



Examiners' Report June 2012

GCSE Geography 5GA2F 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 visit our qualifications websites at www.edexcel.com or www.btec.co.uk for our BTEC qualifications.

Alternatively, you can get in touch with us using the details on our contact us page at www.edexcel.com/contactus.

If you have any subject specific questions about this specification that require the help of a subject specialist, you can speak directly to the subject team at Pearson. Their contact details can be found on this link: www.edexcel.com/teachingservices.

You can also use our online Ask the Expert service at www.edexcel.com/ask. You will need an Edexcel username and password to access this service. See the ResultsPlus section below on how to get these details if you don't have them already.



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 us using the details on our contact us page at 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 raising achievement through innovation in education. Find out more about how we can help you and your students at: $\frac{\text{www.pearson.com/uk}}{\text{www.pearson.com/uk}}$

June 2012

Publications Code UG032279

All the material in this publication is copyright © Pearson Education Ltd 2012

Introduction

The Natural Environment unit requires the candidates to answer a question on a physical geography topic (Coastal, River, Glacial or Tectonic landscapes) in section A and on an applied topic (Wasteful or Watery World) in section B.

The paper was well received by centres in its new format, without a resource booklet. More candidates sat the foundation tier paper than the higher in this series, however, there was evidence that some could have been attempting the higher tier paper.

In part A, Coasts and Tectonics continued to be the most popular topics, with Rivers gaining popularity and Glacial Landscapes still struggling to attract large numbers. However, it must be noted that performance by those taking the Glacial section was on the whole very good.

Overall performance was better in Section B than in Section A, with some candidates struggling with some of the process orientated questions.

Question 1 (a) (i)

Although many candidates scored well on this question, a large number also confused some of the information from Figure 1(a) and therefore opted for the incorrect statement. Candidates must read the resources supplied carefully, especially when the multiple choice answers relate directly to them.

Question 1 (a) (ii) 1

This question proved to be a little tricky for some candidates as they confused the processes of soil creep and slumping. The key differentiator is that slumped areas usually show detachment from the original slope. Identifying processes from photographs would be good practice for candidates.

Question 1 (a) (ii) 2

Those candidates who incorrectly answered 1(aii1) as soil creep, often made the mistake of putting 'dry' as the answer to this question. There is some confusion over the fact that the ground may crack open before taking on water, leading to slumping, when in fact the water is what leads to the slumping.

Question 1 (a) (ii) 3

Rock associated with slumping is often clay based, however, a minority of candidates confused this with the limestone option.

Question 1 (a) (ii) 4

Many candidates were able to answer this correctly as 'slips' even if they had answered an earlier part of the question incorrectly.

Question 1 (a) (ii) 5

The vast majority of candidates were able to identify the correct answer as cliff.

Question 1 (a) (iii)

This question produced highly variable responses with many students unsure of the term "fetch". Centres are encouraged to reinforce students' learning of key terms from the specification so that they can apply them in the exam.

Many candidates struggled with this question as many were unfamiliar with the term "fetch". They therefore also found it difficult to apply the concept to coastal recession. Common mis-associations were with longshore drift or with wash and backwash.

| (iii) 1. What is meant by the term fetch ? |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| How for the wave has travered are sea. |
| Describe how fetch can affect the rate of coastal recession. (3) |
| The bigger the fetch higher the wave will be to it will have more energy. So when I arrives at the coase line Beach it has more power which will have the crift to brode It away It will cuts have carried stones, Perbus (campsian) which will have the Clift to domage to. |



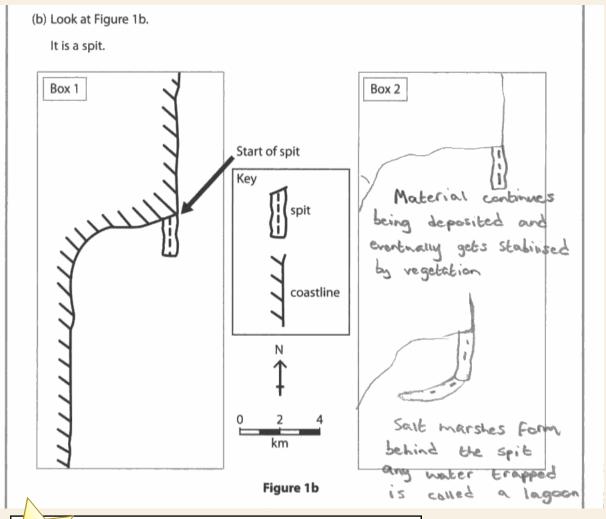
Here the candidate has a clear understanding of the process and can apply this to coastal recession therefore scoring full marks.



Ensure that you learn your processes as a series of terms so that you can apply them appropriately in the exam.

Question 1 (b) (iii)

This question brought variable response from the candidates. Some simply drew a diagram without labels and these responses were therefore self-limiting. Others were unsure of spit development and therefore confused the direction of longshore drift or spit orientation. Common correct answers included spit extension and curving. Some also showed the spit reducing in size. Candidates would benefit from further practice in drawing landform development.



