Pearson
Edexcel

Examiners' Report
June 2022

GCSE Geography A 1GA0 01

ResultsPlus

Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications come from Pearson, the UK's largest awarding body. 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.

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

ResultsPlus

Giving you insight to inform next steps

ResultsPlus is Pearson's free online service giving instant and detailed analysis of your students' exam results.

- See students' scores for every exam question.
- Understand how your students' performance compares with class and national averages.
- Identify potential topics, skills and types of question where students may need to develop their learning further.

For more information on ResultsPlus, or to log in, visit www.edexcel.com/resultsplus. Your exams officer will be able to set up your ResultsPlus account in minutes via Edexcel Online.

Pearson: helping people progress, everywhere

Pearson aspires to be the world’s leading learning company. 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.

June 2022

Publications Code 1GA0_01_2206_ER

Introduction

This was the fifth series for Pearson Edexcel GCSE (9-1) Geography although two of these involved very small numbers of candidates. This Examiner's report is intended to provide an insight into performance on Paper 1 – The Physical Environment component – in particular, analysing the majority of questions in terms of what went well and where common mistakes and under-performance were evident. Exemplar responses from 'real' scripts have been used to demonstrate good practice and highlight common pitfalls encountered by candidates.

The structure of the paper remains the same and is outlined below; please note that this (and future) question papers are based upon Issue 3 of the specificaition.

This paper consists of three 30-mark sections. Of the 94 marks, up to 4 marks are awarded for spelling, punctuation, grammar and use of specialist terminology. The exam includes multiple-choice questions, short open, open response, calculations and 8-mark extended writing questions. The exam command words which are used in this paper are defined on page 43 of the specification. Each of the questions is mapped to one or more of the Assessment Objectives (AOs).

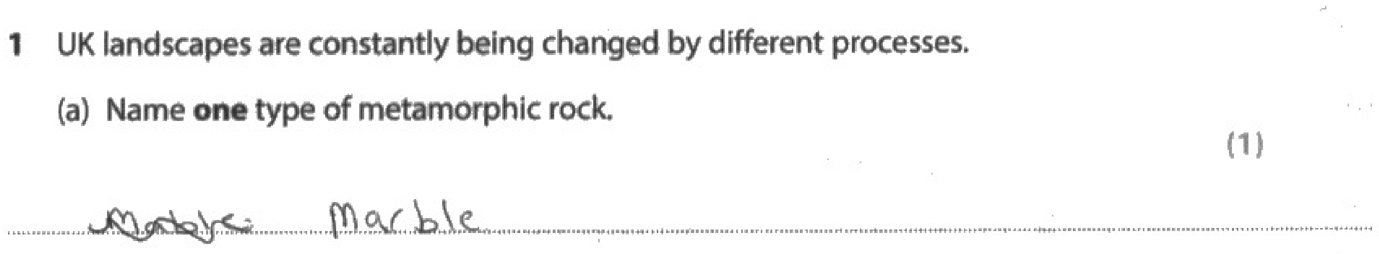
In Section A (the changing landscapes of the UK), candidates are required to answer all the items in Question 1. They are also required to have studied two optional sub-topics from a choice of coastal landscapes and processes, river landscapes and processes and glacial upland landscapes and processes. In addition, candidates are required to answer two questions from Questions 2, 3 and 4. In Section B (weather hazards and climate change), candidates are required to answer all the questions. Section C (ecosystems, biodiversity and management), has a mark tariff of 34, including 4 marks for spelling, punctuation, grammar and use of specialist terminology. In this section, candidates are required to answer all the questions.

In general, the assessment of application and interpretation (AO3) and the addressing of the command words 'assess' and 'evaluate' once again appear to have proven challenging for a significant proportion of candidates.

I hope that you find reading this document useful and that it helps you to improve the performance of your candidates in future examination series.

Question 1 (a)

Most candidates were able to name an example of a metamorphic rock. However, some candidates gave examples of igneous rocks (eg granite) or sedimentary rocks (eg chalk).



1 UK landscapes are constantly being changed by different processes.

(a) Name **one** type of metamorphic rock.

(1)

Marble

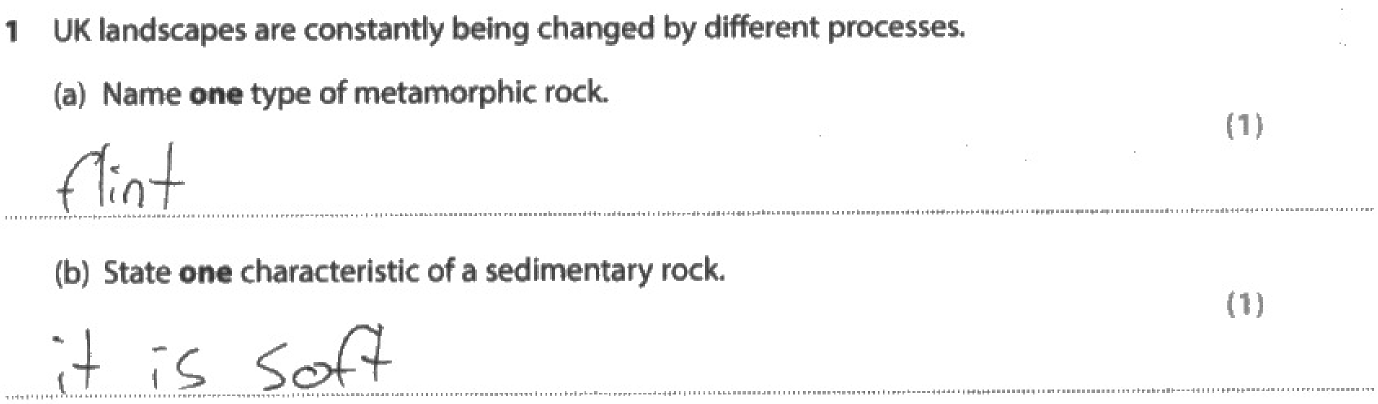
ResultsPlus
Examiner Comments

This response was awarded one mark.

The candidate has given an example of a metamorphic rock (1).

Question 1 (b)

Most candidates were able to identify a characteristic of a sedimentary rock. However, some candidates stated characteristics of igneous rocks (eg formed by cooling) or metamorphic rocks (eg formed by pressure) and were not awarded a mark.



1 UK landscapes are constantly being changed by different processes.

(a) Name **one** type of metamorphic rock.

(1)

flint

(b) State **one** characteristic of a sedimentary rock.

(1)

it is soft

ResultsPlus
Examiner Comments

This response was awarded one mark.

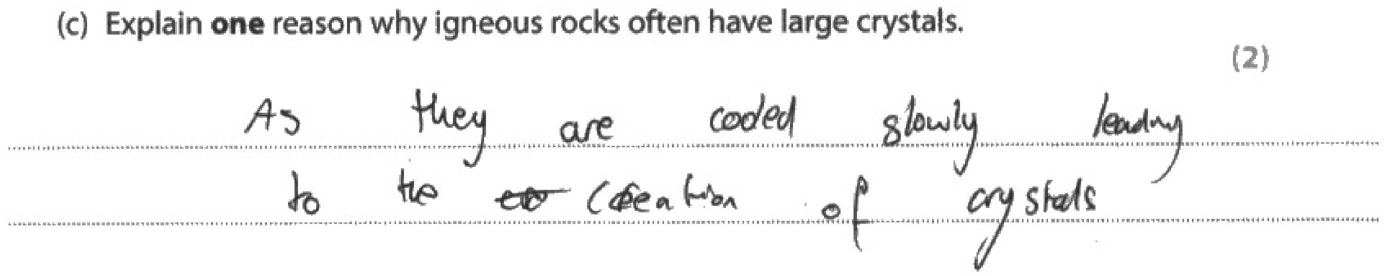
The candidate has given a characteristic which is true for some types of sedimentary rock (eg clay) (1).

ResultsPlus
Examiner Tip

The command word 'state' does not require a lengthy response. In the case of this question a single word answer was sufficient (eg 'soft').

Question 1 (c)

This question proved challenging for some candidates. While many were able to gain 1 mark by referring to crystals being formed by cooling, relatively few were able to gain the second mark by linking this to the location of the cooling (eg 'intrusive' or 'within the crust').



(c) Explain **one** reason why igneous rocks often have large crystals.

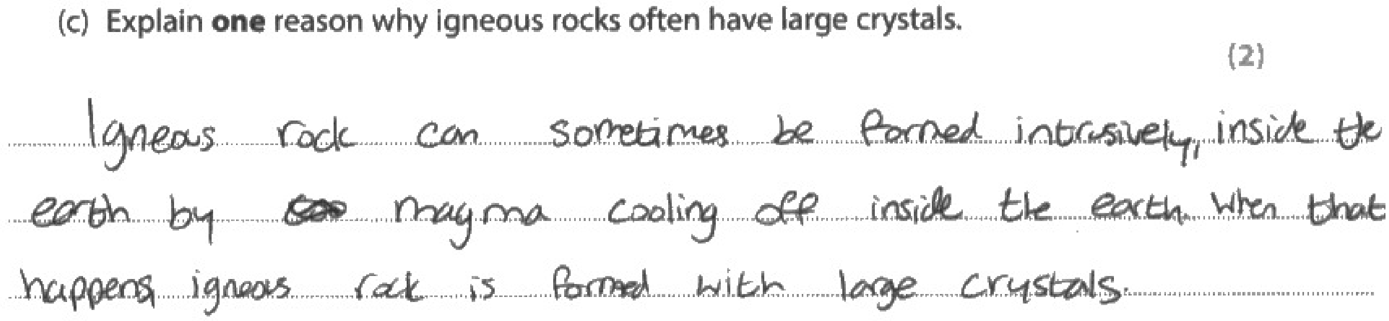
(2)

As they are cooled slowly leading to the ~~co~~ creation of crystals

ResultsPlus
Examiner Comments

This response was awarded one mark.

The candidate makes a basic point that crystals are formed by cooling (1) but there is no development of this idea (eg in terms of the location of the rocks as they cool).



(c) Explain **one** reason why igneous rocks often have large crystals.

(2)

Igneous rock can sometimes be formed intrusively, inside the earth by ~~co~~ magma cooling off inside the earth. When that happens igneous rock is formed with large crystals.

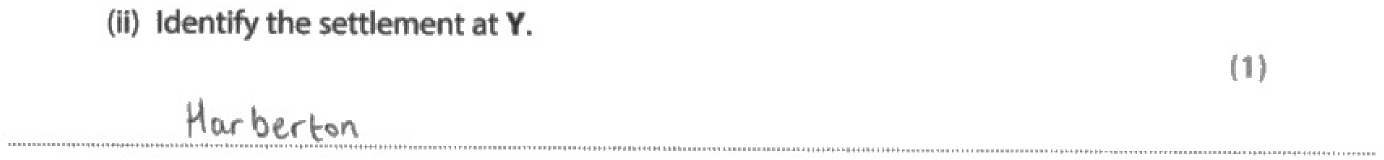
ResultsPlus
Examiner Comments

This response was awarded two marks.

The candidate makes the basic point that crystals in igneous rocks are formed by cooling (1). The second mark was then awarded for the reference to the location of the cooling ('intrusively') (1).

Question 1 (d)(ii)

Many candidates struggled with this question despite the interpretation of cross sections and transects being one of the cartographic skills listed on p.33 of the specification (Issue 3). It is important that candidates are given the opportunity to learn and practise all the skills listed in the specification.



(ii) Identify the settlement at **Y**.

(1)

Harberton

ResultsPlus
Examiner Comments

This response was awarded one mark.

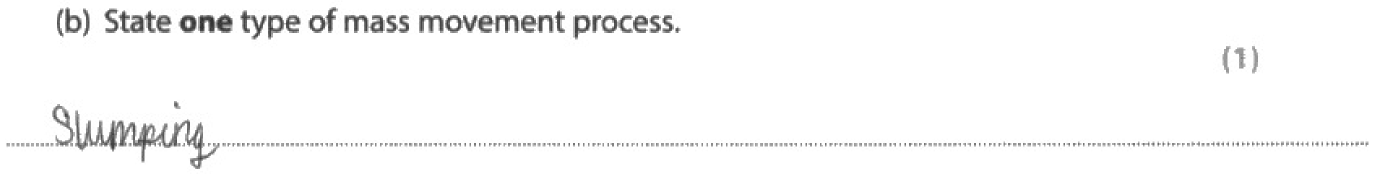
The correct answer was given (1).

ResultsPlus
Examiner Tip

Candidates should be provided with the opportunity to practise all the geographical and mathematical skills listed on p.32-3 of the specification (Issue 3).

Question 2 (b)

This question was answered well by most candidates. A small minority of candidates stated an example of a process of erosion or transportation which was incorrect.



(b) State **one** type of mass movement process.

(1)

Slumping

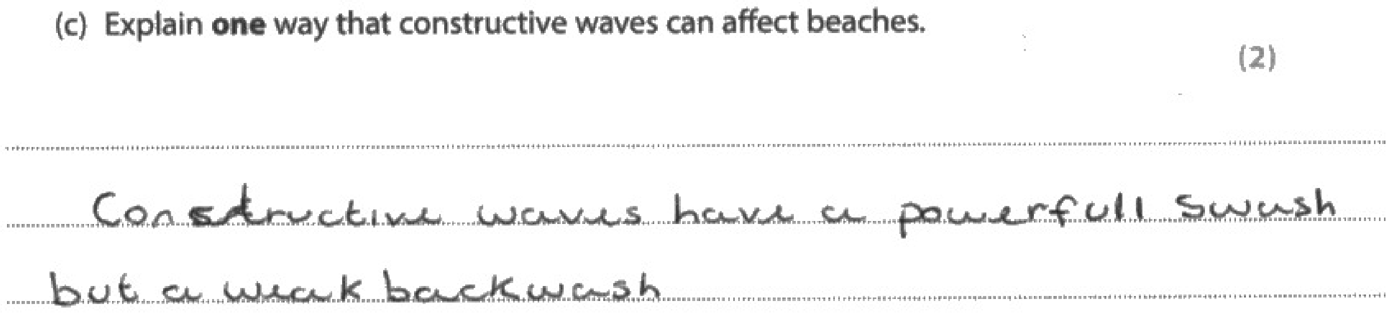
ResultsPlus
Examiner Comments

This response was awarded one mark.

