GCE AS EXAMINERS' REPORTS

GEOGRAPHY
AS

SUMMER 2018

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GEOGRAPHY

GCE AS

Summer 2018

COMPONENT 1: CHANGING LANDSCAPES

Principal Examiner: Noel Thomas

General observations

The paper was accessible across the ability range with little evidence of questions being omitted. It differentiated well and provided the opportunity for candidates to display the ability to appropriately apply their knowledge and understanding of the specification content.

To summarise:

- The time available did not seem cause for concern with very few candidates failing to finish the paper.
- Candidates were making better use of the additional space provided this year. Remember this is only used as guide for those candidates with large handwriting and not a pre-requisite to complete all lines.
- On the whole, the glaciated landscape questions generated a better quality of response with some use of case study evidence. However, fewer centres attempted this option.
- Some centres are still giving out continuation booklets rather than directing the candidates to the additional space provided and the continuation pages at the back of the paper.
- There was continued evidence of candidates having been instructed well on the differences between the command words and their impact upon the AO1, AO2 and AO3 requirements. Centres should ensure that they devote adequate time to discussing the requirements of each command word with candidates.
- There was frequent use of dated case study examples. Centres should be aware that examples and case studies should be contemporary and applied to the question.
- The standard of responses seen to questions examining AO3 and in particular the statistics-based questions suggested that some centres had not addressed this adequately within their teaching.
- As in last year's paper many candidates failed to identify the synoptic requirement for question 7.

Q.1 (a) Most candidates were able to identify a variety of landforms shown in Figure 1. However, few candidates addressed the command word to 'describe' the landforms and selected instead to explain the formation of chosen landforms. Observations regarding the characteristics of landforms were weak.

(b) Many candidates demonstrated a good understanding of sub aerial processes and many also successfully made links to named landforms of coastal erosion. Some were able to competently link chemical weathering processes such as carbonation to the geological characteristics of the rocks. A small number of candidates integrated useful diagrams into their answers. Candidates who examined the role of sub aerial processes with success considered the importance of them in comparison to other factors such as lithology, geology or marine processes or considered how their importance varies between different landforms. A number of candidates did not focus their answers on landforms of coastal erosion.

Q.2 (a) Most candidates were able to interpret **Figure 2** successfully utilising the axes to describe the pattern of sediment gain and loss along the coastline. However, a number of candidates did not address the command word 'describe' and attempted to explain the patterns instead. Some candidates did not support their descriptions with sufficient data or attempt any data manipulation. Some answers lacked a logical description of change **along** the coastline.

(b) Many candidates were able to present detailed evidence about negative impacts of humans on coastal environments in relation to a wide range of places including some off-shore environments such as coral reefs and mangrove swamps. It was good to see a number of case studies from 'beyond the UK' as encouraged by the specification such as Cancun, Mexico but also detailed information which appeared to be based on fieldwork experiences in the UK. It was good to see an increasing number of candidates integrating the use of **specialised concepts** in their answers such as feedback, systems and mitigation. Candidates who achieved well were able to address the command word with success by presenting a balanced discussion on whether human activity has a mainly negative impact.

Q.3 (a) Most candidates were able to identify a range of distinctive landforms in the glacial landscape including the corrie, tarn and arête. However, many candidates did not adequately address the command word to 'describe' the landforms and selected instead to explain the formation of chosen landforms.

(b) Many candidates demonstrated a thorough understanding of abrasion and its role in the creation of landforms of glacial erosion such as corries, striations and roche moutoneés. A number of candidates looked at landforms of glacial deposition. Candidates who examined the role of abrasion with success considered its importance in relation to other erosional processes such as plucking or recognised the dependence of its success on other factors such as the occurrence of basal sliding or the supply of material. Many responses contained annotated diagrams which supported answers. However, candidates should be advised to reference diagrams which are not an integral part of the script.

