GCE EXAMINERS' REPORTS

GCE (NEW)
GEOGRAPHY
AS/Advanced

SUMMER 2018

Grade boundary information for this subject is available on the WJEC public website at: https://www.wjecservices.co.uk/MarkToUMS/default.aspx?l=en

Online Results Analysis

WJEC provides information to examination centres via the WJEC secure website. This is restricted to centre staff only. Access is granted to centre staff by the Examinations Officer at the centre.

Annual Statistical Report

The annual Statistical Report (issued in the second half of the Autumn Term) gives overall outcomes of all examinations administered by WJEC.

GCE AS AND A LEVEL GEOGRAPHY

General Certificate of Education (New)

Summer 2018

Advanced Subsidiary/Advanced

UNIT 1: CHANGING LANDSCAPES

General observations

As in 2017, the coastal theme proved to more popular than the glacial topic but there seems to be a growth in the number of centres teaching glaciation.

Many candidates were not familiar with the command words, which frequently limited their marks. It is important that candidates are prepared to recognise and respond to command words in the correct way so that their information can be directed to the relevant assessment objective. Please refer to the Guidance for Teaching document and the online Assessment Guidance for further details on WJEC GCE Geography command words.

Case studies were often absent or very simple, e.g. a location is identified. The better answers had integrated and developed case studies that had been used appropriately to address the question. Case studies that are simply regurgitated do not fulfil the requirements of the question e.g. Q7b.

Centres could profit by giving candidates practice on 8 mark questions that address both AO1 and AO2. Frequently the AO2 element is not given enough focus in the structure of the answer and it is left to examiners to interpret what is being said in response to the AO2 command.

Section A

Q.1 (a) (i) This was generally well answered with most candidates able to access information presented in a tabular format. The better responses analysed the table by looking for patterns of processes and maintained a clear focus on the need to describe variations rather than simply extract data. Most answers at this level concentrated on either describing the variations of processes between the locations or examining variations of processes within a location. Some attempted a combination of these approaches. Good responses referred to the locations that had the highest and lowest percentage of each process, commented on the relative importance of each process in North Norfolk or examined the importance of processes at each location. Supporting data from the resource was used effectively in high scoring answers. However, less successful responses just described each line or column of the table, without showing variation, which did not answer the set question.

(ii) Candidates found this a challenging question and few gained 3 marks. Most credit was achieved for discussing sand dunes, rock type and the orientation of the coast. However, errors crept in with reference to waves (size and fetch) and the impact of wind erosion – the latter again reflecting misreading the command word. Furthermore, a few candidates offered more than one reason.

(b) Capable responses to this question often examined coastal landscapes that were under threat from erosion or required conservation and management. Many spent some time outlining the issues and in some cases this was so lengthy that answers failed to fully examine the elements of the question that addressed human activity and its assessment. Responses typically looked at installation of groynes and sea walls, sand dune management, beach replenishment and managed retreat. Answers were mostly UK centric but a number did look at the governance of coral reefs using the Great Barrier Reef as a case study. Better responses gave detail in the description of the mechanics of the activity and used a variety of case studies. In less successful answers there was a need for more focus on process and site specific detail. The assessment was frequently simplistic and usually related to the success of the activity in preventing erosion or protecting ecosystems. Some good assessments commented on how human activity can be positive in one location and yet lead to negative consequences elsewhere. Activities were seldom compared in terms of one being more or less positive and change over time was not considered. The AO2 element needs to be given more emphasis in preparing candidates for the examination. Quite a few misread the question, leading to a discussion of how the coastal landscape impacts on human activity. A number reverted to case study detail which was described application to the question set showing a lack of understanding of the requirements of the question. Attention to question analysis during teaching and revision would help candidates to be more direct in their responses.

Q.2 **(a)** **(i)** There were few candidates who gained full marks for this question. The better responses gave a straightforward account usually identifying two high energy characteristics (cliffs, headlands, bays or wave-cut platforms) and one low energy (beaches). These were illustrated using the map either by name or grid reference. However quite a few were confused about high and low energy, whilst others did not specify the type of energy for the chosen characteristics. Candidates need to be more confident with the use of OS maps as many were unsure with grid references and confused eastings and northings. Many misread the symbols even though there was a detailed key. Some drifted into a description of the processes involved showing the need for question analysis as part of the preparation for the assessment.

(ii) Those that understood and applied the concept of the coastal system were able to score well. These responses took Traeth Mawr as a starting point and worked forwards or backwards using a systems approach to discuss longshore drift, coastal erosion and deposition in the context of the map. Some answers failed to recognise that they needed to use the resource and discussed general theory rather than what would be happening at 900710. This led to answers relating to spits, bars and sand dunes which are not evident on the map.

(b) Many approached this question with a sketch of the cliff – cave – arch - stack – stump sequence, most of which were clear, developed and correct. The text descriptions were also often detailed. Answers frequently showed a good grasp of the erosional processes and their role in the development of erosional landforms but case studies were frequently just naming a place, without any supporting information. The better answers integrated case study material in more depth. Assessment often took the form of a comment on the scale of influence of the processes and was expressed simply as 'important' or 'most/least' influential. Although geology was often mentioned, it was seldom used to assess the role of process and often had to be teased out by the examiner from phrases such as 'hydraulic action works on faults'. Some few identified other processes (e.g. wind and weathering) and made simple comparative statements. Few were able to examine the relative role of different processes on one or more landform. Candidates could be more prepared for the demands of the AO2 element of the question by using the mark schemes as part of question analysis.

Q.3 **(a)** **(i)** As with Q1(a) (i) many candidates were confident with the use of tabulated data. Good answers focused on the requirement to compare sedimentary characteristics. These gave developed accounts that examined differences and similarities in the percentages of sediment types between or within the eskers. Good responses referred to the eskers that had the highest and lowest percentage of each sediment type or commented on the relative importance of each sediment type in the eskers. Supporting data from the resource was used effectively in high scoring answers. Some answers lacked organisation and simply gave a description of data that lacked focus on comparison whilst others thought that the numbering 1-4 was sequential and failed to address the question.

(ii) There were very few good answers that addressed the question from the point of view of the energy required to carry sediment of different sizes. Some were able to compare the ability of glacial ice and meltwater to carry different sediment types but this was not common. Many described the process of attrition and the wearing down of sediment from gravel to silt which failed to answer the question.

(b) There were some very good responses that looked at the formation of pingos.These identified the importance of ground ice in the formation of open and closed system pingos and were good at assessing the differences between the two both in form and ground ice conditions. Equally impressive were those that examined patterned ground and referred to sediment size, gravity and slope angle as other factors that were important in their formation. These approaches were characterised by detail in their understanding of process and also gave direct reference to the role of other factors. Although specific case studies were rare reference was frequently made to locations such as the Mackenzie Delta. Some candidates confused the glacial ice that is involved in the formation of kettle holes with ground ice and these responses were limited. A significant number had no knowledge and understanding of the topic and reverted to the importance of glacial erosion on the formation of glacial troughs and cwms and these did not score well.

Q.4 **(a)** **(i)** Answers to this question were usually better when addressing the characteristics of erosion. The majority of candidates were able to identify and locate features such as cwms, aretes, pyramidal peaks and troughs using names or grid references. The characteristics of deposition were less well identified but there were some good answers that interpreted the glacial lakes as being blocked by moraines as well as the ridge at the northern end of Nant Ffrancon. Good responses commented upon the boulder strewn slopes as evidence for the development of ground moraine. Some seemed to have little experience of the use of OS maps and could not identify glacial features in this classic landscape or were unsure with grid references and confused eastings and northings.

(ii) In general this was answered badly with a large number of responses being unable to link knowledge of misfit streams with the example on the map. The better answers were able to point out that the Afon Ogwen was not big enough to form the valley in which it is located but few related this to the depth and width of Nant Ffrancon. Some made reference to the shape of the valley but often the question was unanswered.

(b) The more capable responses to this question used GLOFs to demonstrate their knowledge and understanding of glacial process. Many responses used case studies from Nepal and Peru to briefly outline the cause of the hazard before giving a clear development of the impacts on immediate or distant communities. Although impacts were often outlined from a negative viewpoint a number of responses pointed out the positive economic impacts of employment in management schemes for the local population. This approach scored well when AO2 assessment was considered. Other candidates approached assessment through an analysis of negative demographic, social and economic impacts. A number approached the question by examining the production of landscape features by glaciers, frequently discussing glacial troughs. These were seen as ideal places for the construction of HEP schemes and although answers were often direct the impacts tended to lack focus when it came to impacts with comment more on the energy source than glacial process outcomes. Few referred to the value of the sediment produced by glacial processes. A number of answers reversed the question and looked at the impact of human activity on glacial processes, mainly addressing climate change and glacial retreat. These answers did not score well.

