



GCE EXAMINERS' REPORTS

**GCE (NEW)
GEOGRAPHY
AS/Advanced**

SUMMER 2017

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**WJEC
GCE GEOGRAPHY (NEW)**

Summer 2017

UNIT 1 - 2110U10-1

Section A: Changing Landscapes

In summary, centres should note the following:

- Command words are an important indication to candidates of how they need to use the information they have learned. They give direction to the assessment objectives that make up the mark allocation for each question.
- Questions now address specific assessment objectives or combinations of objectives and candidates should be made aware of this.
- Questions based on resources now have more than a requirement to describe. As seen in 1(a) (i) and 3(a) (i) the resources have been used to apply concepts and knowledge whilst in 6(c) they have been used to stimulate discussion.
- The assessment of numeracy is now part of examination papers and candidates should be prepared for this.
- The integrated use of case study material enhanced answers across both assessment objectives 1 and 2.
- Good candidates engaged in question analysis before attempting their answers.

Question 1(a) (i)

The better answers focused on the requirement of the question to relate mass movement to the development of the coastal landscape. Those responses that related the development to the workings of the coastal system did well. They referred to the impact of mass movement on the form of the coastal landscape as well as the method and speed of movement of material through the system. Discussion of the shape of the cliff face, the protection afforded by the debris at the cliff foot and the movement of sediment along the coast was common in these answers. Other answers discussed how mass movement related to the human elements shown in the resource, although there was less scope to score well in this approach. A number of answers ill-advisedly preceded an analysis of the development of the coastal landscape with a lengthy description of processes leading to mass movement and some had this as their sole focus. It is important that candidates read the question clearly before embarking on their response.

Question 1(a) (ii)

This was generally answered well. A good definition of fetch often led to consideration of the power and destructiveness of waves and the resultant magnitude and rate of erosion. A number of responses linked this to the landscape in the resource. Some answers lacked precision using the term larger rather than longer fetch whilst others just indicated that fetch affected erosion, without saying how.

Question 1(b)

This was answered well by many candidates, with good knowledge and understanding to address the AO1 element of the question. The application of knowledge and understanding required by the AO2 element was often fulfilled by an examination of the influence of biotic factors and physical objects. Some responses reviewed the varying importance of wind within dune systems. Most made good links between the wind action, the role of physical objects at the strand line and the fixation of embryo dunes. The processes of aeolian transport were not often identified and seldom described in any detail. Although many emphasised the importance of wind at different stages of dune formation, referring to movement of sand within the dunes and the development of slacks, a significant number simply described dune succession. This highlights the importance of question analysis. There were some pleasing references to case studies from Wales, the rest of the UK and Europe. A number of answers used diagrams to support the points made. A number of answers were purely descriptive and lacked the analysis required by the question. Some weaker responses seemed to be continuing from 1(a) (ii), with lengthy descriptions of the effect of wind on waves, gaining limited credit, rather than the subsequent dune development.

Question 2(a) (i)

The use of 'describe' as a familiar command word allowed most candidates to score effectively on this question. The identification of highest and lowest percentage of properties at risk was achieved by most candidates with a significant number using data from the resource to support their answers. However, many went on to list the values at many other sites, without demonstrating understanding of spatial differences in different parts of Wales. Few were able to identify geographical patterns that were demonstrated in the resource. A number drifted into explaining why the concentrations varied.

Question 2(a) (ii)

The majority of candidates were able to access the question and most gained 1 mark for identifying the loss of homes using Figure 2 as a stimulus for their ideas. Others started by considering the damage to the community. The better responses were able to back this up with reference to associated elements of social loss such as subsequent homelessness or trauma. However, in some responses there was a repetition of the idea rather than development and here not many gained 2-3 marks. Few used examples, magnitude or referred to sections of society. A significant number failed to understand the character of social loss and described business losses and tourism rather than social losses. Pleasingly there were a few candidates who were able to see the social impact of coastal erosion in a broader sense and addressed recreational losses for local communities and individuals.

