Examiners' Report

January 2012

GCSE Geography 5GB1F 01

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 call our GCE line on 0844 576 0025, our GCSE team on 0844 576 0027, or visit our qualifications website at www.edexcel.com. For information about our BTEC qualifications, please call 0844 576 0026, or visit our website at www.btec.co.uk.

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.

Ask The Expert can be accessed online at the following link:
http://www.edexcel.com/Aboutus/contact-us/

Alternatively, you can speak directly to the subject team at Pearson about Edexcel qualifications. Their contact details can be found on this link:
www.edexcel.com/teachingservices

ResultsPlus

Get more from your exam results

...and now your mock results too!

ResultsPlus is Edexcel's free online service giving instant and detailed analysis of your students' exam and mock performance, helping you to help them more effectively.

- See your students' scores for every exam question

- Spot topics, skills and types of question where they need to improve their learning

- Understand how your students' performance compares with Edexcel national averages

- Track progress against target grades and focus revision more effectively with NEW Mock Analysis

For more information on ResultsPlus, or to log in, visit www.edexcel.com/resultsplus. To set up your ResultsPlus account, call 0844 576 0024

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 raising achievement through innovation in education. Find out more about how we can help you and your students at: www.pearson.com/uk .

January 2012

Publications Code UG030518

Introduction

This report covers responses from the Foundation tier paper of GCSE Geography Specification B. The unit one paper was one hour long. The paper comprised of four compulsory sections and two optional sections. Each section started with a resource based activity, followed by one or two extending questions. The question paper was designed to be progressively more difficult.

The aim of the unit/paper was to provide candidates with a broad and varied understanding of the natural environment. Question paper completion required candidates to apply a range of skills. Candidates needed to be able to interpret and read maps, diagrams and charts.

Question 1 (b) (i)

The majority of candidates produced accurate answers to this question, with a good range of threats being identified. Credit was given to both direct threats (eg lava flow) and indirect threats (eg houses collapsing due to the volcano triggering localised earthquakes). Vague statements referring to 'people dying' and 'everything being destroyed' were not scored.

(b) (i)   Give **one** threat resulting from volcanic eruptions.

(1)

people become homeless

ResultsPlus
Examiner Comments

No mark awarded as the candidate identified an impact rather than a threat.

(b) (i)   Give **one** threat resulting from volcanic eruptions.

(1)

A volcano can produce lethal poisonous gas which can kill humans

ResultsPlus
Examiner Comments

An appropriate threat was identified.

ResultsPlus
Examiner Tip

The term 'threat' refers to the various hazards associated with natural disasters. A threat causes harm/damage.

Question 1 (b) (ii)

Candidates were required to define what a destructive plate boundary is (eg where two plates... collide/smash together/subduct) as well as give an extending statement to gain both marks on this question. The majority of candidates produced strong responses to this item. A common mistake was for candidates to mix-up the different plate boundaries.

(ii) What is a destructive plate boundary?

(2)

Where an oceanic plate subducts under a continental plate causing mountainous formations.

ResultsPlus
Examiner Comments

A good answer. The candidate identified the plates involved, referred to subduction and highlighted the outcome of mountain building.

ResultsPlus
Examiner Tip

One of the strengths of this response is the language the candidate has used. Candidates should always try to include as many geographical terms in their response as they can. This approach shows the examiner that the candidate has a good knowledge of the topic and removes the potential for 'grey' areas.

(ii) What is a destructive plate boundary?

(2)

A   destructive   plate   boundary   is
when   two   plates   rub   against
each   other.

Question 1 (c)

The response to this question was very strong. A wide range of actions were identified and most responses included clear and relevant extension. As the question simply asks for 'actions', credit was given to both preparations and responses (short and long term). Some candidates identified a valid action (such as building stronger houses) but provided weak extension, eg simplistic statements such as "this will decrease deaths" or "reduce damage". These developments were not sufficient for the additional mark available.

