



Pearson

Mark Scheme (Results)

Summer 2017

Pearson Edexcel GCSE
In Geography B (5GB1H/01)
Unit 1: Dynamic Planet

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

| Question Number | Answer | Reject | Mark |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|--------------------------|
| 1 (a) | Uneven (1) Any identified area(s) of high risk of tsunamis (1 = 1 mark, 2 = 2 marks) (1 or 2) some areas have very low risk (1) tropics are high risk zone (1) around the Pacific – ring of fire (1) | Explanatory answers e.g. related to plate boundaries | (2) 1+1 |

| Question Number | Correct Answer | Mark |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| 1(b) | <p>1 mark for each appropriate statement. Additional mark(s) awarded for extending statements.</p> <p>e.g. At conservative boundaries plates slide past each other or slide in the same direction but at different rates (1), friction occurs (1) resulting in a build-up of pressure (1) the release of the pressure results in an earthquake (1) detail of epicentre /focus (1) an example is the San Andreas fault or any acceptable alternative (1)</p> <p>Diagrams should be marked using the above points either as explicitly stated through annotations or implicit in the diagram itself.</p> | <p>(4)</p> <p>1+1+1+1 (1+1+1) +1 (1+1) + (1+1)</p> |

| Question Number | Indicative content |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1(c) | <p>Depends on chosen tectonic event but expect the following impacts to be covered.</p> <p><u>Volcanic</u></p> <p>There are a wide range of impacts that can be examined. They are likely to include:</p> <p>Primary:</p> <ul style="list-style-type: none"> • pyroclastic flows destroying property and threatening lives • lava destroying property and threatening lives • ash clouds threatening air transport and economic activity <p>Secondary:</p> <ul style="list-style-type: none"> • homelessness because of property damage • disease because of dislocation of infrastructure • food and water shortages because of local damage to infrastructure • fertile soil because of volcanic deposits |

Seismic

There are a wide range of impacts that can be examined. They are likely to include:

- shaking ground destroying property and threatening lives
- shaking ground destroying infrastructure – roads, rail lines and bridges

Secondary

- destroying property and threatening lives
- fire - earthquakes destroy gas pipes and electric cables causing fires to spread
- broken water mains prevent the fires being extinguished. Fires spread very quickly in cities
- tsunamis - an earthquake on the sea floor or close to the coast may cause huge waves
- landslides - earthquakes often cause landslides, especially in steep river valleys and areas of weak rocks
- disease and famine - fresh water supplies are often cut off causing typhoid and cholera. Lack of shelter and food causes much suffering.
- soil liquefaction when soils with a high water content are violently shaken they lose their mechanical strength and behave like a fluid and so buildings can literally sink

N.B. - It is very important to recognise that the demarcation between primary and secondary impacts varies according to source.

Explanation of differences will probably be expressed in terms of scale and nature of event and levels of preparedness, quality of building design, quality of emergency relief.

| Level | Mark | Descriptor |
|----------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Level 0 | 0 | No acceptable response. |
| Level 1 | 1-2 | An impact has been identified. Location may be named but little or no locational detail. Lack of clarity of distinction between primary and secondary. No recognition of 'differences'. Limited structure to answer with a very basic use of geographical terminology. |
| Level 2 | 3-4 | Impacts are separated into primary and secondary. Includes location specific information. At least one impact has been identified and extended, with good locational detail. Some limited recognition of differences. Some structure, clearly communicated but with limited use of geographical terms. |

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|----------------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Level 3 | 5-6 | Answer is clearly focused on the chosen tectonic event with strong locational detail. Primary and secondary impacts have been identified and extended with strong locational detail. Attempts to explain the differences. Clear structure, well communicated with mostly sound use of geographical terms. |
|----------------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| Question Number | Answer | Reject | Mark |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------------------------|
| 2 (a) | Many more years of retreat than advance (1) history outlined for one or more periods (1) history divides into distinct (three) periods (1) data to support any one point (1) | | (2) 1+1 |