Question 2(b)

Many candidates were well prepared for this question and it was answered quite well by most candidates and very well by a significant number. The requirement to examine the success of a management strategy meant that the AO2 element was to the fore in many answers. The knowledge and understanding element (AO1) was mainly completed by a description of the strategy although a number of answers did include an analysis of need for the strategy and an examination of how coastal processes had been modified. A common structure seen in the best answers started with a case study (rather than just giving an example at the end), which was used to describe the reason(s) for the strategy, followed

by the strategy itself and an analysis of its success. Many chose a single technique, usually a type of hard engineering such as recurved walls, but others opted for 'hold the line' or 'managed retreat' which opened up the answer to more than one technique. As expected the most popular case studies were from the East coast of England which gave good discussion of the impact further along the coast as well as at the management site itself. There were also Welsh case studies used that indicated fieldwork had been undertaken in areas such as Criccieth and Abereddy. Pleasingly there were also new examples seen such as Medmerry in West Sussex. Less successful answers simply described the financial costs and results of a case study, but did not link the text well to the requirement to consider success. Some candidates were constrained by a lack of a case study and thus gained limited credit whilst others just worked through more than one strategy, not paying attention to the question.

Question 3(a) (i)

The question is a mirror of 1(a) (i) and is an example of where candidates are required to do more than just describe the contents of the resource. Here they are asked to apply their learning to interpret the resource and examine how glacial landscapes change after the retreat of the ice. Responses to this question were generally disappointing with many candidates scoring low marks. The identification of post glacial features was usually confined to misfit streams, a ribbon lake and scree (possibly linked to freeze-thaw). Many candidates simply described the glacial landscape and not post glacial modification. Many described human additions to the landscape such as the road and telegraph poles, but very few linked them to modification of the landscape. There were some good answers that identified post glacial features such as the scree slopes and linked this to freeze/thaw processes and the formation of shallower slopes. Others referred to the stream and the reworking of sediment.

Question 3(a) (ii)

The depth of the glaciated valley in Figure 3 provided the link required and many answers followed this up with reference to the link between ice thickness and the increased pressure that resulted. Some candidates further developed this with comments on increased melting and basal sliding and a few linked this to changing speeds of ice movement. Where these elements were linked to variations in glacial erosion the candidates scored well. Other answers examined how ice thickness impacted upon the weight of ice although their link to glacial erosion was not always developed.

Question 3(b)

The AO1 content of the question was straightforward and simply required a knowledge and understanding of the operation of two processes of glacial erosion. Most candidates chose plucking and abrasion and were mostly accurate in their outline of how the processes operated. There was evidence of a lack of precision in responses f.e. when describing plucking, responses would note that 'ice froze onto rocks' rather than (melt) water freezing in the joints of rocks. The requirement to compare the selected processes was not done well in many cases and often only implied rather than stated with examiners left to guess where the comparison was being made. In these parts of Section A questions there was a need to address both AO1 and AO2 and an answer that simply gives knowledge and understanding will not be well rewarded for its application. Those that did address comparison did it mainly through a direct examination of differences in the operation of the processes or their outcomes (often related to a *rôche moutonnée*). There were a large number that chose freeze-thaw weathering as an erosional process and this limited the potential credit for this approach.

Question 4(a) (i)

In general this question was answered well with candidates responding accurately to a familiar command word. The majority of candidates were able to identify the overall decrease, the largest decline (with supporting data) and the three years with a gain. A significant number also noted the fluctuating nature of the main trend. Some struggled to express an increase in deficit clearly, although the candidate's meaning was usually clear. There were some issues with candidates who were not able to use data effectively. These simply described the deficit between two dates whilst not making comments about the trend. Others just described increases and decreases, without giving an overview of the changes.

Question 4(a) (ii)

Most candidates were able to access credit with comment upon the increased melting of ice in the summer due to higher seasonal temperatures. Responses often referred to a decrease of melting in the winter, although this was seldom discussed in terms of increased freezing due to temperatures below freezing point. Few went beyond this approach to discuss the glacial budget in the context of inputs and outputs to highlight the role of ablation in mass balance.

Question 4(b)

Responses to this question were quite polarized and to some extent related to the fluvio-glacial landform selected. The question was looking for an outline of the characteristics and formation of the selected landform to address AO1 with the link between these elements addressing AO2. The favoured choices of appropriate fluvio-glacial landform were eskers; varves, kame terraces, outwash plains and kettle holes. The best answers gave a developed description of the formation of landforms which included some detail concerning its characteristics. Varves were often dealt with appropriately with the variations of sediment size and organic content linked effectively to the seasonality of deposition in a lacustrine environment. The sinuosity and levels of sediment sorting were also linked to the depositional environment of eskers. The formation of kame terraces, outwash plains and kettle holes were usually described adequately but the link between their characteristics and formation were not as effectively analysed. Unfortunately there were a significant number who chose an inappropriate periglacial or glacial landform or did not attempt to answer the question.