Results lus Examiner Comments

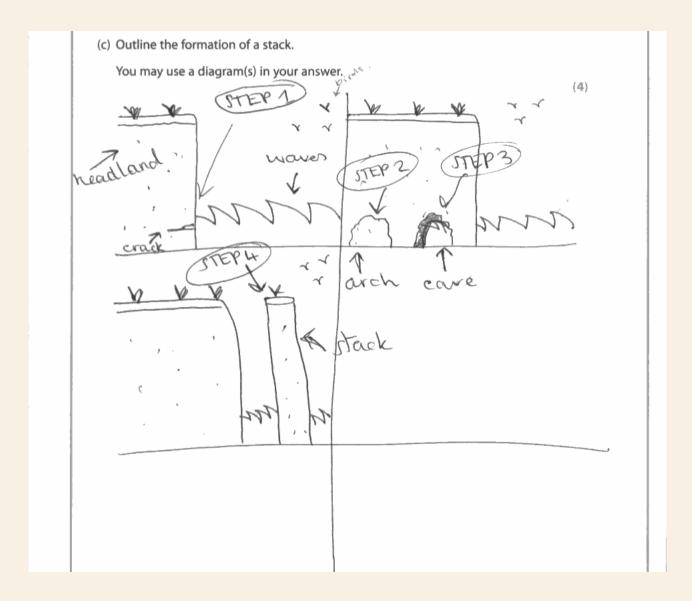
Here the candidate scores full marks for clearly following the instruction of using a labelled diagram. The candidate adapted the diagram to show the progression and both parts of the diagram are labelled. The candidate scores one mark for the extended spit, another for an appropriate curve and the third mark for the label.



Ensure you complete the exact demands of the question, and if asked to label ensure that you do so. It is also good practice to draw landforms so that you are familiar with them in all formats.

Question 1 (c)

The quality of responses was surprisingly varied, for such an iconic coastal feature. Many candidates had some idea of how stacks are formed but confused the order or mistook the process involved. Strong candidates used the diagrams in support (see example), however lower scoring candidates often failed to include a diagram. Use of diagrams to show a sequence was often helpful and therefore gave the students structure to their answer. I was pleased to see this recommendation from a previous series being put into practice. Candidates must, where possible, try to maximise the use of process in their answer and try to break down the formation into a series of stages - this may help to improve performance.



Stacks are for ned by a strong wave hithing a headland to cause hydraulic action (where air is pushed into crack;) This then forms a evack; then an arch is evaded then a cave evades, (where the three is a hole all the way I hrough Theodorp Above the arch cannot be supported then it



This candidate makes good use of the diagram showing sequential changes en route to stack formation. S/he gives a good descriptive account but shows outline through the development of hydraulic action as a process. This response showed a clear understanding by the candidate.



Try to include a sequence in the diagrams to show the examiner that you understand how the landform is formed. Equally where possible try to give some development of process e.g. corrosion/hydraulic action.

Question 1 (d)

Once again many students were able to score three marks, referring to a series of descriptive methods used at a particular location. However, answers were often generic and could relate to any location, therefore access to full marks was restricted. Some lower scoring candidates were also restricted by not outlining how the coast was managed, instead focusing on the reasons for management. The main area for improvement should be the use of specific locational data in the answer, as this was a requirement for full marks. Use of specific locational data can include dates, costing, numerical values (length of a defence), or even a named geology. The name of a place is often not enough. Neither is a specific piece of information which does not relate to the question, i.e. the cost of houses which may fall into the sea!

| (d) Choose an area of coastline you have studied. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Outline how this area of coastline is being managed. Holderness (4) Chosen area of coastline |
| Thes area of coastline has had anyner |
| filted. due to costing analysis some land has been Saved and every 3 |
| years do beach replenishment to stop the Clifts eroding away. Another way is they have been building sea walls along the coast to make sure it Stops it. |



This is a classic example of a candidate giving good descriptive information on the different types of management and how it stops coastal processes. However, like many answers, it failed to clearly address the specific location and was therefore held at 3.



Use of specific information is a necessity on case study questions to achieve full marks. Students should also learn the difference between outline and describe - an outline requires some development or a brief explanation.

Question 2 (a) (i)

Many candidates were able to recognise the two correct answers relating to the distribution of flooding. However, many thought that the sea near Karachi was a severely flooded area.

Question 2 (a) (ii) 1

Many recognised the correct answer as 200mm of rainfall.

Question 2 (a) (ii) 2

The majority of students recognised July as the correct answer.

Question 2 (a) (ii) 3

The vast majority of students recognised 'less' as the correct answer.

Question 2 (a) (ii) 4

The vast majority of students recognised '1.8' as the correct response to the number of homes destroyed.

Question 2 (a) (ii) 5

Most candidates correctly read and interpreted Figure 2(a) and therefore understood the answer as 'farmers'.

Question 2 (a) (iii)

Many candidates clearly understood how flood warning systems reduced the impact of flooding. However they should avoid just stating 'they warn against floods so people know they are coming' as this is a repetition of the question. Common answers referred to increased preparation time, or organisation of evacuation.

