effect links are clearly explained. There is effective use of detailed exemplification to provide evidence of challenges.</p> <p><b>Level 2 (7–10 marks)</b>            Some knowledge and understanding of at least two types of challenge. Cause-effect links are stated but not clearly explained. There is use of exemplification to provide some evidence of challenges.</p> <p>If only one located then top of Level 2 Max.</p> <p><b>Level 1 (0–6 marks)</b>            Limited knowledge and understanding of at least one type of challenge. No cause-effect links are stated. There is limited evidence of challenges.</p> <p>If no located example then top of Level 1 Max.</p>

Question			Answer	Marks	Guidance	
					Content	Levels of response
					<p>Analysis could include comments on different types of challenge, different scales of challenge, different types of cold environment, and contrasts between LEDC/MEDC. This should be explicit for Level 3.</p>	<p><b>AO2 Analysis and application Level 3 (5 marks)</b> Clear analysis and application of knowledge and understanding of challenges.</p> <p><b>Level 2 (3–4 marks)</b> Some analysis and application of knowledge and understanding of challenges.</p> <p><b>Level 1 (0 – 2 marks)</b> Limited analysis and application of knowledge and understanding of challenges.</p> <p><b>AO3 Skills and communication Level 3 (6–7 marks)</b> Answer is well structured with accurate grammar and spelling. Good use of appropriate geographical terminology. Clear conclusion(s) are drawn.</p> <p><b>Level 2 (4–5 marks)</b> Answer has sound structure but may have some errors in grammar and spelling. Some use of appropriate geographical terminology, Conclusion(s) are attempted.</p> <p><b>Level 1 (0–3 marks)</b> Answer has little structure and has some errors in grammar and spelling. Little use of appropriate geographical terminology. No conclusion(s) are attempted.</p>

Question		Answer	Marks	Guidance	
				Content	Levels of response
8		Indicative content: Social challenges include conflicts with indigenous populations; economic challenges include high costs of development in overcoming remoteness and climatic problems; environmental challenges include the fragility of ecosystems, climate, ground conditions, sand storms, avoiding migration routes.	25	<p>Focus is on <b>for</b> development rather than <b>from</b> development.</p> <p>Different challenges may be exemplified by different examples.</p> <p><b>Exemplars:</b>            Level 3 – Ecosystems are fragile and recovery rates are very slow. Any damage to vegetation cover by human activity can cause long-term disruption to short food chains.</p> <p>Level 2 – Ecosystems are fragile and so can be easily damaged by human activities such as driving vehicles off-road.</p> <p>Level 1 – Development can damage ecosystems by vehicles squashing plants as they drive off-road.</p>	<p><b>AO1 Knowledge and understanding Level 3 (11–13 marks)</b>            Detailed knowledge and understanding of the concept of all three types of challenge. Cause-effect links are clearly explained. There is effective use of detailed exemplification to provide evidence of challenges.</p> <p><b>Level 2 (7–10 marks)</b>            Some knowledge and understanding of at least two types of challenge. Cause-effect links are stated but not clearly explained. There is use of exemplification to provide some evidence of challenges.</p> <p>If only one located then top of Level 2 Max.</p> <p><b>Level 1 (0–6 marks)</b>            Limited knowledge and understanding of at least one type of challenge. No cause-effect links are stated. There is limited evidence of challenges.</p> <p>If no located example then top of Level 1 Max.</p>

Question			Answer	Marks	Guidance	
					Content	Levels of response
					<p>Analysis could include comments on different types of challenge, different scales of challenge, different types of arid environment, and contrasts between LEDC/MEDC. This should be explicit for Level 3.</p>	<p><b>AO2 Analysis and application Level 3 (5 marks)</b> Clear analysis and application of knowledge and understanding of challenges.</p> <p><b>Level 2 (3–4 marks)</b> Some analysis and application of knowledge and understanding of challenges.</p> <p><b>Level 1 (0–2 marks)</b> Limited analysis and application of knowledge and understanding of challenges.</p> <p><b>AO3 Skills and communication Level 3 (6–7 marks)</b> Answer is well structured with accurate grammar and spelling. Good use of appropriate geographical terminology. Clear conclusion(s) are drawn.</p> <p><b>Level 2 (4–5 marks)</b> Answer has sound structure but may have some errors in grammar and spelling. Some use of appropriate geographical terminology. Conclusion(s) are attempted.</p> <p><b>Level 1 (0–3 marks)</b> Answer has little structure and has some errors in grammar and spelling. Little use of appropriate geographical terminology. No conclusion(s) are attempted.</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 2013