An example of a mass movement process was given (1). It should be noted that while only a relatively small number of mass movement processes are listed in the specification, a mark would have been awarded for other processes not listed as long as they were correct.

Question 2 (c)

This 'explain' question had 2 marks available. Candidates were required to identify a characteristic of a constructive wave (eg strong swash or swash stronger than backwash) and then link this to the impact on the beach (eg pushes sediment onto the beach or builds the beach up). Candidates who identified two or more characteristics were only awarded 1 mark unless there was a linked development point.



(c) Explain **one** way that constructive waves can affect beaches.

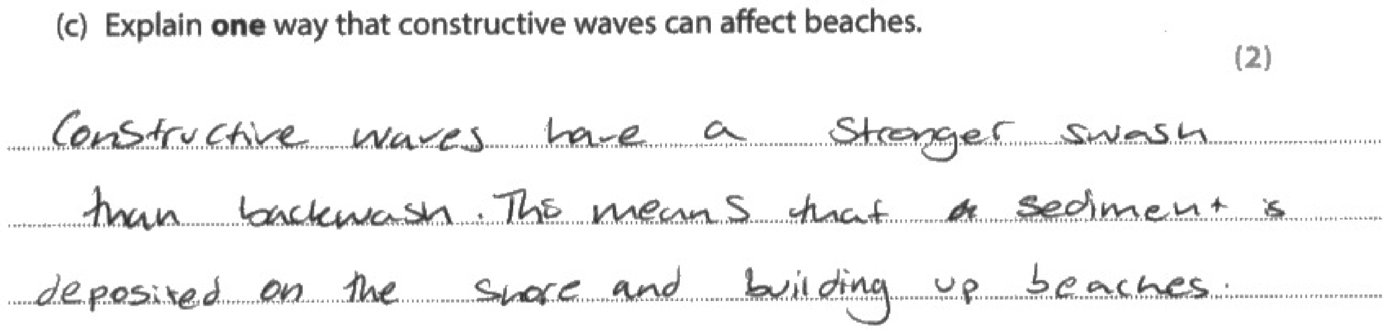
(2)

Constructive waves have a powerfull swash but a weak backwash

ResultsPlus
Examiner Comments

This response was awarded one mark.

The candidate has identified that constructive waves have a strong swash (1) but they have not identified the impact this has on beaches.



(c) Explain **one** way that constructive waves can affect beaches.

(2)

Constructive waves have a stronger swash than backwash. This means that ~~a~~ sediment is deposited on the shore and building up beaches.

ResultsPlus
Examiner Comments

This response was awarded two marks.

The candidate has identifed that constructive waves have a stronger swash than backwash (1) and has then developed this by explaining that this leads to beaches building up (1).

Question 2 (d)

The command word in this 8 mark question is 'examine' which requires candidates to break something down into individual components/processes, say how they individually contribute to the question's theme/topic and how the components and processes interrelate.

While the mark scheme identifies the indicative content for this question, this is not an exhaustive list and candidates were awarded marks for relevant understanding, interpretation and skills which were not listed. Ultimately, when deciding on the final mark, examiners use the level descriptors to allocate a 'best fit' level to the response and then decide where, within the level, the response falls. The level descriptors are the same for all ‘examine’ questions within this paper (Q02d, Q03d and Q04d), and also across all the papers in both GCSE Geography specifications. It is therefore important that centres and candidates become familiar with them and how they are applied. In the case of these questions, the assessment objectives (AOs) which are being examined are AO3 (4 marks) and AO4 (4 marks). To secure the AO4 marks, candidates are required to use geographical skills to extract information from the figures in the resource booklet which will help them answer the question.

In the case of this particular question, this could have included details regarding the rate of erosion along different parts of the coastline; named locations where sea defences were/ were not being used and making links to the rates of erosion in these locations; details of the direction of longshore drift and contrasts between areas with chalk and clay. It was pleasing to see many candidates making use of evidence from the map and graph but this is an area which still needs to be developed. Answers which discuss generally the impact of sea defences and/ or geology on rates of erosion and do not make reference to evidence from the figures will not be awarded any of the AO4 marks (and will be awarded a mxximum Level 1 – 2 marks). The key to securing the AO4 marks is therefore to make sure that evidence is included from the resources which are in front of the candidate. They need to write about what they can see and infer from the resource, rather than simply writing about what they have learnt in class.

In relation to the AO3 marks, the candidates were required to explain the reasons for the variations in the rates of erosion. This part was done well by most candidates with a good understanding shown of the role of sea defences in protecting areas of the coastline. Many candidates were also able to explain that areas with more resistant geology are less likely to be eroded than areas with less resistant rocks. However, as mentioned above the real challenge with these questions is to use the evidence from the figures to support this explanantion rather than to ignore it.

(d) Study Figure 2b in the Resource Booklet.

Examine how different physical processes and human activities may have affected the rates of erosion shown in Figure 2b.

(8)

Flamborough Head is made from chalk whereas the rest of the coastline is made from clay. Chalk is more resistant than clay so is eroding at a slower rate, creating a headland. The Holderness coastline ~~[illegible]~~ has destructive waves as the water has travelled over a large fetch (over the north sea). These erode the beaches at a high rate. Longshore drift occurs from north to south across the coastline, however groynes at Bridlington, Hornsea and Withernsea will limit the amount of longshore drift and limit erosion, which could cause more erosion further down the coastline, ~~but protects the bea~~ as its not protected by sand.

ResultsPlus
Examiner Comments

This response was awarded level 2 – 5 marks.

The candidate has included some information from the resource (eg different geology, direction of longshore drift, some details on the location of coastal defences). They have used this information well to provide an outline of differences in the rates of erosion along the coastline. The answer is weaker when it comes to explaining the variations with there not, for example, being any references to specific erosional processes (eg abrasion or hydraulic action).

(d) Study Figure 2b in the Resource Booklet.

Examine how different physical processes and human activities may have affected the rates of erosion shown in Figure 2b.

(8)

In figure 2b, Longshore drift is effecting the 60km long coastline from North to South. Longshore drift has created a spit at Spurn head which is roughly 5km long due to the deposition of sediment at the end of the river mouth.

The chalk in the North of the figure is eroded less easily than the clay so it forms a headland. This creates a wind shelter for the bay. The clay which stretches 60 km is more easily eroded so through the processes of ; Hydraulic action, attrition and abrasion causes a fast rate of erosion in the North as the coastline has retreated about 10km from the point of the head. At Aldbrough ~~it is about~~ it has retreated roughly 2.5km due to the erosional processes in the North.

The Human activities that have affected the rates of erosion on the coastline includes the implementation of Sea walls (which protect the coast from erosion) in Bridlington in the North and at Hornsea 15 km further south. This has reduced the ~~rente~~ rate of erosion from 5 metres per annum to 2 metres. Furthermore, the addition of groynes a hard engineering solution will reduce the rate of longshore drift as they lie across the beaches and trap sediment moving laterally. This has been implemented in bridlington, Hornsea, mappleton and withernsea. Also revetment in withernsea and mappleton have also slowed the rate of erosion.

ResultsPlus
Examiner Comments

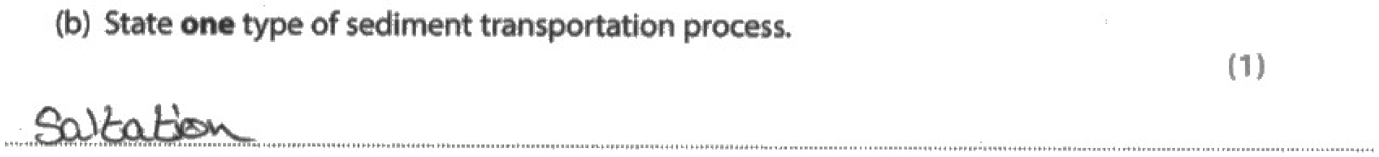
This response was awarded level 3 – 8 marks. The candidate has extracted a range of evidence from the resource (eg length of coastline, different types of geology, location of coastal defences linked to rates of erosion). They have also provided a clear explanation for the differences in rates of erosion which they have identified.

ResultsPlus
Examiner Tip

Make sure that you use a range of evidence from the figures in your answer on both the 8 mark examine questions which you answer.

Question 3 (b)

This question was answered well by most candidates. A small minority of candidates stated an example of a mass movement or erosional process which was incorrect.



(b) State **one** type of sediment transportation process.

(1)

Saltation

ResultsPlus
Examiner Comments

This response was awarded one mark.

An example of a transportation process was given (1).

Question 3 (c)

This 'explain' question had 2 marks available. Candidates were required to identify a reason why sediment size normally decreases with distance downstream (eg due to the process of abrasion) and a second development mark for linked explanation (eg 'which causes the sediment to be worn down'). Candidates who identified two or more reasons (eg abrasion and attrition) were only awarded 1 mark unless there was a linked development point for one of them.

(c) Explain **one** reason why sediment size usually decreases downstream.

(2)

Its been eroded away more by the time it reaches downstream

ResultsPlus
Examiner Comments

This response was awarded one mark.

The candidate has identified that sediment becomes smaller due to erosion (1). However, there is no further development in terms of how erosion actually works.

(c) Explain **one** reason why sediment size usually decreases downstream.

(2)

Attrition causes rocks to hit each other causing them to smooth and decrease in size. There is more energy downstream so more rocks are broken down

ResultsPlus
Examiner Comments

This response was awarded two marks.

The candidate has identified attrition (1) and has then further developed this by explaining that the rocks hit each other and are broken down (1).

Question 3 (d)

Question 3 (d) focuses on the role of erosion processes and geology on the formation of the waterfalls and gorge shown in the figures. The candidates who answered this question more effectively were able to obtain a range of evidence from the OS map and photograph and were able to use this to support their explanation. Most candidates were able to extract at least a limited amount of evidence although this sometimes simply referred to the different geology evident on the top and bottom of the waterfall shown in the photograph. In terms of further evidence which could have been included, candidates could have made reference to the number of waterfalls shown on the map; identified features of the waterfall and gorge shown in the photograph; used map skills to locate these waterfalls/ described the relief in the areas they are located; made reference to the direction of flow of the river and changes in its height above sea level.

The key discriminator between answers was the extent to which evidence was obtained from the resource and whether this was woven through the answer in a way that supported explanation. If this was done reasonably well (with 1-2 pieces of evidence) the answer was likely to reach level 2 and if it was done well (with 3-4 pieces of evidence) it was likely to reach level 3 on AO4.

In relation to the AO3 marks, the candidates were required to explain how both erosional processes and the geology could affect the formation of the waterfalls and gorge. Most candidates had some idea of the erosional proceses involved in waterfall formation and the process sequence was usually well ordered.

(d) Study Figures 3b and 3c in the Resource Booklet.

Examine the role of erosion processes and geology in the formation of the waterfalls and gorge shown in Figures 3b and 3c.

(8)

Waterfalls are formed when horizontal bands of soft rock are underneath bands of hard rock. The soft rock is eroded and the hard rock remains. In figure 3b, the sedimentary rock is soft so was eroded quicker than the hard rock at the top of the waterfall.
At the bottom of the waterfall, there is a plunge pool. Sediment sits in the bottom of this pool and is moved by the strong water falling from the waterfall the sediment then hits against the ~~overhanging~~ side of the waterfall causing abrasion and *eroding away this rock causing an overhang of ~~harder rock above~~ hard rock above. In figure 3b, the rock at the top is igneous which is harder than sedimentary rock ~~which explain~~ so eroded less quickly.

Because of the overhang, the hard igneous rock at the top of the waterfall is left unsupported and eventually collapses causing the river to retreat. This process repeats and the river retreats upstream leaving the steep gorge walls where the river once was. In figure 3c, there is a vertical face/cliff west of the waterfall showing that the river retreated and formed a gorge from 87[illegible]0282 to whene the waterfall is now.

* hydraulic action.

ResultsPlus
Examiner Comments

This response was awarded level 3 – 8 marks. The candidate has extracted a range of evidence from the resource (eg different rock types, description of the gorge from the photograph, location of the the gorge using a grid reference). They have also provided a clear explanation for the formation of the waterfalls and gorge with links to specific erosional processes.

ResultsPlus
Examiner Tip

Make sure that you use a range of evidence from the figures in your answer on both the 8 mark examine questions which you answer.

(d) Study Figures 3b and 3c in the Resource Booklet.

Examine the role of erosion processes and geology in the formation of the waterfalls and gorge shown in Figures 3b and 3c.

(8)

waterfalls are formed when there is a layer of soft rock under a layer of hard rock. Gradually the soft rock erodes creating a ~~an~~ cap of ~~teo~~ hard rock. This rock then falls away due to pressure. The process is repeated and gradually a waterfall forms. Large pieces of Sediment create a deeper plunge pool.

Gradually over time waterfalls form gorges through repeated erosion caused by abrasion and hydraulic action. In figure 3b we can see a large waterfall and gorge, the softer sedimentary rock is being eroded*, deepening the gorge meaning larger sediment is able to be carried through at higher water speeds, further eroding the gorge through abrasion.

* through hydraulic action.