(c) Describe **two** actions that can be taken to reduce the impact of earthquakes.

(4)

1 All there buildings can be built with Shock absorbers, reinforced foundation and Flexible steel So when there is an earthquake the building sways instead of breaking.

2 educate the people with what to do incase there is an earthquake. Japan has an earthquake drill every year. So all people know what to do.

ResultsPlus
Examiner Comments

The candidate identified two actions and provided clear extension.

(c) Describe **two** actions that can be taken to reduce the impact of earthquakes.

(4)

1 Earthquake drills can be introduced to local people that ~~they~~ live near any plate boundries

2 Any cities around plate boundries should be built so they are earthquake proof

ResultsPlus
Examiner Comments

The candidate identified two actions but provided no extension.

ResultsPlus
Examiner Tip

Whenever the 'describe' command word is used candidates are required to extend their response to score full marks. Candidates often lose marks by listing rather than describing.

Question 2 (b) (i)

Although answered well by most, some candidates lost marks by referring to human causes of climate change. As with previous questions on this topic, methane from cattle ranching and paddy fields were considered to be a human, rather than natural cause, as the rapid expansion of these types of farming over the past 50 years has mainly been the result of human decisions and actions.

(b) (i) Identify **one** natural cause that might lead to a change in global temperature.

(1)

Rising Sea levels

ResultsPlus
Examiner Comments

The candidate failed to score as 'rising sea levels' are an effect of change, whereas the question focused on causes.

(b) (i) Identify **one** natural cause that might lead to a change in global temperature.

(1)

Volcanic eruptions

ResultsPlus
Examiner Comments

This was the most common correct response. Large eruptions can add so much ash to the atmosphere that the sun's rays are blocked out, leading to a fall in global temperature.

ResultsPlus
Examiner Tip

When revising for an exam, make good use of the specification. Make sure all the terms are understood. It is often a useful revision exercise to try and convert specification statements into likely GCSE questions.

Question 2 (b) (ii)

Most candidates produced strong responses to this question. For full marks the candidates needed to identify an appropriate human action and provide some extension. The most common correct response referred to 'driving cars leading to an increase in carbon dioxide emissions'. A considerable number of candidates lost marks by mixing-up climate change with ozone depletion.

(ii) Describe **one** human activity that has led to an increase in greenhouse gases.
(2)

Transport people using their cars and all the buses and cars more.

ResultsPlus
Examiner Comments

The candidate identified transport but failed to explain how it leads to an increase in greenhouse gases. The candidate attempted to extend their answer by providing different examples of transport rather than answering the question.

Wanting More food such as beef, then producing more cattle then this cattle produces a mass amount of Methane which is a top contributor to global warming.

4

P 3 9 9 2 7 R A 0 4 2 0

ResultsPlus
Examiner Comments

A good response. Cattle farming was linked to increased methane emissions.

ResultsPlus
Examiner Tip

Methane from cattle or rice fields is considered a human cause of greenhouse gases as the expansion of these types of farming over the past 50 years has resulted from of human decisions/actions.

(ii) Describe **one** human activity that has led to an increase in greenhouse gases.

(2)

One human activity is Polution. Driving cars and flying plains let out a lot of Carbon dioxide and other harmfull gases which gets traped in our atmosphere.

4

ResultsPlus
Examiner Comments

Human activity identified and described - full marks.

Question 2 (c)

The focus of this question was 'economic' impacts, so credit was not given for social or environmental consequences. Candidates needed to make a clear reference to jobs, businesses, trade, expenses and taxes in order to score on this question. As the command word was 'describe', for full marks a candidate needed to develop at least one of their identified impacts. The question was UK focused and a number of candidates lost valuable marks by specifically referring to other regions, in particular Bangladesh and Egypt. The most common correct responses referred to either farming or tourism (both types of industry) and related a change in their fortunes to either increasing or decreasing temperatures.

(c) Suggest **two** possible economic impacts of future climate change in the UK.

