

GCE

Geography

Unit **F761**: Managing Physical Environments

Advanced Subsidiary GCE

Mark Scheme for June 2016

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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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1. Annotations

| Annotation | Meaning |
|---|--|
|  | 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. |
|  | 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  |
|  | Point has been seen and noted |

2. Subject-specific marking instructions

In 9 mark questions, the Level awarded annotation should be positioned in left margin adjacent to the evidence for the award of that level. The wavy line or highlighting annotations may be used as well if the evidence covers more than one line of text.

| Question | | | Answer | Marks | Guidance | |
|----------|---|---|---|-------|---|---|
| | | | | | Content | Levels of response |
| 1 | a | i | <p>Using map evidence from Fig. 1, describe the main physical characteristics of the river channel.</p> <p>Physical characteristics: low channel gradient, meandering/winding, ox-bow lakes, cut-off, channel width, straight section near Hamsey.</p> | 4 | <p>Evidence includes: names, grid references, dimensions. Question refers to the channel, not the valley.</p> | <p>Level 2: Accurate description of characteristics with evidence provided from the map. (3 – 4 marks)</p> <p>Level 1: Limited description of characteristics with evidence provided from the map OR accurate description of characteristics but lacking evidence from the map. (0 – 2 marks)</p> |

| Question | | | Answer | Marks | Guidance | |
|----------|---|----|--|-------|--|--|
| | | | | | Content | Levels of response |
| 1 | a | ii | <p>Suggest two ways in which natural processes have shaped this river channel.</p> <p>Processes include: Fluvial erosion, transportation and deposition in the channel.</p> | 6 | <p>Credit different mechanisms within the same process e.g. suspension and saltation. Question refers to the channel, not the valley. Transportation alone does not affect shaping of the channel; must be linked to erosion or subsequent deposition.</p> | <p>Level 2: At least two valid ways suggested clearly linked to shape. Good use of technical language. (5 – 6 marks)</p> <p>Level 1: One valid way clearly linked to shape OR two valid ways described but not clearly linked to shape. Gaps in technical language. One linked well may reach the top of this level. (0 – 4 marks)</p> |

| Question | | Answer | Marks | Guidance | |
|----------|---|--|-------|--|---|
| | | | | Content | Levels of response |
| 1 | b | <p>Explain two ways in which economic development can increase flood risk in river basins.</p> <p>Economic development may include: urbanisation, industrialisation, deforestation, increasingly intense agricultural activities, river modification. These changes may result in greater/more rapid surface run-off into channels making flooding more likely. Building on floodplains putting people/property at risk is also relevant.</p> | 6 | <p>Credit any valid way. The same aspect of economic development may have an influence in two different ways. The key is to make explicit links to the increase in flood risk. Flooding of valley behind a dam is not relevant, but risk of flooding downstream from a dam burst is.</p> | <p>Level 2 [5-6 marks]: Identifies and explains two different ways resulting from economic development.</p> <hr/> <p>Level 1 [0-4 marks]: Identifies development, but the way(s) are not explained. One explained well may reach the top of this level.</p> |

| Question | | Answer | Marks | Guidance | |
|----------|---|--|-------|--|--|
| | | | | Content | Levels of response |
| 1 | c | <p>With reference to a located example, show how conflicts between different land uses in a river basin can be managed.</p> <p>Ways include planning policies, land-use zoning, international agreements and limiting activities to different times. Flood management strategies/policies are also acceptable, if related to conflict; perhaps through impact of activity upstream on those downstream.</p> | 9 | <p>The key is to link the management strategy to the conflict; how is it resolved?</p> <p>Two different conflicts could be managed in a similar way.</p> | <p>Level 3 [8-9 marks]: Effectively uses identified example to show clearly how at least two conflicts are managed. Link(s) between management and conflict are clearly explained. Answer is well structured with accurate grammar and spelling. Good use of appropriate geographical terminology.</p> <p>Level 2 [5-7 marks]: Clearly identified example provided. Shows how at least one conflict is managed. Link(s) between management and conflict 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>Level 1 [0-4 marks]: Limited/no example. Descriptive observations of management but not linked to conflict(s), or explanation(s) of conflict(s) but not linked to management strategies. Answer has little structure and has some errors in grammar and spelling. Little use of appropriate geographical terminology. If no located example(s) then top of Level 1 max.</p> |

