

Mark Scheme (Results)

Summer 2015

Pearson Edexcel GCSE Geography B
(5GB1F/01)

Unit 1: Dynamic Planet

Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications come from Pearson, the world's leading learning company. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information, please visit our website at www.edexcel.com.

Our website subject pages hold useful resources, support material and live feeds from our subject advisors giving you access to a portal of information. If you have any subject specific questions about this specification that require the help of a subject specialist, you may find our Ask The Expert email service helpful.

www.edexcel.com/contactus

Pearson: helping people progress, everywhere

Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: www.pearson.com/uk

Summer 2015

Publications Code UG041633

All the material in this publication is copyright

© Pearson Education Ltd 2015

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.

Placing a mark within a level mark band

- The instructions below tell you how to reward responses within a level. Follow these unless there is an instruction given within a level. However, where a level has specific guidance about how to place an answer within a level, **always** follow that guidance.
- **2 mark bands**
Start with the presumption that the mark will be the higher of the two.
An answer which is poorly supported gets the lower mark.
- **3 mark bands**
Start with a presumption that the mark will be the middle of the three.
An answer which is poorly supported gets the lower mark.
An answer which is well supported gets the higher mark.
- **4 mark bands**
Start with a presumption that the mark will be the upper middle mark of the four.
An answer which is poorly supported gets a lower mark.
An answer which is well supported and shows depth or breadth of coverage gets the higher mark.

- Mark schemes will indicate within the table where, and which strands of QWC, are being assessed. The strands are as follows:
 - i) ensure that text is legible and that spelling, punctuation and grammar are accurate so that meaning is clear*
 - ii) select and use a form and style of writing appropriate to purpose and to complex subject matter*
 - iii) organise information clearly and coherently, using specialist vocabulary when appropriate.*

Spelling, Punctuation and Grammar Marking Guidance

- The spelling, punctuation and grammar assessment criteria are common to GCSE English Literature, GCSE History, GCSE Geography and GCSE Religious Studies.
- All candidates, whichever subject they are being assessed on, must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Spelling, punctuation and grammar marking criteria should be applied positively. Candidates must be rewarded for what they have demonstrated rather than penalised for errors.
- Examiners should mark according to the marking criteria. All marks on the marking criteria should be used appropriately.
- All the marks on the marking criteria are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the marking criteria.
- Examiners should be prepared to award zero marks if the candidate's response is not worthy of credit according to the marking criteria.
- When examiners are in doubt regarding the application of the marking criteria 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.
- Handwriting may make it difficult to see if spelling, punctuation and grammar are correct. Examiners must make every effort to assess spelling, punctuation and grammar fairly and if they genuinely cannot make an assessment, the team leader must be consulted.
- Specialist terms do not always require the use of complex terminology but the vocabulary used should be appropriate to the subject and the question.
- Work by candidates with an amanuensis, scribe or typed script should be assessed for spelling, punctuation and grammar.
- Examiners are advised to consider the marking criteria in the following way:
 - How well does the response communicate the meaning?
 - What range of specialist terms is used?
 - How accurate is the spelling, punctuation and grammar?

| Question Number | Correct Answer | Reject | Mark |
|-----------------|-----------------------|-------------------|------------|
| 1(a) (i) | B Constructive | All other answers | (1) |

| Question Number | Correct Answer | Reject | Mark |
|------------------|------------------------------|-------------------|------------|
| 1(a) (ii) | C It is fast flowing. | All other answers | (1) |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|--|---|--------------------------|
| 1 (b) | <p>1 mark for each valid immediate response</p> <p>Common responses likely to include:</p> <ul style="list-style-type: none"> • Emotional response, eg. fear (1) • Personal responses, such as drop, duck and cover. (1) • Evacuate the population from the affected area. (1) • Provide emergency shelter (1) • Food and drink. (1) • Emergency services (police, fire, ambulance) and armed forces sent to assist. (1) • Search and rescue operations. (1) • Away from buildings (1) • Reference to charities (1) • Contacting friends and family (1) <p>NB. Question asks for 'immediate responses' so must occur during or within a week of the seismic event.</p> | Reject long term responses and preparations, and effects. | (2) 1+1 |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|--|--|---|
| 1(c) | <p>1 mark for each appropriate primary impact identified. Additional mark(s) awarded for providing an extending statement.</p> <p>Common responses likely to include:</p> <ul style="list-style-type: none"> • Death and injury • Buildings collapse • Infrastructure damaged • Fire • Homelessness. • Loss of possessions. • Personal emotional response. • People trapped/ buried. <p>NB: Generic responses, max mark 3. Name of country acceptable.</p> <p>NB: Answer must refer to both people and property for full marks.</p> <p>1 mark available for data, eg. Year of the event, number of deaths, etc.</p> <p>NB: Command word is 'describe', so at least one primary impact must have been developed for full marks.</p> | <p>Secondary impacts e.g. disease, food shortages.</p> <p>Environmental impacts unless linked to people or property, eg. landslides destroy roads.</p> | <p>(4)</p> <p>1+1+(1+1)</p> <p>OR</p> <p>(1+1+1)+1</p> <p>OR</p> <p>(1+1)+(1+1)</p> |

