

Examiners' Report Principal Examiner Feedback

November 2021

Pearson Edexcel International GCSE In Geography (4GE0) Paper 02

### **Edexcel and BTEC Qualifications**

Edexcel and BTEC qualifications are awarded by 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 <a href="https://www.edexcel.com">www.btec.co.uk</a>. Alternatively, you can get in touch with us using the details on our contact us page at <a href="https://www.edexcel.com/contactus">www.edexcel.com/contactus</a>.

# 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: <a href="https://www.pearson.com/uk">www.pearson.com/uk</a>

November 2021
Publications Code 4GE1\_02\_2111\_ER
All the material in this publication is copyright
© Pearson Education Ltd 2021

#### **General Information**

There was a small entry for this exam series as it was made available to allow candidates to sit an examination this year following on from the teacher assessed grades that were used to award grades in the summer of 2021.

Recognising that not all candidates will have had the opportunity to undertake fieldwork, Section B of the paper only included fieldwork questions that referred to an unfamiliar fieldwork context. Therefore, the paper had a total of 97 marks. The exam included a mixture of multiple choice, short answer, data response and extended response questions. Each of the questions was mapped to one or more of the Assessment Objectives (AOs). Comments on the overall quality of responses and particular issues related to questions across the exam paper are considered in this report.

The paper has provided to be accessible to a range of candidates. The paper provides question choice in each section, allowing candidates to select which areas of the specification they wish to respond to. Questions on economic activity and energy (Q1) were slightly more popular than rural environments (Q2) and urban environments (Q3) which were about equal in popularity. In the fieldwork section again economic activity and energy (Q4) had more responses, followed by urban environment (Q6) then rural environments (Q5). In Section C around half of candidates answered questions around fragile environments and climate change (Q7) with fewer candidates attempting questions on globalisation and migration (Q8) and very few answering the development and human welfare question (Q9). For Section C this follows the pattern of responses seen in previous series.

Examiners noted a number of issues related to how candidates responded to different types of questions:

- As in previous series the breadth and depth of knowledge and understanding demonstrated by candidates was varied across the paper, particularly when trying to draw on key theoretical concepts.
- As in previous series the material in the resource booklet was not always used effectively by candidates. Although stimulus response material was provided many candidates are still not applying their knowledge accurately or in a way relevant to the question. Many candidates still have problems in using evidence directly from the resource (an AO3 skill) in order to be able to generate a successful answer. Where questions refer to more than one resource sometimes candidates still just draw from one. The most

- successful candidates would use the resources as a starting point to develop their arguments and then link to other concepts and examples from their own knowledge and understanding.
- Some candidates did not always recognise important parts of questions, for example when a question required candidates to identify a decade, some would provide just a single year.
- Some candidates did not provide strong answers in the fieldwork section
  of the paper, but given the varied experiences of fieldwork, this is not
  surprising. Candidates need to be familiar with the different stages of the
  enquiry process and potential data collection methods as well as data
  presentation and analysis techniques which could be used.
- For the longer extended response questions there was often a lack of fluency and structure in the longer answers, many candidates just describing and explaining, rather than a focus on analysis or discussion (depending on the question). It was felt that candidates were not always recognising how to tailor their answer to the command word in the question (for assess, evaluate or discuss questions). Where candidates are directed to more than one resource it is important that they refer to both to support their answer. It may be they use one more than the other which is acceptable depending on how they have developed their response, but it is important they draw from both at some point in the response.

# Recommendations for centres based on this exam performance:

- Centres should review the specification content alongside the sample assessment materials and previous papers to ensure they are familiar with the range of key vocabulary that candidates need to recognise and understand, and how they can be used in different types of questions. There is now a range of papers from previous series available which should provide examples of the range of question types which can be included in this paper, as well as the different potential formats of the fieldwork section.
- Ensure that candidates are familiar with the different command words used in this specification. For example, the difference between what is expected for 'analyse' and 'discuss', and what the key components of an answer for this type of question should include.
- Candidates should continue to be supported to develop their 'integrated skills' incorporated in their delivery. These can be found below the subject content in each section of the specification. Being able to interpret different

resources from graphs to maps is an important aspect of this paper. Candidate should ensure they can interpret material from graphs and correctly recognise different axis to be able to read the data on the graphs.