| Question | | | Answer | Marks | Guidance | |
|----------|---|---|--|-------|--|--|
| | | | | | Content | Levels of response |
| 2 | a | i | <p>Using map evidence from Fig. 2, describe the main physical characteristics of the coastline</p> <p>Physical characteristics: uneven/irregular, bays/coves and headlands, steeply sloping/cliffed profile. Presence of caves, geo, arch, stacks and stumps, sand dunes and sandy beach.</p> | 4 | <p>Evidence includes: names, grid references, dimensions.</p> <p>Question refers to the coastline, not areas inland.</p> | <p>Level 2: Accurate description of characteristics with evidence provided from the map. (3 – 4 marks)</p> <p>Level 1: Limited description characteristics with evidence provided from the map OR accurate description of characteristics but lacking evidence from the map. (0 – 2 marks)</p> |

| Question | | | Answer | Mark s | Guidance | |
|----------|---|----|--|--------|---|--|
| | | | | | Content | Levels of response |
| 2 | a | ii | <p>Suggest two ways in which natural processes have shaped this coastline.</p> <p>Processes include: marine erosion and deposition on the coastline, sub-aerial processes on the cliffs, wind deposition.</p> | 6 | <p>Credit different mechanisms within the same process e.g. hydraulic action and corrasion.</p> | <p>Level 2: At least two valid ways clearly linked to shape. Good use of technical language. (5 – 6 marks)</p> <p>Level 1: One valid way clearly linked to shape OR two valid ways described but not clearly linked to shape. Gaps in technical language. One linked well may reach the top of this level. (0 – 4 marks)</p> |

| Question | | Answer | Marks | Guidance | |
|----------|---|--|-------|---|--|
| | | | | Content | Levels of response |
| 2 | b | <p>Explain two environmental issues caused by the use of coastal protection.</p> <p>Issues include: groynes causing changes to beach plan and profile, sea walls or cliff face protection stabilising cliffs, beach nourishment changing beach plan and profile, off-shore/on-shore dredging for the supply of sand for beach nourishment damaging sea bed habitats, visual impact of hard engineering structures, managed retreat encouraging salt marsh development, but resulting in a loss of previous habitats, conservation designations allowing regeneration of degraded habitats.</p> <p>Methods include active intervention (hard/soft engineering) and managed retreat to protect from natural processes, as well as methods used to protect the environment from human activity, such as conservation designations.</p> | | <p>No active intervention (do nothing) is not valid as it is not a protection method.</p> <p>Two issues may result from one method of protection.</p> <p>Issues may be positive as well as negative.</p> <p>Issues may be related to the construction of the protection method.</p> | <p>Level 2 [5-6 marks]: Identifies and explains two different issues resulting from the use of protection.</p> <hr/> <p>Level 1 [0-4 marks]: Identifies protection, but the issue(s) are not explained.</p> <p>One explained well may reach the top of this level.</p> |

| Question | | Answer | Marks | Guidance | |
|----------|---|--|-------|--|--|
| | | | | Content | Levels of response |
| 2 | c | <p>With reference to a located example, show how conflicts between different human activities in a coastal area can be managed.</p> <p>Ways include planning policies, land-use zoning, and limiting activities to different times.</p> <p>Coastal protection strategies/policies are acceptable if related to conflicts e.g. impact of one human activity on another further along the coastline. Disputes over different approaches to management are acceptable if related to different human activities. Impact of people on the environment is acceptable if linked to conservation.</p> | 9 | <p>The key is to link the management strategy to the conflict; how is it resolved?</p> <p>Two different conflicts could be managed in a similar way.</p> | <p>Level 3 [8-9 marks]: Effectively uses identified example to show clearly how at least two conflicts are managed. Link(s) between management and conflict are clearly explained. Answer is well structured with accurate grammar and spelling. Good use of appropriate geographical terminology.</p> <p>Level 2 [5-7 marks]: Clearly identified example provided. Shows how at least one conflict is managed. Link(s) between management and conflict 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>Level 1 [0-4 marks]: Limited/no example. Descriptive observations of management but not linked to conflict(s), or explanation(s) of conflict(s) but not linked to management strategies. Answer has little structure and has some errors in grammar and spelling. Little use of appropriate geographical terminology. If no located example(s) then top of Level 1 max.</p> |

