Rewarding Learning

CCEA GCE - Geography (Legacy)
Summer Series 2017

Chief Examiner's Report

geography

Foreword

This booklet outlines the performance of candidates in all aspects of CCEA's General Certificate of Education (GCE) in Geography (Legacy) for this series.

CCEA hopes that the Chief Examiner's and/or Principal Moderator's report(s) will be viewed as a helpful and constructive medium to further support teachers and the learning process.

This booklet forms part of the suite of support materials for the specification. Further materials are available from the specification's microsite on our website at www.ccea.org.uk.

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Overview

This was the last sitting of this AS specification and so this report does not have to advise on how future candidates can improve; there are no future candidates. However, it must be pointed out that the usual issue of candidates failing to answer the questions as set were seen once more and advice to read, understand and only then start to answer the question has universal applicability beyond the lifetime of this now defunct AS specification. The problem was particularly evident in AS Unit 2 Question 2(c). Other common problems such as timing, poor or incorrect case studies and inadequate preparation or presentation of the field report were not seen; the familiarity of the specification and the large number of past papers available for practice were presumably the reasons.

The AS Unit 1 paper was comparable with previous examination papers and candidates generally responded positively to the challenges and opportunities presented for assessment. Examiners reported that the paper provided suitable opportunities for candidates of all abilities to display their knowledge of physical geography as well as their analytical and investigative fieldwork skills. There was no evidence to suggest that the language employed in the questions presented any barriers to comprehension as all questions in each of the three sections were commonly attempted. Only a minority of candidates appeared to experience time management problems, with a lack of completion of the second essay in Section C.

Section A

As this is the legacy paper, it is not surprising that centres appeared to be fully aware of the requirements and regulations pertaining to the fieldwork submission materials in this assessment unit. Few problems were evident as fieldwork reports contained a clearly stated aim, precise and relevant sub-hypotheses as well as a brief statement of the chosen fieldwork location. The tabulated data submitted provided evidence of primary data collection and contained sufficient numerical values for analytical and interpretative processing. As in previous examination series, river studies and psammosere studies dominated the themes selected for fieldwork. Many centres and candidates continue to benefit from the professional expertise and guidance provided by the dedicated staff of the Field Centres.

Q1 (a) (i) Although almost all candidates were able to recollect and identify the type of sampling method employed in the field, only those who were well prepared could describe their selected process in detail. Occasionally candidates confused systematic and stratified sampling methods. Furthermore, some provided a theoretical description of the method with no convincing links to the actual fieldwork undertaken. Examiners were disappointed in the evaluative component of the answer, as few candidates provided a reflective insight into the strengths and limitations of their chosen technique. There remains a widespread misunderstanding of the random sampling technique as many candidates appear to be unaware that a rigorous random number selection procedure is essential to generate the data set. Some of the weaker candidates misunderstood the term 'sampling technique' and produced irrelevant answers relating to sample size or, in some cases, data collection.

(ii) A diverse range of responses was acceptable and many aspects of fieldwork planning were discussed. Impressive answers were seen relating to pilot testing, risk assessment, site selection, secondary data research etc. Candidates who responded to the dual commands of the question were able to access full marks. The question demanded an understanding of how and why planning was completed, but the former component was commonly neglected. Occasionally attainment was compromised when linkage to their fieldwork was superficial or omitted.

(iii) A large proportion of candidates attained full marks in this question and displayed competent graphical presentation skills. Occasionally marks were lost when:

- Graphical conventions were neglected, e.g. labelling of the variables or units of measurement on the x and y axes.
- The scale devised was inappropriate for the plotting of the tabulated data.
- The dependent and independent variables were incorrectly distinguished.
- An inappropriate graphical technique was selected. Such errors were most commonly manifest when line graphs were used to incorrectly plot discrete data on the x axis. Line graphs should only be used to plot continuous data. Such variables include spatial distance or time series data.
- The title was inappropriate or omitted.
- Errors were identified in the plotting of the data or if the graph plots lacked completion. It was highlighted by examiners that such errors were most common when candidates designed their graph using a complex scaling system.