| Question Number | Correct Answer | Mark |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| 2(b) | <p>1 mark for identifying an appropriate piece of evidence (1) additional mark(s) awarded for extending statements (1).</p> <p>Common answers likely to focus on:</p> <ul style="list-style-type: none"> • Megafauna have disappeared (1) example of same (1) • Little Ice Age (1) with ice fairs in London or equivalent idea to illustrate (1) • Fossilised remains (1) of animals, plants or pollen that no longer live in that area (1) e.g. elephants in London (1). • Landforms (1) like U shaped valleys left by retreating glaciers (1) in Scotland • Ice -core samples from ice sheets (1) showing past levels of carbon dioxide (1) <p>Allow up to 3 marks for any one piece of evidence developed with two extending points.</p> <p>Allow any other legitimate evidence of climate change.</p> | <p>(4)</p> <p>(1+1) + (1+1)</p> <p>(1+1+1)+ (1)</p> |

| Question Number | Indicative content | |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2(c) | <p>Response depends on chosen developing country but expect some of the following impacts.</p> <ul style="list-style-type: none"> • Drought causing loses in agricultural output and both social and economic consequences of that • Increased rainfall causing flooding and both social and economic consequences of that • Temperature rise causing increased stresses in agricultural systems • Temperature rise causing increased sea-levels threatening coastal ecosystems and economies • Increased storminess so more risks from hurricanes • Unreliable rainfall thus stresses in agricultural systems • Desertification and thus impact on agricultural output with falling crop yields. • Spread of diseases which will impact on economic output and human health • Climate change may allow a greater range of crops to be grown • Climate change may stimulate other economic activities e.g. tourism <p>The best answers will address the nature of the impact – economic, social, environmental and perhaps political.</p> | |
| Level | Mark | Descriptor |
| Level 0 | 0 | No acceptable response. |
| Level 1 | 1-2 | Impact of climate change has been identified. Little, if any, development with little or no specific locational identifiable. Limited structure to answer, basic use of geographical terminology. |
| Level 2 | 3-4 | At least one impact of climate change has been identified and extended. Response includes some explanation linking climate change to that impact. Includes location specific information. Some structure, clearly communicated but with limited use of geographical terms. |
| Level 3 | 5-6 | Impacts have been accurately explained including a range of economic and/or social and/or economic. Strong links between the climate change described and the impacts. Detailed place specific knowledge. Clear structure, well communicated with mostly sound use of geographical terms. |

| Question Number | Answer | Reject | Mark |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|--------------------------|
| 3 (a) | It is uneven (1) Geographical variation described as in 'Asia has the most threatened species/Antarctica the least' (1) data to support either point (1) | Limit to 1 mark, a geographical tour describing variation by recycling resource | (2) 1+1 |

| Question Number | Correct Answer | Mark |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| 3(b) | <p>1 mark each for identifying a legitimate impact of altitude. Additional mark(s) awarded for extending statements.</p> <p>Temperatures decrease with height (1) approx. 1 degree per 100 m (1) example to support e.g. alpine at height and/or place as in 'snows of Kilimanjaro' (1)</p> <p>Rainfall changes with altitude (allow rain-shadow effect) (1) which will impact on biome development because plant growth affected by water supply (1) e.g. temperate forest in Bolivia (1)</p> <p>Soil depth/development may be affected (1) by climate and/or topography/slope (1)</p> <p>Allow any other legitimate impact of altitude but limit to 2 marks if just a list of changes.</p> | <p>(4)</p> <p>(1+1)</p> <p>+</p> <p>(1+1)</p> <p>(1+1+1)+</p> <p>(1)</p> |

| Question Number | Indicative content | |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3 (c) | <p>There are a large number of threats to the conserving the biosphere because of the many uses of it in terms of the goods and services it provides and the threats it is under form both human actions and climate change.</p> <p>Answers may take either a threat by threat approach or an overview of how conservation may be threatened by global indifference/neglect.</p> <ul style="list-style-type: none"> • Deforestation for forest products, farmland, etc. usually driven by profit • Conversion to farmland partly for similar reasons but also possibly because of population movements/growth • Overfishing driven by increasing demand • Mining and energy as above but also large role of TNCs • Pollution as product of some of the other processes/impacts • Introduction of alien species through globalisation both historic and present • Tourism and recreation in search for foreign exchange and perhaps rising domestic middle class • Very difficult to achieve international consensus in addressing any of the above issues • Economic growth the priority for many people and many national governments <p>Examination should involve some description of the threat, an explanation of why it impacts negatively on the biosphere and, at the top of the mark range perhaps a summative comment.</p> | |
| Level | Mark | Descriptor |
| Level 0 | 0 | No acceptable response. |
| Level 1 | 1-2 | At least one threat has been identified or general point made. Some description but little, if any, development. Very little detail or data. Limited structure to answer, basic use of geographical terminology. |
| Level 2 | 3-4 | At least one threat has been described in some detail or general point developed. One partially developed statement which links to biosphere conservation. Sound detail and data. Some structure, clearly communicated but with limited use of geographical terms. |