Washlands were frequently not well understood. Most candidates were unfamiliar with the term and those that knew it often could not articulate how they reduced flooding, instead opting for a simple description of what they were.

| (iii) Suggest how the following soft engineering methods can reduce the effects of flooding. |
|----------------------------------------------------------------------------------------------|
| (4) |
| Flood warning systems |
| Electronic sirens go off when there may |
| be a food. Gives people time to |
| evacuate and take their possessions |
| so there will be use casulties and damage. |
| Washlands |
| Areas are allowed to food Areas with |
| nothing of value are anowed to food. It |
| holds the water and drains away |
| harmussiy. |
| |



This candidate scored full marks for two correct points per soft engineering method. Candidates were allowed to state what the washland achieved, as described in the first sentence. This was an uncommon response as many were unsure of the term.

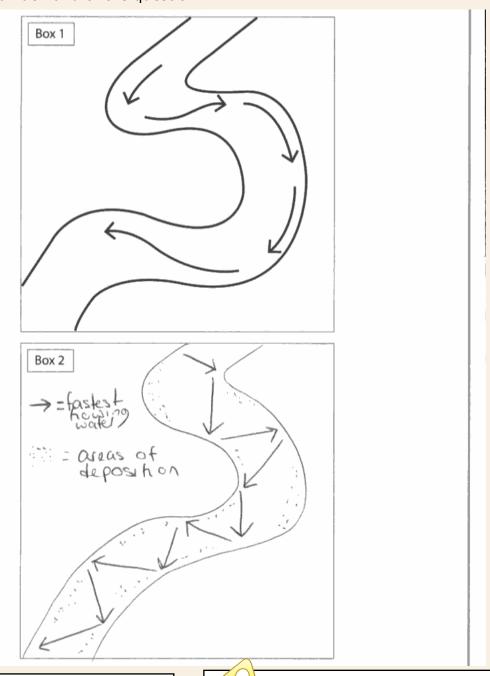


Ensure candidates are familiar with the different soft and hard engineering methods outlined in the specification. For each they should be able to outline what they are and how they reduce flooding.

Question 2 (b) (iv)

Candidates achieved variable success on this question, however the biggest issue was not including labels on the diagrams therefore limiting the possible score to 2 marks.

For those who chose to develop the meander into an oxbow lake, which was the majority, they often achieved full marks with a simple labelling of the word oxbow lake - detail was not required. However some lower scoring candidates were confused and took the meander to an earlier stage therefore scoring no credit. Some also drew a cross-section, which was not relevant in the overall demand of the question.





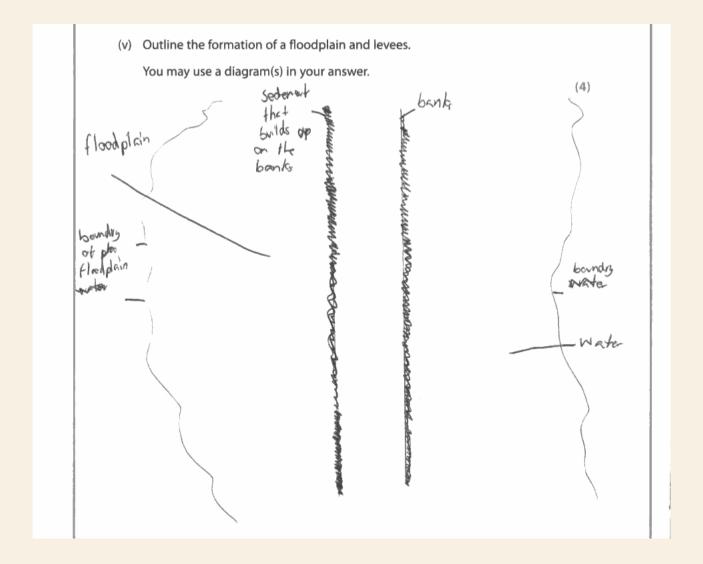
This was a good example of a candidate who scored 0 marks. They did not clearly develop the meander and they have confused the processes shown on the meander.



Practise drawing labelled diagrams of river landforms in addition to learning how they form. Ensure that you follow the demands of the question and if asked label it!

Question 2 (b) (v)

This question was poorly answered by many candidates. A common mistake by many candidates was to simply describe the location of both floodplains and levees, without any focus on the formation. Surprisingly few linked the formation with flooding, and only the higher scoring candidates made any link to sequential deposition. Of those higher scoring candidates many only reached 3, as they failed to tackle both floodplains and levees, focusing mainly on levees. Use of diagrams was often simplistic, and use of a series of stages would help the candidate to develop the answer.



When the a river floods the area those of land that the water cover that isn't in the boards of the river is called the flood plain This D normally flat band. When a river floods the sedement is dropped near the banks of the river as the vater in the flood plain is a feb dellows so their is dropped near the banks of the river as the vater in the flood plain is a feb dellows so their is drops the lead so it drops the land so i



This is one of few examples that addressed both floodplains and levees. The diagram clearly shows an understanding of the difference in spatial distribution. This was a particularly good answer which would have performed well at Higher Tier as it incorporated a temporal aspect to the answer.



Ensure you set out diagrams in a series of stages to show the sequential nature in the formation of the landforms. If two landforms are requested in the question ensure that you address both.