(iv) Although most candidates recognised that their graph allowed for the visual representation of the data set, few were able to identify a logical limitation. Candidates need to recognise that the interpretation of any graph can be subjective and cannot provide objective evidence to prove or disprove a hypothesis. Only more able candidates accurately addressed this more challenging component of the question.

(v) This question proved to be fairly challenging and provided a clearly differentiated outcome. Most candidates provided no more than a simplistic awareness that data that conflicted with the hypothesis required rejection. Only a minority of more able candidates appreciated the role of statistical analysis in hypothesis testing. Examiners were disappointed that few candidates clarified the importance of significance, confidence or rejection levels in the hypothesis rejection process.

(b) Although this appeared to be a straightforward, inviting question, many candidates failed to address both its components. Some provided an overview of fieldwork, but many neglected to quote values or make reference to their results, which was specifically requested. Others provided a more limited discussion with a focus on a narrow range of variables. In the explanatory component of the question, many well-prepared candidates clearly excelled as they demonstrated detailed geographical knowledge in relation to their fieldwork and communicated their response with the inclusion of geographical terminology. Weaker candidates provided a more simplistic, less insightful explanation often lacking in detail and specialist terms.

Section B

Q2 **(a)** The overwhelming majority of candidates correctly identified a valid output from the drainage basin.

(b) **(i)** This skills based question was competently handled.

(ii) Although many candidates understood why clay particles required a high erosion velocity, fewer could explain their settling velocity pattern. Attainment was also compromised when responses were theoretical, lacking specific reference to the resource. It is necessary to reiterate the importance of quoting values when graphical analysis is requested.

(c) Many candidates approached this question with confidence and appeared to gain marks almost effortlessly. Although there were some exceptions, most candidates displayed a competent knowledge of the features associated with the meander bend. Impressive answers introduced relevant erosion processes and related these to high velocity, high energy, conditions operating at the outside of the meander bend. Although many introduced the concept of helicoidal river flow and correctly identified the shifting position of the thalweg, fewer candidates could explain why deposition was the predominant process operating at the inside of the meander bend. Only a minority of the weakest candidates confused the meander features with the pool and riffle sequence and failed to include relevant specialist terminology.

Q3 **(a)** **(i)** This question prompted evidence of logical thinking as most responses clearly described the role of the decomposers within the nutrient cycling process.

(ii) This question, based on the conceptual visualisation of the ecosystem as an open system, posed considerable challenge. Only the most able candidates produced a factually accurate and balanced answer with exemplification from their case study. Candidates commonly discussed the importance of solar energy as an input essential in the process of photosynthesis, but struggled with the inputs relating to matter. Some impressive answers specified the input of migratory birds within the Lough Neagh ecosystem and provided elaboration on their role within the food chains and food webs. Occasionally candidates recognised the input of water from the atmospheric system as well as the input of minerals from the physical weathering of the bedrock. Some candidates who identified a suitable range of ecological inputs were restricted to Level 2 as responses lacked contextual depth.

(b) Examiners commented that candidates performed particularly strongly in this question. Many provided detailed and insightful comparative descriptions from a range of appropriate locational contexts. Psammosere and hydrosere case studies dominated responses. Occasionally marks were lost when a direct contrast was not described between the early and late stages of seral succession or if case study detail was lacking. A surprisingly large number of candidates misunderstood the term microclimate and produced erroneous descriptions of harsh soil conditions.

Q4 **(a)** Unfortunately only a small percentage of candidates could provide an accurate definition of this meteorological term. Many confused relative humidity with absolute humidity and obviously failed to gain credit as these terms are not interchangeable.

(b) A variation in the range and quality of answers was evident. Although many displayed a confident knowledge of ocean currents as a global heat transfer mechanism, few could explain their importance in the maintenance of the Global Energy Balance. Only well-prepared candidates could discuss their role in the

exchange of thermal energy between accurately defined zones of energy deficit and surplus. Some candidates failed to recognise the link between the graphical evidence presented in the resource and the energy budget. Some weak candidates confused ocean currents with atmospheric heat exchange through global winds.

(c) Many candidates produced purely descriptive answers relying heavily on the evidence presented in the synoptic chart. Many quoted accurate values for a range of meteorological variables, but provided limited explanation for the weather changes associated with the passage of the cold front. Such imbalanced responses, which lacked thorough theoretical reasoning, restricted candidates to Level 2.