- In questions that refer to a resource, either in the paper or resource booklet, it is important that evidence from the resource is used to answer the question in some way. There will be specific marks available for the interpretation of these resources. Candidates may find it useful to refer to the resources clearly in some of the extended response questions, making clear reference to the resource in their responses.
- Some questions ask for a particular number of responses e.g. one way, or two strategies, it is important to ensure candidates develop their responses accordingly and provide sufficient development of their responses to achieve the marks in the question. These will differ depending on the command word, and how many marks relate to the question. The space for candidates to response will indicated where there are multiple responses required to try and support candidates structure their response.

### **Individual Question Feedback**

There was some mixed performance in this Section, with some excellent responses but equally those that were quite weak. Questions that incorporated the use of resources and application tended to discriminate the most.

# **Question 1**

- 1 (a) While many candidates were able to provide a suitable definition of the term energy gap. Where responses did not achieve the mark, it was usually because they provided a definition of energy security rather than energy gap or they referred to differences in energy between countries.
- 1 (a) (ii)The multiple-choice questions provided an accessible introduction to the paper. Candidates were usually able to successfully identify two forms of renewable energy.
- 1 (b) This required candidates to use evidence from a figure in the Resource Booklet. This question was answered well by most candidates. Many candidates were able to recognise how the electric bus led to more sustainable energy use.
- 1 (c)(i) Candidates were usually able to provide a suitable factor that affected the location of secondary industry. The most common responses related to accessibility.

1(c)(ii) Most candidates were able to provide reasons why developed countries have a declining secondary sector. A lot of responses provided two distinctly different reasons which were developed well, most often linked to a shift to LICs for cheaper labour and improvement in education meaning people want to work in tertiary/quaternary industry. A number of responses to this however, focused on reduction of workers and the question focused on secondary industry and so a reduction in workers does not necessarily mean a reduction in secondary output. Candidates need to be aware of the difference between a question that states 'declining secondary sector' or 'declining secondary sector employment'.

1(d)(i) and (ii) This required candidates to use a bar graph in the question paper. Candidates were usually able to recognise the correct responses in both cases showing an ability to interpret bar graphs accurately.

1(d)(iii) Many candidates were able to provide a suitable factor that can cause a decline in primary sector employment with the most common response referring to mechanisation.

1(e) Most candidates scored marks on this question, with some very strong responses which suggested candidates had learnt issues related to informal employment in depth. A range of megacities were referred to, and the majority of these were suitable for the points that followed. There were a few surprising megacities provided suggesting that they were not sure what a megacity was, but this was a very small proportion of responses. Responses often focused on lack of employment protection and the potential for exploitation.

1(f) Responses to this question were very variable. The question required candidate to analyse reasons why energy production had changed, referring to the material provided in the resource booklet. Candidates engaged with the electricity part of the Figure well. They were able to describe the pattern for coal and renewable accurately on the whole (although there were some errors in reading the correct axis) and were able to make several suggestions for why this change might be occurring. There were often links to climate change mentioned. There were very few who commented on links to development and how this relates to consumption of energy. There were quite a few responses that only achieved level 1 because candidates just described the pattern on the graph and didn't suggest any reasons for the changes. Candidates did not necessarily grasp the relationship between GDP per capita and electricity production shown on the Figure. The most successful candidates recognised the command word in the question to analyse, providing clear reasons for the changes that were shown.

## **Question 2**

- 2(a) (i) While some candidates recognised the key components of a natural ecosystem, other candidates were distracted by the term natural and provided ideas around areas not being interrupted by human activity.
- 2(a)(ii) The multiple-choice question provided an accessible introduction to the paper. Candidates were usually able to successfully identify two services provided by natural ecosystems.
- 2(b) (i) For this question candidates were required to use the figure from the Resource Booklet. Usually, candidates were able to recognise the nature of the new building meant that there had been changes to accommodate tourists.
- 2(b)(ii) There were a range of other ways rural areas are changing in developed countries provided by candidates. The most common responses focused on diversification. Generally, candidates tended to focus on the positive changes, although others recognised the potential negative changes too.
- 2(c) Many candidates provided responses which were able to score marks here. The most common responses tended to focus on the loss of labour and the impacts this would have on rural families and economies. Some candidates however wrote about the impacts of this migration on cities rather than focusing on rural areas as the question had indicated. There were also a few candidates who clearly did not understand the term rural-urban migration.
- 2(d)(i) and (ii) Candidates were usually able to interpret the population pyramids correctly and identify the correct population group demonstrating their ability to read from bar graphs such as population pyramids.
- 2(d)(iii) Candidates usually were able to provide a suitable reason for counterurbanisation. Usually, responses tended to focus on the negative aspects of cities rather than the positive aspect of the rural area/smaller towns/villages.
- 2(e) For this question candidates needed to provide two separate strategies used to improve quality of life in rural areas. There were many good examples where candidate had written two developed strategies, using specific locational examples and had clearly learnt their case study well. However, there were also a lot of responses that were quite generic focusing on improvement and health and while they could score marks for these ideas, these were often not developed or supported with details to gain further marks. There were some candidates who did not clearly link the strategy to quality of life. There were also some candidates who write about strategies used in urban areas, focusing on improving informal settlements in cities, rather than in rural areas.

