

CCEA GCE - Geography  
Summer Series 2016

## 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 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](http://www.ccea.org.uk)



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# GCE GEOGRAPHY

## Chief Examiner's Report

### Assessment Unit AS 1 and AS 2

### Assessment Unit AS 1 Physical Geography

#### Overview

In the final sitting of AS1, apart from the 2017 legacy paper, examiners commented favourably on the ability of candidates to engage with the questions, respond to the resources and complete the paper in the allocated time. The paper clearly allowed for a differentiated outcome, as marks ranged from the high 20s to the high 80s, which is broadly comparable to previous examination series. The level of language employed in the question paper appeared to present no obvious barriers to comprehension and the lack of omissions in the scripts provided evidence of candidates' willingness to respond positively to the questions. Many candidates now appear to be aware of the assessment objectives and are familiar with the paper's question style, format and general requirements. The paper appeared to provide opportunities for candidates of all abilities to display their cognitive ability, geographical skills and degree of preparation of the physical geography themes, as well as their fieldwork.

#### Section A

As this is the final major session for candidates to deal with their fieldwork on the AS1 Geography paper, it is not surprising that centres have become fully conversant with the requirements and content of the submitted fieldwork report and table of data. It was pleasing that few issues arose regarding teacher/candidate authentication or failure to submit the required materials. In addition, most centres have perfected and streamlined the content of the fieldwork report to include a clearly formulated aim, a range of well-designed and relevant hypotheses and a concise statement of location. Only occasional infringements of the regulations were reported. The tabulated data provides evidence of fieldwork and a range of quantitative variables for use by candidates in Section A of their examination. As in previous examination series, river studies and psammosere succession studies dominate the fieldwork undertaken, with occasional ecological, micro-climatic or settlement studies. In part the answers depended on the quality of fieldwork teaching and there was evidence of marked variation in teaching support between centres. For many candidates a high level of attainment was evident in Section A, which is clearly a reflection of a high level of centre guidance and preparation. As well as teacher appraisal for this achievement, it is also essential to acknowledge the high level of assistance, guidance and professional expertise, which is offered by excellent field centre staff.

- Q1 (a)** All fieldwork planning tasks (from both A and B categories) appeared popular in this selection. Answers generally demonstrated genuine engagement with the fieldwork planning process. Attainment was maximised when candidates responded to the command words in the question and addressed both "how" and "why" tasks. There was evidence that teachers are training candidates to do this by highlighting or underlining these command words on the question paper. Attainment was lower when candidates produced theoretical answers without any relevant or meaningful link to their individual fieldwork.
- (b) (i)** This question proved to be fairly challenging and thus produced a clearly differentiated outcome. Less able candidates appeared to be unaware of the actual purpose of statistical analysis within the investigation process and

commonly confused it with geographical representation, data collection or data tabulation. More able candidates provided excellent answers employing appropriate terminology to express their answers confidently. Those who secured marks recognised the importance of statistical analysis in the provision of proof, significance and objectivity within the hypothesis testing process.

- (ii) This task was extremely well managed by candidates who availed of well focused centre guidance. Many candidates scored full marks for their accurate selection, computation and interpretation of a relevant statistical technique. Examiners were instructed to employ positive marking to ensure that simple errors did not seriously compromise attainment. Since candidates were required to select a technique appropriate to their aim/hypothesis, it is not surprising that Spearman's rank was most commonly applied. Although occasional errors were noted in the ranking of the variables or in the subsequent stages of the calculation, the overall standard of work was reported to be excellent. Many completed their statistical analysis and interpretation with faultless accuracy.

Although a statistical interpretation was occasionally omitted, many candidates competently consulted the significance charts to ascertain the significance of their calculated value. Occasionally candidates failed to comment explicitly on whether their value displayed a positive or negative relationship. A small minority of candidates selected an inappropriate technique and thus achieved a sub-optimal mark for their calculation work. Examiners closely cross-reference the statistical work with the aim of the fieldwork submitted in the report. It is also necessary to highlight that candidates who only present the final Spearman's Rank calculation without the preparatory stages of the computation are unable to access the full marks available. Less well-prepared candidates struggled to apply their statistical technique to their data and their attainment was compromised by either misapplication of the formula or an inability to use the significance graphs to provide a conclusive comment on significance.

- (iii) This question provided a highly differentiated response. A high standard of geographical reasoning was unfortunately not universally seen. This question provided candidates with the opportunity to display their level of geographical/theoretical knowledge in relation to the statistical outcome of their hypothesis testing. Those who performed admirably were well prepared, demonstrating an ability to think confidently and independently, whilst incorporating a wide range of specialist terminology and theoretical concepts. Others failed to achieve high level marks by providing less insightful reasoning with the inclusion of fewer specialist terms and geographical concepts. Less able candidates occasionally failed to engage with the question and simply provided a reiteration of their hypothesis or their statistical outcome without alluding to explanatory facts.
- (c) Well prepared candidates excelled in this question as they provided a detailed methodology for a selected fieldwork variable and used the resource provided to guide them through the evaluation process. Better answers provided a logical, well-sequenced description of the data collection procedure, making explicit reference to the equipment or laboratory techniques employed. Insightful and perceptive candidates revealed and explained a plausible limitation and provided a realistic modification for future improvement. Attainment was compromised if the description lacked detail or if the evaluation lacked feasibility or acceptance. Occasionally answers deviated into an irrelevant discussion and evaluation of sampling without the identification of a specific data collection variable.