| Question | | | Answer | Marks | Guidance | |
|----------|---|---|---|-------|----------|--|
| | | | | | Content | Levels of response |
| 3 | a | i | <p>Using evidence from Fig. 3, describe the pattern of erosion rates.</p> <p>The general pattern is that rates increase with distance towards the middle of the glacier but then decrease towards the snout. However, the pattern is uneven: rates of change vary, the range of rates is wide, there is a plateau.</p> | 4 | | <p>Level 2: Recognises general pattern, comments on the uneven nature of the pattern and uses data to support the description. (3 – 4 marks)</p> <p>Level 1: Recognises the general pattern and either uses data or notes the uneven nature of the pattern OR provides a description of change with distance but without an overview of the pattern. (0 – 2 marks)</p> |

| Question | | | Answer | Marks | Guidance | |
|----------|---|----|---|-------|--|--|
| | | | | | Content | Levels of response |
| 3 | a | ii | <p>Suggest reasons for this pattern.</p> <p>Reasons include: variations in ice thickness, velocity, basal debris, underlying geology, valley morphology. Meltwater erosion is also possible.</p> | 6 | <p>The key is to link the reason to the varying rates. Focus must be spatial not temporal.</p> | <p>Level 2: Clear explanation of at least two reasons. (5 – 6 marks)</p> <p>Level 1: Some explanation of at least two reasons OR clear explanation of one. (0 – 4 marks)</p> |

| Question | | Answer | Marks | Guidance | |
|----------|---|---|-------|---|--|
| | | | | Content | Levels of response |
| 3 | b | <p>Explain two ways climate influences fauna in cold environments.</p> <p>Influence may be on adaptations of specific species. Physiological adaptations to gain heat (eg dark skin colour to absorb heat) or to retain heat (eg thick fur), white colouration for camouflage against snow/ice.. Behavioural adaptations to avoid extreme low temperatures (eg hibernate, migrate, huddle in groups). Influences may also be on characteristics of populations e.g. boom and bust cycles due to variable climate, short breeding cycles due to limited period of favourable conditions, limited diversity due to short food chains and lack of food production in harsh climate.</p> | 6 | <p>The key is to make the link between the climate and the influence on the fauna. Species examples are not required, but may be used and credited if they help the answer.</p> | <p>Level 2: Identifies two ways and explains how they are related to the climatic conditions. (5-6 marks)</p> <p>Level 1: Identifies two ways or explains one. Cause-effect links may be stated but not clearly explained. Max. 2 for valid description(s) of climatic conditions not linked to fauna. One explained well may reach the top of this level. (0-4 marks)</p> |

| Question | | Answer | Marks | Guidance | |
|----------|---|---|-------|---|--|
| | | | | Content | Levels of response |
| 3 | c | <p>With reference to one or more located examples, describe and explain how cold environments can be exploited for short-term gain.</p> <p>Exploitation may be by: resource extraction/use, agriculture, military activity, tourism development. Short-term nature of gain may equate to unsustainability – not balancing socio-economic and environmental needs, or not ensuring potential use for future generations. Over-reliance on a single resource. Gains include employment, income/profit, tax revenues, infrastructure improvements, multiplier effect, quality of life, improved services.</p> | 9 | <p>The key is to focus on the short-term nature of the gains. Seasonal nature of gain is only valid if related to its unsustainability over time.</p> <p>If all gain, or no gain, then Level 2 Max.</p> | <p>Level 3: Uses at least one located example to explain how the area is being used and how it brings gains. Cause-effect links are clearly explained. Short-term nature of the exploitation is explicit. Answer is well structured with accurate grammar and spelling. Good use of appropriate geographical terminology. (8 – 9 marks)</p> <p>Level 2: Gives at least one located example to explain the exploitation. Cause-effect links are stated but not clearly explained. References to the short-term nature may be implicit. Answer has sound structure but may have some errors in grammar and spelling. Some use of appropriate geographical terminology. (5 – 7 marks)</p> |