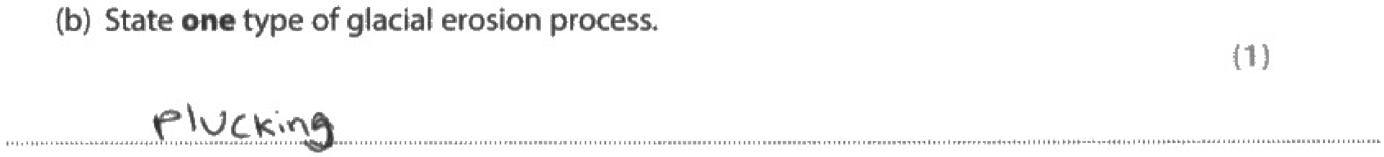
ResultsPlus
Examiner Comments

This response was awarded level 2 – 4 marks.

The candidate has made some reference to features from the map and photograph (eg different types of rock) but overall the A04 elements are quite weak. However, the response does better on the AO3 elements with clear references to specific erosional processes and a clear understanding of the sequence involved in the formation of the waterfall and gorge. In order to improve the overall mark, this candidate needed to select a wider range of evidence from the resources and to weave these through their answer.

Question 4 (b)

This question was answered well by most candidates. The accepted answers were either abrasion or plucking.



(b) State **one** type of glacial erosion process.

(1)

plucking

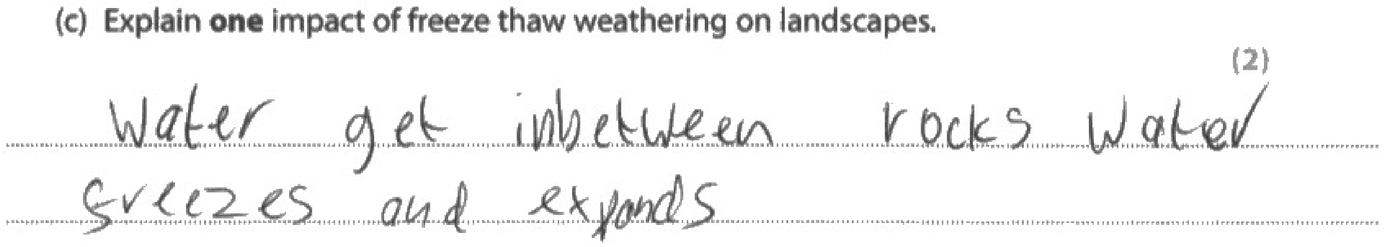
ResultsPlus
Examiner Comments

This response was awarded one mark.

An example of a glacial erosion process was given (1).

Question 4 (c)

This 'explain' question had 2 marks available. Candidates were required to identify an impact of freeze thaw on the landscape (eg breaks rocks apart) and a linked development mark relating to the processes involved (eg water in the rocks freezes and expands). Candidates who identified two or more impacts (eg breaks rocks apart and leads to the creation of scree slopes) were only awarded 1 mark unless there was a linked development point.



(c) Explain **one** impact of freeze thaw weathering on landscapes.

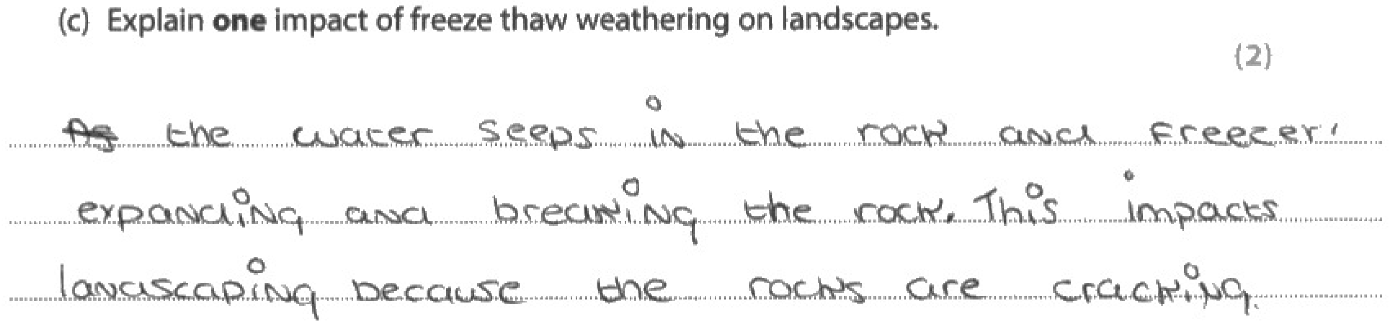
(2)

Water get inbetween rocks water freezes and expands

ResultsPlus
Examiner Comments

This response was awarded one mark.

The candidate has identified that water gets in the rocks, freezes and expands (1). However, they have not developed this point in terms of how this impacts the landscape and so a second mark was not awarded.



(c) Explain **one** impact of freeze thaw weathering on landscapes.

(2)

~~As~~ the water seeps in the rock and freezes, expanding and breaking the rock. This impacts landscaping because the rocks are cracking.

ResultsPlus
Examiner Comments

This response was awarded two marks.

The candidate has identified that water seeps into rocks, freezes and expands (1) and has then linked this to the cracking of rocks (1).

Question 4 (d)

In Q04 (d), candidates could have included details extracted from the map (eg the width of the valley and valley floor or the direction the valley is aligned) and from the photograph (eg the U shape of the valley or the large boulder in the foreground). However, many candidates failed to make mention of some or even any of the evidence from these resources and wrote a generic answer which could apply to any glacial valley. In cases where no evidence was given the response was limited to level 1 – 2 marks even if the explanation was very good. As with all the 8 mark examine questions, the key to securing the AO4 marks is to make sure that evidence is selected from the figures and that this evidence is used to support the explanation.

In relation to the AO3 marks, the candidates were required to explain how erosional processes have led to the formation of the glacial trough shown in the figures. While there were some very good answers which showed a clear understanding of the erosional processes involved and the sequence of formation this was not always the case.

In terms of the overall levels, a response which had little or no evidence from the figures and which was poorly explained was awarded level 1; a response with 2-3 pieces of map and/ or photo evidence with some explanantion was likely to be awarded level 2 and one with 3-4 pieces of evidence which was used effectlvely to support process explanation with some idea of sequence was likely to have been awarded level 3. As with the other 8 mark examine questions, an answer which did not include any evidence from the figures would have been awarded a maximum of level 1 – 2 marks irrrespective of how good the process explanation was.

(d) Study Figures 4b and 4c in the Resource Booklet.

Examine the role of erosional processes in the formation of the glacial trough shown in Figures 4b and 4c.

(8)

Bulldozing likely initially formed the glacial trough by removing any interlocking spurs that were present as well as any other obstacles to the glacier's path. The weight of the glacier then would have flattened the valley floor due to the pressure created onto the valley floor by the weight of the glacier. Abrasion also smoothed the valley floor and walls by ~~suspended sediment~~ the glacier acting as sandpaper to the valley. This likely caused the smooth U shape that the glacial trough now has. Plucking also likely deepened as well as widened the glacial trough due to the glacier removing further sediment from the valley by plucking it out.

ResultsPlus
Examiner Comments

This response was awarded level 2 – 5 marks.

The candidate has made very limited reference to features from the map and photograph (eg smooth U shaped glacial trough) and overall the A04 elements are weak. However, the response does better on the AO3 elements with clear references to specific erosional processes and a good understanding of the sequence involved in the formation of the glacial trough. In order to improve the overall mark, this candidate needed to select a wider range of evidence from the resources and to use this to support their answer (eg refer to the spacing of contour lines to show the relief, measure the width of the valley floor and glacial trough, refer to the large boulder in the foreground of the photograph).

(d) Study Figures 4b and 4c in the Resource Booklet.

Examine the role of erosional processes in the formation of the glacial trough shown in Figures 4b and 4c.

(8)

Before glaciation, the valley would have been much narrower and more V-shaped. However, as the glacier accumulated and ice compacted over many years, processes such as abrasion and plucking would have ~~b~~ begun to widen and deepen the valley.

Processes such as freeze-thaw weathering ~~and plucking would have~~ would have caused frost-shattered rocks to fall onto the glacier, potentially ~~sinking~~ sinking into the ice, and plucking would have taken material out from the valley sides and floor as ice froze around it. This loose material / glacial till was then scraped along the valley floor and sides, abrading it and widening and deepening the valley to become more U-shaped – in 4b, the flat valley floor ~~ca~~ can easily be seen, and in 4c, the lack of contour lines on the valley floor (e.g. 639625) contrasts with steep valley sides (e.g. 643625), indicating a U-shaped valley.

The truncated spur in figure 4b ~~and hanging valleys (e.g. 637628) were that line the edges~~ on the edge of the trough were formed as the ice, moving N.W., eroded away ~~the~~ what would have been a spur of land sticking out into the valley, leaving it truncated. The hanging valleys throughout the trough (e.g. 637628) were formed when tributary rivers (~~&~~ which subsequently formed tributary glaciers) joined the main Nant Ffrancon valley glacier; the rates of erosion on the smaller glaciers were significantly less than those of the main one. After the glaciers melted, the tributary glaciers were left significantly above the valley floor, as ~~the~~ it had been deepened much more by the main glacier.

Post-glaciation, processes like freeze-thaw weathering have led to frost-shattering and Scree slopes forming, as can be seen on the right in figure 4b.

ResultsPlus
Examiner Comments

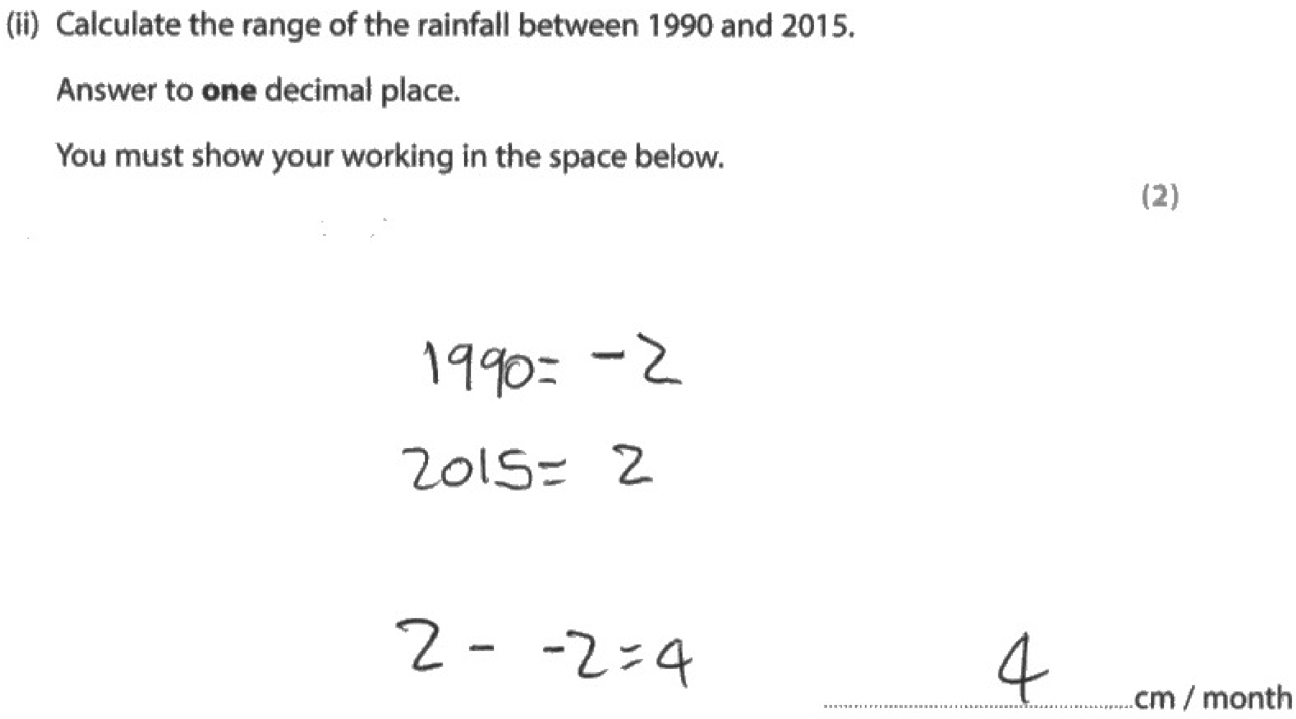
This response was awarded level 3 – 8 marks. The candidate has extracted a range of evidence from the resource (eg using contours to interpret the relief, using grid references to locate features, identifying the direction of travel of the glacier). They have also provided a clear explanation for the formation of the glacial trough including identifying specific erosional processes.

ResultsPlus
Examiner Tip

Make sure that you use a range of evidence from the figures in your answer on both the 8 mark examine questions which you answer.

Question 5 (a)(ii)

In this question, candidates were required to calculate the range of temperatures shown on a line graph. This question required mathematical workings to be shown for 1 mark and the other mark was given for the correct answer. In the case of candidates who used the correct method to calculate the range (highest figure – lowest figure) but had misread the graph, 1 mark was given for the correct workings but the second mark for the correct answer was not awarded.



(ii) Calculate the range of the rainfall between 1990 and 2015.

Answer to **one** decimal place.

You must show your working in the space below.

(2)

1990= -2

2015= 2

2 - -2=4

4 cm / month

ResultsPlus
Examiner Comments

This response was awarded one mark.

The candidate has used the correct method (higher number-lower number) (1) but they have not read the figures correctly from the graph so their final answer is incorrect.

(ii) Calculate the range of the rainfall between 1990 and 2015.

Answer to **one** decimal place.

You must show your working in the space below.

(2)

~~-2.2 [illegible] -2 = 4.2~~

2 − −2.2 = 4.2

4.2 cm / month

ResultsPlus
Examiner Comments

This response was awarded two marks.

The correct answer (1) and correct workings (1) have been shown.

ResultsPlus
Examiner Tip

It makes it much clearer if the final answer is written in the answer space provided (next to the units of measurement).