## Section B

- Q2 (a)** The best answers displayed an ability to use the resource to provide competent descriptive analysis whilst integrating an understanding of drainage basin hydrological processes. Although a range of land uses were provided, candidates most commonly selected settlement and forestry to exemplify their knowledge of hydrology and flood frequency within a drainage basin context. Many exemplary answers were produced displaying both analytical and interpretative skills, as well as a range of specialist terms. Too many candidates failed to discuss interception, transpiration, infiltration and storage/sub-surface flow relating to deforestation. Likewise, discussion of settlement ignored the importance of the expanding urban drainage systems accompanying the expansion of settlement. A small minority of candidates proved their inability to analyse the compound bar charts and therefore this graphical technique may require some additional skills development.
- (b)** This question allowed candidates to draw on case study material, as well as respond to the pictorial scenes of flooding presented in the resource. Most candidates understood the demands of the question and responded positively. Those who used their case study material unselectively and failed to focus on the economic impact of flooding compromised their attainment. Similarly, those who provided generalised responses, which lacked case study detail failed to attain high level marks. Occasionally candidates neglected to make explicit or effective use of the resources, thus failing to respond to the full challenge of the question. Some exemplary answers were produced which cited a particular flood event and displayed detailed and impressive case study detail.
- Q3 (a)** This question was fairly well received and a myriad of acceptable soil changes were depicted and described using quantitative evidence from the resource. Candidates recognised changes in soil depth, as well as the litter, organic matter, moisture or nitrogen content and generally provided accurate values to exemplify the change over time. Although the most able candidates could competently explain the change in relation to theoretical processes of succession, others struggled to provide a logical ecological explanation. A small minority of candidates erroneously alluded to the impact of the soil change. Unfortunately, some candidates neglected to retain their focus on the question and wrote about vegetation change, which cost them valuable marks.
- (b)** Whilst there were some encouraging and well informed answers to this question, examiners were generally disappointed with the responses provided. Although the study of mid-latitude grassland vegetation is a key requirement of the specification, many candidates struggled to describe the characteristics of this natural climatic climax community. Furthermore, the importance of climate in the development of this community was less well understood. Although many could competently describe the annual climatic regime for this biome, they struggled to connect the prevailing temperature, rainfall and wind characteristics to the development of the grasslands. Invalid and irrelevant answers provided a tangential discussion of the chernozem soils of the mid-latitude grassland ecosystem or concentrated on the agricultural landscape rather than the natural vegetation of the biome.
- Q4 (a)** Although the descriptive component of this question proved to be fairly accessible, the explanatory component appeared to be surprisingly challenging. Only a minority of candidates appeared to be capable of displaying a sound and detailed knowledge of hurricane formation. Vigilant candidates recognised the seasonal pattern of hurricanes in the Atlantic but only perceptive candidates related this trend to the thermal reservoir of heat which had built up over the summer months. Candidates commonly recognised the importance of warm oceans as a pre-requisite

for hurricane generation, but few were able to explain how this was essential for the generation of instability and latent heat necessary to sustain convection. Many recognised the importance of the Coriolis force but few could explain why this was an essential stimulus. Therefore, those who displayed a deeper level of understanding of hurricane formation were well rewarded.

- (b) (i) Apart from a small minority of erroneous answers, the majority of candidates applied their meteorological knowledge competently to identify the dew point temperature.
- (ii) This question proved to be very challenging as only a small minority of candidates achieved full marks. Although many could accurately explain the cause of orographic rainfall, few fully understand the concept of Relative Humidity. Many confused the concept of “Absolute” humidity with that of “Relative” humidity and thus failed to appreciate the importance of temperature change in their interpretation of Resource 4C.

## Section C

All questions appeared to be equally popular and provided opportunities for well-prepared and able candidates to excel. To maximise attainment in the extended writing section, candidates should be encouraged to read the questions carefully, de-construct them and devise a brief plan in order to produce focussed and relevant answers.

**Q5** This popular and inviting question provided candidates with the opportunity to display their knowledge of fluvial geography. Able candidates confidently clarified the contrasting features and processes associated with each side of the meander bend. Differentiation between answers often related to the degree of explanatory depth included and the range of specialist terminology employed. Some very articulate and impressive answers included concepts such as the thalweg, the hydraulic radius and even the Hjulström curve when explaining the fluvial processes at work. Examiners welcomed the inclusion of well annotated sketch diagrams to display the contrasting features of the meander bend and a surprisingly large number of candidates displayed such initiative. This was particularly effective when candidates selected a cross-sectional diagram to display the asymmetrical profile of the meander bend with its associated steep river cliff and gentle slip-off slope. Attainment was compromised when candidates failed to clarify the inside and outside of the meander bend and distinguish effectively between pools and riffles. Although candidates competently described the contrasting characteristics of pools and riffles, many neglected to consider their position within the river channel, particularly in relation to the meander bend.