(4)

1 an impact of future Climate Change is that many people who live in coastal areas will need to move due to Sea level rises which will mean more money will need to be spent in building houses more inland

2 another future impact of Climate Change is to since the temperature would have increased here. The UK can start growing more exotic fruits such as grapes which would mean more income for the UK.

ResultsPlus
Examiner Comments

A good response. Two economic impacts were identified with extending statement.

ResultsPlus
Examiner Tip

The specification requires candidates to know the difference between economic, social and environmental impacts. Economic impacts refer to money matters. Correct responses to these types of questions will usually focus on the costs, jobs and trade.

(c) Suggest **two** possible economic impacts of future climate change in the UK.

(4)

1 With the atmosphere of the Earth getting warmer, Ice melts in the poles causing sea levels to keep rising.

2 with the Ice melting in the poles, polar bears struggle to find good. This will cause them to die of starvation, and they will be come extincted.

Question 3 (a)

Most candidates produced accurate responses to this question. Extracting relevant information from the resource was awarded, as were answers based on the candidate's own knowledge.

Topic 3: Battle for the Biosphere

3 Look at Figure 3.

RAINFOREST'S SUSTAINABLE FUTURE

The future of the Amazon rainforest could be helped thanks to woody-vines similar to ivy, known as lianas. When dried, they are tough but easy to twist, making them perfect to use for the production of baskets and furniture.

Using simple techniques, lianas can be harvested by local people without damaging the environment. There is no need to clear the forest and the tough vines have a resistance to local pests, reducing the need for pesticides.

Figure 3 – A newspaper article on the future of the Amazon rainforest

(a) State **two** advantages of developing an industry using lianas.

(2)

1 They can be used for the production of furniture/baskets.

2 It can be harveted by local people without damaging the environment.

ResultsPlus
Examiner Comments

Full marks - two advantages identified.

ResultsPlus
Examiner Tip

Part (a) answers are almost always resource based. Some candidates lost marks on this question by trying to answer the question from their own knowledge rather than extracting information from the article.

Question 3 (b) (i)

Almost all candidates chose the correct option.

Question 3bii

The majority of students correctly identified 'inland' as the gap filler.

Question 3c

Although the majority of candidates were able to produce a strong response to this question, the concept of the biosphere proved challenging to some. It was often mistaken for the atmosphere and in some cases confused with the ozone layer. The most common correct answer related to the balancing of the earth's atmosphere through photosynthesis or the provision of essential goods, such as food and medicine.

(c) The biosphere acts as a **life support system** for the planet.

Describe **two** ways in which it does this.

(4)

1 provides Oxygen as they breathe in the carbon dioxide. Known as the worlds lungs. Allowing humans to breathe and live.

2 The tropical rainforests is a flood defence. protects the planet from major floods as trees soak in and store rainwater for long periods of time

(Total for Question 3 = 8 marks)

ResultsPlus
Examiner Comments

A clear and focused response, which identified the role of the biosphere as a regulator of atmospheric gases and flood defence.

ResultsPlus
Examiner Tip

Make sure candidates are familiar with the concepts and terminology used in the specification, such as the 'life support system'.

(c) The biosphere acts as a **life support system** for the planet.

Describe **two** ways in which it does this.

(4)

1 rainforests - provide the planet with most of its oxygen, nutrients and materials like wood, rubber and fruit.

2 the atmosphere acts as a blanket - keeping heat in the planet but not letting too much heat from the Sun through.

Question 4 (a) (A)

Almost all of the candidates were able to identify the process of evaporation.

Question 4aB

The vast majority of candidates correctly identified precipitation. Candidates who referred to types of precipitation, eg rain or snow, were also credited.

Question 4b

Almost all candidates were able to identify a human action that can lead to a decline in water quality; some struggled to provide an extending statement. The most common correct response referred to some type of pollution (normally sewage or industrial waste) being released into the water course, resulting in the water becoming contaminated/leading to the spread of disease. Overly simplistic responses referring to 'dirty' or 'muddy' water were not credited.