Section C

Q5 This straightforward question proved to be popular and there was clear evidence of engagement with this aspect of fluvial geography. Many candidates displayed considerable in-depth knowledge of the climatic, fluvial, topographic, geological and human factors which contributed to the general flooding or a specific flood event within their selected drainage basin and grasped the opportunity to attain high level marks. The Ganges Basin was undoubtedly the most popular location selected. Differentiation between answers mostly concerned the degree of explanatory depth presented for the physical and human factors proposed as well as the inclusion of place-specific details. Candidates who performed less successfully frequently provided imbalanced answers which lacked geographical terminology and case study depth. Candidates should be reminded to avoid a lengthy introduction with background information.

Q6 This question provided an opportunity for well-prepared candidates to attain high level marks. Many were secure in their knowledge of the mid-latitude Prairies and the myriad of causes of human mismanagement of the ecosystem. Many provided an accurate account of how commercial farming practices contributed to the severe erosion of the mollisols, resulting in the infamous "Dust Bowl" of the 1930s in the American Great Plains. Many displayed a sound knowledge of a range of negative human influences associated with industrial farming, most notably monocultural practices. Candidates commonly outlined a diverse range of soil management strategies but only the more able could coherently and competently explain their purpose in addressing soil erosion. It was pleasing to see that some candidates volunteered annotated diagrams to illustrate specific soil conservation strategies such as contour ploughing, crop rotation, wind breaks, strip cultivation etc. Weaker responses tended to display an imbalance, a lack of case study detail and a more simplistic awareness of a narrow range of soil conservation techniques.

Q7 This question was popular and provided many candidates with an opportunity to display their knowledge of hurricane management strategies. Hurricanes Katrina (2005) and Haiyan (2013) were undoubtedly the most common meteorological events selected for case study exemplification. Many produced a detailed description of a wide range of management strategies with reflective and insightful evaluation. As always, the best answers included accurate and relevant case study and locational details. Although many were awarded Level 3, there was, nonetheless, considerable evidence of differentiation. Occasionally answers were purely descriptive with limited evaluative comments; some introduced only a narrow range of management strategies. Weaker candidates provided more superficial and often less articulate answers. Occasionally candidates introduced lengthy irrelelevant divergent discussions of post hurricane management methods and recovery plans.

Assessment Unit AS 2 Human Geography

Section A

Q1 **(a)** **(i)** No issues; candidates are well practised in applying this skill to a new table of data.

(ii) No issues. A small number of candidates failed to calculate average distance and this had a negative impact on their calculation/result. Most calculated the correct Rn value; any who made a miscalculation were able to secure marks for their own interpretation. Candidates generally set out their calculations to access marks even if they made a mistake in the final calculation. This helped many achieve good marks in this section even with the incorrect Rn value.

(iii) The explanations were good and most candidates secured full marks. Area was the most commonly noted factor. However, a number of candidates confused the relationship between large/small area and the exaggeration of clustering/ regularity. Those who lost marks did so because they simply stated a factor and failed to show an understanding of how this factor would affect the Rn value.

(b) **(i)** This was a clear and accessible question. However, most candidates failed to secure full marks often because they did not identify stratified sampling.

(ii) This was the most poorly answered section of this question. Both descriptions and evaluations were restricted in depth and detail, reflecting limited understanding of pragmatic sampling. Most candidates were able to secure the mark for description and make some kind of positive comment. Negative points in the evaluation were not as strong. There was evidence that the command word 'evaluate' was not always understood.

(c) **(i)** Completed to a good standard. Candidates were clearly fully prepared for triangular graphs. This was accessible to all abilities and many gained full marks.

(ii) Also completed to a high standard. Most candidates identified the need for three components, which add up to 100%.

(d) **(i)** No issues, candidate responses showed a sound understanding of the measures of central dispersion.

(ii) No issues, same as Part (d)(i).

(iii) Some candidates discussed an advantage. Disadvantages were often a simple statement without elaboration. In these cases, 1 mark was awarded. Some did not explain their point fully enough.