Question 5 (b)

Q05 (b) directed candidates to information contained with a resource. As this was a four mark question, there were two marks available for each developed impact, with one mark for identifying the impact using evidence from the resource (AO3) and a further mark for development through explanation of this impact (AO2). The impacts needed to be evident from the figure.

(b) Study Figure 5b in the Resource Booklet.

Explain **one** impact of drought on people and **one** impact on the environment in South east Australia.

You must use evidence from Figure 5b in your answer.

(4)

People

They're 'have been incomes of many farmers that have fell

Environment

Alot of trees have died

ResultsPlus
Examiner Comments

This response was awarded two marks.

The candidate has identified relevant impacts from the image and text boxes and has put these under the correct headings. They have therefore been awarded an AO3 mark for each element. However, neither of these points are developed.

(b) Study Figure 5b in the Resource Booklet.

Explain **one** impact of drought on people and **one** impact on the environment in South east Australia.

You must use evidence from Figure 5b in your answer.

(4)

People

One impact of drought on people in South east Australia is that income of many farmers fall. this is because many crops would die because there isn't Enough water for them. So farmers would be losing money.

Environment

Many animals would have died. I know this because there were 15 months of below mean rainfall. This means lots of animals won't have had water and there habitats would have dried up, so there wouldn't be a water source for them.

ResultsPlus
Examiner Comments

This response was awarded four marks.

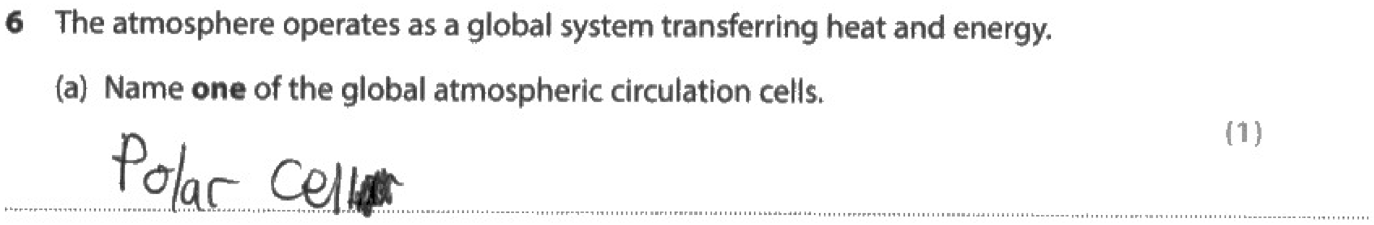
The candidate has identified impacts for both people and the environment which are derived from the resource. Both of these impacts have then been developed through explanation.

ResultsPlus
Examiner Tip

Work through all the papers (specimen and live) and identify the key vocabulary being used (eg words such as 'impact', 'cause', 'frequency' and distribution') .

Question 6 (a)

This question involved the candidates naming one of the global atmospheric circulation cells. This was answered correctly by most candidates.



6 The atmosphere operates as a global system transferring heat and energy.

(a) Name **one** of the global atmospheric circulation cells.

(1)

Polar Cell

ResultsPlus
Examiner Comments

This response was awarded one mark.

The candidate has named one of the three atmospheric circulation cells (1).

Question 6 (b)(ii)

This 3 mark 'explain' question required the candidates to identify one reason for the different amount of solar energy received in the two locations. As one of the marks awarded was an AO3 mark, there needed to be reference to evidence from the resource. This was normally either locational evidence (eg location Y is closer to the Equator) or differences in the amount of solar radiation received at the two locations (eg location Y receives more solar radiation). Candidates were then required to develop their answer to explain why the amount of solar radiation varied (eg linked to the curvature of the Earth and the concentration of incoming solar radiation). Some candidates referred to variations in the distance travelled by incoming solar radiation which is incorrect unless linked to the distance of atmosphere it passes through.

(ii) Explain **one** reason why location **X** receives a different amount of solar energy than location **Y**.

You must use evidence from Figure 6a in your answer.

(3)

Location X is further away from the eqautor than location y meaning that location y gets more direct sunlight as it is closer to the sun. and location y is further from the sun so receives less solar energy.

ResultsPlus
Examiner Comments

This response was awarded two marks.

The candidate has identified that location X is further away from the Equator than location Y (1) and has then developed this through the link to more direct sunlight being received at location Y (1). However, a second development point is not made as the reference to 'closer to the sun' is not creditworthy.

ResultsPlus
Examiner Tip

It is important to focus on both the command word and the number of marks available.

(ii) Explain **one** reason why location **X** receives a different amount of solar energy than location **Y**.

You must use evidence from Figure 6a in your answer.

(3)

location Y is closer to the equator than location X. At the equator the suns rays are the most concentrated as ~~that is where~~ the sun distributes the same volume of energy over a smaller area. This increases the solar energy at the equator increasing the amount of solar energy per day location Y has.

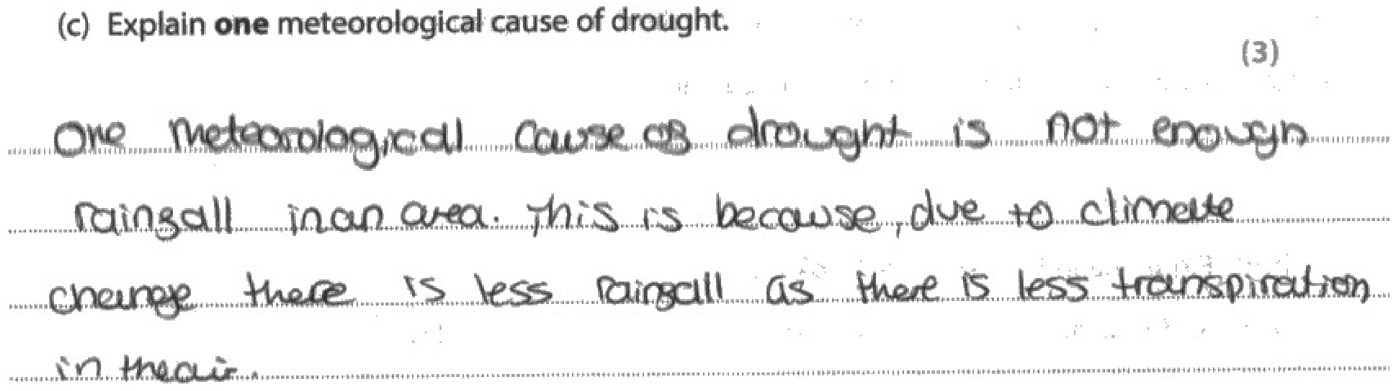
ResultsPlus
Examiner Comments

This response was awarded three marks.

The candidate has identified that location Y is closer to the Equator than location X (1). They have developed their answer through reference to the sun's rays being more concentrated at the Equator (1) and the same volume of energy being over a smaller area (1).

Question 6 (c)

This 3 mark 'explain' question required the candidates to explain one meteorolgical cause of drought. While most candidates showed that they understood what 'meteorological' means there were some who wrote about other causes of drought (eg overuse of water by agriculture). One mark was awarded for identifying an initial cause (eg low rainfall) and two further development marks were then available for linked explanation. There were some very good answers which showed a clear understanding of the causes of drought, linking to a range of causes including shifting jet streams and the impact of cilmate change.



(c) Explain **one** meteorological cause of drought.

(3)

One meteorological cause of drought is not enough rainfall in an area. this is because, due to climate change there is less rainfall as there is less transpiration in the air.

ResultsPlus
Examiner Comments

This response was awarded two marks.

The candidate has low rainfall as a cause (1) and has made one development point by linking this to climate change (1).

ResultsPlus
Examiner Tip

Do not repeat the question in your answer – it wastes time.

(c) Explain **one** meteorological cause of drought.

(3)

One meteorological cause of draught, is ~~the milankovitch cycle~~, solar variation, sunspots can be identified as dark cool patches on the sun, they change about every 11 years and increases the output of energy of the sun (more spots = more energy), on years where the sun has more sun spots, the earth gets hotter, leading to increased evaporation and thus drought.

ResultsPlus
Examiner Comments

This response was awarded three marks.

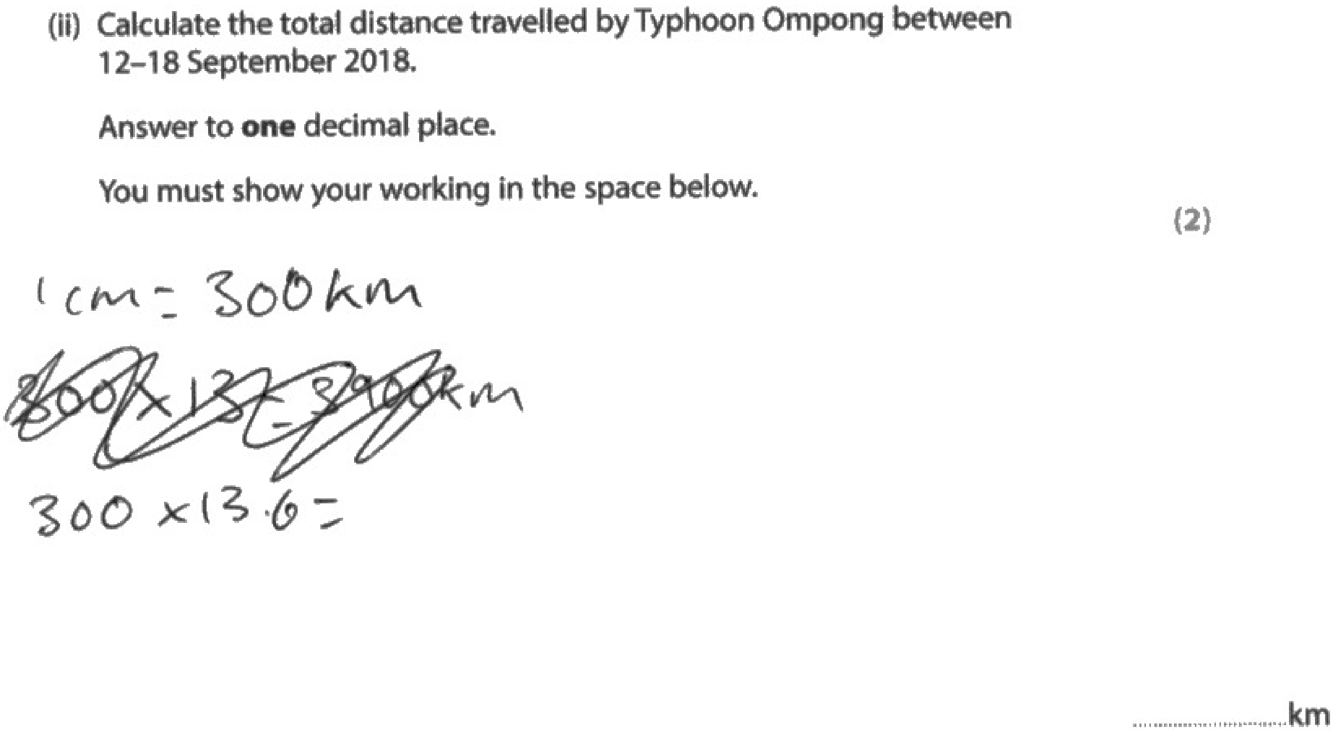
The candidate has identified increased temperatures leading to more evaporation as a cause (1) and has developed their answer through links to sun spots (1) and increased numbers of spots leading to more energy (1).

ResultsPlus
Examiner Tip

If the question asks you to explain 'one' cause it is important that you do not give a range of causes.

Question 6 (d)(ii)

Q06(d) (ii) required candidates to measure the distance travelled by a tropical cyclone over a number of days. They needed to measure the distance using their ruler and then use the scale (1cm = 300km) to calculate the total distance travelled. A range of acccepted distances was given in the mark scheme to allow for variations in the distance measured by candidates. A mark was reserved for the answer (within this range) with the second mark being awarded for the working. This required candidates to show that they had multiplied their measured distance by 300 (showing use of the scale). In the case of a distance which was outside the accepted range, candidates would still be awarded a 'working mark' if they had shown this calculation. There is a space in the answer booklet for the final answer and it is very helpful if the final answer could be written on the answer line. However, if it is not written in this space but it is clear that the correct answer has been given, this will be credited.



(ii) Calculate the total distance travelled by Typhoon Ompong between 12–18 September 2018.

Answer to **one** decimal place.

You must show your working in the space below.

(2)

1cm = 300km

~~300 x 13 = 3900km~~

300 x 13.6 =

....................km

ResultsPlus
Examiner Comments

This response was awarded one mark.

Although the candidate has not given a final answer, they have included the calculation showing a measured distance multiplied by 300 (1) and so have been awarded a mark for their workings.

(ii) Calculate the total distance travelled by Typhoon Ompong between 12–18 September 2018.

Answer to **one** decimal place.

You must show your working in the space below.

(2)

13 x 300 km = 3900

1=300

3900 km

ResultsPlus
Examiner Comments

This response was awarded two marks.

The candidate has given an answer within the accepted range (1) and has included workings showing the measured distance multiplied by 300 (1).