Section B

Q.5 (a) (i) This was generally answered well with the better answers giving due regard to the command to describe *trends*. Here candidates focused on the general characteristics of the airborne ash described fluctuation, peaks, the relative duration of ash output in the explosive phases, the differences in volume between explosive and effusive phases and anomalies. These answers were often backed by supporting data from the resource. Several candidates just described the entire graph and what they saw and thus failed to clearly identify trends. Weaker responses drifted into the description of lava and waterborne debris whilst others gave incorrect data values.

(ii) The better responses took Figure 5a as the structural basis of their answer and addressed the hazard characteristics of each phase of the eruption. These answers provided an explanation of the processes and how they produced hazards and supported their interpretation with observations from the other resources named in the question. Some answers were limited as they treated each resource in isolation and failed to refer to the variety of hazards shown within Figure 5a. A number of responses drifted into general discussion based on volcanic hazards per se, rather than referring to the resources. Many described how the eruption occurred rather than the link between the eruption and the subsequent hazard. A number misinterpreted the resources especially 5a, where they thought that meltwater debris continued throughout the activity, and 5d.

(b) There were a number of good responses that referred to the East African Rift Valley or the Mid-Atlantic Ridge for support and detail concerning processes. Good use of terminology was evident. Typical answers at this level covered: convection currents and spreading; plate divergence; slab pull (although often disproportionately lengthy and not related to activity at diverging margins); MOR/MAR and fractures linked to crust thinning; generic ‘melting’; shield volcanoes; magma and lava solidifying. Many described the sequence of events but the ‘explanation’ element was often lacking in detail giving answers that were general and sometimes superficial. Unfortunately, a number lacked the appropriate knowledge and understanding and discussed convergence or hot spots. Diagrams were evident and some candidates gave detailed annotations however many were simplistic and added little to the explanation in the text.

Q.6 (a) (i) Nearly all correct with the main error being the lack of a negative sign.

(ii) The majority were correct. The typical errors were not including a negative sign, the omission of one number from the list in the calculation or a transcription error.

(iii) There were a pleasing number of good answers to this question with clear use of the resources. The better answers noted the airlines most and least affected, although few tried to explain this in terms of airline size/routes. The rise in visitor numbers was noted and quantified in a significant number of responses however a common error was not making a clear distinction between visitor numbers before and after the eruption: calculation of the change in visitor numbers between 1950 and 2015 did not address the question. The mid and longer term economic impact on tourism (multiplier) was well documented. In less successful answers data was often quoted in isolation, rather than being used to show variations and comparisons. Weaker candidates drifted into a discussion of costs of rebuilding or plane damage where there was no evidence in the resources to back up statements.

(b) This was generally well done by those who gave due consideration to the demand for a description of pattern and analysed the resource with this in mind. Good answers usually noted the decrease away from the vent and noted the west – east orientation of the pattern of fallout. In these responses the use of data was mostly correct. A significant number mentioned the changing rate of deposition with distance from the vent (although not well expressed) and many noted the oval shape of the fallout. Weaker responses simply described what they saw rather than analysing patterns with comparative statements. Some candidates repeated information, albeit in a slightly different way, but gained no extra credit. Some suggested that the ash did not fall beyond the island and terminated at the sea. Candidates would benefit from reading the question carefully so they can structure their responses to address its requirements.

(c) There was generally good understanding of distance related impacts with many using Figure 5c as the basis of their answer. The better responses that addressed volcanoes made clear distinctions between the impact of different types of hazard, rather than treating them generically. A significant number referred to the frequency of an event in their assessment. Few noted that the wind direction would have varying impacts. Many responses addressed the question using a more general approach When earthquakes were addressed reference was often made to magnitude, although this was not extended to volcanoes. A significant number examined the influence of levels of development on the impacts of tectonic hazards. These answers focused on the quality of housing, the preparedness of communities and infrastructure as important regulators of the magnitude of impact. Whilst many noted the impact on settlements only the better answers discussed the size of settlement or their population density. It was pleasing to see the use of case study materials used to support candidate's assessments. Less effective answers relied on description of impacts rather giving attention to the need to assess.

Q.7 **(a)** Most candidates coped well with this question. Again many of the best answers were based on case studies that had been applied in a pertinent manner. Loss of housing was discussed successfully in many answers with candidates talking about deprivation in refugee camps and the long term consequences, such as disruption to education and places of work. Only the most able candidates focussed on psychological impacts, hunger and the practicalities of finding a home. A few developed the ideas of homelessness, aid and corruption affecting people. However, the loss of housing was not always discussed in social terms, because the answer looked at the cost of rebuilding. A number of answers addressed mortality as a social impact by examining the impact of family deaths on survivors or relatives. Another popular focus was the social impacts of loss of infrastructure, not only in communications but also as impacts on the fundamental facilities and systems serving a country or city such as water supplies and sewage system. As Haiti was frequently cited as the named event the breakdown of law and order was frequently addressed. There was a fine line in the discussion between social and economic impacts, with quite a few drifting into the discussion of costs, e.g. no money due to unemployment rather than how the lack of money affected a person. Less successful answers lacked focus on the question and simply wrote about the impacts of an earthquake leaving it to the examiner to identify social impacts. This approach produced a superficial coverage of many social impacts at best and in some cases a focus on demographic and economic impacts thus failing to gain credit. A few candidates offered a volcanic eruption as the event thus emphasising the need to carefully read the question before answering.

(b) Typical answers that scored well selected search and rescue, provision of food and water / housing / medical supplies and evacuation. Many referenced NGOs and charities. These answers were well developed with candidates showing detailed knowledge and understanding of the selected response. In assessing the success, quite a few considered variations between the development of countries (Nepal vs Japan often cited); accessibility to an affected area was also mentioned frequently. Indeed AO2 was probably higher overall for this question as candidates find it easier to assess the success of something that has taken place. Early warning systems were creditable when linked to the success in terms of allowing people to take evasive action. Many answers examined how text warning of tsunamis can give time for evacuation. Unfortunately, many candidates chose to write about planning and preparation for earthquake events (buildings, evacuation drills). Quite a few chose long term responses, such as building programmes, or they studied volcanoes – again misreading the question.

Further guidance on using continuation sheets and additional booklets

As this unit is e-assessed, it is essential that where an answer is completed on the continuation sheets, the candidate clearly writes ‘continued on page x’. Where the answer is continued and completed, candidates must also indicate the correct number of the question.

GCE AS AND A LEVEL GEOGRAPHY

General Certificate of Education (New)

Summer 2018

Advanced Subsidiary/Advanced

UNIT 2: CHANGING PLACES

Principal Examiner: Iwan Rowlands

Section A

Q.1 **(a)** **(i)** Generally well answered. Most candidates gained at least 4 marks by identifying venues from the resource and elaborating upon how these could stimulate regeneration. Where candidates did not gain high marks this was due to not making sufficient use of the resource in this skills based question.

(ii) Most candidates managed to identify a change in behaviour. Better candidates then developed this answer to gain further marks. However many candidates did not manage to gain the development marks as they were not specific enough. Another reason for candidates perhaps not gaining more marks was the fact that they noted more than one change in behaviour e.g. positive and negative. Some candidates did not focus in sufficient detail on the change in BEHAVIOUR.

(b) Answers to this question varied considerably in quality. Some failed to identify any challenges as opposed to consequences and many offered limited examination of the challenges identified thus scoring weakly on AO2 marks. Stronger candidates were able to develop an examination of two or more challenges by referring to detailed and appropriate examples. A wide range of examples was seen, with Cardiff, Liverpool, South Wales Valleys and London featuring most prominently. Some candidates offered very full answers, referring to all three types of situation – where regeneration is absent, has failed or is causing overheating – but this was not essential to gain full marks. Indeed those that did do all three did not tend to get the higher marks as their answers tended to be descriptive.

Q.2 **(a)** **(i)** Generally well answered with most gaining 2 or 3 marks. Most candidates managed to locate areas of high or low concentration. There were some marks lost due to poor locational information e.g. mixing East and West. It is also worth noting that Ireland was not on the map and that Northern Ireland was!

(ii) Many candidates gained the full 2 marks, either by making two appropriate suggestions, or by developing one suggestion. However in some cases the development was not obvious in its suggestion of how it would improve the map. Weaker answers tended to suggest alternative data presentation methods rather than improvements that could be made to this particular choropleth map.