> (b) Outline **one** human activity that can lead to a decline in water quality.
>
> (2)
>
> dumping rubbish in rivers and the ocean making it dirty

ResultsPlus
Examiner Comments

The candidate failed to score full marks due to their simplistic language. At GCSE level, referring to rivers as being 'dirty' isn't sufficient as an extending statement.

ResultsPlus
Examiner Tip

From June marks will be awarded for literacy and grammar on Geography exam papers.

Question 4 (c)

A significant minority misinterpreted this question, confusing an insufficient/unreliable water supply with poor water quality. Candidates frequently referred to polluted waters leading to the spread of disease. This common response relates to water quality and as such did not gain any marks. Where candidates stated that locals are forced to use polluted waters because alternative supplies are unreliable, credit was given. A significant number of candidates were unable to name a suitable location. As with previous questions requiring a named location, 'Africa' was not considered a valid destination. Africa is a very large continent with a wide variety of regions; it is not specific enough to be acceptable as a named location on any question. Although no mark was awarded for naming a suitable location, candidates who failed to identify an appropriate destination were unable to score full marks.

(c) For a named vulnerable area, describe **two** problems caused by an **unreliable** or **insufficient** water supply.

(4)

Named vulnerable area Zimbabwe, Africa

1 An insufficient water supply can be a massive problem for places in Africa. If people are desperate they will use dirty water which can lead to disease.

2 People will end of dying of thirst if they have no water at all. So it can lead to alot of thirst. Also crops can be harder to grow with no water to less income can be a factor.

ResultsPlus
Examiner Comments

The candidate gained marks for explaining that in areas of water shortage people may be forced to drink contaminated water and for the final statement about crop failure and falls in income.

ResultsPlus
Examiner Tip

When a question asks the candidate to identify a named region, full marks can only be gained when an appropriate location is stated. Named locations can refer to regions within a country, specific countries or even groups of countries with similar characteristics - for example, on this question candidates could have referred to the Sahel region of Africa as the entire region suffers from water shortages.

(c) For a named vulnerable area, describe **two** problems caused by an **unreliable** or **insufficient** water supply.

(4)

Named vulnerable area ___Africa___

1 ___unreliable water can be dirty, so it can carry desieses, therefore people are getting ill and dying because of it.___

2 ___Insufficient water ply is bad as people are parched out there, especially in the hot weather, they are getting dehydrated and dying -___

(Total for Question 4 = 8 marks)

ResultsPlus
Examiner Comments

First statement fails to score as the candidate is talking about poor water quality not a lack of water. The second statement identifies an appropriate problem and provides extension.

Question 5 (a)

There was a good response to this question. Not surprisingly, the most common response to this item related to erosion. Identification with a brief extending statement scored both marks. Successful responses identified that erosion was most effective at the base of the cliff, causing the top to become unstable and to collapse. Less successful responses referred to a lack of coastal defences rather than identifying a process.

5   Look at Figure 5.

Figure 5 – Cliff collapse on the east coast of England

(a) Outline **one** process that may have led to the cliff collapsing.

(2)

Erosion at the bottom of the cliff causing the headland to overhang eventually becoming too heavy with nothing to lean on keeping it up

ResultsPlus
Examiner Comments

A clear description of a likely process that may have caused the cliff to collapse.

Question 5 (b)

A strong item for the vast majority of candidates. The most common answers referred to land lost and property damage.

Question 5 (c)

Although a small number of candidates focused their response on unsuitable locations, particularly Spurn Head spit, the vast majority concentrated on landforms and were able to put together strong responses. The effects of erosion on cliffs was common amongst mid-level responses, whilst higher level answers tended to focus on the arch to stack sequence.