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| Level 3 | 5-6 | Strong description of threats with excellent detail/data. Good explanatory links of the impact on the conservation of the biosphere. Examination might involve a comment about severity of impact or changes over time. Good detail and data. Clear structure, well communicated with mostly sound use of geographical terms. |
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| Question Number | Answer | Mark |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 4 (a) | They are very different (1) partial or complete comparative 'histories' recounted (1) demand fluctuates much less (1) demand changes > supply changes in most years and/or demand almost always rising whereas supply more variable (1) data/detail to support any one point (1) | (2) 1+1 |

| Question Number | Correct Answer | Mark |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| 4(b) | <p>Identifying an appropriate threat (1) Additional mark awarded for an extending statement/example (1)</p> <p>Responses likely to include:</p> <ul style="list-style-type: none"> • Contaminated water supplies from domestic waste e.g sewage(1) leading to waterborne diseases (1) such as cholera (1) • Contaminated water from agricultural run-off (1) leading to high levels of nitrates in water (1) which can cause eutrophication (1) • water from industrial waste (1) leading to high levels of heavy metals e.g. lead/mercury (1) <p>Allow impact on quality of ocean/sea water as in impact on water quality of, for example, siltation, sewage disposal etc.</p> <p>Allow any other legitimate threat e.g. poor maintenance of the infrastructure.</p> | (4) (1+1) + (1+1) (1+1+1)) +1 |

| Question Number | Indicative content | |
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| <p>4 (c)</p> | <p>Small-scale intermediate technology solutions have both positives and negatives. Expect focus to be on positives and/or comparison with large-scale solutions. Developing world should come through strongly with named places or place specific examples of technology.</p> <p>Small-scale schemes are likely to include:</p> <ul style="list-style-type: none"> • Wells - Wells are dug to reach water supplies. They are lined with concrete and have a concrete lid to limit pollution by sewage • Hand pumps - an efficient way of reaching underground water where there is less chance of water becoming contaminated, especially if built with concrete aprons • Rain barrel - Water barrels collect rainwater from gutters and roofs can be stored and used in times of droughts. This is called water harvesting. The water stays clean in the covered barrel <ul style="list-style-type: none"> • More secure water supply • Uses traditional skills • Uses local materials • Affordable to both build and maintain • Little impact on natural water stores <p>Examination of the effectiveness should involve a description of how the methods work – an explanation of how they impact on managing the water supplies and at top of the mark range a comment about what constitutes effectiveness e.g. lives saved, time released, better agricultural output etc.</p> | |
| Level | Mark | Descriptor |
| Level 0 | 0 | No acceptable response. |
| Level 1 | 1-2 | An appropriate 'solution' identified. Very little, if any descriptive development. Effectiveness is either absent or simply asserted as in 'it is effective'. Locational detail is thin e.g. a named continent/country. Limited structure to answer, basic use of geographical terminology. |
| Level 2 | 3-4 | At least two solutions adequately identified. One partially developed description which links the scheme to an effective outcome. Locational detail is good e.g. a named area/region/aid project. Some structure, clearly communicated but with limited use of geographical terms. |

