

# Examiners' Report Principal Examiner Feedback

November 2020

Pearson Edexcel GCSE In Geography B (1GB0) Paper 03 People and Environment Issues – Making Geographical Decisions

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#### Introduction

The small cohort of candidates who sat this examination performed well in light of the disruption and distress many will have experienced during 2020. Several students sitting the exam produced substantial answers to the extended writing questions (3d, 3f and 4). They are to be congratulated for showing such resilience during what has been a very difficult academic year.

Compared with previous examinations, there was some evidence of improved:

- time management (the large majority of candidates completed the entire paper, with most completing satisfactory responses for the extended writing questions 3d, 3f and 4)
- focus on most (though not all) question key words
- use of the resource booklet (as opposed to recalled knowledge) when answering the AO3-targeted short-answer questions (such as 2aii, 2b and 3c).

Fewer than 50 candidates sat this examination, however. As a result, all conclusions reached about individual questions and paper-wide performance are tentative on account of the limited amount of available evidence.

#### Question 1ai

Full marks were awarded to candidates who provided two valid distributional features – such as the taiga's presence throughout most of Russia, or its absence in the far north. Weaker candidates lacked the necessary geographic skills to do this and could only provide simple statements such as: 'In Russia'. This was indicative of under-developed atlas and map skills.

#### Question 1aii

The majority of candidates provided a satisfactory answer. They defined the ecosystem either in terms of its linkages and connections (between plants and animals) or in terms of its biotic and abiotic interrelationships. A minority of candidates could not demonstrate sufficient knowledge of the term, typically stating that an ecosystem is: 'Plants and animals.' In such cases, no credit could be awarded.

#### Question 1b

Most candidates answered this question correctly, thereby demonstrating their understanding of data spread measurements.

#### Question 1c

Most candidates were able to provide two valid statements. Most commonly, precipitation and temperature were identified as the key climatic controls on the geography of biomes. Weaker answers scoring just 1 mark typically consisted of two

'mirrored' statements, such as: '1. Some places are too hot for trees to grow. 2. Some places are too cold for trees to grow.'

# Question 1d

This question required explanation of a key environmental relationship, that between vegetation and soil. The majority of candidates provided a succinct explanation of how decaying vegetation returns nutrients to the soil. A minority of candidates were unable to fully sustain this short argument: typically, they stated that vegetation dies but neglected to explain the vital linking idea that nutrients are then added to the soil.

# Question 2ai

Around half of the cohort correctly identified biome X as tropical rainforest. Most of the remainder wrote 'tundra'. They either lacked sufficient understanding of biomes to know that tundra is not a type of forest; or they were still thinking about Figure 1, rather than Figure 2.

# Question 2aii

This question required candidates to make use of the resource booklet and not rely on their own understanding. This was clearly signposted by the prefix "Using Figure 2". Around half of all candidates selectively drew on the material in Figure 2 which dealt with methane stored in frozen soil below the forest. They explained that it is beneficial for forest to be conserved in order to prevent thawing and the escape of methane. A few candidates answered more generally about conservation of nature and the importance of protecting animal habitats. Provided their answer focused on the forests shown in figure 2, some credit was awarded.

# Question 2b

Some questions on this examination paper require candidates to establish logical connections between two or more separate figures. All available credit is therefore linked with Assessment Objective 3. In this question, the explanation was meant to derive from a synthesis of information from Figures 1, 2 and 3. It was pleasing to see the majority of candidates doing so by providing a detailed explanation of the location of oil and gas resources in relation to the distribution of forest.

Candidates scoring full marks were able to additionally create logical arguments about possible pollution or fire risks to the forest.

# Question 3ai

Almost every candidate answered this question correctly.

#### Question 3aii

Most candidates answered this question correctly, thereby demonstrating their understanding of percentage changes over time.

#### Question 3aiii

Most candidates answered this question correctly. They correctly focused on the evidence presented in Figure 4 (rather than using their own knowledge) and were able to select the item which fitted best with the analytical category 'economic'. A minority wrongly identified a political cause or used their own knowledge (for example, writing: 'OPEC price cut').

#### Question 3aiv

Most candidates answered this question correctly. They correctly focused on the evidence presented in Figure 4 (rather than using their own knowledge) and were able to select the item which fitted best with the analytical category 'political'. A minority wrongly identified a non-political cause or used their own knowledge (for example, writing: 'Brexit').

#### Question 3bi

Almost every candidate answered this question correctly.

# Question 3bii

Many candidates answered this question correctly and gained 2 marks. They correctly established an explanatory link between what Figure 5 showed (negative views about Russia, or hostile actions by Russia's government) and possible changes in Russia's energy trade with other countries. In most cases, candidates suggested that European governments might buy less Russian gas as a political response to the provocative events detailed in Figure 5.