A significant proportion of less able candidates deviated into a lengthy and irrelevant discussion of how an ox-bow lake was produced as a result of meander migration.

**Q6** This straightforward and popular question allowed well-prepared candidates to access high level marks. Although Breen Wood in Co. Antrim proved to be the most popular small scale ecosystem selected, other case studies included Belvoir Forest (Belfast), Crawfordsburn Country Park and Lough Neagh. Candidates who tailored their material to address fully both aspects of the question prospered. A lack of breadth, depth or indeed imbalance narrowed the scope of answers and obviously caused differentiation. Candidates frequently produced a fluent, cogent and detailed overview of the abiotic characteristics of their selected ecosystem. Such characteristics included an insight into the temperature, precipitation, aspect, altitude, soil and geological features of the case study. To explain the trophic structure, many able candidates displayed a sound understanding of energy fixation, transfer and loss and employed an impressive range of specialist terminology in their answers. Well-prepared candidates introduced a welcome

range of autotrophs and heterotrophs at each trophic level, confirming their in-depth case study knowledge. Occasionally candidates introduced the trophic structure using food chain or biomass pyramid diagrams, which were a most acceptable way to display the relevant ecological processes, provided they were accurately annotated.

As in previous examination series, a minority of candidates incorrectly selected their vegetation succession case study and thus they struggled to explicitly inter-weave the contextual details required. Similarly, some of the weaker candidates drifted into an irrelevant discussion of nutrient cycling and thus reduced their potential attainment.

- Q7** Attainment in this question was frequently compromised as candidates struggled with the first part of the question. Only a minority of candidates could describe the air masses associated with a frontal depression competently and could accurately outline the relevant characteristics. This should have included a discussion of their temperature, density, humidity, direction of movement as well as their association with the warm and cold sectors of the weather system. Many candidates presented lengthy, but irrelevant, discussions on the passage of a depression and its associated weather sequence. The latter part of the question was handled well, especially by those who were secure in their case study knowledge. Most candidates cited human effects of the February 1994 storm, although it was refreshing to read more current factual answers based upon Storm Desmond and Storm Frank, which occurred in December 2015. Weaker candidates frequently neglected to retain their focus on human effects and drifted into a discussion of economic or environmental impacts. Answers were most impressive when the extreme weather characteristics of the storm, such as the wind or rainfall totals, were linked with the negative human effects. Similarly, examiners welcomed the inclusion of positive human effects associated with low pressure weather systems. There was some evidence to suggest that weaker candidates confused their low pressure weather event with their winter anticyclone or hurricane case study.

## Assessment Unit AS 2 Human Geography

### Overview

The mean mark for the paper was similar to that of the previous examination cycle, which suggests that candidates found this paper to be equally as challenging as that last year. Examiners reported that the paper allowed for a wide range of responses and suited candidates of differing abilities.

One experienced examiner noted that many candidates failed to make adequate use of the resources given within the examination paper, which limited their marks. In addition, another examiner reported that many candidates failed to focus on the question that was set. This was particularly apparent in Section C as a large number of candidates seemed to ignore the requirements of the question and proceeded to write about any case study that they had happened to learn.

A wide range of marks was noted reflecting the hard work by some candidates to learn the course material and apply this knowledge carefully. Unfortunately other responses lacked detailed understanding indicating those candidates who were unprepared for the depth required in the questions.

### Section A

- Q1 (a) (i)** This was a very straight forward question. Most candidates answered this correctly but some did not include the minus in the d column, thus not following the precedent set for other countries in the table.

- (ii) It is pleasing to note that the majority of candidates showed their full working out of the Spearman's Rank Correlation Coefficient and calculated the correct  $r_s$  value. Some counted the number of countries incorrectly or failed to complete the final step ( $1 - 0.076$ ) to determine the coefficient.
- (iii) Some candidates answered this question with a vague description of what a Spearman's Rank value means rather than what this value meant. Some made errors in their application of the significance level, but generally this question was much better answered than it has been in the past.
- (iv) Again, this question was better answered than it has been in previous series. Only one reason was required but in some cases the discussion required further elaboration.
- (b) (i) The majority of candidates were able to identify the two correct answers from the Resource.
- (ii) It was pleasing to see that the majority were able to identify this important mapping technique. However, candidates should learn the correct spelling for choropleth; examiners noted (and accepted) a wide range of variations.
- (iii) Candidates struggled to identify and describe one limitation of this technique. That said, there were some very good, well-argued answers in response to this question.
- (iv) This was one of the less well-answered questions on the examination paper. Candidates struggled to explain why population data might be useful when looking at patterns of oil consumption. Only a minority of candidates were able to make a detailed explanation and to use some evidence from the resource – as is highlighted within the question.
- (c) (i) The quality of answer for this question varied considerably. Some of the main issues were:
- In the first instance some candidates misread the question and instead of identifying and justifying a sampling method for the 12 sites they discussed the collection of stones across the river channel at one site only.
  - Some candidates therefore based their answer on Random sampling. This was not appropriate in this case as a wide range of different sites would be needed for this study.
  - Some candidates identified one sampling method but then proceeded to justify and explain a different sampling method. This was particularly noticeable when candidates chose Pragmatic sampling but often had no understanding of how this actually worked.
  - Some candidates failed to make any sense within their justification, focusing on the wrong or inappropriate points and failing to make a case as to why this particular sampling technique was selected in the first place.
- (ii) Candidates often struggle to achieve good marks in questions that look for the disadvantages of the techniques or calculations used in geographical investigation. In this question candidates tended to either achieve a maximum [2] or no mark at all. Many showed a lack of understanding of the differences between the mean and median and why one might be a better measure than the other in this case. Candidates need to be more aware of the strengths and weaknesses of techniques used.