Section B: Tectonic Hazards

Question 5(a) (i)

The command 'describe' was again familiar and in general candidates responded well. Most candidates gave an accurate description of the distribution shown on the hazard map of South East Asia using specified parts of countries affected. Many also differentiated between the distribution of high and very high earthquake hazard risk. The majority of answers also used proximity to tectonic boundaries to describe the distribution. Less common were answers that reflected upon the linear nature of the distribution or its orientation. Responses that failed to focus on the required categories of hazard risk were less successful as part of their answer did not address the question. Other weak candidates drifted into a discussion of the impact on people at certain locations.

Question 5(a) (ii)

The question was based on AO2 and required the application of knowledge and understanding as demonstrated by the command word 'examine'. The best answers recognised this and linked variations in the level of earthquake hazard with the processes operating tectonic margins. Good responses gave an outline of the production of earthquakes at tectonic margins and applied this to the distribution of areas of very high and high earthquake hazard risk. Most answers did this in the context of a destructive margin but some recognised the non-destructive boundary on the border between Myanmar and India. Suitable responses then went on to elaborate why earthquake risk decreased with distance from tectonic margins, usually relating this to the absorption of energy. A few candidates also commented upon anomalies in the relationship. A significant number of candidates however found it difficult to progress into the top mark band as they saw the question as an opportunity to describe the whole range of earthquake hazard risk. This highlights the importance of question analysis in exam preparation. Whilst quite a few noted that these patterns were due to activity at margins this was seldom developed. Some weaker candidates described high and low risk areas but did not link them to proximity to plate margins, whilst others drifted into a discussion of the impact on people at certain locations.

Question 5(b)

The command word 'outline' denotes that this question has an AO1 focus and requires the candidate to show knowledge and understanding of how earthquakes resulted in the named hazards. Answers were generally sound but there was usually an imbalance in the level of development between liquefaction and landslides. Landslides were usually outlined more accurately. Liquefaction was usually described in terms of shaking by the earthquake and movement of water towards the surface. Few clearly stated that the soil becomes semi-solid (as opposed to liquid). Weaker candidates ascribed the process to fractured water mains. Landslides were usually considered in terms of shaking, steep gradients and unconsolidated sediments. The level of explanation was often oversimplified in many answers. Pleasingly, and appropriately, there was frequently reference to examples such as Japan, Nepal, New Zealand and Pakistan. A small minority of candidates failed to address both hazards. Unfortunately a number of answers drifted into the effects of the hazards especially the impact of liquefaction on buildings.

Question 6(a)

These skills questions reflect the requirement to include the assessment of numeracy into examinations.

Many candidates were able to cope with the identification of the mode in (i) although a significant number did get this wrong. Disappointingly the vast majority of candidates were not able to calculate the interquartile range in (ii). Quite a few gained a mark for ordering the values correctly. Some also identified the median. Whilst many knew that $IQR = UQ - LQ$, most of these candidates wrote $59 - 1 = 58$. Many ignored the advice to show their workings.

Question 6(b)

The question had an AO2 focus asking candidates to recognise and explain variations in the number of buildings destroyed by the 2013 earthquake by applying their knowledge and understanding of tectonic risk and vulnerability. Good responses usually contained discussion based upon building density (often with reference to urban/rural differences), the number of buildings, quality of building construction (often with reference to wealth), government regulations and distance from the epicentre. Quite a few drifted into a discussion of deaths alone, although stronger candidates used the number of deaths to suggest high building density and hence a large number of destroyed buildings. A number of candidates ignored the resource and thus credit for the application of knowledge was limited as only AO1 was being displayed. Weaker candidates misread the question, considering the island to be a combination of an MEDC and LEDC.

Question 6(c)

The question assessed candidates' ability to synthesise information, presented in a variety of formats, to examine the economic impacts of earthquakes. Most answers referred to the photographic resources well, citing the effect of the damaged church on tourism, and the damaged bridge on business and tourism. The better answers were able to develop the economic consequences in the form of direct costs that resulted from damage shown in the resources as well as review the indirect implications for trade and employment. A number of responses focused solely on the photographic evidence and made little use of Figure 6a which gave a narrow focus to the impacts addressed. Nearly all answers successfully addressed the requirements of the question, making good use of their own knowledge in relation to the locality. Weaker candidates lacked detail rather than giving incorrect responses.