Q.4 (a) Some candidates were able to describe the relationship between runoff and temperature with success reading the x and y axis data to support points and using the key with accuracy. However, several candidates struggled with the requirement to look at the relationship between runoff and temperature and tended to look at the two separately. A number of candidates failed to address the command word 'describe' attempting to explain the relationship instead.

(b) Most candidates were able to present evidence to demonstrate that the relationship between glaciated landscapes and human activity can be negative. Excellent place-based detail was used to show the impacts of named glacial lake outburst floods and avalanches. The interpretation of the phrase glaciated landscapes was wide ranging and included some excellent discussions about named places in the permafrost regions of the Arctic Tundra and activities such as quarrying in the UK. Many candidates entered into a good discussion which recognised the positive aspects of the relationship between glaciated landscapes and human activity. The best answers supported points with detailed exemplification from case studies. Case studies were wide-ranging and included conservation of landscapes, mitigation of risk and use of glaciated landscapes in a sustainable way for such things as HEP. A significant number of candidates succeeded in providing substantiated conclusions.

Q.5 (a) (i) Many candidates were able to identify the immediate impacts of earthquakes. However, candidates should be reminded to read the rubric with care as many candidates utilised **Figure 5b** which contained information not visible in the photographs. Many failed to utilise the image in **Figure 5a** adequately to describe the immediate impacts of the earthquake. Some candidates put in information about the impacts of other earthquakes which was beyond the remit of the question.

(ii) Some candidates were able to develop the information in the evidence provided to give clear chains of reasoning about long-term economic impacts of the earthquake. However, a number of candidates did not develop the information, failed to focus on economic impacts and ignored the focus on long-term impacts.

(b) Many candidates were able to identify characteristics of seismic waves such as P and S waves including speed and nature of travel. However, there was a considerable amount of confusion evident in the answers to this question especially with regard to the type of material waves could travel through. The focus needed to be on the characteristics of the waves themselves not on the consequences of them.

(c) Few candidates fully understood the process of liquefaction.

(i) The vast majority of candidates were able to plot the data correctly utilising the x and y axes.

(ii) Whilst the majority of candidates appeared familiar with a Spearman Rank correlation test a good number of candidates did not attempt the question. Most candidates who undertook the question accurately calculated d and d^2.

(iii) Candidates were able to add up numerical data with success. However, some did not understand the Sigma symbol.

(iv) The majority of candidates were able to successfully utilise the Spearman Rank formula.

(v) A small number of candidates demonstrated clear and full understanding of significance tables. Many did not use the critical value accurately to decide whether to accept or reject the null hypothesis and did not explain the geographical significance of the results.

(d) Most candidates were able to identify some impacts of tsunamis. However, there were many answers which lacked specificity and supporting evidence was weak. Many candidates referenced social, economic and demographic impacts which helped to structure essays. Many utilised specific details from the Indian Ocean Boxing Day tsunami 2004 and 2011 Tohoku tsunami. The most successful answers developed balanced discussions on whether tsunami have the greatest impact. Some compared tsunami impacts to those from other earthquake hazards. Some considered the level of economic development and the extent to which risk can be mitigated. Strong supporting evidence was provided by many. Some answers became irrelevant where volcanic hazards were discussed without any explanation of their link to earthquake activity.

Q.6 (a) The majority of candidates found the question challenging. A few demonstrated excellent knowledge of current theories of processes operating at plate margins e.g. slab-pull, ridge-push and mantle depressurisation. However, explanations tended to be partial and not fully explain volcanic activity. In many cases there was a lack of spatial awareness therefore references to the global pattern of volcanic activity was limited. The ability to assess the significance of processes operating at plate margins to explain the pattern of volcanic activity was most successfully undertaken by those candidates who recognised intra-plate hotspot activity which did not link to plate margins. However, there were many who were confused about hotspot activity. Many were able to recognise that there are differences in the type of volcanicity seen at diverging and converging plate margins and could show clear understanding of the nature of the lava produced in each instance leading to variations in explosivity and volcano type. A few candidates even recognised that there are some anomalies in the expected patterns such as Eyjafjallajökull, a composite volcano on a divergent plate margin.