- (iii) This question was answered poorly. Many candidates failed to achieve the maximum [6] marks for what was a simple graphical exercise. The question required candidates to produce a compound (divided) bar graph for the two sites indicated. Examiners expressed concern that a sizeable number of candidates had no idea what a compound bar chart is. Some of the main issues here were:
- candidates plotted pebble length and not roundness;
  - candidates plotted data for one site only;
  - a small minority of candidates attempted this question without using a ruler;
  - candidates failed to follow the appropriate graphical conventions;
  - titles were rarely added to the top of the graph;
  - the labelling of axes was often wrong or absent;
  - a key was not used to indicate the different categories of roundness;
  - the data was not plotted accurately.
- (iv) This question was well answered. Candidates were able to apply their knowledge of river processes to explain how the pebbles became smaller and more rounded.

## Section B

- Q2** (a) Examiners noted that many answers included the detail required for [3] or [4] marks. In this question there was a requirement to compare the population aged 0-14 in 1985 with 2010. Candidates needed to make specific reference to continents/countries within their answer. In addition, they needed to make reference to the trends, e.g. in MEDCs where the percentage was mostly decreasing and then in parts of Africa where the percentage actually increased.
- (b) An experienced examiner noted their surprise that this question was often poorly answered. Some candidates seem to have difficulty distinguishing between a social and an economic implication. In addition, some candidates discussed two or more implications in general rather than elaborating upon one particular social implication.
- (c) Although this was a straightforward question, many candidates failed to achieve the maximum [4] marks. In most cases this was due to vagueness within their definition of crude birth rate and crude death rate. Many answers left out reference to per thousand head of population or per year. At this level, precision in these simple definitions is expected. The majority of candidates were able to explain the effect these had on natural increase (or decrease).
- Q3** (a) The majority of candidates were able to access high marks in this question, with many achieving the full [8] marks. The question required them to discuss two positive and two negative effects of gentrification. Some candidates only made reference to one effect or did not adequately identify whether the effects were positive or negative. Candidates should take care to clearly respond to the demands of the question.

In addition, some candidates failed to make sufficient or indeed any use of the resources provided. Whilst it was acceptable for candidates to bring in their own knowledge and material on gentrification, there was a requirement that specific mention should have been made to both Harlem (Resource 3A) and Hackney (Resource 3B).



- (b) This was a straightforward question that required candidates to outline two issues caused by rapid urbanisation. It remains a surprise that so many AS Geography candidates still struggle to spell correctly their case study place names such as Cairo and Nairobi. The three main issues identified in the specification are: economic activity; service provision and the growth of informal settlement. Variations on this theme were accepted, but sometimes the candidates struggled to show how these were linked with rapid urbanisation. As noted previously, when a question requires two issues – it is important that candidates actually discuss two issues.
- Q4 (a) (i)** This was a straightforward question based on a resource that showed the global expansion of McDonalds over time. Yet again in this paper, candidates lost marks because they did not use facts and figures from the resource. There was also a requirement to link this resource with the concept of globalisation that some candidates struggled to achieve.
- (ii)** It was surprising to note the number of candidates who had an incomplete understanding of the concept of globalisation and how it works. The question was a simple discussion of one positive and one negative effect. Often the candidates created a deep imbalance in their answer – they either had lots of positives and few negatives or vice versa. In many answers there was a lack of detail to support the effect; candidates needed to give more examples of places/companies or areas of the world where this was happening.
- (b)** Many of the candidates were able to identify one way that colonialism hinders development but many lost [1] mark because they did not explain how this process could hinder development in a country. Therefore, for many, only a partial answer was offered. Candidates need to make sure that they respond to the whole question.

## Section C

It was noted in this report for 2015 that ‘answers to the essay questions at the end of the AS level examination papers have gradually been improving over previous series’. Unfortunately, it was particularly noticeable that many candidates struggled with the extended writing questions on this year’s paper. Many ignored the wording of the questions and provided long (and sometimes detailed) answers that did not address question.

A minority of candidates continue to answer only one question in Section C. Obviously this has a detrimental impact on their final mark.

Candidates continue to struggle to produce responses at Level 3 standard. Answers are required to have significant facts/figures and specific case study detail with reference to place. It requires skill to write a detailed answer in the limited time available, but candidates must practice this so that they are familiar with the standard required.