Section B

Q2 **(a)** Descriptions were often restricted due to lack of reference to figures and failure to reference the shape of the USA pyramid. Some candidates still answer resource based questions without quoting figures.

(b) Only the best candidates made reference to the map here. Far too many failed to make the connection between pyramid shape and the process of migration. The word 'migration' was often omitted in responses. As a result, explanations were often limited in detail/understanding.

(c) Many discussed economic implications and not political consequences as required. Some discussed Unalaska, failing to note the reference to Lawrence in the question. Candidates must read the question.

Q3 **(a)** Good answers were seen here, most made reference to place and the resource, although resource use could have been developed in some cases. Candidates were often distracted by the definition of processes, such as suburbanisation and counterurbanisation, rather than focusing on the issues that arise as a result of these processes.

(b) Many candidates seem to think that villages in Northern Ireland are remote rural areas, which is not the case, although most students referred to the Highlands and Islands of Scotland, a much more appropriate case study. The issues were poorly discussed. The specification highlighted population change and service provision (including transport) as major issues affecting remote rural areas. However, candidates often became distracted by matters such as climate and accessibility, which hampered their overall performance.

Q4 **(a)** A large number of candidates did not recognise the growing trade deficit, focussing instead on the increase in total trade. This affected their overall mark.

(b) A large number of social and economic indicators were noted here. HDI was the most common composite indicator, followed by PQLI. However, only a small number of students secured the mark for identifying their component parts.

(c) An accessible question, reflected by solid marks for most candidates.

Section C

Q5 France was the most popular case study here. Others chose Brazil, Canada, China, Italy and the UK, all of which are valid. Most candidates focused on physical resources, confining their discussion of human resources to a lower level. Figures were often quoted. However, links to the actual question were lacking at times, some failing to note and discuss the obvious link between plentiful resources and high population densities.

Q6 **either (a)** The less popular option of Question 6. Answers were good and made decent use of places within the region. Figures were used to support points made. A small number of candidates failed to identify a Regional Development Agency and were penalised accordingly.

or **(b)** The more popular option. Some candidates lost the focus on the management component of the question; others failed to consider tourism, recreation and conservation in an explicit and meaningful way. However, marks were often good, reflecting a solid understanding of the case study.

Q7 Poorly answered. Candidates often became distracted by their development case study and simply wrote all that they knew about Ghana, for example. Candidates who recognised the theoretical nature of this question and made reference to places to support their points performed well. Causes were better understood than possible solutions. Explanations were largely restricted in depth and detail.

Assessment Unit A2 1 and A2 2

A number of items of general interest can be addressed before detailing the separate papers.

- Some of these relate to practical matters:
  - Candidates should try to ensure that if they have to use extra sheets these are properly labelled with centre and candidate number and attached to their answer booklet.
  - Candidates should be encouraged to take a new page for each question to allow them space to revisit the question later. This practice also ensures that Examiners have room to write their comments.

  - Diagrams were generally poor, although a couple of candidates startled us with their wonderful drawing skills. Candidates must take into their geography exams the necessary equipment to draw diagrams. There is always a graph to be drawn in Decision Making; but despite knowing this, some candidates presented scruffy work in biro constructed without the aid of a ruler.

- Some candidates tended to copy resource material too directly – 'verbatim' as the Decision Making Exercise team have it – but this could also be a problem in the other exams: 'the resource being rich, the temptation to copy it out was spotted on a few papers' reported one examiner about A2 Unit 1 Question 6(a)(ii).
- Once again, there were candidates who produced learned responses to case study questions. Although perhaps evidence of careful preparation and learning, candidates are strongly cautioned against this approach for unless the response addresses the elements of the question explicitly, it will not access Level 3 marks and is consequently self-penalising. Candidates are urged to read the question and to address it as it has been set, selecting from their material to do so.
- Many candidates failed to 'use the resources' or alternatively failed to introduce their own material if told to 'use the resource to help you'.
- The command word was not always addressed. The question must be read and understood before the answer is begun.
- If using historical examples, candidates must ensure that material is not extended beyond its actual time period, thus there is no longer a White Australia migration policy.
- As questions are set with regard to the logic of the tasks, candidates should be encouraged to address the sub-sections in the order in which they appear.
- Candidates should be encouraged to maximise the use of appropriate subject-specific terminology and to employ correct grammar and spelling. Thus proper nouns should be given a capital letter.