Question 2 (c)

Many candidates were able to reach 2 or 3 marks for general descriptions of flood management methods. However, common mistakes included omission of specific data which made the answer relevant to the named example, or lack of an outline. It should be noted that specific data can include dates, cost, names of sites along the named river or any other numerical detail, e.g. measurements of management techniques. For an outline students must ensure that their answer has more detail than simple description, development of a process or simple explanation of how the technique reduces flooding are ways to achieve this. Many good answers focused on the River Nene case study.

| (c) Choose a river that you have studied. | |
|-------------------------------------------|------------|
| Outline how this river is being managed. | (4) |
| Chosen river Datwen River | (***) |
| This river has flood gates at the | ctost or |
| the river These act as a barti | code image |
| a flood does happen. These will s | |
| down and can over stop the give | r. The |
| banks of the fluer have also | been |
| highered so that there is no we | for coming |
| are the sless if the slow do | |
| this will minimise the effect of | flocolny. |



This is a typical example of an answer without specific place detail. There is however some outline, so if this candidate had included the costing of one of the methods they would have achieved full marks.



Ensure you give specific locational detail within your answer to achieve full marks.

Question 3 (a) (i)

Many candidates were able to use the resource, Figure 3(a), to determine the correct answer. Some candidates were, however, misled by the idea that a reason why Iceland is suitable for energy production is because it snows a lot.

Question 3 (a) (ii) 1

Many candidates were able to correctly identify 80% as the correct answer.

Question 3 (a) (ii) 2

The majority of candidates correctly identified that hydro-electric and geothermal are renewable energy types.

Question 3 (a) (ii) 3

Many candidates used the resource to work out that the answer was 'mountainous'.

Question 3 (a) (ii) 4

The majority of candidates used the resource to understand that Reykjavik was kept snow free.

Question 3 (a) (ii) 5

Many candidates recognised the correct answer as geothermal energy.

Question 3 (a) (iv)

Responses to this question were often disappointing as many candidates continued to refer to energy production even though the question asked for other uses of glaciated areas. Of those who did provide appropriate answers, many simply listed responses and failed to relate to examples. Students should refer to place examples and should learn different uses with reference to place.

(iv) Energy production is one way people use glaciated areas.

Describe other ways people use glaciated areas.

Use examples in your answer.

(4)

People of home will people of off
the glociated areas, Such as Lights and
Other energised aquipment



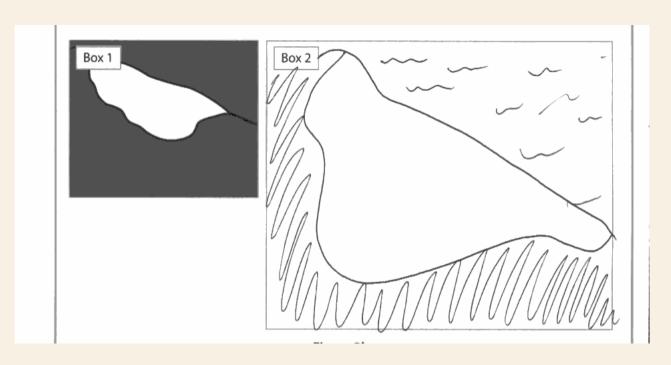
This was a typical response which instead of focusing on other uses, simply referred to energy production. Better candidates referred to skiing, hiking or tourism in glaciated areas and could name specific places.



When asked to give examples, refer to place examples. Where possible be as specific as you can, for example hiking up Mt. Snowdon, or skiing in the Canadian Rockies.

Question 3 (b) (iii)

Lack of labelling restricted many candidates to full marks. Many candidates, by default, scored at least 1 mark for their diagram as they increased the scale of the corrie, however, there were equally some who did not. Common developments of the corrie included melting of the ice, or increased steepness of the backwall. Surprisingly few labelled their responses which were therefore self-limiting.





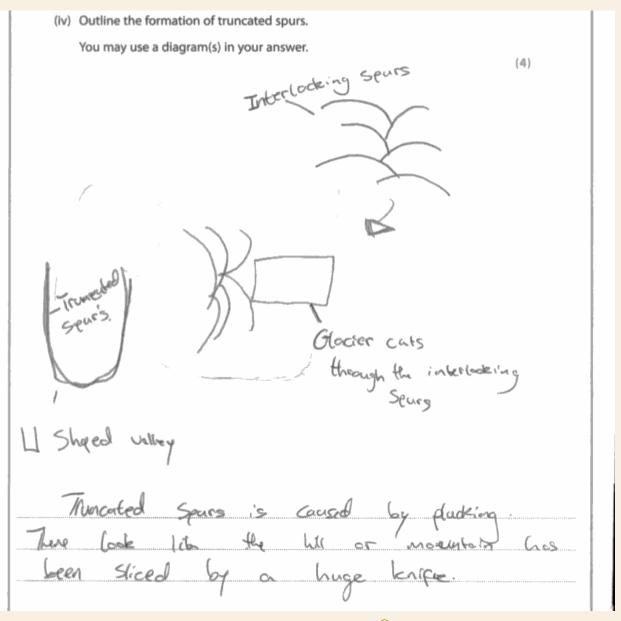
This was a typical response scoring 2 marks. The candidate increases the size of the corrie and draws a distinct steep back wall, but fails to add any labels.



Ensure you label your diagram if that is asked for in the question. Students should practise labelling different glacial landforms so that they can recognise features in the exam.