2 (f) For this question candidates were required to refer to a figure from the Resource Booklet to support their argument about the impacts of humans on the rural landscape. Many candidates were able to give clear reasons for the reduction in deforestation but increase in crops and link this to better farming practices whilst linking to a global focus on reducing climate change by reducing deforestation. These candidates were also able to link ideas to impact on soil quality of agriculture and shift from subsistence to cash crops. While candidates would sometimes refer to the figure there was often little detailed use of the resource to support or guide their response. As with 1f there were several candidates who just described the resource without developing their answer any further.

# **Question 3**

- 3 (a) (i) Candidates were usually able to provide a suitable definition of suburbanisation.
- 3(a)(ii) Multiple choice questions clearly provided an accessible introduction to the paper. Candidates were usually able to identify two problems associated with rapid urban growth.
- 3 (b) (i) For this question candidates were required to use a figure from the Resource Booklet. Candidates were good at using evidence from the resource to justify why this area could be considered part of the rural-urban fringe recognising key features in the photograph.
- 3 (b)(ii) Candidates were usually able to identify the meaning of the term brownfield site.
- 3(c) Many candidates were able to score marks here with common responses about land values and accessibility. The biggest challenges for some candidates was not understanding the term 'land use'.
- 3 (d) (i) and (ii) Candidates were usually able to successfully interpret the bar graph to recognise the correct cities for both questions.
- 3 (d)(iii) Most candidates were able to provide a cause of air pollution in urban areas. The most common response was related to use of cars and their emissions.
- 3(e) While many candidates were able to score marks for this question, the responses were often quite vague and did not often provide development. There were some really well written examples where candidates clearly knew their case

study and gave two very specific strategies and linked this to quality of life. Those that scored less tended to be where this link was not made.

3 (f) For this question candidates were required to refer to a Figure in the Resource Booklet to analyse the factors that affect the growth of megacities. It is clear that candidates usually had a good understanding of what megacities were and were often able to suggest several factors for growth. Occasionally candidates would be provided details about the impacts of the growth of megacities rather than focus on the factors that led to their growth. The most successful candidates would provide details about particular megacities rather than generalising about megacities from different regions. Some candidates who did not access higher levels tended to just lift information from the figure and not make any links to factors. There were also quite a few candidates who provided several examples for growth of megacities but with no reference to the figure at all.

#### Section B

## Questions 4, 5 and 6

In this section, candidates were required to answer one out of three fieldwork questions available. The questions mirrored each other across the three options, and the strengths and weaknesses of response followed similar patterns across each of these. As previously mentioned, the fieldwork section had been reduced to only include questions which referred to an unfamiliar context. There were no extended response questions in this section.

Candidates were provided with information about a student's methodology including the details of the methods, its purpose, as well as an extract from a student's questionnaire including quantitative data for 5 questions with results presented in percentages.

In (a)(i) Candidates had to identify one type of qualitative data collection involved in the enquiry. The most common response referred to the photographs and field sketches.

(a)(ii) Candidates were usually able to identify a relevant sampling method that was used in the enquiry. It is clear that the vast majority of candidate now understand what is meant by sampling strategy. They were also able to correctly identify the different strategies used in the description in the figure. However, candidates were not as successful in providing an explanation of what this sampling method was for the second mark in this question.