ResultsPlus
Examiner Tip

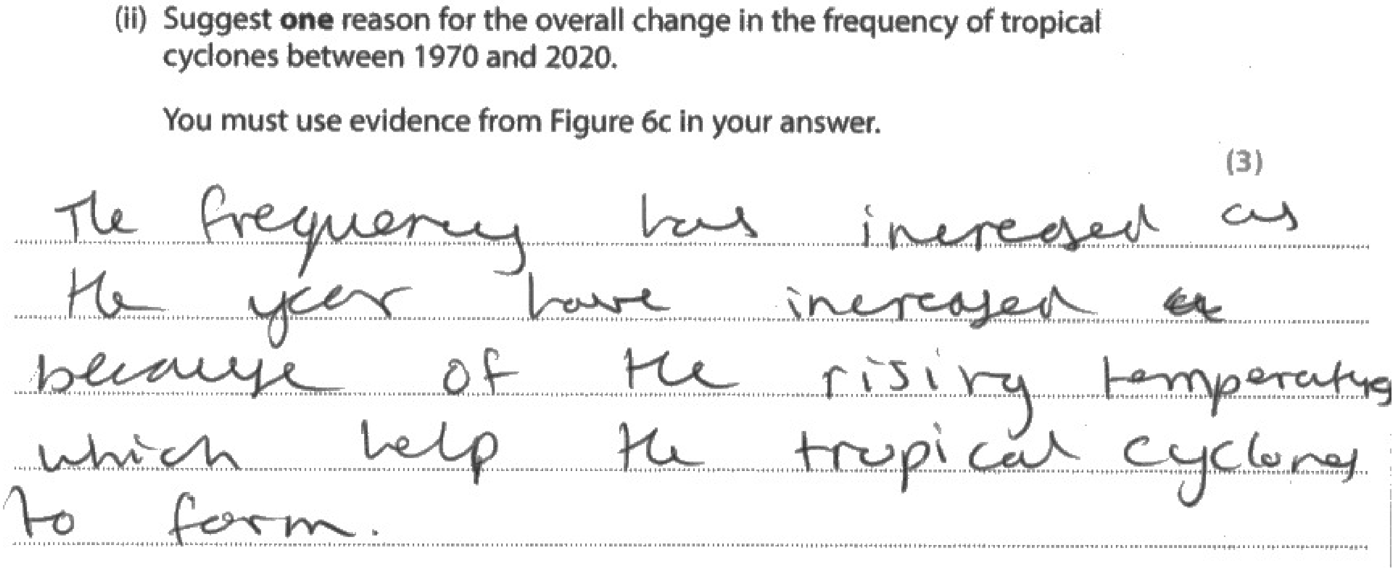
Remember to bring a pencil, rubber, ruler and calculator into the exam.

Question 6 (e)(i)

Q06 (e) (i) required the candidates to identify the year with the highest number of tropical cyclones from a line graph. Most candidates found this a straightforward question and were awarded 1 mark.

Question 6 (e)(ii)

As with Question 6 (b) (ii) this question required candidates to use a resource to help with their explanation. The AO3 mark was linked to candidates recognising from the graph that the number of tropical cyclones had increased over the period. The other two marks were then available for explanation of this increase. A range of possible development points could be made including links to climate change. This question was answered well by many candidates.



(ii) Suggest **one** reason for the overall change in the frequency of tropical cyclones between 1970 and 2020.

You must use evidence from Figure 6c in your answer.

(3)

The frequency has increased as the year have increased because of the rising temperatures which help the tropical cyclones to form.

ResultsPlus
Examiner Comments

This response was awarded two marks.

The candidate has identified that the frequency of tropical storms has increased (1) and has linked this to one development point relating to increasing temperatures (1).

(ii) Suggest **one** reason for the overall change in the frequency of tropical cyclones between 1970 and 2020.

You must use evidence from Figure 6c in your answer.

(3)

Because overall the earth as a whole is generally warmer than what it used to be due to more burning of fossil fuels but also oceanic circulation. the sea / ocean is generally warmer than what it used to be, roughly around 27° or above for a cyclone to start in the ocean. So if there is an increase in the number of tropical cyclones, the world has generally become a warmer and more suitable condition for tropical cyclones.

ResultsPlus
Examiner Comments

This response was awarded three marks.

The candidate has identified that the frequency of tropical storms has increased (1) and developed this by making links to ocean temperatures being warmer (1) which they then link to the burning of fossil fuels (1).

Question 6 (f)

The command word of this 8 mark question is 'evaluate'. This requires candidates to use evidence to determine the relative significance of something, giving consideration to all factors and identifying which are the most important. While the mark scheme identifies the indicative content, this is not an exhaustive list and candidates were awarded marks for relevant understanding and interpretation which were not listed. Ultimately, when deciding on the final mark, examiners use the level descriptors to allocate a 'best fit' to the response and then decide where the response falls within the level. The level descriptors are the same for all ‘evaluate’ questions within this paper and across all the papers in both GCSE Geography specifications.

In the case of 'evaluate' questions, the assessment objectives which are being examined are AO2 (4marks) and AO3 (4 marks). To secure the AO2 marks, in the context of this question, candidates were required to identify and explain the causes of climate change. While the question itself refers to human causes as the question is an 'evaluate' question, candidates could also include a consideration of physical causes in their answer. Most candidates were able to identify and explain some possible causes of climate change and there were many wide-ranging answers which included both human and physical causes.

In relation to the AO3 marks, the command word 'evaluate' required candidates to write a balanced argument which addressed the question. It also required candidates to write a logical answer where their argument makes sense and is supported by the evidence presented. Finally, the command word ‘evaluate’ does require candidates to come to a definitive conclusion. In the context of this question it could involve weighing up the relative importance of human and physical causes. Some candidates recognised that while over geological time physical causes are more important, over the past 100 years or so the evdience suggests that human causes are having a greater impact.

While there were examples of level 3 responses, many candidates got 'stuck' in level 2 because they did not make judgements, or they made judgements which were not supported by the evidence provided in their answer.

(f) Evaluate the following statement.

Human activity is the main cause of global climate change.

(8)

Human activities such as burning fossil fuels add to greenhouse gases. ~~By~~ Humans need energy as they can use it for ~~daily~~ improving their daily routine such as gaining electricity. Burning fossil fuels allow them to gain that energy. However, fossil fuels contain certain gases like CO_2 and methane and when burnt they release these gases into the atmosphere, this would then contribute to the greenhouse effect and increase global climate change. As the population increases these demands also increase. Lately humans have been trying to use more sustainable methods of creating energy sources yet the main use still remains the ones that damage the environment.

~~In addition, On the other hand, there a~~ Deforestation is another human activity, by cutting down trees it means less oxygen can be stored and gases are released, it is also mainly used for crops, extrapolation means dangerous chemicals can be released and irrigation also means a lot of water is used creating a potential period of drought. However drought can also be caused by natural factors such as hydrological and muteorological.

Human activities have increased the rate of climate change much more significantly than anything natural

ResultsPlus
Examiner Comments

This response was awarded level 2 – 5 marks.

The candidate has focused on human causes of climate change with a partial explanation of the role of the burning of fossil fuels and deforestation. Although there is an attempt to draw an overall conclusion at the end this is limited (there is no examination of physical causes in the answer) and there are very few judgements through the answer. This answer needs to improve the AO3 elements in order to move into the top level overall.

(f) Evaluate the following statement.

Human activity is the main cause of global climate change.

(8)

This statement may be incorrect as global climate has always been changing ~~within~~ as evident with ice ages, glacial and interglacial periods. This constant change in global temperature has constantly fluctuated and plummeted. The milankovitch cycle also supports this idea as the eccentricity, earth's axis and precession also has caused climate change. A rounder eccentricity would have caused an interglacial period and an oval eccentricity would've caused a glacial period. Other factor such as volcanoes and meteors affect climate change. Normally volcanic activity cause global temperature to rise however in 1815, the year without summer, the soot from the volcanoe caused the rays from the sun to reflect of causing the world's temperature to decrease.

This statement may be correct as human's exploitation of natural resources such as fossil feuls and deforestation has caused climate change. Deforestation causes less CO_2 to be absorbed, this excess CO_2 in the air causes the enhanced greenhouse effect where theses gases go up in the atmosphere and ~~block or reflect~~ trap the sun's rays causing global warming. Exploitation of fossil feuls cause combustion and production of CO_2 which causes global warming.

In my opinion, this statement is incorrect because climate change has always taken place however humans have just caused climate change to take place at a rapider ~~rater~~ rate.

ResultsPlus
Examiner Comments

This response was awarded level 3 – 8 marks.

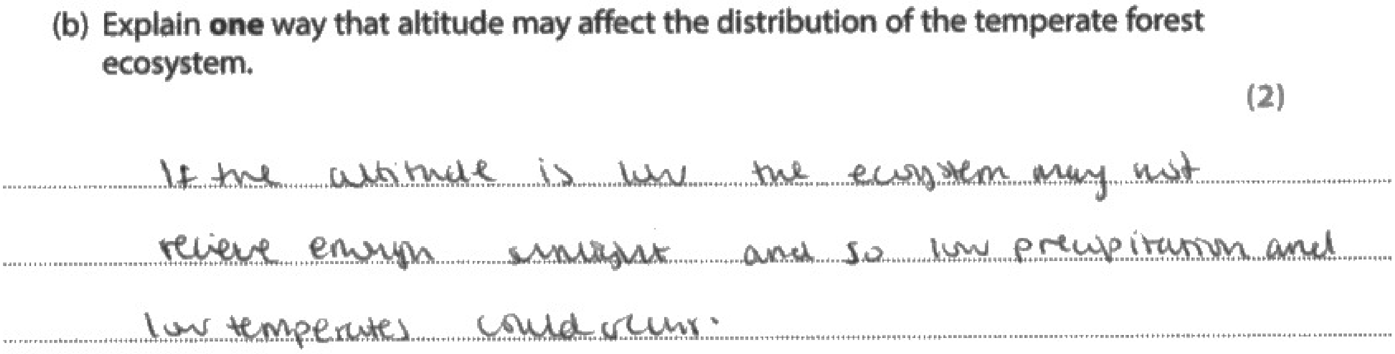
The candidate has provided a range of human and physical causes which are developed well. They have also made judgements through their answer and has an overall concluding paragraph at the end.

ResultsPlus
Examiner Tip

Make sure that you know what the differences are between the command words 'assess' and evaluate'.

Question 7 (b)

As a 2 mark explain question, Q07 (b) requried candidates to identify a way that altitude affects the distribution of temperate forests. One mark was awarded for the reason (eg too cold in higher altitudes) and the second mark was awarded for the affect on the distribution (eg less temperate forests in mountainous areas). While most candidates who were awarded two marks focused on the temperature, some did link it to the nature of soils in mountainous areas.



(b) Explain **one** way that altitude may affect the distribution of the temperate forest ecosystem.

(2)

If the altitude is low the ecosystem may not recieve enough sunlight and so low precipitation and low temperatures could occur.

ResultsPlus
Examiner Comments

This response was awarded one mark.

The candidate has identified that higher altitudes have lower temperatures (1) but has not made a link to the impact on the distribution of the temperate forest ecosystem.

(b) Explain **one** way that altitude may affect the distribution of the temperate forest ecosystem.

(2)

As the altitude increases, ~~precipitatio~~ temperature decreases and precipitation decreases, meaning less temperate forest ecosystems.

ResultsPlus
Examiner Comments

This response was awarded two marks.

It identifies lower temperatures as altitude increases (1) and makes a link to the distribution of temperate forests (1).

Question 7 (c)(i)

In this question, candidates were required to calaculate a percentage using the data provided. They were given the 'total catch' figure and so did not need to work this out. One mark was awarded for the correct answer and the second mark was awarded for appropriate workings. Some candidates did not give the answer to one decimal place and therefore did not gain the mark for the correct answer.

(c) Marine ecosystems in the UK are an important resource.

Study Figure 7b below.

Seven main fish species caught	Weight of fish caught (tonnes)
Mackerel	152 100
Herring	75 500
Blue whiting	60 800
Haddock	33 800
Cod	29 000
Monkfish	17 700
Saithe	15 300
Total catch	384 200

Figure 7b

Seven main fish species caught by UK vessels in 2019

(i) Calculate the weight of cod caught as a percentage of the total catch.

Answer to **one** decimal place.

You must show your working in the space below.

(2)

$$\left(\frac{\cancel{384,200}}{29,00}\right) \cancel{\times 100} =$$

$$\left(\frac{29,000}{384,200}\right) \times 100 = 7.548$$

$$= 7.6\ \%$$

7.6 %

ResultsPlus
Examiner Comments

This response was awarded one mark.

The candidate has shown the correct workings (1) but rounded their answer up instead of down so a mark is not awarded for the given answer which is incorrect.

(c) Marine ecosystems in the UK are an important resource.

Study Figure 7b below.

Seven main fish species caught	Weight of fish caught (tonnes)
Mackerel	152 100
Herring	75 500
Blue whiting	60 800
Haddock	33 800
Cod	29 000
Monkfish	17 700
Saithe	15 300
Total catch	384 200

Figure 7b

Seven main fish species caught by UK vessels in 2019

(i) Calculate the weight of cod caught as a percentage of the total catch.

Answer to **one** decimal place.

You must show your working in the space below.

(2)

384200 ÷ 100 = 3842

29000 ÷ 3842 = ~~7~~7·54

7·5 %

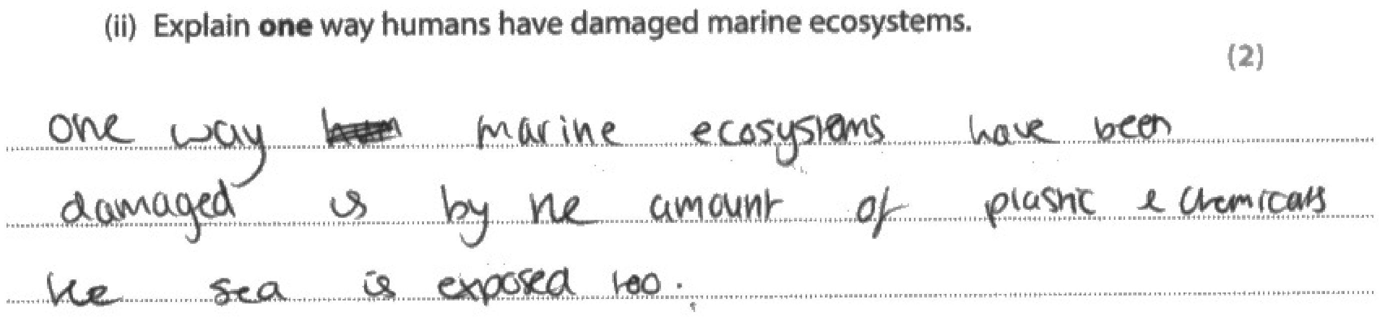
ResultsPlus
Examiner Comments

This response was awarded two marks.