| Question Number | Correct Answer | Acceptable | Mark |
|-----------------|---|---|---|
| 1(d) | <p>2 marks available for identifying layers. Additional mark(s) awarded for extending statements.</p> <p>Common responses likely to include:</p> <p>Lithosphere: allow crust (1)</p> <ul style="list-style-type: none"> • Split into tectonic plates (1) • Oceanic and continental (1) • Brittle (1) • Coolest part of the planet (1) – Air temperature to 900 °C (1) • Least dense part of the planet (1) – Densities range from 2.7 to 3.3 grams per cm³ (1) <p>Mantle (Asthenosphere) (1):</p> <ul style="list-style-type: none"> • Partially molten (1) • Mainly composed of peridotite (1) • Temperatures range from approx 1000 to 4000 °C (1) • Densities range for 3.4 to 5.6 grams per cm³ (1) • Convection currents generated <p>Core</p> <ul style="list-style-type: none"> • Mostly made of iron and/or nickel (1) • Approx. half the diameter of the Earth (1) • Divided into an inner solid and outer liquid core (1) • Densest part of the planet (1) - 9 to 13 grams per cm³ (1) – Makes up 3rd of the Earth’s mass. (1) • Hottest part of the planet (1) - 4000 to 5000 °C (1). Temperature equal to the surface of the sun.(1) | Sedimentary rock/layers/ bedding plans etc... | <p>(4)</p> <p>(1+1) +1+1</p> <p>OR</p> <p>(1+1)+ (1+1)</p> <p>OR</p> <p>(1+1+1) +1</p> |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|--------------------|-------------------|------------|
| 2(a) (i) | A Australia | All other answers | (1) |

| Question Number | Correct Answer | Reject | Mark |
|------------------|----------------------------------|-------------------|------------|
| 2(a) (ii) | D A larger number of cars | All other answers | (1) |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|--|--------|---------------------------------------|
| 2(b) | <p>1 mark for identifying the impact an eruption can have on climate. Additional mark for an extending statement.</p> <p>Common responses likely to include:</p> <ul style="list-style-type: none"> • Volcanoes can release large amounts of ash (1) This ash can reflect the Sun's rays causing the planet to cool. (1) • Over time, eruptions can release large quantities of greenhouse gases or example, eg. Carbon dioxide (1). These gases can trap the Sun's rays causing the planet to warm. (1) | | <p>(2)</p> <p>(1+1)</p> |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|--|------------------|---|
| 2(c) | <p>1 mark for each valid statement. Common responses likely to include:</p> <p>Temperature:</p> <ul style="list-style-type: none"> • Warmest in the south (1) in the summer (1) • Warmest in the west in the winter (1) • Warmest in the lowlands (1) <p>Or opposites relating to coldest.</p> <p>Rainfall:</p> <ul style="list-style-type: none"> • Wettest in the west (1) • Wettest in the highland (1) <p>Or opposites relating to driest.</p> <p>NB: Creditable comments on both temperature and rainfall needed for full marks.</p> <p>Credit idea on continentality eg. Warmer on the coast in the winter (1)</p> <p>Limit to 3 if only one pattern addressed.</p> | Reverse comments | <p>(4)</p> <p>(1+1) +1+1</p> <p>OR</p> <p>(1+1)+ (1+1)</p> <p>OR</p> <p>(1+1+1) +1</p> |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|---|---|---|
| 2(d) | <p>1 mark for identifying an appropriate impact. Additional mark(s) awarded for extending statements.</p> <p>Maximum 3 marks for one impact.</p> <p>Common answers likely to focus on:</p> <ul style="list-style-type: none"> • Raising sea levels (1) leading to coastal flooding (1) and the creation of salt marshes (1). • Higher temperatures/ hotter (1) leading to a change in vegetation (1) and new wildlife. (1) • Increasingly unreliable weather (1) resulting in more droughts (1), heatwaves (1), wetter (1) floods (1) and 'deep freezes' (1) affecting wildlife (1). | <p>Impacts on other parts of the world.</p> <p>Economic impacts unless clearly linked to the environment.</p> | <p>(4)</p> <p>1+1+ (1+1)</p> <p>OR</p> <p>(1+1)+ (1+1)</p> <p>OR</p> <p>(1+1+1) +1</p> |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|------------------------|-------------------|------------|
| 3(a) (i) | A In the north. | All other answers | (1) |