- (b)(i) This question required candidates to use data from the resource booklet to complete some pie charts. Candidates were awarded marks for successfully drawing the lines to create accurate segments as well as correct shading or labelling. Candidates were usually able to score marks here with the majority of candidates being able to correctly draw the lines.
- (b)(ii) and (iii) were multiple choice questions which appeared accessible to a range of candidates. Most were able to identify an advantage of a questionnaire. Part (iii) required candidates to conduct a calculation to find the mean percentage of people who answered 'not sure'. This demonstrated candidates' ability to successfully calculate the mean.
- (b) (iv) Candidates were usually able to make basic suggestions about how data collection could be improved, often suggesting about collecting more of the same data to create a larger sample. Fewer candidates were able to develop this further to gain the second mark. Those that suggested other data collection methods rather than just collecting more of the same data tended to be more successful in developing their response.
- (c) Candidates responded to this question well, recognising what secondary data was and providing a range of potential advantages, from the benefits of being able to compare results, to being able to fully understand the context of the issues being investigated. As a three mark question, in previous series candidates sometimes struggled to take the development far enough to get the third mark. However, with this question many candidates achieved the full three marks recognising the need to extend their answer about the advantage they had provided. It was encouraging to see that most candidates just focused on this one advantage. Although there were a few candidates who did not recognise the command for one advantage and instead listed different advantages rather than developing one fully. A minority of candidates did not know what secondary was and instead wrote about data collection methods or primary data.

#### **Section B**

### **Question 7**

7(a) (i) and (ii) The multiple-choice questions were clearly accessible to candidates who were usually able to identify the meaning of the term drought and identify a method to manage the impacts of desertification.

7(a)(ii) Candidates were usually able to provide details of what desertification was, although often these were basic statements about expansion of desert or the increase of sandy conditions.

7(b) (i), (iii) and (iv) Candidates were often able to successfully identify the correct decade where global temperature variation went above zero. A small number of candidates missed the word decade and provided a single year. For (ii) candidates tended to provide a systematic approach describing the trend for each and then a comparative statement. Others tended to focus on the start and end points for each and then comparing those. Although candidates need to ensure they are familiar with reading graphs with recognising which is the x and y axis as there were a few examples of incorrect data being quoted as a result of reading the wrong axis on the graph. In (iii) candidates were usually able to score both marks here with the most common responses being related to increased car usage and industrialisation. For (iv) candidates also showed good understanding of how climate change is a complex phenomenon that needs to be considered over a long period of time, and the need to consider more than just CO2. Although quite a few candidates only achieved one mark as they gave a reason but did not develop the answer any further.

- 7(c) Candidates were usually able to score both marks for this question providing a range of characteristics of rainforests, with the most common responses around the rainfall, humidity and types of vegetation.
- 7(d) The most common responses focused on Brazil, and provided very detailed case study knowledge about the different ways rainforest can be managed. This was generally a well answered question with lots of candidates giving two developed strategies. There were some candidates who needed to recognise the focus on the question more clearly on rainforest management, rather than the environmental advantages to reduce climate change.
- 7(e) Candidates were required to use the resource from the Resource Booklet to assess the potential variation in economic impact from predicted sea level rise. Many candidates used the resource to guide their response, covering different regions in a methodical approach. Sone candidates did not maintain the focus of

their responses on the economic impacts but instead focused on social/environmental impacts without linking this to economic impacts.

7(f) For this question candidates are required to use two resources from the Resource booklet. Candidates often presented a clear idea of whether global sea level rise is the greatest threat or not. Some chose to work through the threats provided in 7c. There were examples of candidates presented a thorough knowledge of climate change and demonstrated awareness of the issues around the world with clear knowledge of desertification and increasing risk of intense tropical storms. It was encouraging to see many candidates provided a conclusion for their answer too, summarising their discussion. There were quite a few responses that stated their agreement with the statement but lacked any reference to one or both of the figures.

# **Question 8**

8 (a)(ii) Candidates usually scored marks in this question. There were a range of examples provided although the most common responses suggested impacts.

8(a) (i) and (ii) The multiple-choice questions were clearly accessible to candidates who were usually able to identify the meaning of the term sustainable tourism and a reason for growth in global tourism.

8 (a)(ii) Candidates usually scored marks in this question. There were a range of examples provided although the most common responses suggested impacts around different types of pollution, impacts on the environment and impacts on different local cultures.

