OCR
RECOGNISING ACHIEVEMENT

GCE

Geography Specification B

Advanced GCE **A2 7833**

Advanced Subsidiary GCE **AS 3833**

Report on the Units

January 2008

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Advanced GCE Geography B (7833)

Advanced Subsidiary GCE Geography B (3833)

REPORT ON THE UNITS

Chief Examiner's Report

The OCR Advanced Subsidiary GCE Geography B specification attempts to provide a coherent course in Geography and a solid foundation for further study at A2. The philosophy of the specification is essentially about understanding how physical and human systems operate in order to consider how they might be managed in a sustainable way. As such, the use of contemporary examples is important in considering future geographical challenges.

The January 2008 examinations were sat by a small number of candidates in all the available units (Unit 2692 is not available in the January cycle).

There were a significant number of re-sit candidates entered for the A/S units and it was encouraging to note that many of these candidates improved their performance.

Principal Examiners have expressed the view that candidates were generally well prepared in terms of both subject knowledge and examination techniques. Standards appear to be consistent across the units, although it was noted that there was a slight increase in the number of poor responses at A2 level.

Very few candidates aggregated their marks in order to claim a final grade in this cycle.

The following sections give a more detailed breakdown of the individual units.

2687 Physical Systems and their Management

General Comments

The examination was considered appropriate for AS level candidates and almost a full range of marks was achieved. There remains an imbalance in the choices in Section A with fewer candidates as usual choosing to answer the question on Atmospheric Systems but still three quarters answering the Coastal Systems questions. Candidates should be encouraged to look at the whole balance of the Specification, including the headings to each module and study section. Care should be taken by A2 candidates who may be re-sitting their AS module that their more recent studies of topics such as Natural Hazards are not used in place of their AS case studies; they are rarely appropriate. Better candidates can demonstrate a synthesis and overview of the physical systems studied. This ability to see the whole picture of any of the physical systems, to understand how the processes interact, and then to appreciate the impact of management upon the system is the quality that characterises the good candidate. It was of concern how many candidates could not read the question correctly so gave largely irrelevant answers, spell even simple locational terms e.g. Mississippi, or confused geographical terminology e.g. weathering and erosion. A larger than usual number of candidates clearly did not check their answers so producing numerous errors or statements of the obvious e.g. "If we didn't have coastlines there would be a lot more flooding."

Those candidates that achieved the highest grades:

- Demonstrated consistently good performance throughout the paper
- Showed detailed locational knowledge especially in the extended answers – there was a clear sense of place
- Exemplified, even within shorter section answers
- Used appropriate and accurate geographical vocabulary
- Showed they understood cause-effect relationships

And above all:
- Answered the question set

Section A
The format of each question is the same as in previous examinations and as in the complementary Human Systems module. There is a choice of two from three questions, one on each of the three study units. A resource provides stimulus material and data for parts (a) and (b) to show understanding and skills in different contexts while part (c) requires greater use of knowledge. Section (a) nearly always is descriptive and section (b) explanatory – a fact that all too many candidates fail to understand. Parts (a) and (b) have 9 marks each, while part (c) has 12 marks.

Section B
In this longer essay section there is a choice of one from two questions that seek to combine elements of all three physical units, to show the ability to synthesise knowledge and understanding of all aspects of physical geography. There is space in the answer booklet to plan this more demanding task, worth 30 marks, and once again it was evident that the candidates who planned carefully were able to construct a more logical essay that fulfilled the requirements of the question. In this examination the essay responses were generally good which augers well for the new specification.

There was no evidence of shortage of time, and few rubric errors, although a few candidates failed to fully complete all sections of some questions. It is advised that the following comments are read in conjunction with the mark scheme.

Comments on Individual Questions

Section A

1   Atmospheric Systems and People.

   (a)   Study Fig. 1, a weather map. Describe the atmospheric conditions that can lead to the formation of fog.   [9 marks]

   Unfortunately most candidates read this as requiring a description of the weather map rather than the describing of the conditions that give rise to fog.

   The sky is obscured by fog over the Wash.