(b) Many candidates were able to mention the way technology in general is used to reduce risks associated with tectonic hazards. However, few were able to give details of technology utilised such as infra-red cameras, co-spectrometers, tiltmeters, seismometers and the purpose and functioning of the devices. Even when this was noted, few explained what the results indicated and past the fact that such data enables warnings to be given, few could explain how it would therefore help to reduce risk. Whilst many candidates referenced up-to-date case study material, particularly relevant in the world of technology, some very dated case studies such as Mount St. Helens were used. Some candidates did not recognise building design to be technology at work and few were able to be specific on the content of the designs such as base/ isoseismic isolators. Occasionally candidates mentioned named buildings such as the Tokyo Sky Tree. Candidates were more successful with the discussion element of this question considering whether technology is the best way to reduce risks of tectonic hazards or not. Many gave excellent arguments about the link to the level of economic development of a country, the availability of energy to operate technology, the need for technology to work in conjunction with other matters such as governance or education. There were many effective examples given as evidence for the arguments. Several candidates failed to address the question whether technology was the 'best way' to reduce the risks associated with tectonic hazards and therefore failed to reach a clear conclusion. The question allowed candidates to make good use of the specialised concepts and it was good to see some referencing the Risk Equation.

Q.7 Most candidates were able to suggest how hazards can affect connections between places. However, many candidates added a considerable amount of irrelevant material writing about the impacts of the eruption of E15 and the Nepal earthquake. Few candidates were able to generate truly synoptic links. However, there were a few candidates who made clear synoptic links to the effects on perceptions of places and the positive and negative impacts on connections as a result.

GEOGRAPHY

GCE AS

Summer 2018

COMPONENT 2: CHANGING PLACES

Principal Examiner: Melanie Barker

General observations

The paper was accessible across the ability range with limited evidence of questions being omitted; however, many candidates found some of the longer questions challenging. The paper differentiated well and all questions and their constituent parts gave the required characteristic of providing the opportunity to the most able to demonstrate some excellent knowledge and understanding of the specification, whilst also being accessible to those of lower ability.

To summarise:

- Time management did not appear to be an issue with some candidates producing lengthy, detailed answers to all questions.
- The problem of poor handwriting persists for a significant number of candidates. It is easy to lose the thread of an argument or account when focusing on deciphering what has been written. Centres are urged to encourage those with poor handwriting to explore opportunities to have the use of a word processor or a scribe. Spelling, punctuation and grammar are still proving to be an issue for a number of candidates.
- Throughout the paper, the answers to the skills questions varied in quality with some better candidates unable to answer some of the more rudimentary skills questions (e.g. the estimation of the range in questions 2(a)(ii). Both the enquiry process on page 23 of the AS specification and the skills citied in Appendix A on page 27 are elements of the specification that should not be overlooked when preparing candidates for examinations; it is to be expected that some skills will be examined in every examination session.
- It was pleasing to note some higher marks that were awarded in the questions relating to candidates' own fieldwork, however there were some Centres where all candidates scored low marks on one or both fieldwork elements and the issue of thorough follow-up to fieldwork needs to be addressed by these Centres.
- As in last year's paper geographical terminology could also usefully be stressed, paying particular attention to the wording used in the specification as the wording of questions is derived directly from the specification.
- The role of '**place**' in the specification is significant and whilst some candidates are very familiar with case studies *per se*, the central tenet that 'this section is fundamentally at the local level' was not apparent in candidates' responses. This is an issue that was evident in last year's examination and has apparently not been addressed by teachers in their approach to specification delivery.
- In some cases, supporting data / evidence in candidates' answers was 'creative' or at the very least confused: centres should remind their students that (i) examiners are familiar with the 'standard' case studies; (ii) it is easy for examiners to check case studies on the internet.
- Candidates need to be reminded to respond directly to the questions' command word.

