Examiners' Report
Principal Examiner Feedback

October 2020

Pearson Edexcel GCE

In Geography (9GE0)

Paper 1

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Report on 9GEO1 October 2020

The October 2020 was the original paper for the cancelled June 2020 series of examinations.

The entry was very small and as with papers in previous series many chose question 3 (the coastal option) as opposed to the question 2 (the glaciation option).

There was little evidence of unfinished papers.

The demand of the paper was similar to that of 2019.

Q1a

This was found accessible for the majority of candidates. The main error was in answering to two decimal places with it either being ignored or having an incorrect rounding up to 0.9 instead of 0.90.

Q1b

This was found challenging by many of the candidates. Although the question allowed an assessment of both physical and human factors and processes, few demonstrated secure knowledge of the relative importance of physical factors and processes in explaining the impacts of volcanic eruptions. Instead many candidates concentrated upon ***describing*** the hazards produced by volcanoes such as lava/ash and did not relate this descriptive knowledge to an understanding of how these hazards are generated beyond a simplistic link to 'volcanic eruptions'. Many also did not attempt an assessment of the relative importance of these physical factors and processes.

As well as a lack of detailed process knowledge many candidates had limited case study material with which to develop their answers. Those that did often used the volcanic events of Montserrat 1997 and Eyjafjallajökull 2010 to elaborate their answers which provided them with a useful structure of comparing volcanoes at different tectonic settings as well as at different levels of economic development.

Centres are reminded that questions can be set on any of the tectonic hazards detailed in the specification (***earthquakes, volcanic eruptions and secondary hazards such as tsunamis***) and candidates should have enough factual knowledge to answer any of the key questions.

Q2

There were few responses to this question.

Q2a

Many candidates were able to access level 2 but struggled to access level 3. This was as a result of candidates being able to **describe** Milankovitch cycles but found it difficult to **explain** how variations in the earth's orbit, tilt and 'wobble' would then impact upon summer and winter temperatures and why this would cause the variations in the ice

volume shown. Few were able to link these changes in ice volume to subsequent changes in albedo and positive feedback loops further increasing/decreasing ice volumes.

Q2b

Candidates generally found this question accessible and many were able to relate the distribution of the three types of permafrost shown on the resource to the changes in the mean air temperatures. Few, however, were able to explain the anomalies caused by Hudson Bay and the Rockies nor question whether it was mean annual air temperature that was a key factor in influencing the distribution of permafrost or the variation in mean temperature that might explain some of the anomalies shown on the resource.

Q2c

This was another question that was found accessible by many of the candidates who attempted it. Most answers focused on the location of terminal or push moraines in determining the extent of ice movement and chattermarks and the orientation of lateral moraines for the direction of ice movement. Some were side-tracked into detailing esker orientation which was not accepted as being an upland glacial landform.

Q2d

Candidates found this an accessible question. Many started with an evaluation of the difficulties of managing climate change at a global scale and then went on to examine the usefulness of regional strategies such as the Alpine convention and finally focussed on local strategies in national parks such as the Lake District. Those that concentrated upon one national park were unfortunately self-penalising.

Q3

There were many more responses to this question than the glaciation question.

Q3a

Many candidates showed a good understanding of how isostatic process could influence the pattern of relative sea level change shown on the resource. Many correctly explained how isostatic rebound was making relative sea level rise in Scotland and fall in the south coast of England. A few also attempted to explain the anomalies such as the influence of major river systems increasing the rate of relative sea level fall in areas such as the Thames estuary.

Q3b

This question was also found to be accessible by the candidates who attempted this question. Responses that achieved top level marks were those that recognised that they had to explain the formation of more than one landform to be able to answer the

question on landscape. Those that focused on **one landform** (typically the spit) were limited to the top of level 2.

Q3c

The question allowed candidates to examine the local conflicts caused by any type of sustainable management. Many were able to identify the problems caused by a variety of management strategies but to gain top band marks candidates had to identify the stakeholders and ensure that they were local as opposed to generic conflicts.

Q3d

This was found to be an accessible question by the majority of the candidates. A common problem was that rocks were sometimes classified as hard and soft or by thjeri methos of formation (igneous, sedimentary, metamorphic and there was little understanding of the role of joints, bedding planes, crystalline structure or composition in affecting marine or sub aerial processes. Candidates were generally displayed stronger AO1 knowledge of other factors such as the influence of wave type and fetch as well as the impact of human activities increasing and decreasing the rate of coastal retreat. Few could quantify rates beyond high and low.

4a

This was found accessible by many of the candidates who were able to explain the impact of an El Nino event on the hydrological system in either wetter or drier areas. Candidates are reminded that in such resource based questions one mark is awarded for analysing the resource. Unfortunately, a minority of candidates explained the impact of an El Nino event on the western Pacific (which was not shown on the resource) and so were unable to access any marks for their response.

4b

This was a question that was generally answered well by most of the candidates. Most were able to explain two or more physical features of a drainage basin that would affect the shape of storm hydrographs. The best related the **speed** of flows in the drainage basin to the length of the lag time as opposed to the **volume** of surface runoff/overland flow to the size of the peak discharge. These were often those responses that used a diagram to aid their explanation.

4c

Although many candidates used the definition of water security or scarcity and not the UN definition of water scarcity which is 'The capacity of a population to safeguard sustainable access to adequate quantities of and acceptable quality water for sustaining livelihoods, human well-being, and socio-economic development, for ensuring protection against water-borne pollution and water-related disasters.' Most candidates found this question accessible. The best answers explained both short term increases such as pollution of water supplies as well as long term increases such as the over-

abstraction of fossil ground water supplies as well as those insecurities that are likely to be caused by climate change.

4d

This was found to be accessible by most of the candidates. The best answers considered the importance of renewable energy in reducing the risks of further planetary warming by assessing the extent to which renewable switching could reduce carbon emissions and so reduce the risk of further planetary warming. The best responses not only considered the advantages and disadvantages of renewable switching but also compared this to other mitigation techniques such as afforestation.

4e

This was found accessible by most candidates but there was some evidence of imbalance in candidates answers as some focused far more on the carbon cycle rather than the water cycle. The best answers linked the two cycles and emphasised how changes to the carbon cycle would also cause changes to the water cycle. This was the first year when such a question linking the two cycles has been set and centres are reminded that in the specification there are other opportunities to assess candidates knowledge of the links between the two cycles.