| Question | | | Answer | Marks | Guidance | |
|----------|--|--|--------|-------|----------|---|
| | | | | | Content | Levels of response |
| | | | | | | <p>Level 1: Limited or no located example provided. Descriptive statements about human use(s). Cause-effect links are limited or absent. Answer has little structure and has some errors in grammar and spelling. Little use of appropriate geographical terminology.</p> <p style="text-align: right;">(0 – 4 marks)</p> <p>If no located example then top of Level 1 Max.</p> |
| | | | | | | |

| Question | | | Answer | Marks | Guidance | |
|----------|---|---|--|-------|----------|--|
| | | | | | Content | Levels of response |
| 4 | a | i | <p>Using evidence from Fig. 4, describe the pattern of transport rates.</p> <p>The general pattern is that rates increase towards the middle of the year but then decrease towards the end. However, the pattern is uneven; rates of change vary, the range of rates is wide.</p> | 4 | | <p>Level 2: Recognises general pattern, comments on the uneven nature of the pattern and uses data to support the description. (3 – 4 marks)</p> <p>Level 1: Recognises the general pattern and either uses data or notes the uneven nature of the pattern OR provides a description of change with distance but without an overview of the pattern. (0 – 2 marks)</p> |

| Question | | | Answer | Marks | Guidance | |
|----------|---|----|---|-------|--|--|
| | | | | | Content | Levels of response |
| 4 | a | ii | <p>Suggest reasons for this pattern.</p> <p>Reasons include: variations in wind speed, direction, available sediment, dryness of sand surface, presence of vegetation.</p> | 6 | <p>The key is to link the reason to the varying rates. Focus must be temporal not spatial.</p> | <p>Level 2: Clear explanation of at least two reasons. (5 – 6 marks)</p> <p>Level 1: Some explanation of at least two reasons OR clear explanation of one. (0 – 4 marks)</p> |

| Question | | Answer | Marks | Guidance | |
|----------|---|---|-------|---|--|
| | | | | Content | Levels of response |
| 4 | b | <p>Explain two ways climate influences fauna in hot arid/semi-arid environments.</p> <p>Influences may be on adaptations of specific species. Physiological adaptations to lose heat (eg large ears), reduce water loss (eg uric acid) or to stay cool (light coloured skin). Behavioural adaptations to reduce water loss (eg hunt at night) or to stay cool (eg live in burrows out of direct sun). Influences may also be on characteristics of populations e.g. boom and bust cycles due to variable climate, short breeding cycles due to limited period of favourable conditions, limited diversity due to short food chains and lack of food production in harsh climate.</p> | 6 | <p>The key is to make the link between the climate and the influence on the fauna. Species examples are not required, but may be used and credited if they help the answer.</p> | <p>Level 2: Identifies two ways and explains how they are related to the climatic conditions. (5-6 marks)</p> <p>Level 1: Identifies two ways or explains one. Cause-effect links may be stated but not clearly explained. Max. 2 for valid description(s) of climatic conditions not linked to fauna. One explained well may reach the top of this level. (0-4 marks)</p> |

| Question | | Answer | Marks | Guidance | |
|----------|---|--|-------|--|--|
| | | | | Content | Levels of response |
| 4 | c | <p>With reference to one or more located examples, describe and explain how hot arid/semi-arid environments can be exploited for short-term gain.</p> <p>Exploitation may be by: resource extraction/use, agriculture, film industry, military activity, residential use, tourism development.</p> <p>Short-term nature of gain may equate to unsustainability – not balancing socio-economic and environmental needs, or not ensuring potential use for future generations.</p> <p>Over-reliance on a single resource.</p> <p>Gains include employment, income/profit, tax revenues, infrastructure improvements, multiplier effect, quality of life, improved services.</p> | 9 | <p>The key is to focus on the short-term nature of the gains.</p> <p>Seasonal nature of gain is only valid if related to its unsustainability over time.</p> <p>If all gain, or no gain, then Level 2 Max.</p> | <p>Level 3: Uses at least one located example to explain how the area is being used and how it brings gains. Cause-effect links are clearly explained. Short-term nature of the exploitation is explicit. Answer is well structured with accurate grammar and spelling. Good use of appropriate geographical terminology. (8 – 9 marks)</p> <p>Level 2: Gives at least one located example to explain the exploitation. Cause-effect links are stated but not clearly explained. References to the short-term nature may be implicit. Answer has sound structure but may have some errors in grammar and spelling. Some use of appropriate geographical terminology. (5 – 7 marks)</p> |