| Question Number | Correct Answer | Reject | Mark |
|------------------|--------------------------------------|-------------------|------------|
| 3(a) (ii) | B Rising global temperatures. | All other answers | (1) |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|--|--------|---------------------------------------|
| 3(b) | <p>1 mark for stating a role of the biosphere in maintaining soil health. Additional mark for an extending statement.</p> <p>Common responses likely to include:</p> <p>Decomposers, such as worms (1), break down organic material (1), increasing the soil's fertility (1).</p> <p>Vegetation canopy 'shields' the ground from heavy rain (1) preventing soil erosion (1).</p> <p>Decomposing leaves (1) add organic matter to the soil (1) providing nutrients to vegetation (1).</p> | | <p>(2)</p> <p>(1+1)</p> |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|---|--------|---|
| 3(c) | <p>1 mark for identifying a suitable approach to biosphere management. Additional mark(s) awarded for a developing statement.</p> <p>Common responses likely to include:</p> <p>Local/National:</p> <ul style="list-style-type: none"> • National Parks (1) which give legal protection to important landscapes / environments (1) preventing their exploitation (1). • Nature Reserves (1) which restrict access (1). • BAPs - Biodiversity Action Plans (1). Location specific actions imposed to ensure habitat / wildlife survival (1). <p>Global:</p> <ul style="list-style-type: none"> • World Heritage Sites (1) where the UN works with local governments to manage unique environments (1). • Trade agreements (1) such as CITES (1), where countries agreed to stop trade in endangered species (1). • Global treaties (1), such as the Ramsar Convention (1) which protects endangered wetlands (1). <p>NB: Creditable comments on both local and global actions needed for full marks.</p> | | <p>(4)</p> <p>(1+1) (1+1)</p> <p>OR</p> <p>(1+1+1) +1</p> |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|--|--------|--|
| 3(d) | <p>1 mark for identifying a destructive human activity. Additional mark(s) awarded for developing statements.</p> <p>Maximum of 2 marks for a list.</p> <p>Common answers likely to refer to:</p> <ul style="list-style-type: none"> • Deforestation for timber (1) eg. Mahogany (1) causes soil erosion (1) habitat destruction (1) and food chain collapse (1). • Mining (1) stripping off forest cover and/or poisoning of water supplies.(1) • Conversion to farmland (1) is reducing biodiversity (1) through monoculture (1). • Man-made climate change (1) is lending to higher sea levels (1) or links to change in temperature and/or rainfall (1) extended with an impact eg. drought becoming more common (1). <p>NB: Explanation is needed for full marks.</p> | | <p>(4)</p> <p>1+1+ (1+1)</p> <p>OR</p> <p>(1+1)+ (1+1)</p> <p>OR</p> <p>(1+1+1) +1</p> <p>OR</p> <p>(1+1+1+ 1)</p> |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|----------------|-------------------|------------|
| 4(a) (i) | B 10% | All other answers | (1) |