**Q5** This question was popular and was answered by a majority of candidates. The question was a familiar one that required candidates to use a national case study to describe and explain how population structure changes over space. Unfortunately, a significant number of candidates failed to read the question properly and answered based on changes over time. There was also a sizeable number of candidates who did identify that the answer should be based on change over space but who then did not go into enough detail. Some used their case study for population distribution and tried to make it fit the question. The question elicited a variety of responses based on the range of countries. The main issues involved in answering this question included:

- Some candidates failed to describe the changes to the population structure. There was a requirement for candidates to use key facts and figures from the national case study (eg birth and death rates) and to cross-reference these with the population

structure. More reference needed to be made to the different parts of the population structure: 0-14, 15-64, 65+ with comment made on the shape of the pyramids.

- Many candidates made good reference to the explanation of the changes to the population structure, but some needed to be more detailed in their response making specific reference to the reasons for the changes identified.
- As with last year, some added their own diagrams of the population pyramids, but it is important to ensure that they make reference to the pyramid changes in their writing.

**Q6** This question produced some very good, well written responses. However, there were a number of issues identified that led to marks being lost:

- A significant number of responses did not refer to a place or places that would be classed as remote rural.
- Some candidates spent more time outlining the different solutions that were instigated to counter the issues (or to promote rural regeneration in the area) as opposed to a discussion on the issues highlighted in the specification (population change, service provision and transport). For example, a number of candidates focused on the Highlands and Island Enterprise which was not needed for this question.
- Examiners noted that many candidates failed to access Level 3 marks due to a serious lack of knowledge/use of appropriate case study material. Candidates need to ensure that they use appropriate facts and figures to demonstrate their command of the specific case study.

**Q7** Examiners noted that this question was answered particularly poorly this year. Candidates struggled to achieve high Level 2 or Level 3 marks. Many candidates simply provided case study answers on Ghana or Italy and attempted to make their learned case study fit the question.

The question required an explanation of the problems associated with defining and measuring development. Candidates were able to discuss some of the particular measures of development, but often failed to develop a meaningful discussion of the problems associated with measuring development. However, a more significant issue was that a majority of candidates failed to address the problems of defining development in detail. Examiners reported a sizeable number of answers that made no reference to the definition of development.

In addition, the question required some reference to place(s) for illustration.

## Assessment Unit A2 1 and A2 2

### General Remarks

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

- A number of centres seem to tell their candidates to answer all the essay questions first. This makes marking the questions a somewhat confusing task but what is more significant is that examiners reported that this strategy did *'not seem to produce essays that were any stronger than candidates who followed the set structure'*. In similar vein in A2 1 a number of candidates began the examination by answering the Global Issues question. Examiners noted *'there is no tangible gain in doing so'*.
- Also on a practical level, an examiner drew attention to the fact that some candidates

continued answers on file pages set inside answer booklets, which had no candidate number or centre number on them and were not attached to the answer booklets in any way. What if they had become separated?

- Candidates should be encouraged to take a new page for each question to allow them space to add any extra material they might think of later and this practice also ensures that examiners have room to write their comments.
- Prepared answers remain a problem for weaker candidates, for they often neglect to consider what the question has actually asked them: ‘many wasted a lot of time with irrelevant material which was not useful for the argument’ was one observation in such a case.
- Where candidates are researching their own examples, teachers need to ensure that they are choosing appropriately. For some centres where a variety of different case studies were used which suggested independent research, some studies were not of the correct scale and candidates were penalized as a result.
- Some candidates tend to copy resource material too directly, and not just in the Decision Making exercise.
- And then there are the perennials:
  - many candidates spell their case studies incorrectly;
  - key terms are frequently not defined;
  - many fail to ‘use the resources’ or alternatively to ‘use the resource to help you’ by failing to introduce their own material; and
  - the command word is not always addressed.

## Assessment Unit A2 1 Human Interactions and Global Issues

### Overview

The paper was reported to be straightforward. Candidates had little difficulty understanding the questions, which ‘*examined the specification in an accurate manner*’ reported one examiner. There were few examples of candidates misinterpreting the questions, although use of the phrase “to help you” tripped a number up who either left out resource reference or their own material. There were few rubric violations, one examiner had three; most did not see any. The most ‘popular’ options were Option A (especially Q1) with a split between Option B (especially Q3) and C (split). In terms of Global Issues, tourism is still the most popular issue, followed by pollution and nuclear energy. Very few centres answer the agriculture question.

### Section A

#### Option A: Impact of Population Change

- Q1** (a) Most were at Level 2; some better laid out answers got into Level 3. One examiner reported on simplistic answers more worthy of GCSE. The best responses offered examples and made some attempt to classify the factors.
- (b) (i) Mostly candidates scored full marks, so long as they backed up the description with figures.
- (ii) Weaker candidates just described the Epidemiological Model and did not develop their answer; others managed the terminology well. A lot of candidates did not relate their answer to the resource. Few identified or



explained the proportional significance of cancer doubling. Many did not recognise the proportional significance with cancer rising and cardiovascular falling.

- (c) Barra and Vatersay vs Peterborough were the most common choices of case study. For many, the implications for Barra were lacking, but in contrast, Peterborough was quite well covered with facts and figures. Some did well, too, with Achill Island as their emigration study, although on the whole responses tended to be better for in-migration.