(iii) The majority of candidates were able to suggest an appropriate factor, but some suggestions e.g. infrastructure were quite vague, and relatively few were able to develop their suggestion sufficiently to gain full marks. Many drifted into repeating descriptive element of a (i) here. Some of the better answers focused, for example, on universities and referred to the supply of highly skilled graduates and to the links between university research and business start-ups.

(b) Few candidates understood the concept of rural rebranding. Many candidates were not even able to identify a rural area. Where candidates did manage to locate a rural area, answers tended to be narrowly focused on individual rural enterprises e.g. Folly Farm, the Eden Project, and Glastonbury Festival. These were often limited in terms of the detail and examination of consequences. The better answers were located in Snowdonia and the Lake District and focused on adventure tourism, however even these answers tended to be generalised with simplistic reference to impacts and little examination.

Section B

Q.3 **(a)** **(i)** The correct answer needed to be stated clearly in thousands to gain a mark. It was disappointing that only a minority of candidates achieved this.

(ii) Most candidates gained marks here although with weaker candidates the overall trend was not clearly noted. Some candidates merely noted what was happening in each column. Better answers were structured and clearly written rather than a series of statistics. Stronger candidates identified the fluctuation in addition to the general rise in in-migration and out-migration.

(iii) The majority of candidates named a suitable technique – usually a line graph or a bar graph. Far fewer achieved the full 3 marks for justifying their choice: many answers relied on a description of the technique, with insufficient emphasis on why it was suitable. The word ‘easy’ was used often. Stronger justification comments were required to get full marks. It is worth remembering that one way of justifying a method is to say why it is better than other methods.

(iv) Most candidates were able to access Band 2 at least for AO3 by outlining some of the strengths and/or weaknesses of the data, and a good number achieved 3 or 4 marks out of 4. However, assessment of the strengths and weaknesses (AO2) was often relatively weak. Overall, the lower scoring answers tended to be quite generic (discussing, for example the pros and cons of secondary data in general), rather than focusing on the secondary data provided. Other weak answers drifted into what information was not included in the table rather than focusing on the data itself.

Q.4 This produced a wide variety of answers in terms of subject matter and quality but on the whole, the fieldwork questions were answered with greater confidence than in 2017. Some of the investigation titles provided were still vague when it is expected that all candidates should be able to articulate the title of the investigations undertaken in the field. A very small number of scripts confused physical and human geography investigations.

Weaker scripts tended to list the data presentation methods without explaining what they were used for. Answers of this nature generally did not include much in the way of justification. Another weakness observed was the drift into evaluation. To access higher AO2 marks an understanding of the requirements of the command word is needed. Many candidates spent unnecessary time describing in detail their fieldwork data collection methods before going on to discuss the presentation of the data. However, it was encouraging to see some excellent answers from a wide range of centres, and most candidates showed clear evidence of involvement in data presentation decisions.

Better answers tended to concentrate on a smaller range of methods of presentation – maybe 2 or 3. This enabled them to concentrate on the justification. Many answers were much longer than the allocated 18 lines and were not sufficiently focused on the justification.

Coastal fieldwork was by far the most popular choice here and many good answers were seen. In some cases however candidates used methods that were unsuitable for the data they were attempting to show. Of the higher tariff questions on the paper, this is the question that produced the highest quality answers.

Q.5 Again, answers varied widely in quality and subject matter. As with Question 4, some failed to state an appropriate title, and a small number confused their physical and human geography investigations. Some of the weaker answers saw planning almost exclusively in terms of basic considerations such as arranging transport to fieldwork destinations. Many candidates appeared to show a lack awareness of fundamental aspects of planning such as conducting a risk assessment, pilot studies, sampling procedures, etc. This likely reflects the probability that most planning is undertaken by teachers rather than the candidates themselves.

Nonetheless, there were some excellent answers and some centres have clearly prepared their students very effectively in the rudiments of planning their investigations. It is encouraging to see that fieldwork is being undertaken at a wide range of locations, often some considerable distance from the candidates' own centres.

Another weakness was that many answers looked at the effectiveness of their data collection methods. Whilst clearly there is an overlap between the two stages better candidates did manage to make this distinction clear. One further comment regarding risk assessment is that this needs to be realistic. From some responses you would get the sense that walking around a town in groups is potentially a high risk activity!!

In general, this question showed evidence of good quality knowledge and understanding although a little more sophistication is required in the pupils' understanding of the fieldwork undertaken.

Further guidance on using continuation sheets and additional booklets

As this unit is e-assessed, it is essential that where an answer is completed on the continuation sheets, the candidate clearly writes 'continued on page x'. Where the answer is continued and completed, candidates must also indicate the correct number of the question.

GCE AS AND A LEVEL GEOGRAPHY

General Certificate of Education (New)

Summer 2018

Advanced Subsidiary/Advanced

UNIT 3: GLOBAL SYSTEMS AND GLOBAL GOVERNANCE

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.

- Time management did not appear to be an issue for most candidates, with some producing lengthy, detailed answers to all questions; where timing was an issue it was for Questions 7/8 or 9/10, this can be largely attributed to candidates writing too much for the short answer questions. Some centres had encouraged their students to answer these longer questions first; this is something which could be considered by candidates in future examinations.

- 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.

- 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 pay attention to the mark allocation, as only too frequently some candidates had written more for questions 5 and 6, than for the longer essay questions.

- In some cases, candidates still need to be reminded to respond directly to the questions' command word, however, there is a substantial improvement for this cohort compared to last year at AS. However, some candidates did not take care to read the wording of the questions, leading to irrelevant responses.

- Questions 4, 7 and 9 were far more popular than Questions 3, 8 and 10 respectively. In terms of parity, Questions 3 and 7 and Questions 4 and 8 were equally accessible respectively. However, Question 8 was mostly better answered than Question 7, as candidates were able to use good case studies as the core of their answer. Question 9 was more accessible to the full range of candidates than Question 10, with candidates performing better on Question 9.

- Case studies were not always well developed in the longer questions, with the exception of Question 8. Students should be encouraged to learn more details about a fewer number of case studies ('strength in depth') as many were just place names.

- It was encouraging to see that a very small minority of candidates had included a brief plan for the longer questions.

- Whilst there was explicit attempt at assessment – it tended to lack depth and was sometimes one-sided with limited recognition of temporal or spatial differences which are both intrinsic specialist concepts at A level.

Section A

Q.1 **(a)** Very well answered – nearly all achieved 3 marks, typically for higher peak, supporting data and then Newaukum lasting longer or Mercer being flashier or both peaking on the same day. Other points on the mark scheme were seldom seen. However, some students got too caught up in describing data changes of each river and therefore omitting the key element of comparison. It was disappointing to see only a few candidates being able to use terminology such as 'flashy' or a steeper rising limb. Many wrote more than necessary to obtain the marks, including irrelevant material about the starting and end levels, i.e. not related to the peak discharge, which means that the question was not read carefully.

(b) Most gained at least 3 marks, many gained 4 marks and quite a few gave further creditworthy comments. The most commonly selected land use change was deforestation followed by urbanisation. However, quite a few did not gain the mark for identifying a land use type as they used terms such as 'building houses/road building' or 'agriculture' without specifying intensification.

Many candidates worked their way logically through the processes related to increased impermeability, loss of water storage/stemflow, lower infiltration, increased surface run off (fewer used the term overland flow). More able candidates also mentioned saturation excess and/or infiltration excess. Less able candidates gave lengthy descriptions about pre-land use changes – again signifying that the question had not been carefully read.

Q.2 **(a)** Most candidates' answers reached Band 2, with quite a few reaching Band 3, but relatively few gained full marks. There were some Centres whose students had grasped the concept and were clearly familiar with the idea of processes occurring sequentially. The elements most frequently presented related to waterlogging, anaerobic conditions, partial decomposition of plant matter and accumulation of peat. More able candidates were more precise, e.g. 'since the last Ice Age' rather than 'a long time' or even 'a couple of hundred years', mentioned factors such as acidity and clearly followed the correct sequence in the process. More able candidates mentioned sphagnum moss rather than 'plants/ferns'. Relatively few candidates mentioned both carbon store and specific vegetation or location knowledge, preventing access to the top of Band 3. Changing climatic conditions inducing more rainfall was almost never seen in candidates' answers. A few were familiar with the different types of peat bog, but usually this added little to the discussion of process. Weaker candidates talked about 'decomposition' rather than 'partial decomposition', whilst some said that the soil decomposed and described the colour and texture of peat rather than its formation.