| Question Number | Correct Answer | Reject | Mark |
|------------------|---|-------------------|------------|
| 4(a) (ii) | C The widespread use of fertilisers and pesticides | All other answers | (1) |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|--|---|----------------------------|
| 4(b) | <p>1 mark for identifying an appropriate impact. Additional mark awarded for an extending statement.</p> <p>Common responses likely to include:</p> <ul style="list-style-type: none"> • Local population forced to use contaminated water sources (1), possibly leading to disease (1). • People forced to travel longer distances (1) to access safe water. Possible impact on education (1) / family responsibilities (1). • Crop failure (1) leading to a lack of food for livestock (1) / less income (1) / higher food prices (1) / starvation or malnutrition (1). • Shortage of water for industry (1). Potential relocation and loss of jobs (1). • Impact on domestic water usage (1) such as hosepipe bans (1). • Shortage of water for drinking (1) leading to dehydration (1). • Idea of conflict (1). | Impacts on the environment / wildlife if not directly linked to people. | (2) (1+1) |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|--|--------|--|
| 4(c) | <p>1 mark for identifying an appropriate human activity. Additional mark(s) awarded for extending statements.</p> <p>Common answers likely to include:</p> <ul style="list-style-type: none"> • Deforestation (1) has affected the water cycle leading to less rainfall (1). • Over extraction from industry (1) - e.g. Coca Cola and the Plachimada aquifer. • Excessive extraction for farming (1) e.g. shrinkage of Aral Sea due to large scale irrigation (1). • Reservoir construction (1) affects flow rates downstream (1). • Pollution from domestic / industrial/ agricultural sources (1) can make a water supply dangerous and unusable (1). | | <p>(4)</p> <p>(1+1)+ (1+1)</p> <p>OR</p> <p>(1+1+1) +1</p> |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|--|--|--|
| 4(d) | <p>1 mark for identifying an appropriate benefit. Additional mark(s) awarded for extending statements.</p> <p>Common answers likely to include:</p> <ul style="list-style-type: none"> • More secure water supply (1). • Increased availability of water (1) reducing journeys for collecting water (1). • Built using traditional skills (1) and from local materials (1) therefore can be repaired by local people (1). • Affordable to build / maintain (1) • Little impact on natural water stores (1) and therefore minimal impact on the surrounding environment (1). • Does not require expensive technology (1) / fuel (1) to run. <p>NB. Named example might be location or type of technology.</p> <p>NB: As the command word is 'describe', at least one benefit must have been developed to attain full marks.</p> | <p>Answers focused on large scale management schemes, such as dams and river diversions.</p> | <p>(4)</p> <p>(1+1)+ (1+1)</p> <p>OR</p> <p>(1+1+1) +1</p> |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|---------------------|-------------------|------------|
| 5(a) (i) | D discordant | All other answers | (1) |

| Question Number | Correct Answer | Reject | Mark |
|------------------|----------------|-------------------|------------|
| 5(a) (ii) | A stack | All other answers | (1) |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|---|---|----------------------------|
| 5(b) | <p>1 mark for recognising that storms would increase rates of erosion.</p> <p>Additional mark for an extending statement.</p> <p>e.g. More storms would cause erosion to increase (1) because there would be more destructive waves/ waves taller, closer together (1).</p> <p>e.g. Increased storm activity would increase rates of erosion (1) as the sea would have more energy (1).</p> <p>Erosional processes identified eg. hydraulic action (1).</p> | Answers that refer to alternative processes, e.g. weathering. | (2) (1+1) |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|--|---|------------------------------|
| 5(c) | <p>1 mark for each valid benefit identified.</p> <p>Benefits imply a positive. For mark to be awarded there needs to be a benefit identified. Eg. 'It can improve the coastline' has clearly not identified a benefit.</p> <p>Common answers likely to include:</p> <ul style="list-style-type: none"> • Effective at stopping erosion (1) • Lasts a long time (1) • Requires little maintenance (1) • Reduces seafront insurance fees (1) • Promotes coastline development (1) • Creation of tourism attractions, eg. promenades (1) • Creates beaches (1) • Protects towns/houses/villages (1) • Reduces flooding (1) • Protects the coastline (1) | Benefits associated with soft techniques. | (2) 1+1 |

| Question Number | Indicative content | |
|---|--|---|
| *5(d) QWC i-ii-iii | <p>Retreating coastlines can cause significant problems for local residents.</p> <p>Common responses may include:</p> <ul style="list-style-type: none"> • Transport infrastructure affected, limiting access • Endangered properties become worthless • Increased insurance costs • Loss of valuable farmland • Threat to historical buildings and cultural significance of region • Restricted beach access discourages tourism • Coastline businesses could be closed resulting in unemployment • Amenities (e.g. electricity and water supplies) many need to re-routed at considerable expense. | |
| Level | Mark | Descriptor |
| 0 | 0 | No acceptable response. |
| 1 | 1-2 | At least one impact of coastal retreat has been identified. Little, if any, development. Limited structure to answer, basic use of geographical terminology. |
| 2 | 3-4 | Likely that an appropriate location has been identified. At least one impact of coastal retreat has been briefly explained. Some structure, clearly communicated but with limited use of geographical terms. |
| 3 | 5-6 | Response is specifically focused on the chosen case study region. At least two impacts have been explained. Clear structure, well communicated with mostly sound 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 | Correct Answer | Reject | Mark |
|-----------------|--|-------------------|------------|
| 6(a) (i) | A There are no flood defences at X. | All other answers | (1) |