Assessment Unit A2 1 Human Interactions and Global Issues

Overview

The majority of candidates were able to respond well to the paper, only the weaker candidates failed to grasp what was expected of them. Just a small minority did not manage to complete the paper in the time allowed. There were very few rubric violations. Good use was made of the resources by most, but by no means all. One examiner mentioned that some candidates failed to respond adequately to the standard question format 'to help you' and did not bring in their own material. One issue was the use of prepared answers: one examiner even asked the top team to look into a centre whose students' case studies were virtually word for word the same.

Section A

Option A: Impact of Population Change

Q1 **(a)** Most candidates were able to give three categories of migrant. Few used the photo.

(b) The migration age resource was easily understood and most candidates scored well, only one of the examiners reported having candidates who made limited use of the resource.

(c) Some candidates had not learnt the Demographic Transition Model stages and floundered, but most who attempted this question scored well. A number of candidates were guilty of listing stages rather than explaining and so achieved fewer marks.

Q2 **(a)** This question provided a good opportunity to score full marks. There was sound work detailing the differences in health care availability, social and gender issues. However, some candidates had poor understanding of HIV/AIDS. Many gave Africa as an example of an LEDC; this mistake has been common for years and it is always Africa, nobody thinks that any other continents are countries.

(b) There was some thoughtful work here, the resource offered the opportunity for good candidates to shine, provided, of course that its use was matched with their own material. Some did not bring in their own material and/or just described the resource. Health concerns were sometimes neglected; that they increased with the level of education was perhaps more difficult to comprehend than the other factors which declined with level of education.

(c) This question was generally well answered with good case study detail, although some candidates just wrote out their case study policy without evaluating it as required. On occasion candidates took one historical era from their case study and extended it to deal with its entire history. This was most common with the White Australia policy.

Option B: Planning for Sustainable Settlements

Q3 **(a)** Defensible space had been well learnt by most candidates and they scored well in both aspects, particularly the definition, though some missed the locational aspect of it.

(b) The Hamburg resource was generally used well, although some failed to understand the question. Definitions of sustainability are learnt but explanation of the concept sometimes proved difficult, both for this resource and Question 4(b).

(c) Curitiba was the most common case study and candidates were able to address the question well in a case study context. Weaker responses were from those who neglected the specifics of the question and just presented a learnt essay about their place.

Q4 **(a)** A significant number of candidates failed to address the economic drawbacks in this question, focusing only on the environmental advantages of deindustrialisation. This limited their marks.

(b) This question was a good differentiator. The Hutt City resources proved somewhat inaccessible for weaker candidates, who tended to describe them and just say this is sustainable at the end. Some did not bring in their own material.

(c) The question was not always directly addressed, with candidates veering to prepared essays on evaluation of transport strategies – which didn't quite answer the set question. The commonest case study was Cambridge, although some used Curitiba or Belfast.

Option C: Issues in Ethnic Diversity

Q5 **(a)** **(i)** Some candidates had not learnt the key terms from the specification, making it difficult for them to identify factors that created ethnic diversity. Others could identify but could not explain. Candidates who were well prepared got good marks here.

(ii) The discriminator of using their own material separated candidates. There were those who used the resource only, and a few that neglected the resource entirely. Multiculturalism proved more elusive than discrimination.

(b) The nature of conflict proved to be difficult for some case studies but the better candidates were able to use the terms to fit in well with the question. As always, we had some prepared answers that failed to address the question directly.

Q6 **(a)** **(i)** Most did spot religion and language and scored well, although as with Question 5(a)(i), a failure to know the primary factors of ethnicity made it difficult for some candidates to locate them in the resource.

(ii) As with Question 5(a)(ii) the lack of own material was the main discriminator and, with the resource being rich, the temptation to copy it out was spotted on a few papers. Others struggled to link back to the question, how the two aspects had led to conflict.

(b) This question was well answered, particularly for some centres who focused on Jerusalem. There were also some decent essays on Belfast. Most clearly referenced the three factors required, although the spatial outcomes could be weak.