Question 7(a)

The question contained both AO1 and AO2 elements and the majority of candidates gained credit in both. Good responses often outlined the hazards associated with explosive volcanic eruptions and there was developed reference to pyroclastic flows, ash clouds, lahars and landslides. The knowledge and understanding element of the question was enhanced by integrated reference to case study material in the better responses. Another successful approach was to examine the nature of explosive eruptions and note was made of their unpredictability, frequency and magnitude; frequently related to tectonic process. Less strong answers addressed similar content but was more list like in character. When examining why explosive eruptions may be more hazardous, good responses made comment on the magnitude of the hazards produced or compared them to effusive eruptions. Few tried to compare individual eruptions to highlight spatial variations in the level of hazard produced.

Question 7(b)

This question had an AO1 focus and lent itself to a case study approach. Many candidates took the opportunity to demonstrate their knowledge and understanding of short term responses to volcanic hazards. Good responses outlined evacuation using Monserrat, Iceland and Indonesia as their case studies. The management of lava flows was also used effectively to answer the question as was the control of infrastructure with Iceland being well developed as an example. Rescue and aid were developed well at a conceptual level although a number of answers drifted into examples that were responses to earthquakes rather than volcanoes. Better answers displayed a logical structure and presented their selected strategies in an ordered fashion. There were a number of candidates who failed to focus on the short-term element of the question and diverged into other time scales.

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Section A: Changing Places

Question 1(a) (i)

Generally well answered. Most candidates gained at least 4 marks by locating extreme values and supporting with statistics. Candidates who did not score as highly either failed to make use of the resource or explained patterns rather than described them.

Question 1(a) (ii)

Most candidates managed to identify one reason for the high income per capita in some regions. Better candidates clearly identified a specific reason before developing this answer to explain fully how the reason links with the generation of higher incomes. Many candidates did not manage to gain these development marks as they were not specific enough e.g. noting 'better paid jobs' as a reason but not explaining what these jobs might be.

Question 1(b)

Most candidates managed to identify two challenges. Better candidates elaborated on these challenges whilst the very best succeeded in examining their severity. Ways of examining severity included looking at proposed or implemented solutions or comparing the magnitude of the problems identified i.e. identifying the 'biggest' problem. Others noted whether these challenges were difficult to solve or not. Some candidates ignored the 'examine' command and described the challenges, thus failing to gain the AO2 marks. A small minority had no sense of a rural area within their answers.

Question 2(a) (i)

This was generally well answered with most gaining 4 or more marks. Where candidates did not score highly it was because they did not refer clearly to both photographs. Some candidates were, once again, not specific enough and listed items from the photograph and did not make adequate linkages to change within the area over time.

Question 2(a) (ii)

Again most candidates managed to identify a reason for negative perceptions of regeneration. Many candidates then managed to develop this answer to gain further marks, although not fully for 3 marks. Popular answers included loss of community or rising house prices. The most successful answers were able to link their answer clearly to urban regeneration in areas such as Bilbao.

Question 2(b)

Of all the extended questions on the paper, this one produced the highest quality answers. Most pupils showed good knowledge and understanding of what regeneration is. Significant numbers were able to explain the economic improvements meaningfully and in the context of a well-developed example. This naturally led to marks being picked up for both AO1 and AO2 as clear links were made between named schemes and the improvements seen. Case study knowledge was generally very good across all centres. Many pupils needed to use the continuation page to complete the answer. On occasion, this was because the candidate unnecessarily described the history of the case study in too much detail before discussing the regeneration project itself. There was also some repetition of ideas in these answers, either two case studies that illustrated the same points, or an overly long description of the multiplier effect.

Those that did not gain marks for AO2 usually lacked an example and tended to list economic improvements without explaining what had led to them. Some pupils were only able to discuss more jobs and more money spent and presented a rather narrow view of the improvements made.