The answer is correct (1) and accurate workings are shown (1).

Question 7 (c)(ii)

This question was answered well by most candidates. The first mark was awarded for the human activity and the second mark was awarded for a linked impact on marine ecosystems. A wide variety of answers was seen.



(ii) Explain **one** way humans have damaged marine ecosystems.

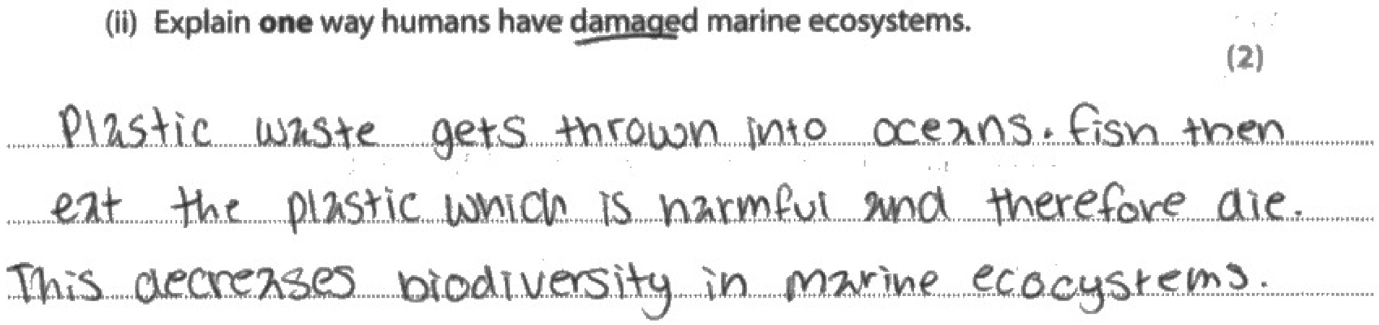
(2)

One way marine ecosystems have been damaged is by the amount of plastic & chemicals the sea is exposed too.

ResultsPlus
Examiner Comments

This response was awarded one mark.

The candidate has identified a way in which human activity damages marine ecosystems (1) but has not developed this through explanation.



(ii) Explain **one** way humans have damaged marine ecosystems.

(2)

Plastic waste gets thrown into oceans. Fish then eat the plastic which is harmful and therefore die. This decreases biodiversity in marine ecocystems.

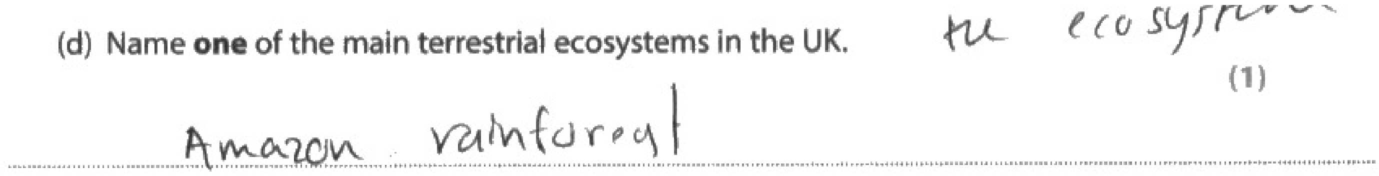
ResultsPlus
Examiner Comments

This response was awarded two marks.

The candidate has identified a way that human activity damages marine ecosystems ('plastic waste gets thrown into oceans') (1) and has developed this through explanation ('fish eat the plastic which is harmful') (1).

Question 7 (d)

Q07 (d) was answered well by most candidates. A small proportion of candidates referred to tropical rainforests or boreal forests. Although these have the word 'forest' within the answer, they are not appropriate answers for the UK.



the ecosystem

(d) Name **one** of the main terrestrial ecosystems in the UK.

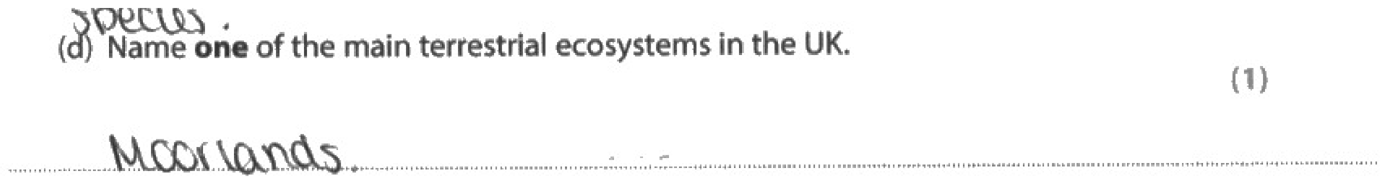
(1)

Amazon rainforest

ResultsPlus
Examiner Comments

This response was not awarded a mark.

Although the word 'forest' is included in the answer, the Amazon rainforest is not an ecosystem in the UK.



species.

(d) Name **one** of the main terrestrial ecosystems in the UK.

(1)

Moorlands.

ResultsPlus
Examiner Comments

This response was awarded one mark.

The example given is correct.

Question 7 (e)

Q07 (e) required candidates to interpret a photo resource. A mark (AO3) was reserved for evidence from the photo with the remaining 2 marks being awarded for development through explanation. Most candidates were able to suggest a relevent adaptation with many being able to make linked development points.

(e) Study Figure 7c in the Resource Booklet.

Suggest **one** way that the vegetation shown in Figure 7c has adapted to the tropical rainforest environment.

You must use evidence from Figure 7c in your answer.

(3)

As seen in figure 7c, the tree has buttress roots which is adapted to help support the tree in the soil and get the nutrients it needs.

ResultsPlus
Examiner Comments

This response was awarded two marks.

The candidate has identified buttress roots from the photograph (1) and has then developed this with one linked strand through the roots providing support to the tree (1).

(e) Study Figure 7c in the Resource Booklet.

Suggest **one** way that the vegetation shown in Figure 7c has adapted to the tropical rainforest environment.

You must use evidence from Figure 7c in your answer.

(3)

The vegetation has [illegible] adapted by growing larger leaves, as can be seen on the plants ~~&~~ at the bottom of figure ~~2~~ 7C. This allows them to catch more sunlight, and produce more energy, in order to grow faster.

ResultsPlus
Examiner Comments

This response was awarded three marks.

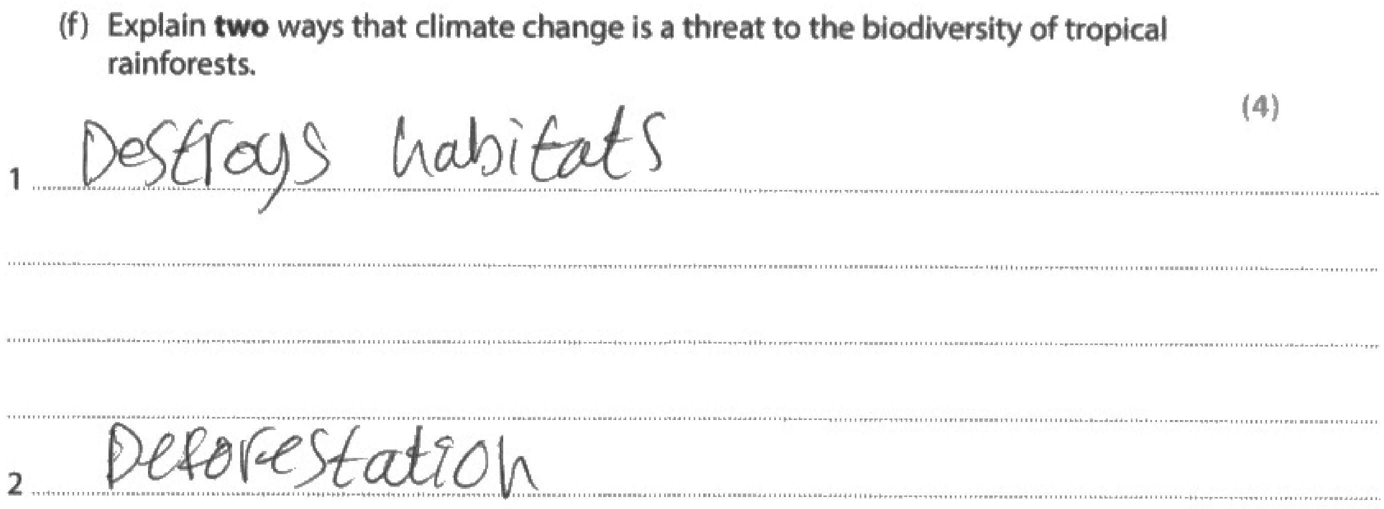
The candidate has identified that the plants have larger leaves from the photograph (1) and then has two strands of development – catching more sunlight (1) and producing more energy in order to grow faster (1).

ResultsPlus
Examiner Tip

Read the question carefully and try to leave time at the end of the examination to check your answers.

Question 7 (f)

Many candidates were able to gain at least two marks on this question. They were able to identify examples of threats to the biodiversity of tropical rainforests. However, there was a greater challenge in explaining how climate change was leading to these impacts. Simply stating that climate change was leading to 'increased temperature' or 'lower rainfalll' which then led to these impacts was insufficient for the remaining two marks. As shown in the mark scheme and the example answers, candidates needed to make links to changes such as 'greater droughts' or 'soils becoming drier'.



(f) Explain **two** ways that climate change is a threat to the biodiversity of tropical rainforests.

(4)

1 Destroys habitats

2 Deforestation

ResultsPlus
Examiner Comments

This response was awarded one mark.

A mark was awarded for the destruction of habitats which is an impact of climate change. A mark was not awarded for 'deforestation' as this is a cause rather than a consequence of climate change.

(f) Explain **two** ways that climate change is a threat to the biodiversity of tropical rainforests.

(4)

1 Increase ~~in~~ in temperatures can cause vegetation to ~~die~~ die ~~leading~~ ~~to~~ if they are unadapted to higher temperatures. This leads to a loss of habitats, which can ~~be~~ lead to an extinction of species.

2 Climate change can cause ~~a~~ drier (less humid) climate in the rainforest which can cause animals and trees not used to the change to die out disrupting ~~the~~ the food chain in the tropical rainforest.

ResultsPlus
Examiner Comments

This response was awarded four marks.

The candidate has identified two ways that climate change is a threat to biodiversity both with developed strands. The first point makes a link between the loss of habitats (1) and vegetation dying because it cannot adapt to the higher temperatures (1). The second point links the fact that plants and animals can not adapt to the changing temperatures (1) and that food chains are disrupted as a result (1).

Question 7 (g)(i)

Q07 (g) (i) required candidates to plot a bar chart accurately which most of them were able to do. They were not required to shade the bar in. Some candidates missed this question out completely and it is important that they read through every part of the paper.

(g) Deciduous woodlands show a range of distinguishing features.

Study Figures 7d and 7e below.

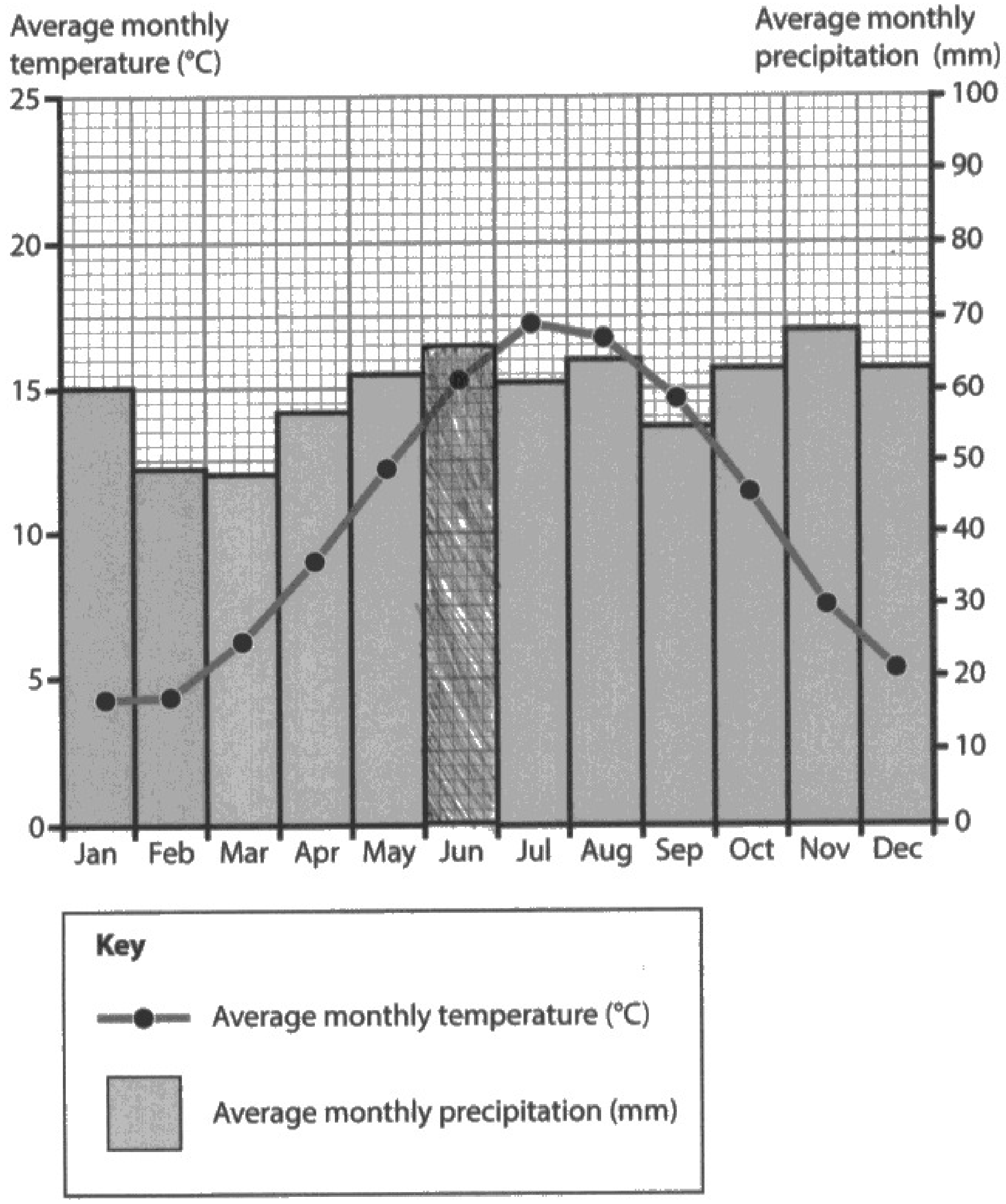


Figure 7d

Climate graph for an area of deciduous woodland in the UK

	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec
Average monthly temperature (°C)	4.6	4.7	6.4	9.0	12.3	15.3	17.3	16.8	14.6	11.4	7.5	5.3
Average monthly precipitation (mm)	60	49	48	57	62	60	61	64	55	63	68	63

Figure 7e

Data for the climate graph shown in Figure 7d

(i) Plot the June precipitation total on Figure 7d.