The main 'elevator' for moving between levels was the amount of explanation. Aconsiderable number of candidates achieved lower scores as they focused their answer on coastal defences rather than landforms. All candidates should be familiar with the terminology used in the specification.

*(c) For a named hard rock coast, explain the development of its coastal landforms.

(6)

Named hard rock coast ..... Dover .....

As the rock is eroded the cliff gets a crack in it. ~~white~~ As the crack grows it turns into a cave which continues to get eroded. ~~the~~ When the back of the cave is knocked through it forms an arch. The top of the arch weakens and breaks off leaving a stack. The stack continues to get eroded and shortens leaving a stump.

ResultsPlus
Examiner Comments

A Level 3 response, as the candidate identified a suitable location. They highlighted the process of erosion and outlined the change from cave to stump. More explanation of the processes involved needed for full marks.

*(c) For a named hard rock coast, explain the development of its coastal landforms.

(6)

Named hard rock coast .... lovecove bay ....

This are has hard rock and soft rock.
The hard rock has stayed the same Howeve
the soft rock has been erocrea making a
natural harbour or bay. It is because the
hard rock is there is that the waves can't really effect
the town behind the bay. & It is similar to
a coastal defence such as a sea wall.

Question 6 (a)

Although candidates answered the question well, a significant number of students failed to score on this item. The most common incorrect responses referred to tectonic processes, with earthquakes and constructive plate boundaries frequently being used to explain the valley's formation. For full marks only a brief extending statement is needed.
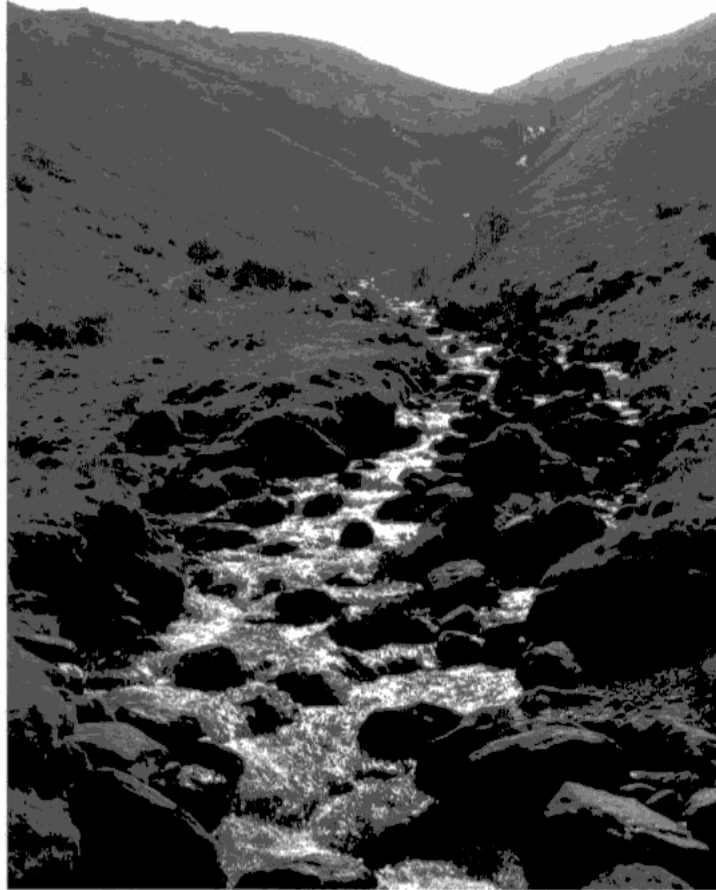
6 Look at Figure 6.

Figure 6 – Valley in the upper course of a river

(a) Outline **one** process that may have helped to create this valley.

(2)

water erosion has helped Shape the valley over years.

ResultsPlus
Examiner Comments

The candidate identified erosion but offered no extension. For full marks the candidate needed to explain how erosion works or name a specific type of river erosion.

5 Look at Figure 5.

Figure 5 – Cliff collapse on the east coast of England

(a) Outline **one** process that may have led to the cliff collapsing.