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| Level 3 | 5-6 | Strong description of solutions and explanation of their effectiveness with excellent detail/data including named places and aid agencies/IGO's etc. Clear structure, well communicated with mostly sound use of geographical terms. |
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| Question Number | Answer | Reject | Mark |
|------------------|-------------------------------------------------------------------------|---------------------|------------|
| 5 (a) (i) | Slumping and/or sliding Allow reasonable synonym e.g. landslides | All other responses | (1) |

| Question Number | Answer | Mark |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| 5 (a) (ii) | <p>Common responses likely to include:</p> <ul style="list-style-type: none"> • Rocks are softer in some places than others and so more easily eroded (1) example of same (1) • Rocks are more jointed in some places than others (1) example of same (1) • Waves are more powerful (1) because of fetch/frequency of storms (1) • They are not protected (1) by hard engineering and/or example of same (1) • Extreme climate/meteorological events might affect some coasts but not others (1) example of same (1) • Building/overburden may lead to cliff instability example of same (1) <p>Allow any 3 basic reasons for 3 marks or any extended statement to maximum of 3 marks.</p> | <p>(3) 1+1+1 Or (1+1) + 1</p> |

| Question Number | Indicative content | |
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| <p>*5(b) QWC i-ii-iii</p> | <p>Some coastlines are eroding by as much as 2 metres a year. This is causing many threats to both people and the environment.</p> <p>Losses to people will include economic and social. Losses to the environment will be damage to ecosystems but also loss of land and property thus has economic implications.</p> <p>For example, in Christchurch Bay there are many threats:</p> <ul style="list-style-type: none"> • Loss of homes e.g. Barton-on-Sea and resulting impact on economy • Difficulty of obtaining insurance • Cost to local economy of putting in place engineering schemes to slow erosion or protect local infrastructure • Necessity for relocation for some with social impacts on family life • Negative impact on tourism and so loss of income in local economy • Negative multiplier effect of reduction in economic activity • Destruction of ecosystems, sometimes fragile <p>Examination might be comment on:</p> <ul style="list-style-type: none"> • Unevenness of impacts • Cost and benefits of coastal protection • Short term/long-term issues of coastal defences <p>Allow any other acceptable interpretation.</p> | |
| Level | Mark | Descriptor |
| Level 0 | 0 | No acceptable response. |
| Level 1 | 1-3 | One or more threats are identified e.g loss of land. Some limited descriptive extension of impact of that threat on either people or environment. Places unlikely to be clearly recognisable. Some structure to answer and some relevant use of geographical terms. |
| Level 2 | 4-6 | Two or more threats are identified. One impact on either people or environment clearly described with link between cause and consequence. Response is likely to include some local detail and data. Clear structure, clearly communicated, with relevant use of geographical terms. |
| Level 3 | 7-8 | Describes at least two threats in some detail covering both people and environment. Examination is clear and coherent. Response is likely to have excellent developed place detail and data. Clear structure, well communicated with excellent use of geographical terms. |

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| SPaG Level 0 | 0 | Errors severely hinder the meaning of the response or candidate does not spell, punctuate or use the rules of grammar within the context of the demands of the question. |
| SPaG Level 1 | 1 | Threshold performance Candidate spells, punctuates and uses the 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. |
| SPaG Level 2 | 2 | Intermediate performance Candidate spells, punctuates and uses the 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. |
| SPaG Level 3 | 3 | High performance Candidate spells, punctuates and uses the 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. |

| Question Number | Answer | Reject | Mark |
|------------------|-----------------------------------------------------------------------------------|-----------------------------------------|------------|
| 6 (a) (i) | Hydraulic action and/or abrasion or corrosion Lateral erosion/undercutting | All other responses including 'erosion' | (1) |

| Question Number | Answer | Mark |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| 6 (a) (ii) | <p>Common responses are likely to include:</p> <ul style="list-style-type: none"> • They have a higher discharge (1) so more energy (1) • They flow over more easily eroded materials (1) example of same (1) • They are not managed (1) example of same (1) development of point through explanation of impact (1) • They have steeper (higher) gradients (1) so flow faster (1) therefore more erosive (1) • They have more (bed)load (1) • Higher rainfall/stormier environment (1) so higher discharge (1) so more erosive (1) <p>Allow any 3 basic reasons for 3 marks or any extended statement to maximum of 3 marks.</p> | <p>(3) 1+1+1</p> <p>Or</p> <p>(1+1) + 1</p> |