(1)

ResultsPlus
Examiner Comments

This response was not awarded a mark.

The bar has been plotted incorrectly (it is too high).

(g) Deciduous woodlands show a range of distinguishing features.

Study Figures 7d and 7e below.

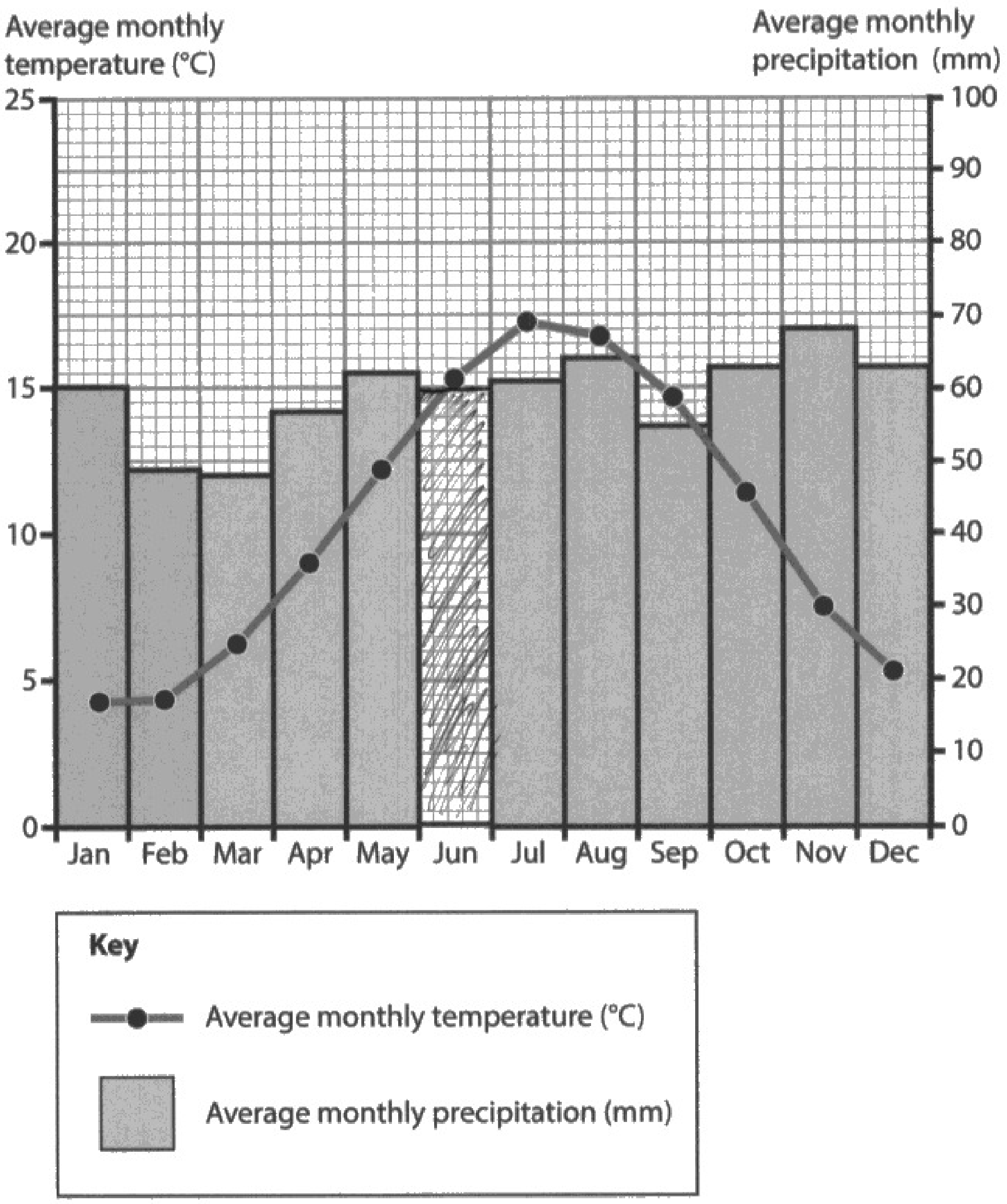


Figure 7d

Climate graph for an area of deciduous woodland in the UK

	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec
Average monthly temperature (°C)	4.6	4.7	6.4	9.0	12.3	15.3	17.3	16.8	14.6	11.4	7.5	5.3
Average monthly precipitation (mm)	60	49	48	57	62	60	61	64	55	63	68	63

Figure 7e

Data for the climate graph shown in Figure 7d

(i) Plot the June precipitation total on Figure 7d.

(1)

ResultsPlus
Examiner Comments

This response was awarded one mark.

The bar has been plotted correctly.

ResultsPlus
Examiner Tip

When plotting bar graphs make sure you use a ruler rather than drawing freehand.

Question 7 (g)(ii)

In this question, candidates were required to calculate the mean value of a set of monthly temperatures. This question required candidates to give the correct answer and to show their workings. If the candidate gave an incorrect answer but showed correct workings they were awarded 1 mark. This could include where they had added the monthly temperatures up incorrectly but had then shown that this calculated number had to be divided by 12. Some candidates lost a mark because they did not follow the instruction to give the answer to one decimal place, while others lost both marks as they calculated either the median or the mode.

(g) Deciduous woodlands show a range of distinguishing features.

Study Figures 7d and 7e below.

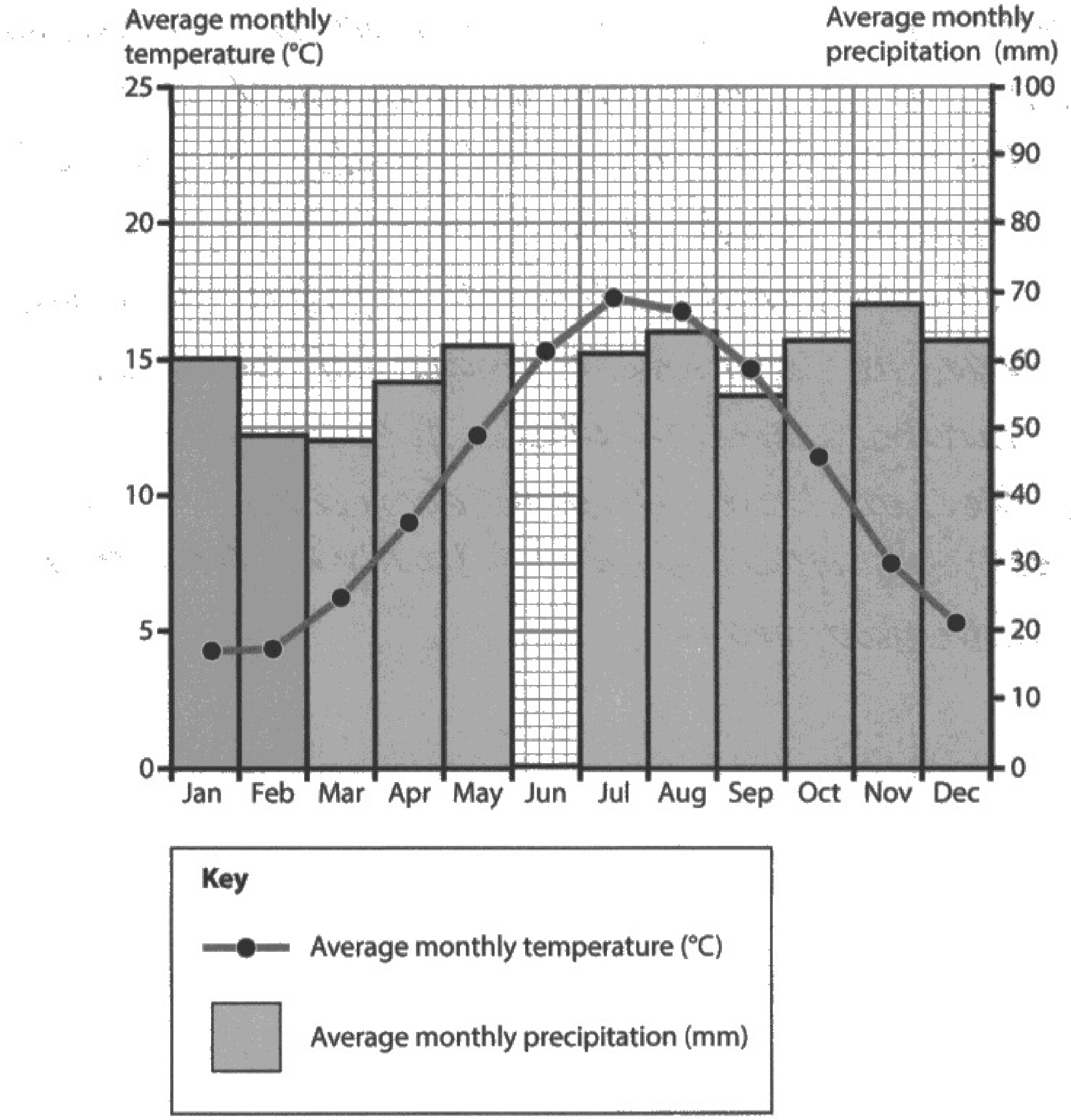


Figure 7d

Climate graph for an area of deciduous woodland in the UK

	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec
Average monthly temperature (°C)	4.6	4.7	6.4	9.0	12.3	15.3	17.3	16.8	14.6	11.4	7.5	5.3
Average monthly precipitation (mm)	60	49	48	57	62	60	61	64	55	63	68	63

Figure 7e

Data for the climate graph shown in Figure 7d

(ii) Calculate the mean of the average monthly temperatures shown in Figure 7e.

Answer to **one** decimal place.

You must show your working in the space below.

(2)

125·2 ÷ 12 = 10·43

10·4 °C

ResultsPlus
Examiner Comments

This response was awarded two marks.

The correct answer is given (1) and accurate workings shown (1).

(g) Deciduous woodlands show a range of distinguishing features.

Study Figures 7d and 7e below.

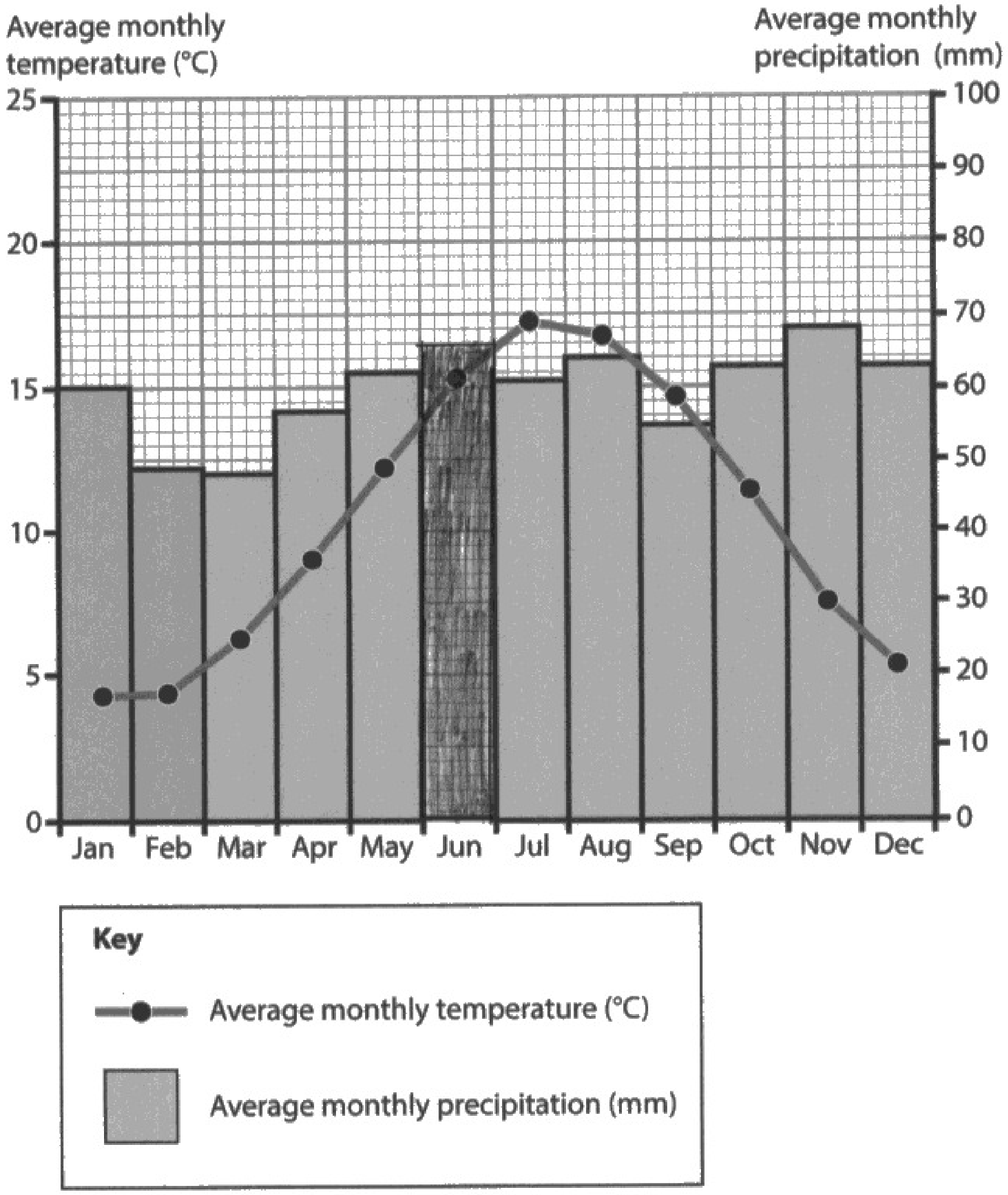


Figure 7d

Climate graph for an area of deciduous woodland in the UK

	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec
Average monthly temperature (°C)	4.6	4.7	6.4	9.0	12.3	15.3	17.3	16.8	14.6	11.4	7.5	5.3
Average monthly precipitation (mm)	60	49	48	57	62	60	61	64	55	63	68	63

Figure 7e

Data for the climate graph shown in Figure 7d

(ii) Calculate the mean of the average monthly temperatures shown in Figure 7e.