Question 3 (b) (iv)

Very few candidates had an understanding of what a truncated spur was, and for those that did, they struggled to develop their answer enough to outline how they were formed, instead giving a simple description. Higher scoring candidates often showed the V-shaped valley with interlocking spurs, the movement of ice through the valley and the subsequent U-shaped valley with truncated spurs. Even so, few developed their answer. Simple explanation of why the glacier moves, or development of one of the processes such as abrasion or plucking would have helped.





This candidate shows some understanding through the use of diagrams. However, the text at the bottom is only description, therefore the response is limited to 3 marks.



Candidates need to be made aware of all glacial landforms in the specification, even the lesser known ones such as truncated spurs. It appears, from the limited knowledge shown, that some landforms are less well known.

Question 3 (c)

This was a well answered question and many candidates scored at least 3 marks, with a large majority scoring 4. Students often referred to the Galtur example and could quote figures highlighting the effects. For answers scoring only 3 marks, an omission of facts was often the reason. Some candidates wasted space by giving a full account of the case study including the causes.

| (c) Choose an avalanche you have studied. |
|-------------------------------------------------------------|
| Outline the effects of this avalanche. |
| Chosen avalanche galhal. |
| the The avalante happed seconds at a stor 4000 km aren |
| wer the stolm consed lots of ma show and LIGH Speed |
| wind - castry show to build up on mountainside. Avalench |
| hoppeopl. 31 people died altogethe, people looked to search |
| for sulvivols soon after. Toads here ship have here |
| destroyed. 30,000 people accounted from the dea. |
| be partain valley lost ajobed &smillogn |
| a day scease the pay 1348 than stray al ahay tectos |
| offer of nove andarches |
| I |



This was a typical answer, that included both causes and effects - even though only effects were requested. The inclusion of a series of pieces of data, number of deaths, number of people evacuated and cost of damage, earned the full 4 marks.



Ensure that you support your answer with specific locational detail which is relevant to the demands of the question.

Question 4 (a) (i)

Although many candidates were able to access the correct answers, those that did not often misinterpreted the question by opting for the *effects* instead of the *causes* of the L'Aquilla earthquake.

Question 4 (a) (ii) 1

The majority of candidates used the resource correctly to show that over 70,000 people were made homeless by the earthquake.

Question 4 (a) (ii) 2

The majority of candidates understood that the cost of the earthquake was 4 billion Euros.

Question 4 (a) (ii) 3

The majority of candidates identified 'collapse' as the correct answer.

Question 4 (a) (ii) 4

The vast majority used Figure 4(a) to identify 'strict' as the correct answer.

Question 4 (a) (ii) 5

Most candidates identified 'dangerous' as the correct answer.

Question 4 (b)

This was a question for which candidates appeared well prepared, as examiners saw a wide range of answers relevant to volcanic regions. Such answers included the usual fertile soil, friends and family and inability to move, as well as the unusual spiritual reasons and belief in the predictive methods used by local authorities. Still many candidates only scored 3 out of 4 marks, as they did not include examples in their answer. In this question an example required more than just a country name, instead a volcanic region or cone would have sufficed. Candidates should aim to prepare for this type of question by looking at a range of examples of famous volcanic areas around the world in order to develop their geographical understanding.

(b) Give reasons why people continue to live in areas affected by volcanoes.

Use examples in your answer.

(4)

People Kantinues b Live in areas asserted by volcanoes
become either they sind it rensicial on they curt assort to

More among. Farmers use the sertile soid to grow bettee

and make money so of the tomists visiting the volcanoes.



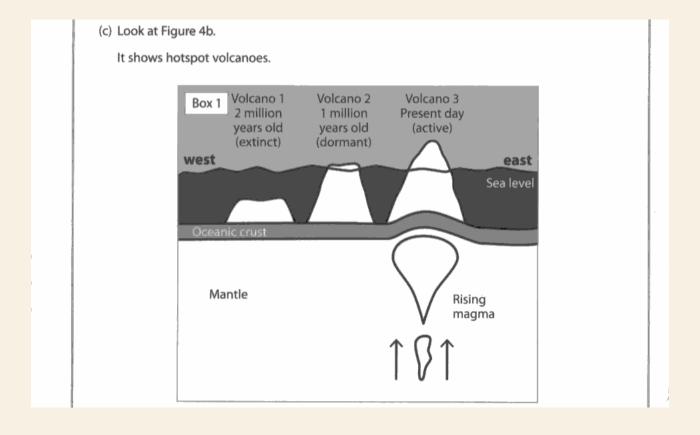
This was a typical response which gave a range of reasons but failed to use supporting examples. For this reason the response could only score 3 marks.

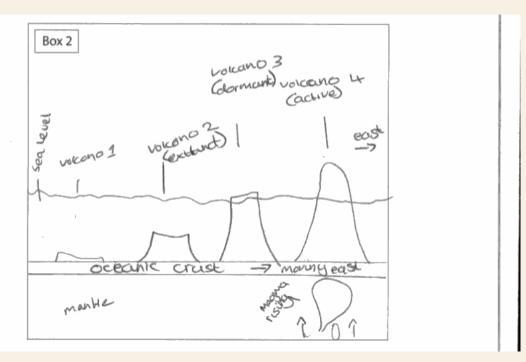


When learning examples, refer to named volcanic regions. Learning 2 or 3 famous volcanic regions will help with your answer and develop your understanding of tectonics around the world.