Section B Global Issues

Q7 **(a)** Many candidates scored full marks on this question.

(b) The aims for the investigations were often very vague, which disadvantaged some candidates.

(c) Good responses from most candidates who knew thoroughly what was usually a Los Angeles case study. The weakest aspect was the evaluation of strategies, which was often left to the end, cramped into a single paragraph.

Q8 **(a)** Generally there were good responses on waste management.

(b) The aims for the investigations were often very vague, which disadvantaged some candidates.

(c) There were good responses here, provided the candidate applied the material to the British Isles as required. Some candidates penalised themselves by describing Chernobyl or Fukushima. The justification of the candidate's own position was often overlooked. Candidates really must read the question.

Q9 **(a)** Very few centres teach agriculture as a global issue; some examiners saw no answers at all to Question 9. Good marks were scored on GM crops.

(b) The aims for the investigations were often very vague, which disadvantaged some candidates.

(c) Responses here were almost always Brittany; some were prepared answers, which failed to deal with the question as set.

Q10 **(a)** Some candidates did not clearly discriminate between advantages of tourism and eco-tourism and so lost marks for not being specific enough.

(b) Some investigations were rather banal and did not allow candidates to develop full answers. Their aims did not always relate to tourism management.

(c) A few ecotourism essays crept in, but most focused properly and Mallorca was the most frequent study, often handled with detail, although reference to places could be improved. Some centres described but did not name policies, especially for centres that had opted for Nepal. As in Question 7(c), evaluation was limited.

Assessment Unit A2 2 Physical Geography and Decision-Making

General Remarks

This examination paper permitted candidates of differing abilities to respond positively to the questions posed; differentiation by ability was achieved. No issues were noted in relation to time allowance. It was pleasing to note that rubric violations were limited in number and the majority of candidates responded to the required number of questions and sub-sections.

When addressing resource-based questions, candidates should aim to interrogate the resources fully and to manipulate information given therein to address the demands of the question, perhaps to justify claims made or substantiate arguments. For example, figures, dates or values can enhance the quality of description or evaluation. In addition, candidates should be reminded that long portions of verbatim quotation from resource-based material will not be awarded high marks.

Candidates should be encouraged to practise and develop the higher order skill of evaluation. To this end, it was pleasing on a number of occasions to see candidates provide their own opinion explicitly, perhaps as a summary to their case study responses as in Question 2(c). This provided evidence of personal consideration and evaluation of the issues discussed and thus enhanced the sophistication of the response.

Given the importance of timing, it is necessary for a case study to be introduced with succinct points and details rather than a lengthy background; it is imperative that candidates move onto the main body of their response as quickly as possible.

Once again, the quality of the diagrams was disappointing. In examination conditions, high quality of construction cannot be expected; however, the quality of the information contained on a diagram should be accurate and explanatory. Practice of the skill of diagram construction in the classroom would benefit candidates who should also be encouraged to be 'examination ready' with appropriate equipment such as pencils, ruler and so forth.

Section A

Option A: Fluvial and Coastal Environments

Q1 **(a)** Question 1 was a popular choice. However, the focus on 'coastal erosion processes' was, at times, neglected, with a number simply naming relevant processes and failing to develop the geography in any significant way.

(b) A number of candidates neglected to address the 'operation' aspect of this question; at times, those who did provided restricted depth and detail. The 'benefits' aspect was handled to a much higher standard, with better responses addressing both the tourism/amenity and coastal protection dimensions.

(c) In the main, candidates were well prepared for this question and most elected to employ the Colorado Basin as their case study. The level of case study detail was often good; however, at times, candidates restricted the quality of their response due to limited, superficial evaluation.

Q2 **(a)** It was disappointing to see, once again, candidates neglect to address the 'increasing' aspect of this question. In addition, references to place were often cursory.

(b) The majority of candidates were able to interrogate the resources provided and to employ details appropriately in their response. The evaluation aspect was, at times, restricted, perhaps through lack of reference to negative aspects such as cost.

(c) Responses to this question were, in general, of lesser quality than Question 1(c). A number of candidates failed to link the positive and negative arguments to specific coastal management strategies such as sea walls, beach nourishment, groynes, gabions and revetments. Case study information was, at times, restricted in depth and detail, and references to specific locations within the larger region were on occasion lacking.