(2)

Erosion at the bottom of the cliff causing the headland to overhang eventually becoming to heavy with nothing to lean on keeping it up

Question 6 (b)

Like its cross over question on 5, the vast majority of candidates produced strong responses to this question. The most common responses referred to crops being destroyed or houses being damaged.

Question 6 (c)

As with 5(c) the main 'elevator' for moving between levels was the amount of explanation. Level 1 responses included little (or no) explanation; whereas level 2 responses had to include some explanation, although this may have been rather basic/vague; whilst level 3 responses had to include clear explanation. Candidates who failed to name a specific location were limited to 4 points. To achieve level 3, candidates had to include both physical and human causes in their answer, for full marks both human and physical causes had to be clearly explained. A considerable number of candidates lost marks by highlighting climate change as the flood cause but then only referred to sea level changes and coastal inundation, rather than the impact of glacier melt or increasingly erratic rainfall patterns.

*(c) Using examples, explain the physical and human causes of river flooding.

(6)

One physical factor of a river flooding is the heavy rainfall in an area which causes the discharge of a river to rise and eventually rise to the surface of the land. One human cause of rivers flooding is dumping rubbish into rivers, this can case flooding by making the discharge rise and reaching the surface of the land. Another

ResultsPlus Examiner Comments

The candidate identified a human and physical cause of flooding but provided only the most basic explanation.

ResultsPlus Examiner Tip

The key to gaining full marks on levelled responses is the depth of explanation. To achieve full marks candidates are normally required to clearly explain two actions, landforms, responses. Long lists with little development score few marks. For a maximum score on a question that refers to a named location, case study specific information will be required.

Question 7 (a)

Most candidates produced strong responses to this question. For full marks candidates were required to make two accurate statements. Due to the wording of the question, there was no requirement to include graph data. Therefore, an answer which identified the general increase and also highlighted the faster rates since the 1980s would have scored both points. Although there was no requirement for data, the best responses often included accurate graph readings and change calculations. If a candidate had chosen to include data in their answer, only precise figures were accepted.
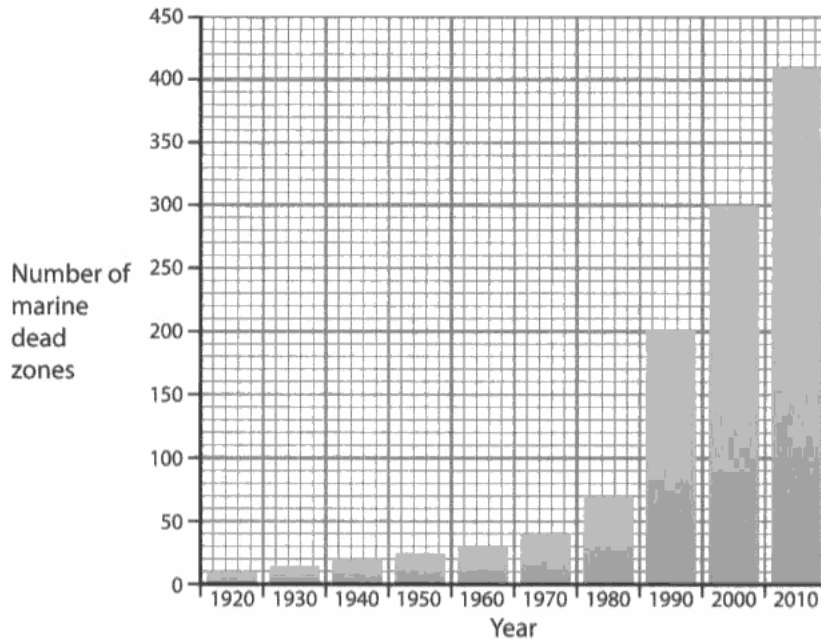
7 Look at Figure 7.

