Pearson Edexcel

Examiners' Report

Principal Examiner Feedback

November 2021

Pearson Edexcel A Level

In Geography (9GE0)

Paper 1

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The November 2021 was the original paper for the cancelled June 2021 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.

Question Q1a

This was found accessible for the majority of candidates. Most candidates were able to successfully draw a line of best fit. The main error was in not understanding the log scale.

Question Q1b

In contrast to the 2020 paper, this question was found to be less challenging by most of the candidates. Many displayed a secure knowledge and understanding in assessing the extent to which the social and economic impacts of earthquakes were mainly the result of their magnitude by considering earthquake events of different magnitudes alongside other factors such as governance and the level of development.

Unfortunately, some of the candidates were insecure in the case study material which they used to develop their answers. The Haiti 2010 and Tohoku 2011 seismic events were often used but in some cases, there was inaccurate case study detail ranging from the magnitude of the event to the social and economic impacts. Whilst it is acknowledged in some cases there is debate on the exact fatalities caused by seismic events, the magnitude and dates of the events are not. Centres are reminded that the key criteria in the mark scheme for level 3 answers in such questions is:

Demonstrates accurate and relevant geographical knowledge and understanding throughout.

and should ensure that their students are secure in their case study knowledge.

Question Q2

There were few responses to this question.

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 recognise the general trend of the mass balance of the Cascade glacier decreasing in size but missing the variation shown in Figure 2a. There were, however, sound explanations of how the decline in the mass balance of the glacier showed that ablation exceeded accumulation and so increased meltwater, but few could develop this by examining the possible impacts on seasonal meltwater events and so river discharge. Few also recognised the

wider impact on the hydrological cycle sediment yield or water quality. Centres are reminded that a specification is fairly proscriptive in the content that could be examined and although as detailed in the mark scheme

Accept how changes in the mass balance of the South Cascade glacier might lead to other changes to meltwater quantity and quality

Centres are encouraged to ensure that their students are aware of specification which states the key ideas to learn.

Global warming risks disruption of the hydrological cycle (meltwater, river discharge, sediment yield, water quality)

Question Q2b

Candidates generally found this question accessible, and many were able to relate the differences in the sediment size and location to the different processes of glacial and fluvio-glacial transport. The best also suggested that the fluvioglacial deposits were also likely to display stratification.

Question Q2c

This was another question that was found accessible by many of the candidates who attempted it. Most answers focused on the fact that as warm (temperate) based glaciers often had meltwater at their base their rate of movement was faster than cold (polar) glaciers which are likely to move only through internal deformation. The best also considered other factors such as compressional and extensional flow.

Question Q2d

Candidates found this an accessible question. Many started with an evaluation of how tourism gave value to these landscapes, but some unfortunately viewed this as a global not a local value. There were some candidates who correctly identified the value of these landscapes for global research but few managed to evaluate their role in controlling the radiation balance of the earth.

Question Q3

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

Question Q3a

Many candidates showed a good understanding of how sea level rise would form coastlines of submergence such as Dalmation coasts, Rias and Fjords. Some then explained how isostatic process could influence the development of contemporary landscapes but few could explain that these were in conjunction with the rising sea level shown in the resource.

Question 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 not only the differences in the beach profile between winter and summer beaches but also the differences in the sediment profiles. Many were able to explain the role of wave type in influencing the beach profile and, as highlighted in the mark scheme, candidates were not disadvantaged if they used either standard A level text book or more sophisticated university text explanations.

Question Q3c

This question was found to be accessible for the majority of candidates who displayed good understanding of both psammosere and halosere succession. The role of mangroves in stabilising tropical shorelines also featured prominently.

Question Q3d

This was also found to be an accessible question for the majority of the candidates. Many could explain the role of economic factors and in particular the use of cost benefit in determining the coastal management policy. There was were also good answers that also examined the role of social and environmental factors in this decision making process. The Holderness and the Norfolk coast were often used as examples but centres are reminded that a key criteria in the mark scheme for 20 mark questions is:

Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1)

There were some candidates who wrote inaccurate accounts of their case studies – particularly for the Holderness coasts. Centres are encouraged to ensure that their students have access to the most up to date strategies and policies for this particular case study.

Question Q4a

This was found accessible by many of the candidates who were able to explain the possible consequences of an increase in the production of unconventional oil. There were a wide range of answers accepted and many candidates were able to explain the consequences of deep water drilling on marine ecosystems as well as the impact on the forest and aquatic ecosystems caused by an increase in tar sands.

Question Q4b

This was a question that was generally found challenging by many candidates. Although some recognised the word geological and wrote on the processes of venting, outgassing and weathering, many, unfortunately wrote about biological processes such as photosynthesis or the various carbon pumps that exist in the ocean. Although the latter could gain some credit if they explained lithification

explanations of how land-based ecosystems regulated atmospheric carbon levels were unfortunately a rubric error.

Question Q4c

In contrast to 4b, 4c was found to be accessible by the majority of the candidates and there were many good answers that examined a range of changes to ocean health such as acidity, salinity and temperature and linked these securely to the impact on people. The best answers noted that in many developed countries the impacts may be less significant than in developing countries as a result of the dependence of the latter on marine resources for their livelihood.

Question Q4d

Although this was found to be accessible by most of the candidates, many of the candidates explained rather than assessing the point(s). This was a shame as many of the explanations of the impacts of climate change on the flows of the hydrological cycle showed good knowledge and understanding. Few, however, were able to develop their answers with an assessment of these impacts and few had convincing case study material beyond 'some areas of the world would be wetter and some would be drier'. Centres are encouraged to ensure that their students are aware of both the recorded recent changes to precipitation as well as the predicted changes to both precipitation and evaporation from organisations such as the Meteorological office which have identified that a warming of 3C by 2070 may increase by 3.5 times the number of intense rainstorms of 30mm in one day.

Question Q4e

This was found accessible by most candidates and there were many good answers which identified and explained the water conflicts in the Nile, Mekong and in the Middle East. The best answers then evaluated the extent to which water treaties can overcome these conflicts by examining the success of the Mekong River Commission as well as the water sharing treaties in the Rivers Colorado and Nile. Some compared the effectiveness of those treaties which were between countries and between states to great effect.

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