- Q2** (a) Not well answered, the distinctions could have been clearer in many cases. That many asylum seekers were on an individual journey was not appreciated. As so often, those who gave examples, although not specifically required to do so, tended to demonstrate greater depth.
- (b) Well-handled; many Level 3 answers were seen. There was often a lack of key terms associated with both theories; but most candidates appeared to understand the main differences between the theories.
- (c) Most of the candidates used the resource well. Those who had China for their case study tended to spend a good deal of time on the background to the policy at a cost to evaluating its impact. Generally, evaluation was the main stumbling block to success along with lack of detailed resource use.

#### **Option B: Planning for Sustainable Settlements**

- Q3** (a) Some candidates did not appreciate sufficiently the differences between the two footprints; others did and brought in the correct terminology. Fewer dealt well with the 'teach us' strand of the question. Others didn't address the issue of what the terms told us about sustainability.
- (b) More use might have been made of the resource in many cases. The environmental consequences were well discussed, but the social aspects didn't get good coverage. The distinction between social and economic continues to cause difficulties for significant numbers of candidates.
- (c) This was usually answered with Cambridge as the case study, the marks reflecting the level of detail brought to bear and how well the evaluation was handled. One examiner remarked that this was the '*best of the essay questions*'.
- Q4** (a) The question was straightforward but some answers were not clear, there were a number of candidates who concentrated on either just problems or just benefits. The 'urban sustainability' aspect was not always addressed.
- (b) This question was seen to contain a rich resource from which many were able to elicit a range of positive aspects of urban parks, although negative contributions were not identified by all. Resource use was better than the own material; external material tended to be quite limited in depth and detail and some needed to address the issue of sustainable development more closely.
- (c) Some candidates did not read the question sufficiently closely and answers were seen that used a detailed case study (usually Curitiba) rather than general reference or omitted the environment. Other responses included only a vague reference to places. One examiner had this as the '*worst of the essay questions*'.

**Option C: Issues in Ethnic Diversity**

- Q5** (a) (i) *Answers here were weak* observed one examiner. The majority who attempted this question did not score highly, which was surprising given the straightforwardness of the actual question. A lack of resource use hindered many as did as an absence of accurate terminology, or failure to identify the causes accurately, some causes of conflict were not as outlined in the specification.
- (ii) Ethnic cleansing was better handled than any other cause. Use of the resource was less rigorous than might have been anticipated. Commonly discussed were Belfast and Sri Lanka.
- (b) The evaluation aspect of this question was the weakest. The best responses were able to make an evaluation, acknowledging the greater importance of primary factors. Candidates often could discuss the factors, definitions and examples but did not take their answers as far as evaluation.
- Q6** (a) (i) Good resource use was seen here, although reasons for segregation were often poorly explained.
- (ii) By contrast the same resources were less well utilised in this part of the question. Good answers brought in detailed knowledge of other cities.
- (b) Annexation was sometimes missed; it should have been mentioned if only to say that it had not been a factor. Jamaica and Britain were the commonest examples; also Sri Lanka and East Timor. Evaluation was sometimes absent.

**General Remarks**

- Q7** (a) Well-answered by most, but some displayed limited understanding. Ozone was the predominant choice. Quite a few candidates omitted this question.
- (b) This was the best handled of the four Section b questions, but as with all of them there were many candidates who wrote about the collection of data rather than its analysis.
- (c) This was well-answered, usually with reference to Los Angeles. Some candidates spent too long on the formation of smog, which was not necessary to the answer. The impacts aspect was less well handled.
- Q8** (a) This was answered very well or very badly. Mostly it was the former.
- (b) This saw varied responses.
- (c) The better answers here made plentiful reference to the British Isles; weaker ones tended to be those with least place reference or where depth and detail was wanting. Candidates needed to reach a decision, but many struggled with this especially in terms of justification and evidence. The prepared answer issue was particularly evident here: 'for some it was as if they had learnt off an answer but it didn't fully fit the aspects of the question' said one examiner.
- Q9** (a) Well handled.
- (b) More detail was needed on data analysis.
- (c) More place reference would have been helpful for many candidates. Candidates needed to reach a decision after having discussed the opposing arguments relating specifically to food crisis and the general use of GM crops; some didn't. *'This question really pushed candidates to show their knowledge and understanding and to use it'* was one comment.

- Q10** (a) Tourism change was often missed.
- (b) This was the weakest of the (b) questions.
- (c) Many here missed saying anything or enough on the international standards, few candidates appreciated the need for discussion throughout the essay. Specific resorts gained more marks rather than just stating 'in Costa Rica'. A greater variety of places were seen here than for most questions.

## Concluding Remarks

Most candidates interpreted the questions well; just on occasion elements were missed.

*'As always the mark scheme was clear, concise and easy to apply'* reported several examiners.

A few were rushed at the end, one examiner judged this by the way in which handwriting could become more difficult to read.

## Assessment Unit A2 2 Physical Geography and Decision-Making

### General Remarks

Examiners reported that the paper was accessible, allowing candidates of differing abilities to respond positively. Some tended to copy resource material too directly or did not interpret 'to help you' sections with accuracy. There were few rubric violations noted. There is still evidence of an over-reliance on 'learned or model answers' in case study sections (including 1(b) and 6(c)) so some candidates do not correctly develop their knowledge with respect to the question asked.