Question 4 (c) (iii)

Many candidates performed well on a potentially tricky question, however some responses were limited by the failure to use labels as directed in the question. Good responses showed the movement of the 3 volcanic cones to the west, with cones 1 and 2 eroded down or, alternatively, the formation of new cones, or the eruption of cone 3 were common answers. Those candidates that only used the labelling from box 1 did not gain credit for labelling as they had to label a *development*. Some candidates opted to present their answer in plan view, which was often self limiting as they could not obviously show the changes to the cones in box 1.







This is a good answer, as the candidate recognises the erosion of the intial 3 cones, the movement in a westerly direction and the formation of a new cone. Through the labelling they have recognised the change in the state of the volcanic activity.



Practise the formation and development of tectonic landforms through a series of labelled diagrams so that you are familiar with them for the exam. Ensure that you use labels when requested.

Question 4 (d)

Candidates have clearly been prepared on the formation of volcanoes at plate boundaries, but found the identification of characteristic features more of a challenge. Many candidates still followed the description of a volcanic eruption at a divergent plate boundary and this answer, although relevant, was self limiting as it did not pick up on other features, for example type of volcanic activity, seismic activity or associated landforms at this plate boundary. Equally, many struggled to offer any outline and often gave a descriptive list of features, focused around the diagram. Some candidates confused divergent plate boundaries with destructive and subsequently referred to convergent plate boundaries.

Question 4 (e)

This question proved a challenge for many candidates. The specification requires students to be able to understand how earthquake forecasting, building design, planning and education can reduce the effects of earthquakes. Although there are no known methods of successfully forecasting earthquakes, well noted by some candidates, the mark scheme allowed credit for pre-emptive signs that could potentially signal an imminent earthquake. Methods of planning for earthquakes such as practice drills or safety provisions were not acceptable answers as they are under the planning component of the specification. Acceptable answers included ancedotal evidence including earthquake clouds, animal behaviour, foreshocks or changes in gas emissions. A number of students struggled with this.

Many candidates reached 3 marks and gave good detail on building design, often being able to relate to known examples such as Tapei 101 or the San Francisco airport. However, an inability to relate to methods of forecasting or to identify that many earthquakes cannot be forecast held the responses at 3.

| (e) Outline how the effects of ea building design. | orthquakes can be reduced throug | h forecasting and |
|-------------------------------------------------------|----------------------------------|-------------------|
| Use examples in your answer | r. | (4) |
| Eurthquales (| carnot be prec | 1 - / |
| | will happen | - |
| | an earthque | |
| 1 1 | happen. It | |
| | 3 Seismometer | |
| the place | marement. Bu | uldings can |
| also be | designed bet | ter by |
| 1 | re-intercony to | 11.400 |
| in and | build at building | s out of |
| | material to | |
| P SUL a | metal an | u Use |
| Goode - balance | y or top | of the building |



This candidate scored full marks, as s/he gave a good account of building design with implicit detail on how design reduces effects. There was also reference to the use of seismometers to help 'predict'. Given that many candidates found the forecasting element challenging, this was accepted at Foundation Tier.



Ensure you have an understanding that earthquakes cannot be forecast, but that there are a variety of methods of short timescale notification (although some may not be covered in detail by the core texts.)

Question 5 (a) (i)

The vast majority of candidates were able to identify the two correct answers showing how recycling can help the environment.

Question 5 (a) (ii) 1

The vast majority of candidates recognised that recycling uses fewer natural resources.

Question 5 (a) (ii) 2

Many candidates successfully used the resource to identify that recycled paper can be used to make toilet paper. Some confused it with 'more' paper - which was almost correct but not in the resource, as directed by the question.

Question 5 (a) (ii) 3

The majority of candidates understood that recycled glass can be used for road building. Some lower scoring candidates thought it could be used for "edible buildings".

Question 5 (a) (ii) 4

Many candidates used the resource to identify that recycled glass can be made into sand which is used for golf bunkers.

Question 5 (a) (ii) 5

The majority of candidates identified 'plastic' as the correct answer.

Question 5 (a) (iii)

Candidates were well prepared for this answer and many could write in detail on the different recycling schemes. Some mistakenly referred to countrywide schemes, such as those in Germany, but the vast majority focused on schemes run by local authorities. Candidates' understanding of recycling is clearly twofold, either how you recycle at home, or what happens to material once collected from your home; both were acceptable. Many answers simply referred to coloured bins, and only the higher scoring candidates focused on what happened to items once they had been removed from the domestic environment. Good answers focused on the reprocessing of material which helped students achieve the relevant piece of 'local detail' to access full marks. Many were limited to 3 marks for generic references to recycling.

| | (iii) Choose an example of a local scale recycling scheme you have studied. |
|---------------|-----------------------------------------------------------------------------|
| | Describe how its waste material is recycled. |
| je jr | Chosen local recycling scheme Bracknell (4) |
| | Breackney termed up with working and other towns to |
| 7 | help recyle more. By using colour coded bins, recyclide waste |
| n P | is sent to plants/factories ou round the country lapor |
| | is sent to a recycling plant to be made into other |
| - - - | thing like toilet papar. Plastic curps and can be |
| | re made into more plastic items |



Although this candidate refers to place names, the link between two areas was enough for the local detail relevant to the scheme, therefore allowing this response to achieve full marks. Although the rest of the answer is generic it gives a clear account of the recycling process.