| Question | | | Answer | Marks | Guidance | |
|----------|--|--|--------|-------|----------|---|
| | | | | | Content | Levels of response |
| | | | | | | <p>Level 1: Limited or no located example provided. Descriptive statements about human use(s). Cause-effect links are limited or absent. Answer has little structure and has some errors in grammar and spelling. Little use of appropriate geographical terminology.</p> <p style="text-align: right;">(0 – 4 marks)</p> <p>If no located example then top of Level 1 Max.</p> |

Section B

| Question | | Answer | Marks | Guidance | |
|----------|--|---|-------|--|---|
| | | | | Content | Levels of response |
| 5 | | <p>With reference to located river basins, explain why the need for the management of flood risk varies.</p> <p>Need for flood management includes: social-protection of people and homes; economic-protection of businesses, infrastructure and environmental-protection of habitats, species. Need may also be related to the influence of physical vulnerability factors, such as climate, topography, geology, channel shape/size, discharge levels. Need may be increasing due to rising population in flood risk areas and greater threats from more extreme weather. Need may vary over time and from place to place.</p> | 25 | <p>Need may vary due to differences in population density, level of economic development, existing protection, values and attitudes of residents and governments.</p> <p>Need may vary within, as well as between, basins.</p> | <p>AO1 Knowledge and understanding</p> <p>Level 3: Detailed knowledge and understanding of why flood management is needed. Cause-effect links are clearly explained. There is effective use of detailed exemplification from at least two located basins. (11 – 13 marks)</p> <p>Level 2: Some knowledge and understanding of why flood management is needed. Cause-effect links are stated but not clearly explained. There is use of exemplification from at least one located basin. (7 – 10 marks)</p> <p>Level 1: Limited knowledge and understanding of the need for flood management. Cause-effect links are limited or absent. There is limited exemplification from at least one located basin.</p> <p>If no located example then top of Level 1 Max. (0 – 6 marks)</p> |

| Question | | | Answer | Marks | Guidance | |
|----------|--|--|--------|-------|--|---|
| | | | | | Content | Levels of response |
| | | | | | <p>Explicit comments about the varying need are likely to be made throughout the answer.</p> <p>Explicit comments about varying need are likely to be made just in the introduction/conclusion.</p> <p>Varying need is implied, through the use of contrasting basins/locations.</p> | <p>AO2 Analysis and application</p> <p>Level 3: Clear analysis and application of knowledge and understanding of the varying need for flood management. (5 marks)</p> <p>Level 2: Some analysis and application of knowledge and understanding of the varying need for flood management. (3 – 4 marks)</p> <p>Level 1: Limited analysis and application of knowledge and understanding of the varying need for flood management. (0 – 2 marks)</p> |
| | | | | | | <p>AO3 Skills and communication</p> <p>Level 3: Answer is well structured with accurate grammar and spelling. Good use of appropriate geographical terminology. Clear conclusion(s) are drawn. (6 – 7 marks)</p> <p>Level 2: Answer has sound structure but may have some errors in grammar and spelling. Some use of appropriate geographical terminology. Conclusion(s) are attempted. (4 – 5 marks)</p> |

| Question | | | Answer | Marks | Guidance | |
|----------|--|--|--------|-------|----------|--|
| | | | | | Content | Levels of response |
| | | | | | | <p>Level 1: Answer has little structure and has some errors in grammar and spelling. Little use of appropriate geographical terminology. No conclusion(s) are attempted. (0 – 3 marks)</p> |