### Section A

#### Option A: Fluvial and Coastal Environments

- Q1** (a) (i) While this was a very popular question the Resources were often underused. The development of the 'demand' aspect of this section was frequently limited. A discussion of management was often given, though it was not as relevant to (i) as it was to (ii).
- (ii) The rich resource material was not used well by some, especially the map. Often the 'reasons for' requirement was overlooked and the 'to help you' ignored.
- (b) This proved to be a straightforward question for those with good case study knowledge. There were many good Colorado and some Nile based answers. Candidate's pre-learned answers often meant that strategies became the focus rather than aims and impacts.
- Q2** (a) (i) Most identified a positive and negative argument, with some using the resource material to good effect.
- (ii) Poor selection from the resource hindered some answers with 'river profiling' being the best-handled section. Often it was the lack of clear explanation on how strategies would impact flooding that proved a downfall.

- (b) Holderness and South Devon and Dorset dominated. In both cases strategies needed to be detailed with a focus on people and environment impacts. In Holderness many repeatedly identified soft engineering without any real facts or impacts, in Devon/Dorset places were identified but factual strategy detail was weak. Some Holderness answers were too GCSE in standard concerning process and impact.

### Option B: The Nature and Sustainability of Tropical Ecosystems

- Q3** (a) Diagrams were better than those previously seen. Some gave description without facts (e.g. acidic without figures pH4-4.5) or did not explain the characteristics identified in terms of soil processes.
- (b) Some explanations lacked ITCZ or Hadley Cell references. The summer rainy season was generally handled better than the winter drought.
- (c) The Amazon was ubiquitous in these responses and while some were unbalanced regarding the nutrient cycle and trophic structure, many were sound. Diagrams were often used to good effect if supported by the written text.
- Q4** (a) Viewed by examiners as *'a nice resource'* and accessible to candidates, this was often effectively used though some lifted the text too directly thus underdeveloping their answer.
- (b) Some needed to use the graph more fully or accurately. Temperature variation was not adequately explained by a fair number of candidates. ITCZ and Hadley Cell references were required for Level 3 marks.
- (c) Many good Level 3 responses were found. Better candidates showed greater precision on the case study details and the evaluation was the aspect most often underdeveloped.

### Option C: The Dynamic Earth

- Q5** (a) The equivalent question last year had been poorly read and again the requirements of the question needed accurate interpretation. Ocean floor AND 'other' evidence from boundaries were needed with clear links to Plate Tectonics theory. Evidence was often only vaguely described.
- (b) Well-handled by some though others used poor terminology in their response. Definitions were often known but commonly candidates described impacts or how to predict earthquakes rather than how prediction might reduce impacts.
- (c) Valid case studies were usually known and impact detail provided but the reasons for 'contrasts in management' was not always seen as the focus of the question. Even when it was, 'stage of development' was frequently described with the exclusion of other factors such as knowledge or hazard perception.
- Q6** (a) Most diagrams were sound, but often oceanic/continent destructive margins were employed though even these allowed most of the key processes to be discussed. There was some misunderstanding between island arcs and hot spots. One centre had pupils referencing island arch?
- (b) Most used the resource with accuracy, though many did not individually develop the nature, scale and timing elements identified in the question itself.
- (c) Rather than evaluate hazards candidates often described benefits along with hazards. This was only appropriate evaluation if the hazard element was identified, for example, ash falls can be fatal to people and destructive of property but they can improve the fertility of natural habitats or of farmland.

## Concluding Comments

The examiners reported that the language of this paper was both appropriate and unambiguous for candidates. While some candidates need to learn to understand the relevance of the 'to help you' phrase, others need to improve their examination technique to structure their answers in line with the commands and guidance of the question.

The examiners found the mark scheme to be appropriate and easy to apply.

Again little direct evidence was found of candidates not completing questions on this part of the paper.

## Section B: Decision Making Exercise

### Overview

The decision making exercise continues to be a challenging part of the A Level suite of examinations, particularly as it follows a set of questions addressing Physical Geography. However, it is greatly to the credit of the candidates, and to the centres supporting them, that most are able to deal with this challenge. Effective time management has been and continues to be key in enabling candidates to do well. There was conflicting evidence this year of the impact of time management by candidates. Some examiners felt that it was not an issue for the majority of candidates, while others reported short and seemingly rushed sections at the end of some candidate's papers, suggesting time was an issue in those instances. This would reinforce the emphasis that centres should give to time management in the preparation of their candidates, especially in this paper.

This year the context was a proposed reservoir on the Peace River in British Columbia. The environmental, social and economic arguments were presented in the usual textual, photographic, cartographic and graphical formats. As has been the case in recent years, further information is provided in infographics. This year they happened to be created by groups opposed to the development. As always, these are a rich source of information for candidates, providing details which the best candidates were able to weave into their answers.

Candidates seemed to find most of the resources accessible, although less use was made of the graphs 7C1 and 7C2 than some of the other resources. Some candidates used the photographs and the artist's impression of the development very effectively, incorporating discussion of these into their reports. As ever, the best candidates neglected little in the resource booklet, making use of the whole range of the resources effectively.