Figure 7 – A graph showing the number of degraded marine zones with little life (dead zones)

(a) Describe the changes in the number of marine dead zones.

(2)

as the years increase the number of marine dead zones increases, this shows the increase in overfishing.

ResultsPlus
Examiner Comments

The candidate identified the general increase but failed to score full marks as the second statement was explanation rather than description.

ResultsPlus
Examiner Tip

On a 'describe the graph' question candidates are simply required to say what they see. Often the most successful responses include accurate graph readings or identify periods with different rates of change.
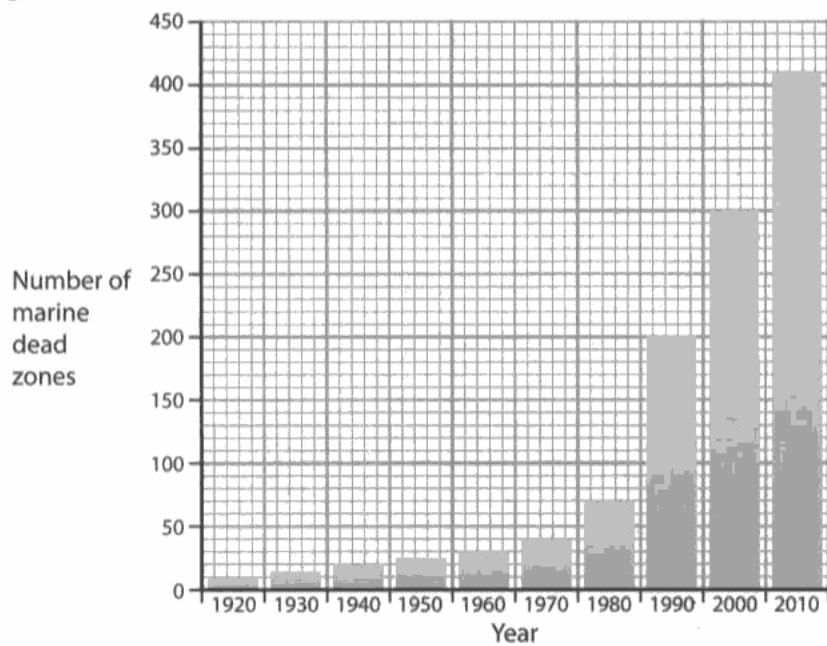
7 Look at Figure 7.

Figure 7 – A graph showing the number of degraded marine zones with little life (dead zones)

(a) Describe the changes in the number of marine dead zones.

(2)

The number of dead marine zones has increased from 10 zones at in 1920 to 410 zones in 2010.

Question 7 (b)

As with the comparable questions on section B, the vast majority of candidates produced strong responses to this question. The most common correct responses referred to over-fishing and habitat destruction. Candidates who simply stated 'fishing' or 'more fishing' were not credited.

Question 7 (c)

To help achieve consistency through the paper, the main 'elevator' on section C levelled responses was again the depth of explanation. For full marks, students needed to focus at least part of their response on a specific location. Weaker responses referred to general disagreements without explaining the opposing views and only explained one 'side' of the conflict.

*(c) Using examples, explain how marine ecosystems can be managed.

(6)