| Question | | Answer | Marks | Guidance | |
|----------|--|---|-------|--|--|
| | | | | Content | Levels of response |
| 6 | | <p>With reference to located coastlines, explain why the need for the management of development varies.</p> <p>Need for management of development includes: social-views of people, demand for homes and jobs; economic-growth of businesses, infrastructure provision; environmental-protection of habitats and species from building and pollution. Need may also be related to physical vulnerability factors, such as high wave energy, weak geology, aspect, beach width. Need may be increasing due to rising population in coastal areas and greater threats from more extreme weather and rising sea level. Need may vary over time and from place to place.</p> | 25 | <p>Need may vary due to differences in population density, level of economic development, existing protection, values and attitudes of residents and governments. Need may vary along, as well as between, coastlines.</p> | <p>AO1 Knowledge and understanding</p> <p>Level 3: Detailed knowledge and understanding of why management of economic development is needed. Cause-effect links are clearly explained. There is effective use of detailed exemplification from at least two located coastlines. (11 – 13 marks)</p> <p>Level 2: Some knowledge and understanding of why management of economic development is needed. Cause-effect links are stated but not clearly explained. There is use of exemplification from at least one located coastline. (7 – 10 marks)</p> <p>Level 1: Limited knowledge and understanding of the need for economic development management. Cause-effect links are limited or absent. There is limited exemplification from at least one located coastline.</p> <p>If no located example then top of Level 1 Max. (0 – 6 marks)</p> |

| Question | | | Answer | Marks | Guidance | |
|----------|--|--|--------|-------|--|---|
| | | | | | Content | Levels of response |
| | | | | | <p>Explicit comments about the varying need are likely to be made throughout the answer.</p> <p>Explicit comments about varying need are likely to be made just in the introduction/conclusion.</p> <p>Varying need is implied, through the use of contrasting coastlines/locations.</p> | <p>AO2 Analysis and application</p> <p>Level 3: Clear analysis and application of knowledge and understanding of the varying need for the management of economic development. (5 marks)</p> <p>Level 2: Some analysis and application of knowledge and understanding of the varying need for the management of economic development. (3 – 4 marks)</p> <p>Level 1: Limited analysis and application of knowledge and understanding of the varying need for the management of economic development. (0 – 2 marks)</p> |
| | | | | | | <p>AO3 Skills and communication</p> <p>Level 3: Answer is well structured with accurate grammar and spelling. Good use of appropriate geographical terminology. Clear conclusion(s) are drawn. (6 – 7 marks)</p> <p>Level 2: Answer has sound structure but may have some errors in grammar and spelling. Some use of appropriate geographical terminology.</p> |

| Question | | | Answer | Marks | Guidance | |
|----------|--|--|--------|-------|----------|--|
| | | | | | Content | Levels of response |
| | | | | | | Conclusion(s) are attempted. (4 – 5 marks) Level 1: Answer has little structure and has some errors in grammar and spelling. Little use of appropriate geographical terminology. No conclusion(s) are attempted. (0 – 3 marks) |

| Question | | Answer | Marks | Guidance | |
|----------|--|--|-------|--|--|
| | | | | Content | Levels of response |
| 7 | | <p>With reference to located examples, examine the range of challenges cold environments present for economic development.</p> <p>Challenges include: Social- conflicts with indigenous populations, low population totals, life-style issues; Economic- high costs of development in overcoming remoteness, ground conditions, and climatic problems, lack of market; Environmental-the fragility of ecosystems, climate, ground conditions, sea ice, earthquakes, avalanches, avoiding migration routes, topography, altitude.</p> | 25 | <p>There is a range of challenges due to the extreme climatic and ground conditions (physical) and the traditional lifestyles and economy of the existing populations (human). Range of challenges may vary from place to place, and over time.</p> | <p>AO1 Knowledge and understanding</p> <p>Level 3: Detailed knowledge and understanding of the challenges for development. Cause-effect links are clearly explained. There is effective use of detailed exemplification from at least two located examples. (11 – 13 marks)</p> <p>Level 2: Some knowledge and understanding the challenges for development. Cause-effect links are stated but not clearly explained. There is use of exemplification from at least one located example. (7 – 10 marks)</p> <p>Level 1: Limited knowledge and understanding of the challenges for development Cause-effect links are limited or absent. There is limited exemplification from located example(s).</p> <p>If no located example then top of Level 1 Max. (0 – 6 marks)</p> |