(b) Most candidates gained at least 1 mark, but relatively few entered Band 3. The majority of candidates discussed both extraction and drainage, in weaker candidates these processes were seen as synonymous. The 'how' element was often not addressed in candidates' answers, with simple statements about the carbon store decreasing and the use of peat as a fuel/compost, without making the necessary connection between the two. There was quite a lot of repetition as candidates struggled to say something different about drainage and peat extraction, e.g. the phrase 'more CO_2 in the atmosphere and less carbon stored in peat' for both situations, again omitting 'how'.

More able candidates concentrated on drainage, working their way through the idea of drying out, aerobic conditions, oxidation, erosion, and used more sophisticated terms such as 'changed from carbon sink to source'. Extraction concentrated on burning and the subsequent release of CO_2.

The least able candidates drifted into global warming, rainfall change, cultivation and pollution. Some also talked about areas across the world – again not reading the question which directs them to Figure 2.

Q.3 This question was not attempted by many students; where it was, it tended to be very case study led with lots of description but limited assessment. Where candidates achieved high marks for this question, it is surmised that the AO1 content came from their U4 Weather and Climate option.

AO1: most entered Band 2, some entered Band 3. Quite a few talked about seasonal changes, including change in ice stores as well as precipitation – but some forgot to add whether there was a deficit; few looked at the seasonal changes in evapotranspiration. The concept of mass balance was seldom explored well – indeed many did not identify inputs, outputs or stores. Few looked at long term climate changes, other than as a result of anthropogenic causes (under AO2). Variation in the Jet Stream was mentioned as a factor – but again lacked detail. Those looking at El Niño usually had more detail. The UK drought case study was one of the commonest, although details were sketchy. More recent examples used by candidates include the Murray Basin and California. Some very good answers lacked an assessment of these factors and consequently lost A02 marks.

Quite a few did not clearly link drought to water deficit. Weaker candidates drifted into a discussion of the consequences of water deficits. Others talked about surpluses rather than deficits when looking at seasonal changes and El Niño.

AO2: most entered Band 2, few entered Band 3. Seldom more successful than AO1, apart from when considering man made causes. 'Relative' was usually expressed in simple terms e.g. 'whereas' or 'however' rather than considering the scale of importance (with evidence in support). Some candidates looked at the relative importance of water extraction (usually quoting the Aral Sea), and depending on the Centre, aquifer depletion was occasionally mentioned.

Q.4 This was probably the best-answered question on the paper. The majority of candidates clearly understood causes for changes in the carbon store. Sometimes the emphasis was on human reasons exclusively; however, better candidates discussed changes caused by other causes such Ice Ages and volcanic eruptions. The time element was sometimes only inferred or stated as being in 'recent times'.

AO1: most candidates entered Band 2, some entered Band 3. Having answered Question 2, quite a few candidates were able to re-use/develop the ideas there. As with other questions, some candidates did not fully consider the wording; in this case 'time' was often omitted or simply implied. Nearly all candidates considered more than one reason; many looked at increased combustion due to industrialisation, some with good data and factual support; this often included population increase, manufacturing, increasing wealth causing more demand, BRICS and NIC development. Deforestation often followed or was combined with the industrialisation discussion – typically referencing the Amazon Rainforest (but with few convincing statistics). Although many also looked at global warming, there was sometimes confusion about processes (e.g. whether warm water holds less carbon). Nonetheless, some managed a good account of flows between sea and atmosphere. Few discussed changes in terms of fast and slow processes; likewise, long term changes due to natural cycles of (inter) glacial periods. A considerable number of candidates considered afforestation, and some even included green power generation; whilst the weakest worryingly confused carbon and ozone.

AO2: most candidates reached Band 2, some achieved Band 3. Nearly all candidates considered the scale of change in terms of the large increase in atmospheric carbon. Those who considered afforestation and green energy overestimated their impact on change 'decrease the amount', whereas few noted that they are more likely to 'reduce the rate of increase.' The relative importance of seasonal changes was seldom noted.

Section B

Q.5 (a) Most candidates gained at least 3 marks and many reached the top of Band 2. Nearly all referred to at least 2 countries, usually Poland and the UK. Most candidates differentiated between the perception and reality of the impact of immigrant labour in the UK, stating that people thought that immigrants were 'stealing their jobs.' There was good understanding of the Polish attitudes, although sometimes rather clumsily stated. However, weaker candidates just said that Polish people wanted more immigrants to fill the jobs of their emigrants. Many failed to differentiate between Sweden and Poland; Sweden often being cited as a lower income higher unemployment country than the UK with a lot of emigration for better paid jobs! Few noted that Swedish people welcomed migrants to do jobs that could not be filled by Swedish citizens. Many also erroneously referred to a taxation burden and a strain on the UK benefits system due to migration. It was not always clear whether the candidates were talking about economic factors as opposed to social ones, e.g. cost or access (waiting times) to the NHS, housing and education. Some did not make it clear that remittances go back to Poland. Not surprisingly, quite a few referred to the EU referendum, but this was seldom used in a constructive manner to answer the question. The least able candidates drifted into talking about cultural impacts. Many candidates wrote far too much for 5 marks.

(b) Many candidates gained 4 marks, usually 2 + 2 rather than 3 + 1. Quite a few wrote further creditworthy material. Nearly all referred correctly to politically driven factors. Less able candidates just gave several variations on the theme of 'open door' (often citing Germany in the last couple of years) or strict control; Australia's points-based system was often quoted and the very strict control in North Korea was often cited. Many referred to the plans to build a wall between the USA and Mexico but did not develop this well as a physical barrier rather than a 'soft' border control. Few mentioned the need for labour, leading to invitations such as 'Windrush' – indeed some thought that they were refugees. War and persecution were often used, citing Syria in particular; land grabbing was mentioned sometimes, but no examples. Candidates found it harder to explain why people might not want to enter a country, e.g. government led xenophobia, instability; instead they said people chose countries based on the education and health care system. The weakest candidates drifted into a discussion of the consequences of migration, whilst others wasted time defining migration or chose two factors that were actually the same thing (e.g. anti-migration policies and pro-migration policies).

Q.6 **(a)** Nearly all gained at least 2 marks, many gained 3 and quite a few had further creditworthy points. Answers typically started with the USA dominating China in 1970 plus data support; many went on to note the respective decrease and increase, as well as the change in domination by 2008 (sometimes not read accurately); many noted the period of equal numbers, however come candidates misread the China figure for 1970. Weaker candidates laboriously described increases and decreases for each country separately, rather than making a direct comparison of balance. Comparisons were done well but not always concentrating on China dominating by 2010.

(b) Most candidates gained at least 2 marks, and many gained at least 4. However, answers were often not very coherently organised and therefore understanding was not conveyed. Many referred to the UNCLOS rules, although quite a few were unsure about the difference between territorial seas and EEZs. Most noted the issue of overlapping EEZs causing tension, for which the most common case study was the South China Sea, or distant territories, such as the Falklands: lacking much in the way of development on this location, where there was a tendency to concentrate on the war and not reasons for the tension. The value of underseas resources was nearly always mentioned; some looked at the control of shipping lanes. Weaker candidates confused the Arctic and Antarctic, and some missed the word 'islands' in the question and discussed the Arctic without linking to islands at all. As with the other short-answer questions, many candidates wrote far too much for 5 marks.

Q.7 This question generated a mixture of responses: For AO1, most entered Band 2, with few entering Band 3. This is another example of the question being misread, with quite a few drifting into the consequences of migration. Furthermore, it is not always clear whether the candidate is really discussing economic migration, e.g. the benefits of diaspora communities in lifting new migrants out of poverty (as opposed to just writing 'join relatives'). As expected, quite a few candidates based their answers on simple push-pull factors. However, most found something else to discuss (e.g. types of poverty) or had reasonable case study material, thereby lifting into Band 2. Global hubs were noted by many, but with little development other than to cite one example. Only the most able candidates discussed access to markets and / or primary commodity prices which is, after all, the specification content for this issue: most made a good link to the effect on poverty noting differences between countries or explaining that movement was rarely down to one factor only. Scales of movement were often noted, e.g. rural – urban, international, intercontinental. Movement of women in SE Asia for domestic posts and men for building work in Qatar were often noted. Although refugees were mentioned, they were not well linked to the economic aspects of movement. Weaker candidates did not distinguish between absolute and relative poverty. Furthermore, some state that doctors in Eastern Europe are living in poverty. It is worth Centres ensuring that candidates are familiar with the wording of the specification in their teaching in order that candidates know which bits of knowledge to include in their answers, thus avoiding many of the generic push-pull factors style answers.