Option B: The Nature and Sustainability of Tropical Ecosystems

Q3 **(a)** The majority of candidates included a specific fact or figure to support their description; however, descriptions were often basic. The explanations offered were sound and links to climate well discussed.

(b) Although most candidates identified a range of characteristics appropriately, restricted development of and focus upon the relevant processes limited the marks that could be awarded.

(c) The case study details provided in response to this question were often pleasing; however, the causes of salinisation were frequently of higher quality than the evaluation of the attempted solutions. This precluded a number of candidates from obtaining Level 3 marks.

Q4 **(a)** The quality of the diagrams provided was disappointing. In examination conditions, high quality of construction cannot be expected; however, the quality of the information contained on a diagram should be accurate and explanatory. At times, the explanations offered in relating to the Hadley Cell and the ITCZ were basic, lacking relevant terminology and detail. The explanation of the climatic characteristics of tropical forests exceeded that of deserts in quality.

(b) Although the definitions provided for productivity were often poor, the explanations relating to climate were of much higher quality and often supported with temperature and precipitation figures. A number of candidates referenced the role of nutrient cycling, the structure of the tropical forest and niche adaptations.

(c) Responses to this question were, at times, disappointing. The level of case study detail offered to support the evaluation of sustainable management was often restricted. In addition, a number of candidates did not address the question explicitly, preferring to write 'all I know' about the case study. Such responses, although evidence of hard work on the part of the candidate, cannot access Level 3 marks.

Option C: The Dynamic Earth

Q5 **(a)** Once again, the quality of the diagrams provided was disappointing. In examination conditions, quality of construction cannot be expected; however, the quality of the information contained on a diagram should be accurate and explanatory. The direction of travel of convection currents, for example, is fundamental to the explanation of collision boundaries and yet they were often omitted or marked incorrectly.

(b) The majority of candidates made good use of the resource and reference to additional locations was good. However, a number of candidates did not address the 'environmental' aspect of the question and, instead, discussed social and economic benefits/hazards at length.

(c) Given that this question was straightforward, it was disappointing to see that the case study detail provided was often poor, and links between perception, stage of development and management were often restricted.

Q6 **(a)** Explanations of the causes were too often cursory with, for example, restricted use of relevant terminology. A number referred to a particular earthquake event to focus upon impacts and this enabled the candidate to address a range of impacts successfully. It was disappointing to see that a number discussed the impacts in the context of a volcanic eruption rather than an earthquake event.

(b) Most candidates correctly identified the nature of the boundaries depicted; however, a significant number failed to recognise A as an ocean-to-ocean boundary. The explanations offered were often of pleasing quality, making good use of the resource materials and relevant terminology.

(c) In general, good case study detail was incorporated into the descriptions. However, once again, candidates appeared to prefer the 'describe' aspect of the question to that of 'evaluation', thus, on occasion, limiting the potential reward.

Section B Decision Making

Overview

This year the context for the Decision Making Exercise (DME) was the proposed developments in the historic Dún Laoghaire harbour to make the port accessible to larger cruise ships. The usual resources were available to candidates: maps, photographs, artist's impressions, text, and an infographic and graph. There was also a screenshot taken from the Pobal Maps GIS system (https://maps.pobal.ie) showing deprivation levels in the vicinity of the proposed development. All of these resources were designed to ensure that candidates could get a clear impression of the proposed development relatively quickly, and to illustrate the scale and scope of the proposal. There was also sufficient material to ensure that they could see how the proposal would impact on people and the economy, and on the environment.

In general, candidates appeared to find the material accessible, although little use was made of the graph showing the growth of this form of tourism (Resource 7D3). Some candidates referred to the photographs effectively, and wove a discussion of these into their arguments. The best candidates effectively mined the resources for all of the information that could be used, and incorporated this material in well-crafted answers.