8 (b) (i), (ii) (iii) and (iv) While some candidates found it challenging to recognise the decade that the exports were higher, the responses in (ii) and (iii) showed many candidates had a good understanding of the context of the changes taking place. In (i) some candidates missed the command to identify a decade, and instead provided just a year. For (ii) candidates usually provided a logical response looking at both imports and exports in terms comparing the two. Often candidates would use data to support their answer, although candidates could also score full marks without using data. In (iv) candidates would often have some idea of why the data was a good indicator or increased globalisation, although could not always develop this for the second mark. Some candidate attempted to provide multiple reasons rather than focusing on just one.

8(c) Candidates responded well to this question. The most common responses included comments on the use of technology for communication and transport.

8 (d) For this question candidates showed a good understanding of the potential negative impacts of hosting TNCs. Although candidates could have focused on economic, social or environmental costs the majority of responses focused on how TNCs may not benefit local people, and their potential to do great damage to the environment.

8(e) Where candidates correctly recognised what donor countries were they were usually able to provide some comments which began to highlight suitable impacts. A number of candidates demonstrated a good understanding of the issues linked to ageing populations along with the benefit of remittances. Some candidates found it difficult more than basic points about these impacts, so remained in Level 1. However, the more successful candidates who reached the higher levels recognised the command word to include some assessment of the impacts, even if just with careful use of language to show which they felt had the greatest or most significant impact. Unfortunately some candidates provided answers which discussed the impacts on host countries rather than donor countries. Some candidates also did not provide any reference to the resource in their answer.

8(f) There were some candidates who provided a good discussion of the role of migration and trade in the global economy and reached a conclusion. In these extended response questions candidates are required to refer to figures from the Resource Booklet. Most candidates would make reference to Figure 8b or 8c but not always with same coverage or attention. Often candidates would make a judgement, often at the beginning about whether the global economy was affected by migration or trade.

#### **Question 9**

9 (a)(i) and (ii) The multiple-choice questions were clearly accessible to candidates who were usually able to identify the quality of life indicators and the component of the Human Development Index.

9 (a) (ii) Most candidates were able to recognise the term infant mortality rate, although not always able to gain both marks, by providing an explanation or detailed definition. Usually, candidates would provide the idea of the number of deaths of children, often saying under one year old, but would not recognise the per 1,000 people, or provide any further details.

9 (b)(i), (ii), (iii) and (iv) Most candidates were able to identify the year when the birth rate fell below 40 per 1,000 and were able to score marks on most aspects of this question. For (ii) usually candidates would provide a description of each,

and use some comparative language. Candidates would often use figures to support their answer, although this was not a requirement. For (iii) a lot of answers focused on improvements in healthcare and were explained well. For (iv) quite a few candidates described the Figure rather than providing a reason, or listed two reasons rather developing just one.

9 (c) Candidates provided a range of relevant examples for this question. While they could have gained marks for general strategies such as international aid, often they provided a lot of detailed examples showing they had good knowledge of the different strategies that can be used to reduce uneven development.

9(d) Candidates were usually able to score marks on this question demonstrating good knowledge and understanding of different bottom-up development projects, and were able to give two well explained strategies, often with good use of place specific information. The most common responses focused on the ability of local populations to have a role in ensuring the success of the project as well as it being usually more appropriate for local needs. Many candidates provided a lot of detail about these bottom-up projects suggesting they had good case study knowledge. There were a few candidates who appeared unclear of what bottom-up project were.

9(e) For this question candidates were required to use the Figure in the Resource Booklet to assess the importance of food security to global patterns of economic development. Although candidates were able to explain some of the links between food security and economic development, often candidates would make broad generalisations about food security and about development. Where candidates reached the higher levels, they tended to focus in on a particular country to explain and provide evidence for their ideas. A lot of candidates either described the figure well and gave weaker reasons or gave slightly more detailed reasons but did not refer to the figure or use evidence from the figure. A few responses didn't make links to the pattern of economic development.

9(f) Candidates usually had strong view on whether economic indicators were the most useful for measuring development. This question requires candidates to refer to two resources from the Resource Booklet. Few candidates made significant reference to food security, tending to focus more on the development indicators provided in 9c. These indicators were presented with number which some candidates used to structure their discussion, arguing that either the order they were presented was wrong, or which of those presented was the most important and why. The stronger responses argued that all of the factors in 9c and 9b link in some way to having more money e.g. to have a good literacy rate

you need to have money to pay for schools and education, therefore agreeing with the statement. A lot of responses, however, were quite descriptive going through 9c with minimal judgement. Most responses did not include any detail from 9b.

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