For AO2, most entered Band 2, some entered Band 3. A few candidates interpreted the question as meaning 'importance of poverty' in relation to economic and non-economic migration, rather than factors other than poverty impacting economic migration. Invariably poverty was considered to be a large factor. Assessment was often in terms of 'however' and 'whereas' – simple comparative statements. There was limited assessment of political factors; technological change and access to information was considered to be instrumental in accelerating migration; quite a few candidates noted that many people in poverty have no means of moving.

Q.8 This was an interesting and straightforward question, so it was a pity relatively few answered it. For AO1, most candidates' answers reached Band 3. Many adopted a useful scaled approach to this question, working from local examples (typically the Lamlash case study), to regional examples (North Atlantic and EU fishing quotas / fishing bans), to national (Great Barrier Reef) to international efforts (UNCLOS, whaling). The soft approach of media publicity was also used frequently, typically with regard to plastics. Although many noted the Welsh 5p plastic bag charge, this was not followed up well in terms of how plastic bags reach the oceans. Oil tanker construction and discharge were often mentioned. The impact of population growth and managing the oceans as a Global Commons were seldom considered. Unfortunately, a few candidates presented their answer in terms of what will be done, therefore the evidence to assess it (AO2) was missing.

For AO2, almost all answers reached Band 2, with many reaching Band 3. The inhibitor to entering Band 3 was nearly always failure to mention or clearly allude to sustainability. Otherwise, most assessment went beyond simple comparative statements. The success of the 5p plastic bag charge was often overestimated, although some noted that this charge does not solve the problem of plastic still in the oceans. Likewise, publicity, even by Blue Planet, was seen as not being enough to change behaviours, serving only to raise awareness of oceans, possibly the first step to altering behaviours. There was quite a divergence in opinion regarding the Great Barrier Reef, but most statements were credible. The local nature of some actions was often noted, together with the damaging aspects of farmed fish.

Section C

Q.9 The majority of candidates chose to answer this question rather than question 10. Some students struggled to do all 3 elements of the question – tending to either concentrate on the resources or use their own knowledge and therefore make limited use of the resource material.

AO1: most entered Band 2, quite a few entered Band 3. Most candidates used Europe as the main – even sole – source of discussion. Reference to African migration was usually in terms of rural – urban. When African migration to Europe was considered, most did not indicate whether this would be to urban areas. This lack of clarity was present in many discussions regarding movement from Eastern Europe to Western Europe – even though movement to rural and urban areas is well documented. Some candidates used information on China or India (presumably from Unit 4) for this question which was encouraging in terms of candidates' approach to synopticity. However, as with Question 7, most candidates used push-pull discussion. However, many moved beyond this by discussing wider issues such as counter-urbanisation, modern telecommunications and media. Considerable discussion focussed on urbanisation of rural areas – unfortunately case studies were weak (usually just a place name). Older people were often cited as examples of urban-rural movement (for a peaceful life), which better candidates used to show why further rural depopulation would occur due to house price increases. Although rural regeneration was mentioned, it was not developed, a few noted that rural areas would just 'fade away'. Some more able candidates suggested that both rural and urban areas would increase due to the overall increase in population. In the search for synopticity, none mentioned tectonic activity. Attempts to use sea level rise due to global warming were not focussed on rural areas. Climate change was seldom discussed in the AO1 context. Likewise, changing carbon flows just amounted to inconclusive statements about peat extraction.

AO2: many entered Band 3. Many candidates completely omitted reference to the future, a common problem was that many described past/recent trends and then stopped the discussion. Nonetheless, assessment of where people might live in the future was often done very well, with the great majority predicting a reduction in rural populations due to migration and/or urbanisation. Meanwhile there were conflicting, but acceptable views, on the role of telecommunications and transport networks in determining future rural populations.

AO3: most answers reached Band 2, with many reaching Band 3
A few candidates ignored the resources (including all candidates from one Centre). More sophisticated answers made good links between Fig 5 and Fig 6, including good use of 'rural regions with some urban development' as indicators of future urban expansion, together with showing where migration is taking place into urban areas. However, many just described Fig 5, without applying the question. Many candidates did not understand the negative numbers on Fig 6, not realising that they are outward migration: this led to more errors when comparing with Fig 7. Furthermore, a rate per 1000 was not understood: very few showed that the absolute numbers would be much smaller in rural areas. Candidates struggled with Fig 7, many omitting to make any use of it at all, of those that did, many opted to describe but not interpret it in terms of the question. Good candidates made the link of outward migration from rural Spain due to declining precipitation – but few clearly justified whether they would go to urban or rural areas inside or outside Spain. Some simply said they went to places like the UK where there is no predicted change, whilst others thought they would become farmers in Sweden or Finland – in the Finnish case they had not considered Fig 6. Meanwhile, Fig 8 was mainly used as a starting point for AO1 discussion.

Q.10 Far fewer candidates attempted this question; many of the observations noted in Question 9 apply to this question and there was a general lack of assessment to whether rural could be protected.

AO1: quite a few only just reached Band 2, few reached Band 3. This proved to be a very challenging question – reflected in the marks awarded. Many simply talked about rural – urban migration. Few were aware of measures to protect rural areas, even within the context of National Parks, AONBs were scarcely noted and case studies were limited (place names usually). As with Q9, there was almost no reference to climate change and carbon cycling. Answers were almost all UK centric.

AO2: quite a few stayed in Band 1, very few reached Band 3. Following from AO1, most just assessed rural – urban migration as being inevitable. Having produced little detail about protection of rural areas, there was limited and simple assessment.

AO3: most reached Band 2, some reached Band 3. A few candidates ignored the resources completely. Candidates found it harder than those answering Question 9 to make good use of the resources. Candidates usually used Fig 8 to show protection from change, whereas Fig 5 was used to show that loss of rural areas is inevitable and that many National Parks are already partly urbanised. Again, the misunderstanding of the negative values in Fig 6 led to erroneous statements, such as people would be moving to rural Spain. Fig 7 was often ignored or incorrectly linked to people moving to Spain for drier weather. Other comments were similar to Question 9, e.g. total population changes.

GCE AS AND A LEVEL GEOGRAPHY

General Certificate of Education (New)

Summer 2018

Advanced Subsidiary/Advanced

UNIT 4: CONTEMPORARY THEMES IN GEOGRAPHY

General observations

The paper was accessible across the ability range and it differentiated well, providing the opportunity for candidates to appropriately demonstrate their knowledge and understanding of the specification content.

The following points are observations I feel are worth noting for the benefit of both teachers and future candidates:

- There were very few rubric errors. Nevertheless, timing was an issue for some candidates. Most candidates managed to complete 3 essays in creditworthy form. However, some candidates only completed a very short third essay. Teachers need to ensure they highlight the importance of timing (In terms of Unit 4, this equates to approximately 40 minutes per essay; this includes planning and writing time).
- Candidates generally struggled to score more than 40 marks in total. This was a result of them failing to meet the requirements for Level 3 AO2. Most responses simply addressed the key focus of the question, without assessing the wider conceptual issues and specialised concepts surrounding the theme. Where centres had discussed the specialised concepts, the candidates had clearly been told to signpost and discuss them in their responses, which resulted in higher marks.
- The assessment objectives for Unit 4 are in stark contrast to the legacy G3(a) paper and candidates should be made aware of this. There has been a distinctive shift in terms of the AO weightings for Unit 4. The vast proportion of marks available are for the A02 component of the assessment objectives. For example, 65% of the marks available on the Tectonic Hazards questions and 50% of the marks available for the Section B essays are now awarded for A02.
- The specialised concepts are clearly signposted in the syllabus and must be integrated more effectively into teaching and learning approaches. At the start of each AS / A Level unit it states: *"As an outcome of studying this theme, learners will gain an understanding of specialised concepts: XXX"* These specialised concepts must be addressed, discussed and practised by candidates during their studies.
- Good candidates engaged in question analysis before attempting their answers. This was evident, as their responses contained more analytical openers and connectives, which enabled them to access the top band marks available for A02.
- The structure of responses was generally very good. Most scored full marks in section A and B on this aspect, which demonstrated good A03 skills.
- There was a lack of well-integrated diagrams, graphs and sketch maps.

Theme 1: Tectonic Hazards

This was the weakest section of the Unit 4 exam. Many examiners felt that this section had been neglected due to the time constraints of delivering a new / unfamiliar specification and the fact that most of this material was covered during the AS year, and possibly hadn't been revisited.