Verbatim use of resources is a continued bugbear for Examiners of this paper. Some Examiners reported that this was less common this year than before, never the less it remains an issue. A replicated phrase here and there is not a problem, and indeed is understandable. However, when whole sentences – or in extreme cases whole paragraphs – are replicated verbatim, that runs contrary to what is required. The Decision Making challenge is for a candidate to take the arguments presented, examine and internalise them and construct an argument in their own words structured as a report. Occasionally Examiners see a passage which is virtually verbatim, with just a word or two transposed or omitted, but that is little better. There is occasionally a frustration in seeing excessive verbatim in Sections A, B(i) and B(ii), only for the candidate to show in C that they can craft an answer free of verbatim after all. Unfortunately, by then the damage is done. Candidates cannot be reminded too often that verbatim use of resources will result in very limited outcomes.

A: Introduction

This was found to be fairly straightforward by most candidates, as being asked for a description of the project and a discussion of the need for it is not an unusual way to start the report. Where candidates did fall down, it was generally that they omitted one or other of the requirements in the introduction. One Examiner commented that some candidates wasted time on unnecessarily long-winded introductions, which contributed little to addressing the two requirements of this section.

B: The Likely Impact

(i) People and the Economy

This section held the bulk of the marks in the report, and most candidates rightly concentrated their effort on this. Examiners reported this section as 'well done', and the range of resources available allowed a detailed discussion of the potential beneficial impact of the proposed development, and the counterarguments. One Examiner commented that the best answers were those that used the full range of resources including the infographic, the GIS screenshot and the photographs.

(ii) The Environment

This was probably a little more challenging for the candidates and they had to work a little harder to find the content, especially in the counterarguments. The mark allocation reflects this, and the material was there, although they had to look for it carefully and struggle a little more to make the argument. Most candidates were able to handle this challenge effectively.

C: Conclusion

There seemed to be a balance in the candidature between those who decided to support the proposal and those who decided to argue against it. As always, those candidates who articulated the decision early in C and spent the remainder of the section in justifying it were best placed to gain marks. It is worth emphasising that Section C is not a repeat of Sections B(i) and B(ii). This is not simply an opportunity to re-run the arguments in the previous sections. This section is the only place in this paper where the social and economic arguments, on one hand, can be measured against the environmental arguments, on the other. It is the 'greater overall benefits' that are sought here, balancing strong arguments on both sides. Those candidates who merely reprise Sections B(i) and B(ii) in the Conclusion are missing an opportunity to weigh up the complex arguments in the round.

There was a little evidence of answers being incomplete or rushed at the end, with shorter Section C responses in some instances and, very occasionally, Section C was omitted altogether. The particular challenges of a 2 hour and 30 minute paper, with two very different tasks to be completed in that time, are well known to all of us. The new specification, where Decision Making will be a separate paper from 2018, may help to remove some of those additional challenges to candidates.

Format

These are two very straightforward marks, but there are still a number who drop one or both of these. Candidates should continue to be reminded that they should refrain from embellishing or improving on the headings and subheadings provided. They should also ensure that the headings and subheadings are on different lines, and are not incorporated on the same line as the start of their written answers. There are still a few candidates who do not structure their reports at all. They lose these two marks, of course, but, in addition, also often fail to answer the question well.

Role

This was generally well handled and most candidates got both marks for adopting and maintaining the role of Dr Jim Robinson.

Graph

This was generally well handled this year, and the data lent themselves to a fairly simple graphical representation, usually by a bar or line graph. As always, the more attentive the candidate is to the data, ensuring that a scale is chosen which allows the largest value to be included while allowing differences in smaller numbers to be discerned, the more successful the resultant graph is. Some candidates prefer graph paper, while others use the lined paper in the booklet.

Either approach works, but neither will be particularly successful if too small a scale is chosen, and accuracy marks are likely to be lost. Nonetheless, many candidates were awarded 8 out of 8 for this task.

Update on the issue

Candidates are told in the paper that they should not use any information that they might know about the issue that is not present in the Resource Booklet and Question paper. However, it may be of interest for teachers and candidates to know that construction of Dún Laoghaire Harbour began in May 1817, so the bicentenary of the impressive structure is being celebrated this year. The Cruise Berth continues to be an active proposal (see http://dlharbour.ie/projects/cruise-berth-consultation/) although significant opposition is still being voiced (http://www.saveourseafront.net).

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