Q.1 (a) All candidates were able to access the resources in Figure 1 to make meaningful comparisons about the ways in which Loch Lomond was represented. Many candidates, however, did not pay attention to the command word 'compare' and wrote separate statements describing each image; furthermore, candidates should be encouraged to look at the mark allocation as for full marks, more than a simple description of each image is required. In answering the second part of the question, it was evident that most, but not all, candidates were familiar with the concept of 'conflict'; this is an example of where questions are derived directly from the specification.

(b) This question gave candidates the opportunity to use a wide choice of examples and therefore a wide variety was seen. In some cases, candidates were well-prepared for this part of the examination insofar as they clearly understood that the command word 'examine' requires a different writing approach than 'describe' or 'explain' do. The instruction to 'examine' impacts of growth in a geography examination is also intended to prompt candidates into 'thinking like a geographer', for instance by focusing on the way impacts of quaternary industry growth near universities and science parks might be linked with changes occurring in other places e.g. the building of new roads and railway stations to support such activities and their personnel. The aspect of the specification from which this question is drawn (the growth of the quaternary industry) was rarely referred to explicitly in candidates' answers; applying this idea to a local place would provide weaker candidates with a useful narrative through this aspect of the specification. Therefore, such candidates simply gave generic ideas about the impact of industrial growth.

The best answers examined changes occurring over varying scales which were often very detailed. Candidates who accessed the full range of AO2 marks available typically evaluated both positive and negative aspects of quaternary industry growth and were able to develop the impacts beyond simple multiplier effect. For those candidates who only accessed the AO1 marks, they typically provided a descriptive account of the creation of 'jobs' without examining the economic impact of this. In a few cases, candidates wrote about impacts in particular small-scale places e.g. Aztec West Business Park to the north of Bristol: this was encouraging to see, and very much in line with recommendations in relation to teaching and learning about **changing places** (case studies of **local** places - as opposed to case studies of large cities or states - is recommended throughout this part of the A-level course). Candidates who wrote about economic impacts of growth of quaternary industry in large cities such as London or San Francisco struggled to access the full marks available (because the scale was too overwhelmingly large to perform competently). It is worth Centres explicitly reminding students of the need to embrace the 'specialised concepts' outlined in the specification, particularly when answering questions requiring 'examination' or 'evaluation'.

Q.2 (a) This first part of this question examined Assessment Objective 3 in which students are expected to be familiar with located proportional circles (3.5 Appendix A page 27); meanwhile the command word 'describe' is the simplest command word in the specification. It is clear that some Centres have rehearsed this skill with their students and such students easily accessed the four available marks. Some students lost marks through careless ignoring of the 'in England and Wales' element of the exam question. Centres are to be encouraged to drill their students into reading every single word on the paper in order to avoid careless errors.

The second part of this question was a real discriminator. Careless use of the key led to errors by candidates of all abilities and some clearly didn't anticipate being asked to do this and therefore omitted this question.

(b) This question further discriminated those students who had not carefully read the word 'social' in the command. This was a straightforward knowledge-based question where the best answers were supported by clear, pertinent locational detail.

(c) This question was the highest tariff question on the paper and better-candidates were clearly prepared to write at length presenting evidence to support their arguments about the degree of success of rural rebranding. Many candidates were able to write fluently about two contrasting rural communities, but in some cases, they were either unfamiliar with the wording 'continuity and change' (which is a direct lift from the specification) or they did not engage with the command 'to what extent'. This resulted in relatively poor performance for these candidates on this question.

Meanwhile, the best candidates were able to identify positive and negative aspects of the rural rebranding process and credit these impacts as affecting different groups of people and / or places at a range of scales e.g. those rural areas close to large metropolitan areas.