Answer to **one** decimal place.

You must show your working in the space below.

(2)

4.6 + 4.7 + 6.4 + 9.0 + 12.3 + 15.3 + 17.3 + 16.8 + 14.6 + 11.4 + 7.5 + 5.3

= 125.2

125.2 ÷ 12 = 10.43

10.43 °C

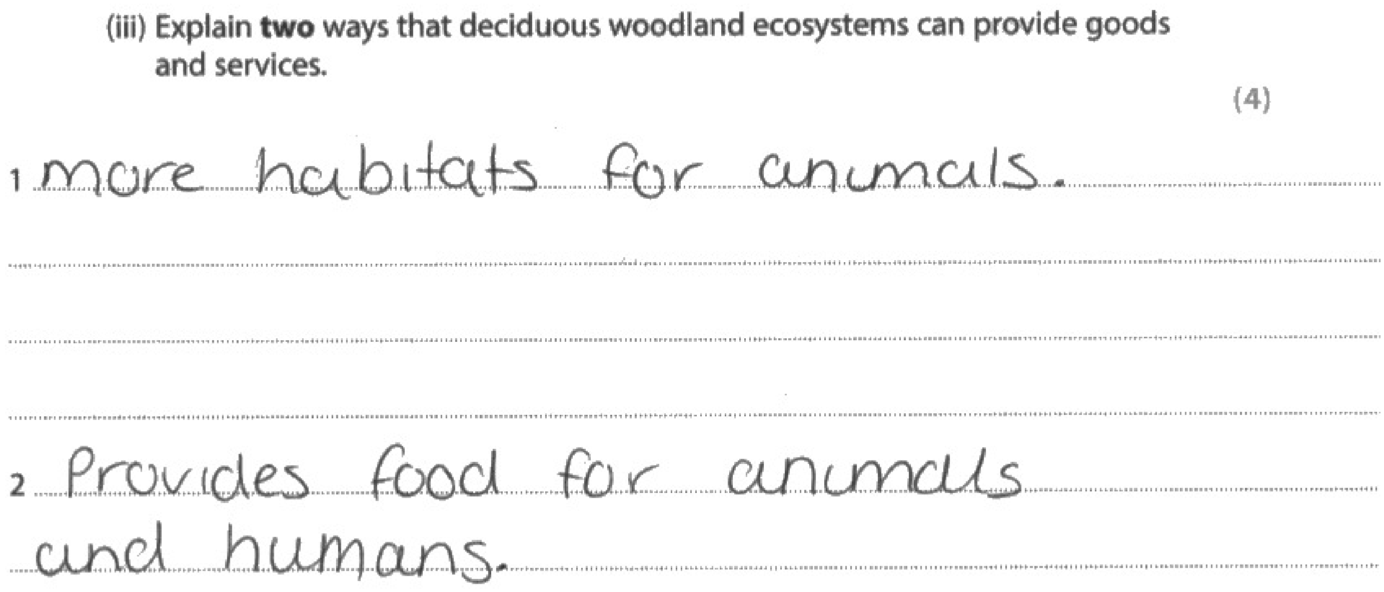
ResultsPlus
Examiner Comments

This response was awarded one mark.

Although correct workings have been shown (1) the answer is incorrect as it has been given to two decimal places rather than to one decimal place (as required by the question).

Question 7 (g)(iii)

Q07 (gi (iii) required candidates to identify two ways that deciduous woodlands can provide goods and services. They could have identified two different goods or two different services or a combination of the two for full marks. A wide range of examples was given ranging from timber for making furniture to the provision of a habitat for animals and plants to live in.



(iii) Explain **two** ways that deciduous woodland ecosystems can provide goods and services.

(4)

1 more habitats for animals.

2 Provides food for animals and humans.

ResultsPlus Examiner Comments

This response was awarded two marks.

The candidate has given two different examples of goods or services provided by deciduous woodlands but neither of them have been developed.

(iii) Explain **two** ways that deciduous woodland ecosystems can provide goods and services.

(4)

1 Wood ~~for furniture~~ is cut down and is used to make furniture.

2 Chestnuts are harvested which can be eaten.

ResultsPlus
Examiner Comments

This response was awarded four marks.

Two different examples of goods provided by deciduous woodlands have been given and both of them are developed. The first point identifies that wood is cut down (1) and develops this by stating that it is used to make furniture (1). The second point identifies that chestnuts are harvested (1) and that these can be eaten (1).

Question 7 (h)

The final question on the paper proved challenging for some candidates with a significant minority not even attempting to answer it. This means that not only did they miss out on the 8 marks but they also failed to achieve any of the 4 SPaG marks which are linked to this question. Even if the candidates had only score level 1 – 1 mark for the content they may still have gained some of the SPaG marks and should be encouraged to attempt it.

The final question on the paper will always link at least two parts of the Topic C content. In this case it linked 3.6b and 3.7c.

For the AO2 marks, candidates were expected to recognise that there is a range of ways in which human activity is impacting on deciduous woodlands ecoystems. While most of these are having a negative impact there are some examples of ways in which human activity can protect these areas. Locational knowledge could be used to support the understanding shown and there were some good examples of located woodlands with specific activities and impacts identified. In terms of the range of impacts required, level 2 was likely to be achieved on this element through 2-3 impacts while 3-4 impacts were likely to be awarded level 3 (depending upon the quality of explanantion).

In relation to the AO3 marks, the command word 'assess' requires candidates to write a balanced argument which addresses the question. It also requires candidates to write a logical answer where the argument presented makes sense and is supported by the evidence presented. Finally, while not requiring a final concluding paragraph, the command word 'assess' does require judgements to be made. In the context of this question, this required candidates to weigh up the relative impact of human acitivity. This could be linked to the scale of impacts; whether the impact was largely positive or negative or in terms of the relative imapct of human and physical factors. While there were examples of level 3 responses, many candidates got 'stuck' in level 2 because they did not make judgements, or they made judgements which were not supported by the evidence provided in the answer.

This question also has 4 marks allocated for the assessment of spelling, punctuation, grammar and use of specialist terminology (SPaG). Obviously, candidates will not be awarded any of these marks if they do not answer the question or if their response does not achieve any marks for the 8 mark part. The use of paragraphs is one element which contributes to this mark and should be encouraged as it helps to structure candidates' responses.

(h) Assess the importance of the impact of human activity on deciduous woodland ecosystems.

(8)

~~Within deciduous woodlands~~ Human activity has a large impact on deciduous woodlands.

In the New forest, paths are made around the forest which are not used as they are should, people walk off the path and destroy native species of plants which decrease the biodiversity of the area. As well as walking over plants, littering is a large problem not just in the New forest but acceross the world, animal who live in these forest may eat them which may cause them to die. Bin are placed around but are not used which can over time destroy the forest. In the New forest, horeses/ponies are able to roam freely within the forests and the village, drivers who don't watch their speed in their car may hit a ponig and kill it which ~~isn't~~ will decrease the amount of species in that area.

ResultsPlus
Examiner Comments

This response was awarded seven marks overall – level 2 – 4 marks for the content and 3 marks for SPaG.

In terms of the actual answer, it identifies several ways in which human activity affects deciduous woodlands. There is some located knowledge and attempts have been made to explain the impacts. There is some attempt to qualify the scale of the impacts (eg 'human impact has a large impact' and 'littering is a large problem') although these are limited.

(h) Assess the importance of the impact of human activity on deciduous woodland ecosystems.

(8)

One human activity that effects deciduous woodlands is forestry, which is an important industry to provide building materials. This can damage the ecosystem by decreasing the quantity of vegetation and causing massive disruption to the woodlands old growth. However, this can be mitigated by avoiding cutting down old growth and by using techniques such as coppicing to allow the woodland to grow back rapidly. These techniques can be encouraged by programmes such as the 'Forest Marque' in the New Forest, which ~~issues~~ shows that businesses use sustainably sourced local timber, allowing consumers to make more informed decisions. ~~This is widely~~ Sustainable forestry is widely practiced by organisations such as the forestry comission, so the impact ~~can~~ is fairly limited, and can actually be beneficial as it makes way for new growth.

Another human activity that impacts deciduous woodlands is tourism. This can cause substantial damage to the ~~ecos~~ ecosystem as tourists tend to trample vegetation ~~and~~ ~~etc~~ and destroy plantlife on verges by parking their cars ~~their~~ there. They can also engage in harmful activities such as fire lighting. However, in many areas the impact of tourism is limited. For example, in the New Forest car parks have been built to decrease parking on verges and the 'New Forest Tour' (which is an open top bus ride through the forest) reduces traffic overall. Furthermore, educational leaflets such as 'Five ways to love the forest' in the New Forest ~~limit the~~ discourage people from carrying out environmentally harmful activities.

In some cases, human activities can be beneficial to the ecosystem, such as keeping ponies which can clear the forest floor and make way for new growth.

In conclusion, the impact of human activities such as forestry and tourism can be very harmful to the forest, however these impacts can be mitigated through responsible measures to ensure that those activities remain sustainable.

ResultsPlus
Examiner Comments

This response was awarded the full twelve marks – level 3 – 8 marks for the content and 4 marks for the spelling, punctuation, grammar and use of specialist terminology.

The response is clearly structured using paragraphs and is focused on the question. A range of impacts is identified and explained with supporting located knowledge. Reference to the scale of some of the impacts provides an element of judgement. There is also an overall concluding paragraph providing further judgement although this is not required by an 'assess' based question.

ResultsPlus
Examiner Tip

Using paragraphs to organise a longer response is effective. Writing a very short plan in the margin is also a useful strategy to ensure that the answer remains focused.

Paper Summary

Based on their performance on this paper, candidates are offered the following advice:

- Ensure that you are familiar with the command words used in the specification. For example, the difference between what is expected for 'assess' and 'evaluate'. Candidates should be reminded that 'assess' questions require evidence to determine the relative significance of something, considering all factors and identifying which are the most important. 'Evaluate' questions require candidates to measure the value or success of something and, ultimately, provide a substantiated judgement/conclusion.
- In questions where there is reference to a resource, it is important that evidence from the resource is used to answer the question as these are targeting AO3 (application of knowledge and understanding).
- In the 8 mark 'examine' questions in Section A, candidates must use evidence from the resources in their answers rather than simply repeating what they have learnt and revised. The information extracted from the resources should be used to support their answers. Making clear reference to the resource in their responses (eg 'Figure 3a shows that... ') may help ensure that the candidate does use this evidence. This will mean that candidates' answers are specific to the locations and/ or features shown in the resources rather than being generic answers which could apply to anywhere. As a guide, 2-3 pieces of evidence are required for level 2 and 3-4 pieces for level 3.
- In questions where they are asked to develop a single reason, it is important to ensure that the appropriate number of links in the explanatory chain are developed. The number of marks should be used as a guide to this. If a question asks the candidate to explain one reason, then the development points need to be linked to this initial reason rather than simply writing down several unlinked points or identifying several different reasons. Using connectives such as 'therefore' and 'as a result' will help to ensure that points are linked.
- There will always be a few questions that require candidates to perform a calculation (AO4). It is essential that candidates have a calculator with them. It is also important to read the question carefully. For example, if the question states that they should 'show your workings' or give the answer to one decimal place it is important that they do so.
- Centres should spend time reviewing the specimen and live papers to ensure that they are familiar with key vocabulary which is being used in the questions – both in terms of key geographical terms (eg 'biodiversity' and 'meteorological') and words which provide the 'slant' to the question (eg 'characteristics', 'distribution' or 'frequency'). This will also ensure that candidates are familiar with the structure of the paper and will hopefully avoid situations where the rubric has not been followed.
- Centres should prepare candidates for the exam using the wording of the specification and relate this to the content taught, so that candidates are familiar with question wording used in the examination.

Grade boundaries

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

https://qualifications.pearson.com/en/support/support-topics/results-certification/grade-boundaries.html

Pearson Education Limited. Registered company number 872828
with its registered office at 80 Strand, London WC2R 0RL.