| Question | | | Answer | Marks | Guidance | |
|----------|--|--|--------|-------|--|---|
| | | | | | Content | Levels of response |
| | | | | | <p>Explicit comments about the range are likely to be made throughout the answer.</p> <p>Explicit comments about the range are likely to be made just in the introduction/conclusion.</p> <p>Range is implied, through the use of contrasting locations.</p> | <p>AO2 Analysis and application</p> <p>Level 3: Clear analysis and application of knowledge and understanding of the range of challenges. (5 marks)</p> <p>Level 2: Some analysis and application of knowledge and understanding of the range of challenges. (3 – 4 marks)</p> <p>Level 1: Limited analysis and application of knowledge and understanding of the range of challenges. (0 – 2 marks)</p> |
| | | | | | | <p>AO3 Skills and communication</p> <p>Level 3: Answer is well structured with accurate grammar and spelling. Good use of appropriate geographical terminology. Clear conclusion(s) are drawn. (6 – 7 marks)</p> <p>Level 2: Answer has sound structure but may have some errors in grammar and spelling. Some use of appropriate geographical terminology. Conclusion(s) are attempted. (4 – 5 marks)</p> |

| Question | | | Answer | Marks | Guidance | |
|----------|--|--|--------|-------|----------|--|
| | | | | | Content | Levels of response |
| | | | | | | <p>Level 1: Answer has little structure and has some errors in grammar and spelling. Little use of appropriate geographical terminology. No conclusion(s) are attempted. (0 – 3 marks)</p> |

| Question | | Answer | Marks | Guidance | |
|----------|--|--|-------|--|--|
| | | | | Content | Levels of response |
| 8 | | <p>With reference to located examples, examine the range of challenges hot arid/semi-arid environments present for economic development.</p> <p>Challenges include: Social- conflicts with indigenous populations, social/political unrest, high rates of population growth or low population totals; Economic- high costs of development in overcoming remoteness, ground conditions and climatic problems, lack of market; Environmental-the fragility of ecosystems, climate, ground conditions, water availability, topography, sand storms, soil salinity, avoiding migration routes.</p> | 25 | <p>There is a range of challenges due to the extreme climatic and ground conditions (physical) and the traditional lifestyles and economy of the existing populations (human). Range of challenges may vary from place to place, and over time.</p> | <p>AO1 Knowledge and understanding</p> <p>Level 3: Detailed knowledge and understanding of the challenges for development. Cause-effect links are clearly explained. There is effective use of detailed exemplification from at least two located examples. (11 – 13 marks)</p> <p>Level 2: Some knowledge and understanding the challenges for development. Cause-effect links are stated but not clearly explained. There is use of exemplification from at least one located example. (7 – 10 marks)</p> <p>Level 1: Limited knowledge and understanding of the challenges for development Cause-effect links are limited or absent. There is limited exemplification from located example(s).</p> <p>If no located example then top of Level 1 Max. (0 – 6 marks)</p> |

| Question | | | Answer | Marks | Guidance | |
|----------|--|--|--------|-------|--|---|
| | | | | | Content | Levels of response |
| | | | | | <p>Explicit comments about the range are likely to be made throughout the answer.</p> <p>Explicit comments about the range are likely to be made just in the introduction/conclusion.</p> <p>Range is implied, through the use of contrasting locations.</p> | <p>AO2 Analysis and application</p> <p>Level 3: Clear analysis and application of knowledge and understanding of the range of challenges. (5 marks)</p> <p>Level 2: Some analysis and application of knowledge and understanding of the range of challenges. (3 – 4 marks)</p> <p>Level 1: Limited analysis and application of knowledge and understanding of the range of challenges. (0 – 2 marks)</p> |
| | | | | | | <p>AO3 Skills and communication</p> <p>Level 3: Answer is well structured with accurate grammar and spelling. Good use of appropriate geographical terminology. Clear conclusion(s) are drawn. (6 – 7 marks)</p> <p>Level 2: Answer has sound structure but may have some errors in grammar and spelling. Some use of appropriate geographical terminology. Conclusion(s) are attempted. (4 – 5 marks)</p> |

| Question | | | Answer | Marks | Guidance | |
|----------|--|--|--------|-------|----------|--|
| | | | | | Content | Levels of response |
| | | | | | | <p>Level 1: Answer has little structure and has some errors in grammar and spelling. Little use of appropriate geographical terminology. No conclusion(s) are attempted. (0 – 3 marks)</p> |

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