Ensure that your recycling scheme is on a local scale; best to stick with one operated by a local authoritity. Reference to the named centres where material is recycled is a good way to achieve the mark for 'local locational detail'.

Question 5 (b) (ii)

This question brought a range of answers, not always the correct ones. Many could identify that in option B Europe used more energy than South America, however few picked up that south of the equator Australasia used the greatest amount of energy. I would advise that, on multiple choice questions which relate to a resource, that candidates carefully check their answer.

On a purely administrative point, the energy unit was not included on the map, as we felt, in this case, it would detract from the candidate understanding, even though it is good geography to have a key.

Question 5 (c) (i)

The vast majority of candidates correctly identified a non renewable fuel, with coal, oil or natural gas the overwhelmingly popular responses.

Question 5 (c) (ii)

This was an answer that many candidates had clearly prepared for, yet it still brought at mixture of responses. Some candidates were confused by Q5(ci) and therefore referred to non-renewable energy types, highlighting the importance of reading the question very carefully. Other candidates gave generic responses which were self-limiting, especially when they wrote 'cheap' for an advantage and 'expensive' for a disadvantage; such examples were not credited. Better candidates either developed their answers, e.g. stating that one advantage could be that they release fewer greenhouse gases, which reduces global warming or they referred to specific types of renewable energy and constructed their answer around these, for example wind turbines can disrupt the migration of birds. Although candidates are not required to learn specific types of renewable energy it is advisable as it helps to develop the answer.

| | (ii) Describe the advantages and disadvantages of renewable energy. | |
|----|---------------------------------------------------------------------|------|
| | (4 | 4) |
| į. | Advantages | |
| | They at will never run out, so t | Les |
| | don't need to be replaced, they produce la | >ts |
| | et energy | |
| | Disadvantages | |
| | Wind power is noisy and thereport | to |
| | myrating birds Solar was power doe | so't |
| | with at night or when its cloudy or | |
| | places will not much Sun. | |



This candidate scores 3 for disadvantages and scores 1 for the advantages. Candidates could achieve full marks in this way or by identifying two relevant points on both advantages and disadvantages.



When learning about renewable energy try to learn specific points associated with different types.

Question 5 (d)

This question was one which candidates were well prepared for. Many were able to gain top Level 2 marks for appropriate descriptions, or Level 3 answers which included some explanation and/or a specific point - in this case a statistical supporting fact, such as the cost of different methods or savings gained by using a specific method. Variation included answers which referred to reducing waste instead of energy, or those who chose schemes which had no relation to the question, though these were in the minority. Candidates could improve their performance by referring to how the chosen methods reduce energy loss as opposed to stating points such as 'plugs needing to be switched off' Better answers came from references to loft insulation/cavity wall insulation, as candidates could refer to how these reduced heat loss and the subsequent impact.

| *(d) Explain how energy wastage in the home (domestic) can be reduced. (6) | |
|-----------------------------------------------------------------------------|------|
| Turn of all appliances by the wall | f |
| So den energy in wasted on stands | Ψ, |
| Durchase double grozing window, the | use |
| prevent heat being work through wind | OW |
| so you save money. Durchaste was | |
| lost unsulation, there prevent heat | |
| being close throughwalls/ros No | |
| you soure money and less whereigh | |
| us wasted. Tum your themostale | |
| down 1°C, you will barely notice | |
| a difference un the lamperature un pa | y. |
| home and a vort amount of will | DICK |
| will be vowed, and less money will | 1 |
| be used on heating tutobells. During | DOC |
| a varcher for your balling this hal | 00 |

unished your boler so less heat
us worked. Buy an up-to-thatte data
boiler, there are more snerry efficient
then old ones. It you're valor but a
younger on unstead of usung the Central
heating, a lucy (Total for Question 5 = 25 marks)
amount of energy will be should



This is an example of a top Level 3 answer which has a range of methods to reduce energy waste in the home, and is supported by numerical information: lowering the thermostat by 1 degree. The candidate clearly refers to how the methods help reduce energy wastage.



Try to learn numerical data to support your work, especially when referring to reducing energy waste in the home.

Question 6 (a) (i)

The vast majority of candidates could use the resource to identify the messages shown in the cartoon. Many scored full marks on this question.

Question 6 (a) (ii) 1

Many candidates recognised the answer as 'poor' water supply.

Question 6 (a) (ii) 2

Many candidates correctly identified the point that people may have to travel 'long' distances to get clean water.

Question 6 (a) (ii) 3

The vast majority recognised 'time' as the correct answer.

Question 6 (a) (ii) 4

The vast majority of candidates recognised 'school' as the correct answer.

Question 6 (a) (ii) 5

Most candidates recognised that supplying piped water to villages was 'expensive'.

Question 6 (a) (iii)

This question brought a variety of responses. The understanding of appropriate technology was much better in comparison to previous series. Many candidates could identify one or two different types of appropriate technology such as boreholes or hand dug wells, but few described really clearly how they improve water supply, instead focusing on describing the methods.