| Question Number | Correct Answer | Reject | Mark |
|------------------|--------------------------|-------------------|------------|
| 6(a) (ii) | C High land value | All other answers | (1) |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|---|--------|---------------------------------------|
| 6(b) | <p>1 mark for identifying an appropriate slope process (i.e. form of mass movement). Additional mark for an extending statement, eg.</p> <ul style="list-style-type: none"> • Soil creep (1), the slowest form of mass movement (1) is caused by changes in temperature (1) or soil moisture (1) • Slumping (1) is a type of landslide (1) where the material moves in a rotational manner (1). • Type of weathering identified, eg. Physical (1) with explanation (1) • Surface runoff (1) with explanation (1). | | <p>(2)</p> <p>(1+1)</p> |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|---|--------|-------------------------------------|
| 6(c) | <p>1 mark for each valid change identified.</p> <p>Common answers likely to include:</p> <ul style="list-style-type: none"> • Channel - Narrow to wide • Channel - Shallow to deep • Velocity - Slow to fast • Discharge – Small to large • Gradient – Steep to gentle • Bedload – Large to small • Bedload – Angular to smooth. • Comparison of features, eg. Waterfalls upper course, meanders middle course. | | <p>(2)</p> <p>1+1</p> |

| Question Number | Indicative content | |
|---|---|---|
| *6(d) QWC i-ii-iii | <p>River flooding can cause a wide range of impacts:</p> <ul style="list-style-type: none"> • Transport: Important roads and rail links can be cut off and vehicles damaged. Affecting commuting, accessing facilities etc. • Industry: Factories can be closed and stock lost. Profits affected by cost of flood, possible relocation and job losses. • Tourism: Tourists can be discouraged from visiting, hitting local hotels, restaurants and attractions. • Housing: Homes can be damaged/ contaminated. Residents may have to be temporarily rehoused. Impact on future insurance costs and property prices. • Flood waters may be contaminated leading to the spread of disease. | |
| Level | Mark | Descriptor |
| 0 | 0 | No acceptable response. |
| 1 | 1-2 | At least one impact of flooding has been identified. Little, if any, development. Limited structure to answer, basic use of geographical terminology. |
| 2 | 3-4 | Likely that an appropriate location has been identified. At least one impact of flooding has been briefly explained. Some structure, clearly communicated but with limited use of geographical terms. |
| 3 | 5-6 | Response is specifically focused on the chosen case study river. At least two impacts have been accurately explained. Clear structure, well communicated with mostly sound 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 | Correct Answer | Reject | Mark |
|-----------------|--------------------------------------|-------------------|------------|
| 7(a) (i) | B grew fastest between 2009 and 2010 | All other answers | (1) |

| Question Number | Correct Answer | Reject | Mark |
|------------------|-----------------------------|-------------------|------------|
| 7(a) (ii) | D 5 million km ² | All other answers | (1) |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|---|--|-------------------------------------|
| 7(b) | <p>1 mark for each valid threat:</p> <p>Common responses likely to include:</p> <ul style="list-style-type: none"> • Over fishing (1) • Toxic pollutants from industry / shipping (1) • Oil spills (1) • Eutrophication from sewage / fertilisers (1) • Habitat destruction from coastal development (1) • Climate change (1) changes in salinity (1) and warmer temperatures.(1) • Aquarium trade (1) • Unsustainable fishing techniques (1) such as trawling (1) or cyanide fishing (1). • Impact of tourism e.g. divers touching and killing reefs (1). • Human waste (1). | Pollution, tourism and waste on their own. | <p>(2)</p> <p>1+1</p> |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|---|--------|---------------------------------------|
| 7(c) | <p>1 mark for each identifying a valid reason. Additional mark for an extending statement.</p> <ul style="list-style-type: none"> • Ecosystems have been cleared (1) to make way for coastal developments, eg. hotels (1) / improve access for shipping (1). • Pollution from coastal settlements (1) has degraded water quality (1). • Changing farming practices (1) have led to marine eutrophication (1) / the siltation of coastal habitats (1). • Over-fishing (1) has led to food chain imbalances (1). • Tourism activities (1) such as divers touching and killing coral reefs (1). | | <p>(2)</p> <p>(1+1)</p> |