Q.1 Candidates were able to discuss a variety of primary and secondary earthquake hazards, generally demonstrating good knowledge and understanding (A01). Case studies were frequently utilised, with the most popular examples being Christchurch, 2011; Haiti, 2010 and the Indian Ocean earthquake and Tsunami, 2004. (A01) Most candidates were able to make the distinction between the local and global scale (A02). The best responses were able to offer comparison between the two scales, either by looking at specific hazards or events. For example, many disagreed with the statement, citing tsunamis as having a global impact (A02). Good answers also highlighted the fact that the scale of hazards tend to be focussed at the local and regional level (A02). Weaker answers tended to be simplistic in nature, agreeing with the statement or disagreeing without providing supporting evidence.

Q.2 Most responses focussed on dealing with the effects of earthquakes. Very few candidates examined volcanic events. Candidates had little difficulty in identify the difference between short-term and long-term responses to the effects of tectonic hazards. However, there was a tendency for answers to be very generalised and vague. It was common for candidates to state that: "A short term response would be the donation of food, medical supplies and water" or in terms of long-term responses: 'Hazard resistant design could be used". The lack of appropriate case study support was disappointing. In addition, there was also a lack of balance, as there was often an overemphasis on short-term responses, to the detriment of long-term responses. Better responses compared the effectiveness of short-term and long-term responses, using case studies of varying degrees of effectiveness to support their points (A02). The most common examples seen were Haiti, 2010 (for short-term responses) and discussions surrounding aseismic design and planning / preparation techniques (E.g. The Great Californian Shakeout / Earthquake drills in Japan / hazard resistant design in the USA) (A01). Most comparative points were linked to the level of development of a country and the nature of the tectonic activity (A02). The best responses were largely those that looked at a limited number of examples but developed evaluation of a range of elements of the responses to the hazards (A02). Weak responses were usually a generalised discussion or contained factual inaccuracies.

Theme 2: Ecosystems

Q.3 Most candidates attempted Question 3 for this theme. There was a limited grasp of the role and influence of temperature on the structure and functioning of ecosystems. Most candidates tended to largely ignore temperature and spent most of their response discussing other factors such as the influence of humans on ecosystems. In a small number of responses, candidates discussed trophic levels and levels of NPP (A01). These responses were also characterised by the effective use of case study examples from the tundra and tropical rainforest (A01). The best responses also showed knowledge and understanding of the other factors identified in the specification (moisture, light and nutrient availability) (A02) and it was pleasing to see the inclusion of Gershmel diagrams, which helped to supplement and support the arguments presented (A01). Better responses also discussed the specialised concepts of causality, interdependence, systems and thresholds in an effective fashion. (A02) Weaker answers tended to agree with the statement and superficially discussed different ecosystems across the globe and focussed on temperature, stating that it was "hotter" or "colder" in different places, without exploring the influence of these differences on the structure and functioning of ecosystems. Weaker answers commonly failed to consider other factors which influence ecosystems. The "structure and functioning" component of the question posed difficulties for several pupils, and as such this part of the question was often ignored.

Q.4 The answers to Question 4 tended to be better than those seen for Question 3. However, there was an overriding tendency to be negative and answers generally lacked balance. In addition, there was a lack of case study support, with generic comments being the norm. Most candidates were aware of the different threats to the ecosystem (A01) but struggled to highlight some of the positive ways in which the Arctic tundra biome is being utilised – E.g. the role of indigenous people / ecotourism policies. Moreover, the sustainability component was dealt with poorly. There were plenty of opportunities for A02 here (E.g. mitigation / place / scale / time scales / scale etc.) but they were not taken by many. The best responses had a clear understanding of what the tundra is and its unique characteristics (A01). These answers largely focussed on resource exploitation and tourism (A01), examining the impacts of these activities in a sophisticated fashion, highlighting the positive and negative implications for the Arctic Tundra (A02). Weaker answers examined the Arctic tundra in a generic fashion, making sweeping assertions with little or no case study support. If analysis was provided it was bland and lacked development. E.g. "This is not sustainable" or "This is bad for the environment."

Theme 3: Economic Growth and Challenge: India or China or Development in Sub-Saharan Africa

Q.5 Overall, this question was addressed poorly. Many candidates displayed a very limited understanding of the term "demographic characteristics", with most referring in generic terms to "population growth". There was incomplete knowledge and understanding of the distribution of the Indian population and the structure of the Indian population. It was clear that candidates had little understanding of the role of political policies in determining the demographic characteristics of India. Moreover, it was also clear that they had a limited understanding of additional factors, which have influenced the demography of India, such as cultural, economic and physical factors. The best responses were able to examine a range of factors, which have influenced the demographic characteristics of India (E.g. "The Emergency" and enforced sterilisations / the impact of economic reforms introduced in 1991 / globalisation / the role of physical geography - the fertile plains of The Ganges river basin are the most densely populated in the world) and showed a high degree of analysis of their importance (A02). Better candidates were able to highlight the interdependence of these factors and highlighted the differences spatially. (A02) Weak responses were characterised by limited knowledge and understanding of India's demographic characteristics and tended to focus on issues such as the caste system but demonstrated little understanding of the demographic issues it presented.

Q.6 Once again, this question was addressed poorly, with candidates presenting generic knowledge and understanding. Pupils were able to categorise issues relating to health, water quality and pollution etc. but these discussions lacked support. The lack of focus on named urban communities was a major issue. The strategies presented tended to cover regional and national scales. The best responses were able to discuss a range of urban issues such as housing, waste, water management and transport. (A01) These responses were characterised by a clear link to specific examples of where these issues occurred, and the responses used to address them. Evaluation largely referenced social, economic and environmental indicators (A02). Very few students offered a comparison of the strategies presented and failed to discuss the scale of the strategies in sufficient detail. Weak responses discussed issues that are not specific to urban areas, such as food and energy security. Many of the weaker responses seen completely failed to examine the "urban" focus of the question.

Q.7 In comparison to Question 5, this question was answered much more effectively, as candidates utilised the One Child Policy as a starting point (A01). In addition, many candidates referred to the Heihe–Tengchong Line, as a means of describing China's population distribution (A01). This served to facilitate discussion about China's population distribution and structure, as candidates were able to examine the relative importance of physical variables such as climate and relief in comparison to cultural, economic, political and social factors. (A02) Most responses focussed on place and globalisation as the overarching key themes (A02). Candidates generally had a secure knowledge of political factors and how these have influenced the demographic structure of China. Better answers provided balance and considered other factors. For example, the best responses generally referred to the One Child Policy, economic development in the East because of the "Open Door Policy", the influence of physical factors, such as water supply and cultural issues. (A01) Weaker responses had a poor grasp of China's physical geography and a muddled understanding of the One Child Policy and Hukou system.

Q.8 Answers to Question 8 were much weaker than those seen for Question 7. This Question presented similar issues to the problems that have already been highlighted for Question 6 on India. Once again, candidates failed to address the "urban communities" element of the question. Most candidates discussed national policies, without referring to named urban communities. It was also apparent that the terms "evaluate" and "sustainability" proved to be an issue for some students. The best responses were focussed on specific issues and locations (A01). Responses targeted named strategies to address the issues of urban communities, with many referring to eco-cities such as Tianjin. (A01) The AO2 element was done far more effectively in this question than in question 6, as candidates appeared to have better examples and knew how to link the solutions to the urban issues. (A02) Similarly to the responses seen to Question 6, weak responses discussed issues that are not specific to urban areas, such as food and energy security. Many of the weaker responses seen completely failed to examine the "urban" focus of the question.

Q.9 This was the least popular question from the Sub-Saharan Africa theme. This was the first time this topic has been assessed and it was clear that in depth knowledge and understanding of Sub-Saharan African countries was lacking in many instances. Many candidates tended to examine "Africa" in generic terms, which is unacceptable. Worryingly, some candidates included the examples of Algeria and Egypt. Most candidates approached the question by examining the relative importance of the resource curse and corruption (A01 / A02). A small number of candidates examined the role of ecotourism and trade blocs (A01), but these responses tended to lack depth and detail. The specialised concepts of place and interdependence were generally well developed (A02), especially where students focussed on a single country such as The Democratic Republic of The Congo (A01). Better responses offered a comparison between countries (A02) and examined the importance of additional variables such as physical, cultural and social factors, which serve to promote or hinder development in Sub-Saharan Africa (A01). The best responses were linked well to named countries and had a good knowledge and understanding of the factors that influence development (A01). Weaker responses merely named the occasional country and did not discuss case studies in any depth. Weaker candidates also struggled to give economic factors and talked in general terms about "levels of development".