Question 6 (b) (ii)

A significant number of candidates found it difficult to interpret the map and to give both correct answers. Many could identify that the water surpluses were found in the north west, but fewer recognised that water deficits were mainly found in the east of Spain. Many, instead, opted for the south coast of Spain having water deficit, when in fact the south coast has both deficit and surplus. Candidates should check their answers to ensure that other answers are not more plausible.

Question 6 (c) (i)

Many candidates were able to access correct answers such as reservoirs and aquifers, however, clearly some were not familiar with the term "local scale water source" and were therefore limited.

Question 6 (c) (ii)

Many answers focused on either the UK or Spain as appropriate HICs which had water shortages. Only a few low scoring candidates referred to an LIC as an example. Most correct responses made references to the usage of luxury tourist facilities, such as swimming pools, water parks and golf courses; two marks were available for such responses and many candidates were stuck at 2. However some made reference to the impact upon local populations or the issue of seasonal imbalance which contributed to the shortages and enabled candidates to reach 3 or 4 marks.

(ii) Describe how the demands of the leisure and tourism industry can lead to water shortages in High Income Countries.

**Noncercs of Supply Spain has was tourist a year. Thuy Supply there tourists with pools and Jush green golf.

Coirses. Thuy do this with locals of water. Using all this water wears muy clon't have much for anything else. Thun when fundance supplying the tourists there isn't much water left for the people who live in spain for hune every day lives. So spain hun have a water shortage.



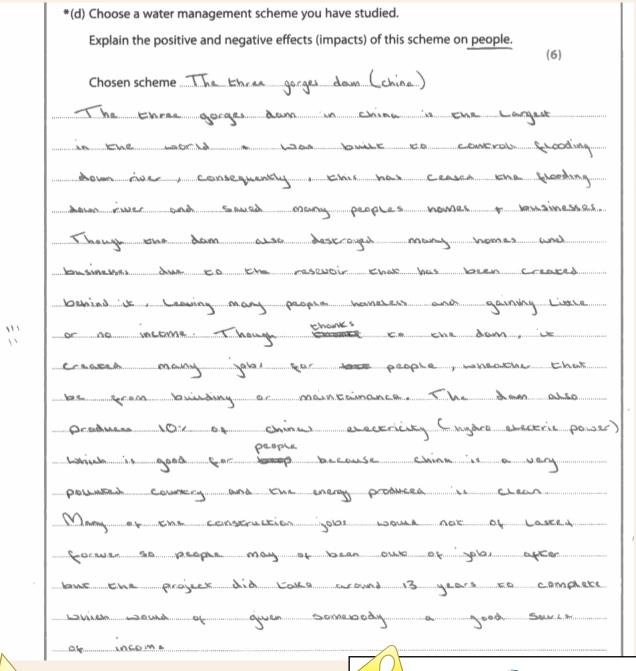
This candidate makes reference to the usage associated with tourist activity and the impact on the local people. Further detail about the impact or reference to seasonal imbalances in water supply would have improved the response which nevertheless scored 3 marks.



Ensure that you make reference to the correct setting, when asked for tourist led water shortages in HICs.

Question 6 (d)

The quality of answer here depended on the example chosen, with many references to the 3 Gorges Dam reaching Level 3 scores. Some candidates were limited by their inability to refer to the impacts on people. Equally, some examples, such as Sydney Olympic park or Walkers Crisps factory had more reference to the scheme and less reference to the impact on people. Top level 3 answers gave reference to both explanation and a specific point, on either the negative or positive impacts on people. Lower scoring responses simply described the schemes.





Here is a typical Level 3 response which referred to the 3 Gorges Dam. The candidate focuses on both the positive and negative impacts and includes clear development and statistics.



By learning only 2 or 3 statistics per case study, candidates give themselves a greater chance of gaining full marks; it is best not to strive to learn too many and thereby overstretch yourself.

Paper Summary

Candidate performance on this tier was roughly in line with previous series. There is encouraging evidence that centres are following advice given through reports such as these. The examiners were pleased with candidate performance and would like to congratulate all who took the paper.

Below are some general observations which could help improve overall candidate performance:

- i) Learn processes in the specification as definitions many candidates found this a challenge in Section A.
- ii) Practise drawing landforms, so that they are easily recognised in a skill based question.
- iii) On questions requiring use of examples, try to make reference to places, and where possible support your answer with some data.
- iv) On landform questions try to break the formation into a series of stages. Ensure you are able to explain or develop one part of the sequence.
- v) On case study questions ensure that you include place specific detail to access the higher marks.

A final note to candidates is to request that they answer all questions on the paper, as often candidates will leave spaces. It makes sense to attempt all multiple choice questions even if you are unsure of the correct answer.

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

Further copies of this publication are available from Edexcel Publications, Adamsway, Mansfield, Notts, NG18 4FN

Telephone 01623 467467 Fax 01623 450481

Email <u>publication.orders@edexcel.com</u>
Order Code UG032279 June 2012

For more information on Edexcel qualifications, please visit www.edexcel.com/quals

Pearson Education Limited. Registered company number 872828 with its registered office at Edinburgh Gate, Harlow, Essex CM20 2JE