With regards to the candidate's choice of location(s), it is worth reminding candidates that there is a need to briefly contextualise their chosen rural settlements, and that this provides evidence of understanding. Whilst it is easy for examiners to check that a tiny hamlet actually exists, it is far preferable to read a short sentence conveying characteristics of its location than to have to reach for an electronic device to confirm this.

As with question 1c, comments relating to the essence of 'changing places' and use of specialised concepts apply here too.

Q.3 (a) Answers to this question fell into one of two camps: those candidates who were familiar with the content of the first stage of the enquiry process (from where this question is drawn) and those for whom this was very unfamiliar territory. Centres should be reminded that the enquiry process forms part of the specification (Section B page 23) and as with other areas of the specification, candidates will benefit from familiarity with the wording thereof. Many candidates simply described their data collection and marks for an answer of this kind are restricted to Band 1. For those students who were familiar with the elements of planning within the enquiry process, they were able to access all 5 marks available with comparative ease.

(b) In the first part of this question, answers were similarly divided as in the previous one. Some candidates were not familiar with the concept of 'sampling technique' which is an explicit element of the enquiry process. Candidates should be taught appropriate vocabulary in relation to sampling to enable them to discuss the merits and appropriateness of different techniques. The second part of the question enabled most candidates to access most of the marks. They were able to deduce that placing three graphs on one set of axes facilitated ease of comparison; however, some students ignored the mark allocation and did not develop their suggestions accordingly. Finally, the third part discriminated between those students who have been taught explicitly to evaluate methods of data presentation and suggest alternatives and those who had clearly never given consideration to alternative ways of appropriately presenting data. There were a pleasing number of students who could eloquently justify an alternative technique.

(c) The wording of the question was chosen specifically to encourage candidates to evaluate both field sketches and photographs (Appendix A, page 28 Skill reference number 7.1 and 7.2). Weaker candidates were unable to distinguish between the two while the best candidates were able to identify succinctly the advantages pertinent to each. Some approached this by contrasting the two techniques: this approach resulted in pleasing answers and is to be encouraged.

Q.4 This question varied significantly from centre to centre as well as between candidates within centres. There was a huge discrepancy between how well centres had prepared their students for this section. This was unexpected as it very much follows the pattern of the legacy papers from previous AS specifications and was a clear element of both the SAMs and the 2017 paper for this Specification. Four marks were available for an account of the approach to data analysis of to the physical geography investigation with 6 further marks allocated for justifying the chosen techniques. The best answers were richly detailed and referred to one or more data analysis techniques in a specified local context. The best candidates were able to quote facts and figures drawn from their fieldwork in order to evidence their analysis. Meanwhile, too many weaker candidates did not read the question carefully and simply wrote about their data collection methods, some admittedly did justify these and thus were able to gain access to some AO2 marks.

Q.5 There was a significant variation in candidates' answers to this question, this variation was clearly determined on a centre by centre basis. Answers from some centres, demonstrated that candidates were able to both recognise the various elements of planning that had gone into their fieldwork investigations and evaluate accordingly.

Those who accessed the full AO2 marks available (six in this instance) were able to do more than simple justification of the importance of the generic elements of the planning process; they were able to additionally *evaluate* these elements in the particular *context* of their investigation. Some mid-ability candidates accessed good marks through familiarity with two or more components of fieldwork planning and recognising where these had led to success or otherwise of their investigation. It is to be acknowledged that it is probably teachers (rather than the candidates) who have planned this fieldwork for this component; however, as in other questions, the more the candidates are familiar with the wording of the specification, the better armed they are to respond to questions derived directly from it.

For Centres entering their candidates as a milestone for the full A level qualification, it is worth ensuring that candidates are familiar with this first stage of the enquiry process as they will be expected to do this independently for their A level NEA, and indeed the success or otherwise of their personal investigation relies on thorough planning.

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