Section B: Fieldwork Investigation in Physical and Human Geography

Question 3(a) (i)

Few candidates were able to gain full marks as most failed to use Figure 3 fully. When asked to provide “2 characteristics of shops in Figure 3” many candidates resorted to simplistic comments, such as: “The shops are large” or “the shops are narrow.” Candidates were also quick to point out that there were: “A lot of vacant shops” or “there are many chain stores.” Candidates need to be encouraged to use resource materials in a more sophisticated fashion. For instance, the best candidates were quick to identify that: “Worcester Street has many shop vacancies. 9 shops are currently unoccupied.” “There is an abundance of technology shops on ... Street, as X, Y and Z are adjacent to one another.” There was a distinct impression amongst examiners that candidates were a bit flustered by this question, suggesting that they perhaps hadn’t seen a GOAD map previously.

Question 3(b) (i)

Addressing AO3, most candidates managed to identify two pieces of data and/or information that could be collected in the area. Better answers then gave information on exactly how the data collection technique could be implemented. Popular answers included pedestrian counts, questionnaires and Environmental Quality Surveys. These examples allowed candidates to elaborate and prior knowledge of using these techniques in the field contributed to some of the best answers. In order to address the AO2 element, candidates were required to address how this information could be collected in the area shown in the resource or a similar CBD area. Some answers drifted into a justification of techniques chosen – these did not score as well. Some answers lacked depth of outline – with many simply naming the data to be collected.

Question 3(b) (ii)

Again, this question did not elicit strong responses. Many candidates failed to show understanding of what a GOAD map is and how it could be used within investigations. Others did not address the 'present data' aspect of the question. Better candidates managed to identify suitable data to present and suggested suitable methods of doing so e.g. flow lines or drawing isolines on the map to represent pedestrian counts or flows.

Question 4

Overall, candidate responses to fieldwork questions were very disappointing. Centres need to be aware that a clear and focused title is vital if pupils are to access the higher mark bands on these questions. More care and attention needs to be paid to the quality of investigations being undertaken as, on occasion, the titles provided by candidates were far too vague or not fit for purpose.

On Question 4, it became apparent that candidates were not sufficiently aware of the six stages of enquiry detailed in the specification and rather than focusing on data collection drifted to describe a combination of stages such as planning, analysis and evaluation.

Where the question was addressed more effectively, candidates could identify appropriate data collection methods but could not describe them in sufficient detail. For instance, they could state that: "Systematic sampling was used to collect data during my investigation into ..." but they were unable to provide depth or justify the implementation of this technique.

Furthermore, in terms of equipment used, candidates were quick to state: "We used a quadrat to ..." but once again, depth, development and justification were lacking. Better answers tended to concentrate on two or three methods of collection. This focus enabled candidates to effectively justify the methods concerned. However, these answers were a rarity. With only 18 lines of response suggested candidates should have time to focus and interpret the question effectively before responding. Many answers were much longer than the allocated 18 lines but were not sufficiently focused.

Coastal fieldwork was by far the most popular choice here with measuring sediment size along the shore proving to be a popular focus. Where candidates had good knowledge of sampling strategies, the justification element was far stronger. In weaker responses there was often a limited range of methods discussed.

Glaciation fieldwork, where measurements of slope deposits and clasts had been undertaken, generated some good responses. However, there were cases where it seemed that only few field measurements had been taken and that the fieldwork was mainly observation of features. These instances led to very few marks being awarded for description of method. In general, answers based on glaciation fieldwork lacked confidence with candidates seemingly unclear as to what data they had collected and why. This was summed up by one candidate who stated 'I didn't really know what I was doing'.

Question 5

Responses were marginally better than those for Question 4. Candidates could discuss their findings but not in sufficient detail. Comments were made regarding findings but there was little if any substantiating evidence. Common comments were: “The regeneration of Cardiff Bay has been a great success environmentally. My questionnaire proved this”. Or, “In Cathays, there were lots of signs of graffiti. My Environmental Quality Survey proved this”. Some answers read too much like a classroom based case study and made very little reference to actual fieldwork and data collection.

In addition, the evaluative component of the answer needed further focus. If it was attempted, it tended to centre on simplistic observations such as: “I could have handed out more questionnaires” or “I could go back on a different day.” A full write-up of their geographical investigations post-fieldwork would be beneficial for students, as many appeared to be unsure when writing about their investigations.

Better candidates noted their findings with substantiating data before carefully evaluating their findings – a successful route to gaining AO2 marks was evaluating data collection methods.

Once again, it is worth considering the amount a candidate is required to write on these answers. Taking time to interpret the question and the command word appropriately will mean a candidate can access the higher marks by writing more concisely. Some answers listed finding after finding but could not evaluate these, limiting their marks to the mid-range.



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