Q.10 This was a very popular question. Responses were generally characterised by secure knowledge and understanding (A01) and appropriate analysis (A02). Strong responses were able to link the causes and solutions effectively, showing an understanding of how solutions can address a range of issues e.g. stone bunds, retaining top soil and increasing fertility of soil (A01). Evaluation generally focussed on cost and temporal issues (A02). There were some good responses that looked at the scale and areal extent of the strategies identified. (A02) The most common examples cited were soil and water conservation techniques such as the use of stone bunds and magic stones (Burkina Faso), The Great Green Wall (multiple SSA countries), Tree Planting Schemes such as the FAO Acacia Project (Burkina Faso) and the use of fuel efficient cooking stoves, such as the Changu Changu Moto fuel efficient stove, which limits deforestation and subsequently levels of desertification (Malawi) (A01). Weaker responses lacked focus and tended to "drift". For instance, some candidates wrote about the impacts of desertification, which failed to address the question set. If candidates did attempt to discuss the strategies implemented, they failed to focus on a specific location and talked in generic terms about "a country in Africa" and made basic points like "farmers can be educated to help stop desertification".

Q.11 The biggest issue with this question was the lack of understanding regarding the term "geological". This problem was reported by many examiners. This occasionally applied to whole centres, which clearly raises a concern. Some candidates had interpreted geological as "geographical", and as such, all factors discussed were referred to as being geological/geographical, which nullified their discussion to a degree. The best responses clearly understood the importance of geology and the conditions needed to produce certain types of energy e.g. fossil fuels and geothermal power (A01). Most responses glossed over geology and discussed the role of climate and relief factors. Wind, tidal and HEP were common examples given, and in a handful of scripts, nuclear power (A01). Better responses discussed a range of conceptual themes such as place, scale and sustainability (A02). Weaker responses were characterised by a poor understanding of geological factors and a superficial discussion of the importance of alternative factors.

Q.12 This was a very popular option, possibly because it was familiar to teachers who had delivered the G4 Energy unit on the legacy specification. There were some issues with the terms "supply" and "demand", as some pupils confused / muddled the terms. In addition, some candidates had a weak understanding of the term "demographic". However, overall, this question was answered well. The best candidates demonstrated some good knowledge and understanding of the demographic factors, which influence the demand for energy, alongside a range of additional factors, such as economic, technological and social demands (A02). These responses tended to focus on population growth, the rise in disposable income and the economic development of BRICS / MINT nations (A01). The very best responses were able to use evidence to justify the conclusions they were drawing and provided analytical comments on the influence of demographic factors (A02). Weaker responses lacked exemplification and a firm grasp of the relative importance of demographic factors on the changing demand for energy.

Q.13 This question was another popular option, possibly because it was familiar to teachers who had delivered the G3(a) Weather and Climate unit on the legacy specification. This question produced some of the best answers seen on the paper, with some high-quality analysis presented. (A02) Most candidates agreed that low-pressure hazards tended to have the largest immediate impact. (A02) Case study material tended to be stronger when referring to low-pressure hazards, with candidates examining the impacts of hurricanes. Hurricane Katrina was the most commonly cited example. (A01) Most concentrated on the Sahel region when discussing the impact of high-pressure hazards. (A01) Generally, fewer facts and examples were provided for high-pressure hazards. The best responses tended to analyse the question from the perspective of demographic, economic and social impacts. (A02) Better responses also used specific examples to analyse the relative importance of these impacts and then drew comparison between low-pressure and high-pressure hazards. (A02) The best responses also discussed other factors, which contributed to the severity of impacts, such as levels of development and scale. This demonstrated a firm understanding of the relevant specialised concepts. (A02) Weaker responses showed little comparison other than superficial statements. A small number of students mixed up low-pressure and high-pressure systems, which resulted in them being given minimal credit.

Q.14 This question was mostly answered well, possibly because it was familiar to teachers who had delivered the G1 Climate Change unit on the legacy specification. Some answers were excellent; however, others merely recited a general and superficial list of strategies. Although A01 is only worth 41% of the total marks for Section B essays in Unit 4, good quality case study support still needs to be in evidence. Better responses saw candidates examining strategies at a range of scales (A02) to aid their evaluation. In addition, the best responses had a clear understanding of the key terms used in the question and were able to discuss them at length using specific examples (A01). The interdependent nature of strategies was a key element of band 3 responses. (A02) Weaker responses focussed on strategies without showing any real understanding of the difference between mitigation and adaptation. Moreover, weak responses struggled to evaluate the strategies presented and stated “it is sustainable” or “it is unsustainable” without offering any elaboration or supporting evidence.

GCE AS AND A LEVEL GEOGRAPHY

General Certificate of Education (New)

Summer 2018

Advanced Subsidiary/Advanced

UNIT 5: INDIVIDUAL INVESTIGATION

General Observations

It was pleasing to note that the majority of centres submitted a series of interesting and appropriate investigations in 2018, which were appropriately linked to the specification. Most samples arrived on time with the moderator and the centre administration was often exemplary.

The success of the Non Examination Assessment (NEA) depends very much upon careful planning and preparation, and allowing candidates ownership of their work. It was pleasing to note that in the majority of cases this happened, however, it was noted that a significant number of candidates attempted investigations that were insufficiently focussed and that a number of centres still very much controlled the fieldwork experience, trying to shoehorn their standard fieldwork into the new requirements of the specification.

While candidates are required to choose their titles independently, if candidates are going to display the skills necessary for attainment at the highest levels, centres have a responsibility to guide their candidates towards appropriate research areas and establish the fieldwork process. Although it is permissible to provide a theme for a class or larger group, deciding for example, that all candidates will investigate sand dunes or deprivation is by its very nature limiting. Candidates must structure their investigations in a thoughtful manner and have appropriate sub-questions/aims that are related to their investigation. These then drive the necessary data collection and analysis and allow meaningful conclusions to be reached. It is recommended that candidates have no more than three or four sub-questions.

Centres are required to submit three pieces of paperwork with each investigation. First, Section 1 Candidate/Teacher Authentication which must be signed by both the student and teacher. It was noted that in some instances these forms were not submitted with the work. Secondly, Section 2, Candidate Proposal Form should be submitted with each investigation. Once again in a number of instances these were not present and sometimes unsigned by the teacher. It is vital to spend an appropriate amount of time working through this form with candidates, as it is an opportunity to give some guidance and support to ensure that they are on a clear and appropriate path BEFORE they embark on their data collection phase. On the proposal form, clear reference should be made to focus points in the specification, for example 1.1.4 Factors affecting coastal processes and landforms, rather than just 'Coastal Landscapes'. Applying their ideas to specific parts of the specification will assist the candidate to focus appropriately on material within the specification, material that will ultimately support their knowledge and understanding as they prepare for the examinations. It was worrying to note that many proposal forms were poorly completed, often with minimal information. Would centres please ensure that they use the downloadable forms, which are available on the WJEC public website. Please do not photocopy forms directly from the specification. Centres are also reminded that WJEC offer a Title Advice Service for tutors to submit candidate proposals for further advice if they wish to do so. This service is not compulsory but offers teachers the chance to gain input from our senior moderators on the suitability of particular candidate proposals. If you wish to take advantage of this service, please complete the NEA Title Advice Form which is available on the public website. For your reference, there is also a guide to developing titles and completing the proposal form available. This document contains numerous exemplars of completed proposal forms and aims to clarify what form of guidance teachers can and should be giving to their students.

It was noted that many investigations were significantly longer than the recommended word guidance, with some being over 15000 words. Centres must advise candidates of this fact and remind them of the impacts of producing work that fails to meet the assessment criteria. The guidance of 3-4,000 words was introduced to give candidates a clear indication of the length and nature of the report required for the NEA. A concisely written, well-directed and focused investigation will meet the Band 5 criteria for Analysis and Interpretation, Conclusions and Presentation Requirements and Evaluation whereas a rambling, repetitive one will not. Securing manageable and focussed investigation titles for each candidate, through detailed discussion at the outset could greatly assist this process.

It was pleasing to note that the majority of candidates had been well briefed and followed the prescribed structure for the investigation (detailed in the specification), however, some did not, having no page numbers, candidate and centre number and ignoring the font size and line spacing requirements. Please encourage your students to follow the prescribed structure and format for the investigation and use a formal system, such as Harvard when referencing sources. This was often poorly done with many candidates having little idea of how to proceed with referencing.

Highlighting each candidate mark sheet in each section to note the appropriate criteria where marks were awarded would greatly facilitate the moderation process and annotation in the body of the work would also assist the moderator to understand where and why the centre marks were given. Annotation of the work varied, from none to quite detailed comments. Where annotation was present it was often helpful and objective, with the strengths and weaknesses of each investigation clearly identified. It should be noted that in some cases comments did not always match the criteria and the marks awarded for a particular level. Please do not use post its. Some centres did not submit marking grids, while some grids had more than one mark. Where internal standardisation has taken place centres must make it clear which is the final mark for the moderator's consideration. A number of centres made errors in addition and transference of marks onto IAMIS and care needs to be taken in this respect next year.