In St Lucia they use zoning. This is were diffrent parts of the marine ecosystem are used for diffrent things like tourism, fishing, and conservation. This means there is only some areas that are over used in St-Lucia. The In the Uk there is a fishing quater were fisherman can only get a sertun amount of fish and size so there still fish do to breed. So there is more fish for the future.
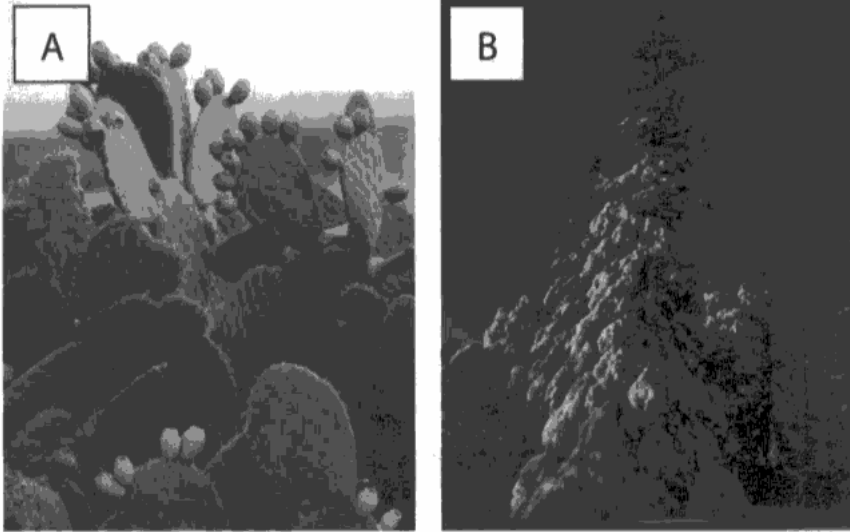
ResultsPlus
Examiner Comments

Level 3 response. The candidate referred to two examples (zoning in St Lucia/ quotas in the North Sea) and provided clear explanation of how the actions identified help to manage marine ecosystems.

Question 8 (a)

The vast majority of candidates scored well on this item. Candidates who focused on the cactus tended to achieve the highest scores.

8 Look at Figure 8.

A

B

(Source: © Kalle Pahajoki/Alamy)

Figure 8 – Plants that live in extreme climates

(a) For **either** A **or** B, identify **two** features which have enabled the plant to cope in its extreme climate.

(2)

Chosen plant ...... A

1 It copes by storing water in its large roots & has no leaves

2 It has spikes/prickly bits to stop bugs etc. taking the water out of it.

ResultsPlus
Examiner Comments

The candidate identified two adaptations.

ResultsPlus
Examiner Tip

Some candidates lost marks on this question by mixing up their adaptation - i.e. referring to the cacti's long roots and linking these to water storage.

Question 8 (b)

Almost all candidates were able to identify an appropriate adaptation.

Question 8 (c)

Again the main 'elevator' for moving between levels was the amount of explanation. To reach level 3, candidates needed to make the link between their identified action and sustainability. Environmental, economic and social sustainability were awarded.

*(c) For a named extreme environment, explain how local communities have tried to achieve sustainability.

(6)

Named extreme environment **Burkino Faso, Hot Arid.**

In Burkino Faso they build a diquaties which is a long shallow trench with rocks placed over it. It ~~collects water~~ Collects water so that farmers can grow there crops there. It is good because the local people get food. It is sustainable because it is easy to build and can be taught to futer generations.

Also In Burkino faso they build a gutter on top of there house that leads to a water tank. These water tanks can be made and managed simply by using clay and bamboo. They are affective because they collect water for a family. They are Sustainable because they are easy to build and maintain. They can also teach futer generations how to build them so they all have water.

(Total for Question 8 = 9 marks)

Paper Summary

The general level of response on this paper was of a high standard. Most candidates demonstrated a clear understanding of the foundations of each topic and many were able to write with focus and provide in depth responses.

Candidates had the choice of answering either sections 5 or 6 and 7 or 8. As with past papers, the 'Coastal Change and Conflict' topic proved most popular in section B. In contrast to previous series, 'Marine Environments' had fewer candidates than 'Extreme Climates'. The breakdown in both cases was approximately one third, two thirds.

Candidates completing the 'Extreme Climate' topic were given the choice of focusing on either a hot, arid or arctic region. Hot arid locations, in particular Australia, was again most popular but did not necessarily generate the best answers. Candidates studying polar landscapes were often able to provide responses of equal quality.

Grade Boundaries

Grade boundaries for this, and all other papers, can be found on the website on this link:

http://www.edexcel.com/iwantto/Pages/grade-boundaries.aspx