| Question Number | Indicative content | |
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| <p>*6 (b) QWC i-ii-iii</p> | <p>River flooding is almost always a result of both human and physical causes:</p> <p>Physical causes might include;</p> <ul style="list-style-type: none"> • Prolonged or torrential rainfall • Antecedent conditions – soil already saturated • Spring snow melt • Steep relief • Impermeable rock type • Confluence <p>Human causes might include;</p> <ul style="list-style-type: none"> • Urbanisation reducing infiltration • Deforestation increasing run-off • Agricultural land use changes • Global warming increasing rainfall/storminess <p>Comparison should involve a description and explanation of the causes and some attempt to evaluate their relative significance - better answers will comment that all rivers flood 'naturally' but frequency and scale are both exacerbated by (most) human actions although, in some cases defences will prevent flooding in one place only to make it worse downstream.</p> | |
| Level | Mark | Descriptor |
| Level 0 | 0 | No acceptable response. |
| Level 1 | 1-3 | Identifies at least one cause of flooding, either physical or human. Some limited descriptive statements about how one of them causes flooding. Some structure to answer and some relevant use of geographical terms. |
| Level 2 | 4-6 | Describes both physical and human causes of river flooding. Likely to lack balance. Importance stated but not explored with limited comparison, largely unsupported. Clear structure, clearly communicated, with relevant use of geographical terms. |
| Level 3 | 7-8 | Describes human and physical causes in some detail. Likely to be balanced. Comparative importance of different causes explored. Response is likely to have developed place specific content. Clear structure, well communicated with excellent use of geographical terms. |

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| SPaG Level 0 | 0 | Errors severely hinder the meaning of the response or candidate does not spell, punctuate or use the rules of grammar within the context of the demands of the question. |
| SPaG Level 1 | 1 | Threshold performance Candidate spells, punctuates and uses the 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. |
| SPaG Level 2 | 2 | Intermediate performance Candidate spells, punctuates and uses the 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. |
| SPaG Level 3 | 3 | High performance Candidate spells, punctuates and uses the 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. |

| Question Number | Answer | Mark |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| 7 (a) (i) | <p>Dominant and/or three out of five and/or equivalent idea (1) data to support (1)</p> <p>Allow 'importance' to be interpreted as why plastic waste is such an (important) concern as in 'it isn't biodegradable (1) and can do great damage to ecosystems (1)</p> | (2) 1+1 |

| Question Number | Answer | Reject | Mark |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------|
| 7 (a) (ii) | <p>Award one mark for correct identification of a threat (1) second mark for the development of that point (1)</p> <p>Ingestion of plastic debris by fish and/or other marine creatures (1) causing biosystem degradation (1)</p> <p>Pollution of water (1) causing disease to bathers and/or biodiversity decline (1)</p> <p>Debris interfering with food chain (1) especially on coral reefs and/or in mangroves (1)</p> <p>Allow any other reasonable threat.</p> | Answers that suggest that the threat is the wasted opportunity of failing to recycle the plastic. | (2) (1+1) |

| Question Number | Indicative content |
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| <p>*7 (b) QWC i-ii-iii</p> | <p>Candidates might focus on a wide range of international laws and agreements, including:</p> <p>Global:</p> <ul style="list-style-type: none"> • The Law of the Sea, established to prevent individual countries from taking more than their fair share of the ocean's resources. • International Seabed Authority established to safeguard resources and environments. • International laws ratified to prevent the dumping of radioactive waste into the sea. • Global Marine Species Assessment is an internationally managed programme designed to study marine ecosystems. • MARPOL – International convention for the prevention of pollution from ships. • IWC – International Whaling Commission set up to protect whale. • CITES – prevents the trade in endangered marine animals. • RAMSAR – global effort to protect wetlands, including marine ecosystems such as mangrove swamps. <p>Some will approach this from the angle of current ocean health focussing on some of the following 'health checks';</p> <ul style="list-style-type: none"> • Acidification through increased CO2 levels • Warming waters and impact on phytoplankton populations • Loss of species through overfishing • Eutrophication especially in-shore waters • Coral reef and mangrove destruction <p>This approach might have little detailed information on the various 'international laws and agreements' but by reviewing ocean health come to the view that (whatever they might be) they are self-evidently ineffective.</p> <p>Examination should include a description of the laws and agreement and/or the current health of the oceans and an explanation that links the legal process(es) and their impact.</p> <p>Expect a judgement about success at the top of the mark range.</p> |