Examiners continue to find examples where candidates have used the text in the booklet verbatim, or close to verbatim. Candidates should know that this approach is very costly in terms of marks gained, as it demonstrates little understanding. Examiners are vigilant in detecting work which is taken directly from the resources without having been interpreted and set in the candidate's own words. Such candidates often penalise themselves doubly, as they replicate sections of the text, spending precious time for which they get little reward, and then often omit the information in the resources more widely.

The following comments give some detail about the individual sections of this year's DME.

#### **A: Introduction**

This required candidates to describe briefly the proposed project and discuss the need for it, which is a fairly standard way to begin a DME. While generally this was answered fairly well, a number of examiners commented on the tendency to introduce irrelevant background material into this section, rather than concentrating on describing the project itself.

**B: The Likely Impact****(i) People and the Economy**

This proved to be the best answered section by most candidates. As there were 12 marks allocated to it, this was welcomed. The best responses were from candidates who fully exploited the resources to provide responses with adequate breadth and depth of ideas by addressing people and economy as well as the counterarguments. Others addressed both elements, but failed to express their ideas clearly and effectively with adequate detail and figures. Unfortunately, some candidates either omitted the counterarguments or produced a response with an environmental rather than economic focus. Some omitted the People of the First Nations, missing an important series of arguments. Again, some candidates were too reliant on verbatim quoting in this section.

**(ii) The Environment**

Examiners reported that candidates had few issues in addressing this section. Some candidates drifted away from 'environment' in their arguments, and produced a response with a more economic focus (referring to loss of farmland productivity) or people focus (referring to the effects of toxins on human health) while others presented an unbalanced response with very little content in their counterarguments. While it is possible for arguments to appear in different sections, the candidates must make clear the way in which they fit into the section in which they are introduced, and not blur the line between environmental and social, for example.

**C: Conclusion**

Candidates this year seemed relatively balanced between deciding that the project should go ahead or should not, and arguments were able to be advanced whatever decision candidates opted for. Responses varied greatly in this section overall in terms of quantity and quality. A number of examiners noted their disappointment for candidates in this section. It is particularly disappointing in the case of those candidates who had performed very well in both parts of Section B. The vast majority of candidates stated a clear decision and most provided effective supporting arguments. However, a number are still failing to adequately address the overall benefits to fully justify their decisions. Often they are not balancing the 'people and economic' arguments with the 'environmental'. When they do not do this, often the result is that this section becomes merely a summary of their points in B(i) and B(ii). For instance, they might acknowledge that there are environmental arguments against their decision and then restate the counterarguments for these.

Some candidates rushed this section as responses often lacked the necessary depth and breadth of idea to gain a high mark in Level 2 or to justify awarding Level 3.

**Format**

This should be a straightforward two marks for candidates, but there are still a disappointing number who drop marks here. Some added "the" to people and economy or invented their own subheadings such as "the environmental impacts". Some failed to present the main heading and subheading on a different line, often combining the heading and the subheading into 'The likely Impact on People and the economy' for instance, losing a mark. The use of 'Conclusion' rather than the more common heading 'Decision' also threw a few of the less heedful candidates.

**Role**

This was generally well addressed and the majority of candidates gained both marks for adopting and maintaining the role.

**Graph**

Compared to some previous years the graph had somewhat more data to plot this year, but most examiners did not feel that this led to an increase in the number of marks lost to accuracy. Indeed, most examiners reported that the majority of candidates gained full marks for the graph.



A very small proportion of candidates used an inappropriate graph type, such as a scattergraph. An equally small number reproduced the table in their report and did not attempt to draw a graph. Overall, the conventions of a properly constructed graph (title, keys and labelled axes) were included by the majority of candidates. A small number failed to insert the correct units on the Y axis. Some candidates failed to refer to their graph (more common for those who submitted their graph separately on graph paper) or referred to Table 1 and not the graph.

Currently there is a choice available to candidates. They can either use graph paper or they can draw the graph directly into the booklet. Both approaches offer some advantages and some disadvantages. Using lined paper often speeds up the task, and the graph can be constructed perfectly accurately using this method, if drawn carefully. Where candidates choose an inappropriate scale they produce graphs which cannot possibly show the nuances of the data in the table, and will lose accuracy marks as a result. Generally, although not exclusively, this is not a problem when using graph paper, as candidates tend to use the whole page. Some candidates use a ruler for the scale with, for instance, 1 centimetre being used for 100 rooms required in this year's graph. Remarkably, some graphs are constructed without recourse to a ruler, which makes it difficult for candidate and examiner alike to judge the accurate placement of bars or points. Scale lines were occasionally erratic, making it challenging to represent the figures with any accuracy. The figure most often losing marks this year was 1100, which was often shown as 1010. Despite all of these points, it is worth remembering that there were many 8 out of 8 scores for the graph whether drawn on graph paper or not.

### **Update on the issue**

Candidates are told in the paper that they should not use any information that they might know about the issue which is not present in the Resource Booklet and Question paper. However, it may be of interest for teachers and candidates to know that this proposal has been given permission and construction of the dam has begun. In July 2016 logging trucks were hauling timber from the site, the worker accommodation continued to be constructed and riprap continued to be placed along the section which will make up the south bank of the new reservoir.

## Contact details

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