The following refers to specific areas of the Independent Investigation mark scheme and its application:

Context

It was reassuring to see candidates clearly discussing the context of their investigations at the outset, linking to theory and creating appropriate sub-questions. This gave the investigations a clear framework. Care should be given when choosing a suitable title for the investigation.
Although most were achievable and well linked to the specification, some were unwieldy, having a weak focus on place and the specification. It was good to see many including links to appropriate theory but sometimes this was broached but not followed through, perhaps showing a lack of understanding of its relevance to the investigation. A worrying factor was that a number of centres allowed candidates to pursue investigations based upon theory that is not in the specification, such as Bradshaw or Burgess. The specification content on water and carbon cycles gives clear emphasis to basin hydrology and temporal variations. Studies of changes in channel characteristics or shape and size of bedload do not support this study material. Investigations focusing solely on Bradshaw’s model are not permissible.

It was good to see most candidates discussing risk although often it was generic and not well linked to their investigation. There was little understanding of ethics shown, with many ignoring it. This is something that needs to be addressed in the future, as it could be a limiting factor. Support from literature was often patchy and often not well applied with many just listing sources in their appendix. Candidates had some secure locational context, which was often well justified, although at times this was lengthy, historical and not well linked to the investigation.

Methods of field investigation

This assessment criterion was frequently one where the marks awarded by centres were on the generous side. To achieve Band 5 candidates must show strong evidence of wide ranging and good quality data collection methods, both quantitative and/or qualitative that are relevant to the research question. These methods should be justified and group and/or individual contributions clearly identified. Often, where group work had been undertaken, this was not the case.

Knowledge and understanding of sampling strategies was very variable, in some cases it was well understood and applied, while at times it was totally ignored or just listed, e.g. “I did random sampling”, without any explanation or justification. Weaker students perceived sampling as a method of data collection rather than a method of predetermining how the data might be collected.

Methods of data collection were varied with the strongest candidates having a wide range of approaches, which were usually well described and justified and clearly linked to the sub-questions. However, many candidates used a limited range that did not always collect data that was relevant to the task in hand, while some centres allowed candidates to use a range of common methods regardless of what the task was, this was not conducive to independence. A good description of a method is one that can be replicated by the reader; this was often not the case.

Many candidates adopted the approach of using a table to present their methods, this allowed them to link their methods to sub-questions, describe methods, evaluate and discuss strengths and weaknesses. Good descriptions also made use of annotated photographs and diagrams to illustrate methods.

Investigations are required to present/analyse data and information from both primary and secondary sources. Some investigations showed minimal evidence of primary data collection and offered little explanation of how secondary sources were used.

Sample sizes of questionnaires were often inappropriate with many thinking small is beautiful. If using a questionnaire, it would be helpful to see a copy, most probably in the appendix. It could be annotated to show expected outcomes and to justify choices. Better candidates modified their questionnaires as the result of completing a pilot study. It is not necessary to include all the copies showing the raw data, this can be summarised in a table if needed.

Data presentation and findings

Again this was an assessment criterion where centres often were generous with the marks awarded. To achieve Band 5 candidates must use a wide range of methods of data presentation, which are accurate, appropriate and well applied. The use of cartographical techniques was very disappointing with many candidates clearly having little understanding of the value of maps.

Location maps were often very poor and of postage stamp size. While it is important to show where a location is, in terms of the investigation it is much more important to show where the data was collected. It was pleasing to note that some candidates used maps in a more sophisticated way, for example, locating graphs or photographs on the map or presenting isoline or flow maps. To be considered accurate maps must have a clear heading, scale, north point and where appropriate a key. If they are from a secondary source this should be credited. Many candidates did not fulfil these criteria.

Candidates used a range of different graphs to present their data. To be accurate they must have a clear heading and axes should be clearly labelled with the appropriate units. It is also imperative that the correct type of graph is used for the data, e.g. line graphs can be used to compare changes over time for more than one group. Pie charts are best to use when trying to compare parts of a whole. They do not show change over time. Bar graphs are used to compare things between different groups or to track changes over time. It was clear that some candidates did not understand the relevance of this. Scatter graphs should ideally have a line of best fit drawn on them. Some candidates used graphs indiscriminately, for example one candidate had twenty-two pages of pie charts!

Many candidates made use of photographs, although not always to the best advantage. The best were clearly titled, located and well annotated, the worst were small postage stamp sized photos placed on a page with nothing else. To be valuable annotation must be meaningful, rather than just labels. Other presentation methods used included field sketches, Wordle diagrams, pictograms data tables, box plots, and land use maps.

Analysis and Interpretation of findings

To attain Band 5 candidates are required to give a sophisticated analysis and interpretation of findings, clearly showing why they were appropriate and relevant to the research question. Ideally they should show some individuality and/or links between the study and other aspects of Geography, in a word, synopticity. It was pleasing to note that many candidates did.

Ideally it would be best to integrate this section with the data presentation, as direct reference could be made to the data as presented, this was done with varying degrees of success, weaker investigations separated the two and hence often found it hard to produce a sophisticated analysis. Most investigations were straightforward in their analysis, with candidates describing their data, with stronger investigations making specific reference to figure numbers. Some candidates did apply their findings back to the original question and some applied their knowledge and understanding to the models to which their data was being applied. Links to other aspects of Geography were largely incidental.

There was some use of statistical techniques, this was very much on a centre-by-centre basis, and with the most common technique being use of a Spearman's rank correlation coefficient. Candidates should be made aware that they need at least ten sets of data for this process to offer any reliability. There was often little understanding of significance and many had difficulty relating the results of their analysis to their investigation.

Conclusions and Presentation requirements

To achieve Band 5 candidates must have a sophisticated and confident summary that draws thorough conclusions which address the research question and is underpinned by relevant theory, while at the same time they must present a well-structured, concise and logical report that accurately references secondary information.

Conclusions were best done when linked directly, through sub-headings or sub-sections to the stated question or hypothesis, which were generally quite concise with good reference to data and trends. The best were followed by a summary conclusion drawing the individual conclusions back to the title. The most effective used the full range of data, which was discussed in some detail, and it was pleasing to read the perceptive comments in the best work.

Weaker investigations limited themselves to simplistic statements of the obvious based upon limited data sets. These tended to be straightforward and very descriptive, and in many cases were simply a repeat of the analysis.

Presentation was generally good across the majority of candidates, although the sections were not always clearly delineated. Too many candidates included all their raw data and some put all their graphs, maps and photographs in the appendix. It was obvious that some centres had not briefed their candidates about the necessary structure, particularly in relation to pagination and page labelling.

It would be appreciated if centres could refrain from using plastic wallets/polypockets , simple treasury tag or a light plastic folder will suffice. Several centres sent the work of all candidates, loose leaf, which in one instance resulted in the work of several candidates getting mixed up. It would be desirable to foster some pride in the work that is presented by candidates. Some work displayed serious SPAG errors that could easily have been sorted by the use of spell checking.

Evaluation

This section of the investigation is worth twenty percent of the total mark and should be given due consideration, but not to the extent that it becomes overlong, wordy and ceases to be concise.

To achieve Band 5 candidates must show highly effective evaluation of the knowledge and understanding gained from field observation. They must have a perceptive evaluation of each stage of the fieldwork investigation including the ethical dimensions of the field research; have perceptive and well-considered reflections of further research and extension of their geographical understanding.

It is worth noting that the criteria relate very much to the fieldwork experience, and where candidates show little evidence of primary data collection and effective and independent planning, a good evaluation becomes very difficult to achieve.

The best candidates evaluated each stage of their investigation using sub-headings; but many struggled to make sensible suggestions for further investigation. These suggestions were often very basic such as do more, collect more data, and go on another occasion. There was a real lack of evaluation relating to the knowledge and understanding (of their research area) gained during the process of conducting their investigation. Few questioned the validity of their initial aims.

Many students were reticent to question the theory that underpinned their investigation, with many limiting their evaluation to the methods of data collection.

Discussion of the ethical dimensions was mostly absent and it was also very worrying to note that many candidates only spent a day or less collecting data for their investigation making it very difficult to introduce a temporal aspect to the work.

Please note the sample submission date for 2019, which will be Friday, March 29th.

WJEC
245 Western Avenue
Cardiff CF5 2YX
Tel No 029 2026 5000
Fax 029 2057 5994
E-mail: exams@wjec.co.uk
website: www.wjec.co.uk