| Level | Mark | Descriptor |
|---------------------|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Level 0 | 0 | No acceptable response. |
| Level 1 | 1-3 | Identifies one or more law/agreement or health indicator. Some limited descriptive detail but weak links to impact. Some structure to answer and some relevant use of geographical terms. |
| Level 2 | 4-6 | Describes two or more law/agreement or health indicators in some detail. At least one is developed with some cause and effect established. Clear structure, clearly communicated, with relevant use of geographical terms. |
| Level 3 | 7-8 | Clear and full description of two or more law/agreement and/or health checks. Good explanations of how at least two laws protect the oceans or explanations of the evidence of health checks. Clear and coherent evaluation of impact. Clear structure, well communicated with excellent use of geographical terms. |
| SPaG Level 0 | 0 | Errors severely hinder the meaning of the response or candidate does not spell, punctuate or use the rules of grammar within the context of the demands of the question. |
| SPaG Level 1 | 1 | Threshold performance Candidate spells, punctuates and uses the 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. |
| SPaG Level 2 | 2 | Intermediate performance Candidate spells, punctuates and uses the 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. |
| SPaG Level 3 | 3 | High performance Candidate spells, punctuates and uses the 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. |

| Question Number | Answer | Mark |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| 8 (a) (i) | <p>They have large ears (1) that keep them cool and/or help them find prey (1)</p> <p>They live underground (1) to stay cool during the daytime (1)</p> <p>They have thick fur (1) to protect against low night-time temperatures (1)</p> <p>They have sandy coloured fur (1) which gives them effective camouflage (1)</p> <p>Allow any other acceptable response.</p> | (2) (1+1) |

| Question Number | Answer | Mark |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| 8 (a) (ii) | <p>Climate change increasing temperatures (1) so loss of habitat, failure to adapt idea (1)</p> <p>Climate change reducing rainfall (1) so loss of habitat, failure to adapt idea (1)</p> <p>Changing environment because of human action(s) (1) so loss of habitat, failure to adapt idea (1)</p> <p>Allow idea of; small or similar idea (1) therefore at risk from predators (1)</p> <p>Allow any reasonable threat.</p> | (2) (1+1) |

| Question Number | Indicative content | |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>*8 (b) QWC i-ii-iii</p> | <p>Candidates content focus should be on global and local sustainable actions/management to protect extreme environments including their communities. These might include;</p> <p>Local:</p> <ul style="list-style-type: none"> • Intermediate technology e.g. diguettes • Conservation farming which includes – multi-cropping, harvesting over the whole year, limited ploughing • Renewable energy – e.g. solar power <p>Global:</p> <ul style="list-style-type: none"> • Global climatnd/e change summits and agreements e.g. Kyoto • Treaty of Antarctica <p>Examination should include a description of sustainable management schemes – explanation should link these to the protection of extreme environments and the criteria for success – how would this be measured? Conservation of the environment obviously but perhaps also, protection of traditional cultures and or economic sustainability?</p> <p>Expect a judgement about success at the top of the mark range.</p> | |
| Level | Mark | Descriptor |
| Level 0 | 0 | No acceptable response. |
| Level 1 | 1-3 | Identifies one or more management strategy. Some limited descriptive detail but weak links to impact. Some structure to answer and some relevant use of geographical terms. |
| Level 2 | 4-6 | Describes a sustainable management strategy in some detail . At least one is developed with some commentary about effects of that strategy on the environment/communities. Response is likely to include named examples. Clear structure, clearly communicated, with relevant use of geographical terms. |
| Level 3 | 7-8 | Clear and full description of at least one management strategy Good explanations of how the strategy(ies) impact on the environment/communities. A clear and coherent evaluation of the 'success'. Clear structure, well communicated with excellent use of geographical terms. |

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| SPaG Level 0 | 0 | Errors severely hinder the meaning of the response or candidate does not spell, punctuate or use the rules of grammar within the context of the demands of the question. |
| SPaG Level 1 | 1 | Threshold performance Candidate spells, punctuates and uses the 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. |
| SPaG Level 2 | 2 | Intermediate performance Candidate spells, punctuates and uses the 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. |
| SPaG Level 3 | 3 | High performance Candidate spells, punctuates and uses the 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. |