#### Question 3biii

Many candidates answered this question correctly and gained 2 marks. They correctly established an explanatory link between what Figure 7 showed (a new pipeline extending thousands of miles towards China's border) and possible changes in the pattern or value of Russia's energy trade. In most cases, candidates suggested that sales to China would increase because Russian gas can now be transported faster, more easily and possibly more cheaply. A few answers argued that European countries might buy less gas as a political reaction against Russia's alliance with China - which was a very sophisticated idea for GCSE-level candidates to be expressing.

#### Question 3c

This 4-mark question made use of a single figure only: a clear signal that candidates would be expected to apply their own understanding to the information provided in order to create a blend of source evidence and their own knowledge. Most were able to do so, with common themes including the economic costs of operating oil and gas extraction in different types of physical environment (as shown in Figure 8). Candidates who scored half marks only typically paid insufficient attention to the word "cost". They asserted that the presence or lack of forest would affect the ease of developing oil and gas. However, there was no development of the implications of this for economic costs and profitability.

# Question 3d

The majority of candidates reached the middle or upper mark band, having established a clear focus on Russia's own energy companies. Very few wrote about energy companies in general and it was pleasing to know the question was carefully read in most cases. As might be expected, candidates who scored approximately half marks were able to describe a range of challenges but offered little in the way of assessment using evaluative language.

In contrast, candidates reaching the upper end of the mark range took a view on the scale and severity of the challenges illustrated in Figure 9. A few excellent answers argued that political barriers to collaboration with Western businesses may eventually disappear and that the greatest challenge for energy companies are actually associated with long-term climate change and the need to ultimately abandon fossil fuels.

#### Question 3ei

The key idea here is that there is a continuous (many said 'infinite') flow or supply of energy. Most candidates were able to articulate this understanding, usefully expanded on through use of examples.

# Question 3eii

The key idea here is that materials can be used again, as with biofuel waste being used to produce new biofuels, or recyclable nuclear waste. Relatively fewer numbers of candidates were able to explain this concept. A few explained the idea of 'recycling' but without reference to energy resources, which limited attainment to just 1 or 0 marks.

# Question 3f

In common with question 3d, there was a clear difference in the quality of assessment and evaluative language provided by candidates at the upper end of the

mark range and those closer to the middle of the range. The question was "scaffolded" for candidates by virtue of the instruction to assess both "physical and human" factors. This helped weaker candidates to organise their response into two paragraphs. Stronger responses weighed up the relative importance of physical and human factors. Several very good answers arrived at a final assessment that human factors are ultimately most important. They based this on evidence showing that countries with enormous wind energy potential currently choose not to develop it for economic reasons and because they have yet to develop a strong political commitment to lowering carbon emissions.

# Question 4

The low entry for this examination makes it hard to generalise about candidate performance on this question given that a considerable number of candidates only provided a very short answer. Of the twenty or so substantial answers that were produced, around half chose Option 1 and most produced a short and simplistic account advocating the development of wind energy in order to help tackle climate change. In other words, they focused more on what is best for the world rather than for Russia's economy. Their arguments were narrow and did not allow for wide use of the resource booklet.

In contrast, the handful of excellent arguments produced by candidates at the top end of the mark range were more nuanced and closely focused on Russia's own economic needs and interests in the medium and longer term. Some of these answers advocated Option 2 by taking a bullish but defendable position that continued oil and gas trade is arguably in Russia's best economic interests for now, even if this is selfish when viewed from a global perspective. A handful of highscoring answers advocated Option 1 and argued a strong case for this being in Russia's long-term economic interests given the finite nature of fossil fuel resources, and the potential for Russia to become a world leader in profitable exports of wind energy technology.

# Paper summary

Moving forwards, the following points may help guide future teaching and learning.

- It is important that candidates fully understand the meanings of key terms and phrases, such as ecosystem or recyclable energy resource. Each year, candidates may be required to provide a brief definition of one or more key terms and phrases.
- It is vital that candidates recognise which questions are asking them to make use of source material in the answer space - and which are not.
  AO3- targeted short-answer questions require material to be selectively extracted from sources. These questions will always use a phrase such as 'Study the figure' or 'Using the figure'.

- Candidates require clear guidance on how to answer the 8-mark and 12mark questions in a way which is fully aligned with the test assessment objectives. Question 4 requires them to blend their own prior knowledge and understanding with evidence gleaned from the resource booklet. The 8-mark questions require analysis and interpretation of resource booklet evidence only.
- The final 12-mark question is designed to be a synoptic essay with a very broad remit thereby allowing candidates to draw on understanding from all parts of the course. Narrow answers based on a single simplistic argument (such as the need to avert climate change) are unlikely to reach the highest mark band).

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