| Question Number | Indicative content | |
|--|---|---|
| <p>*7(d) QWC i-ii-iii</p> | <p>Named location can be small or large scale. Common examples likely to include:</p> <ul style="list-style-type: none"> • St Lucia introduced a community-based coastline management programme in 1986. 19 areas (including reefs and mangroves) were declared Marine Reserve Areas. These areas have been developed as ecotourism resorts to provide local communities with new employment opportunities, which enhance rather than destroy the coastline. • The EU has introduced a Common Fisheries Policy for all its member states in an attempt to revive fish stocks. Each year a limit (quota) is placed on the number of fish from each species that can be caught. The EU has also designated some regions as no-take zones for species particularly under threat e.g. North Sea Cod. • Lamlash Bay, in the Firth of Clyde, has seen the introduction of a no-take zone as a response to the local scallop beds being over-fished. New laws forbid destructive fishing methods and there are plans to make Lambash Bay a coastal marine park. | |
| Level | Mark | Descriptor |
| Level 0 | 0 | No acceptable response. |
| Level 1 | 1-2 | At least one sustainable management measure has been identified. Little, if any, development. Limited structure to answer, basic use of geographical terminology. |
| Level 2 | 3-4 | At least one sustainable management measure has been briefly explained. Is likely to include named locations. Some structure, clearly communicated but with limited use of geographical terms. |
| Level 3 | 5-6 | At least two management measures have been explained. Response is likely to focus on specific measures introduced at named locations. Clear structure, well communicated with mostly sound 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 | <p>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.</p> |
| SPaG Level 2 | 2 | <p>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.</p> |
| SPaG Level 3 | 3 | <p>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.</p> |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|---|-------------------|------------|
| 8(a) (i) | C The temperature increases from July to February. | All other answers | (1) |

| Question Number | Correct Answer | Reject | Mark |
|------------------|----------------|-------------------|------------|
| 8(a) (ii) | A 21 °C | All other answers | (1) |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|---|--|-------------------------------------|
| 8(b) | <p>1 mark for each sustainable action identified. Responses from both hot arid and polar regions are valid.</p> <p>Common responses likely to include:</p> <ul style="list-style-type: none"> • Farmers could use fertilisers to improve soil quality (1) • Intermediate technology can improve water supply (1). • Diets could be improved through multi-cropping programmes (1). • Renewable energy sources (solar and geothermal) (1) • Grey water recycling schemes (1). | Global actions, eg. the Kyoto protocols or the Antarctic Treaty. | <p>(2)</p> <p>1+1</p> |

| Question Number | Correct Answer | Reject | Mark |
|-----------------|--|---|-------------------------------------|
| 8(c) | <p>1 mark for identifying a valid threat associated with out-migration. Additional mark for providing an extending statement.</p> <p>Common answers likely to include:</p> <ul style="list-style-type: none"> • Migrated populations don't learn the traditional languages / stories / beliefs (1) resulting in their culture being lost (1). • Migrated populations have no use for the traditional skills (1), as such, these are not passed on to the next generation (1). • Population decline results in a lack of workers (1) farmland may have to be abandoned (1). • As communities shrink services become unviable (1), shops / schools / transport links / post offices closing (1). • Reducing numbers (1) so population may disappear altogether (1). | Responses that refer to alternative threats, eg. the impact of tourism. | <p>(2)</p> <p>1+1</p> |

| Question Number | Indicative content | |
|--|---|---|
| <p>*8(d) QWC i-ii-iii</p> | <p>Flora (plant) adaptations may include:</p> <ul style="list-style-type: none"> • Shallow root systems to maximise water capture. • Tap root to access water deep beneath the surface. • Waxy leaves or needles to reduce moisture loss. • Thick bark to provide protection against cold winds or fires. • Spikes to discourage grazing animals. • Short life cycle to reflect growing season. <p>Fauna (animal) adaptations may include:</p> <ul style="list-style-type: none"> • Fur and fat layers to provide insulation. • Stores of moisture to survive without regular access to water. • Adapted claws, teeth and limbs to access food sources. • Large paws to enable the animal to walk on snow or sand. • Ability to hibernate to miss the most extreme weather conditions. | |
| Level | Mark | Descriptor |
| Level 0 | 0 | No acceptable response. |
| Level 1 | 1-2 | At least one adaptation has been identified. Little, if any, development. Limited structure to answer, basic use of geographical terminology. |
| Level 2 | 3-4 | At least one adaptation has been briefly explained. Some structure, clearly communicated but with limited use of geographical terms. |
| Level 3 | 5-6 | An adaptation for both flora and fauna has been explained. Clear structure, well communicated with mostly sound 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. |