   It was the higher scoring candidates who looked for the underlying fog forming conditions with evidence drawn from the weather map:

   This is an area of high pressure (1004-8 mbs) in which air will be sinking so causing a temperature inversion which would trap in any fog once it forms. Anticyclones have clear skies that lead to rapid cooling of the ground at night.

   Candidates must appreciate the meaning of the command 'Describe' – all too many candidates wasted time and space by explaining.

   (b)   Explain ways in which fog can affect human activity.   [9 marks]

   This section did require explanation but too many candidates described, often inaccurately, the impact on a wide range of forms of transport:

   Fog means drivers can't see very far so crashes are common, especially on motorways.

   Whilst others showed a lack of understanding of the scale and nature of fog:

   Fog is described as an interference which stops two people who are sitting 100kms away from seeing each other.

   It was the more successful answers that went beyond transport delays and accidents to explain the impact on aspects of human activity:

   Fog is bad for human health. The fogs of the 1950s in London increased the death rate amongst the elderly who developed lung problems such as bronchitis.
   ……

(c) For a named urban area that you have studied, explain its urban microclimate.
[12 marks]

As usual 'named urban area' generated a wide ranging interpretation of scale. Some focused on London whilst others focused on a more local scale and one centre did use their micro-climate study of their school to exemplify their answers. Many candidates described the microclimatic conditions rather than explain them:

The centre of London is 4 degrees hotter than the surrounding area so this is termed an urban heat island.

Such answers were valid but missed the point that this was an explanatory question so did not get above level one marks. Those that did seek to explain tended to explain the heat island effect:

The centre of Birmingham is hotter as buildings are made of concrete that absorbs the sun's heat in the day, stores it and then releases it at night so warming the area. More traffic and air conditioning in inner city areas also give off heat that raises urban temperatures.

The highest achieving candidates went beyond the heat island to look at aspects such as wind funnelling by buildings, smoke and dust producing more rainfall etc.

2 Landform Systems and People

(a) Study Fig 2 which shows a field sketch of a river valley. Describe the evidence that suggests these slopes are unstable. **[9 marks]**

This was a disappointing set of responses. Too many ignored 'describe the evidence' so merely described the processes at work on the slopes – usually weathering - or saw this as a river question so producing irrelevant answers based around channel conditions.

Most candidates demonstrated a lack of observational skills so answers were quite basic.

There are large boulders at the river's edge. They are not rounded which suggests they have fallen here rather than been transported here by the river.

A valid observation but it was the more able that identified evidence of soil creep, avalanche (free fall) and slides or flows. Many seemed very confused by the 'bent' tree and interpreted it as a cause of instability rather than a symptom:

The tree's roots are weathering the rock (biological) and as they prise out the rock fragments so they move downslope under gravity.

Some did make the river valid evidence for instability:

The river undercuts the slopes making them unstable so the material slides down. The river also removes this material so more can slide down.

Technically this is explanation but it is clear that the candidate understands the causes of slope instability.

(b) Suggest ways that unstable slopes can be managed. **[9 marks]**

This was often done quite well with a good range of management strategies from slope grading to metal nets. Some did stick to the situation shown in Fig. 2 but this was not required so the candidates who described the managing of avalanche risk in Switzerland was perfectly acceptable.

Some candidates still saw this as a river question so focused on the management of the channel often with expensive and impractical strategies:

If the channel could be straightened and lined with concrete the river would be less erosive, being faster, so would not undercut the slope so making it less unstable.

Others again demonstrated a lack of understanding of slope instability:

One approach is to remove the vegetation especially trees. This reduces biological weathering so making the slope more stable.

More effective answers focused on the different aspects of the slope – base, slope face, top of slope or looked at its components such as drainage, vegetation etc. many adopted an effective soft (e.g. restricting access, afforestation) versus hard engineering (e.g. gabions at the foot slope, sheet metal piles etc) approach.

(c) **For a named river basin that you have studied, explain how and why upper river catchments are managed.** **[12 marks]**

This was often a disappointing section with the Tees and Mississippi (usually spelt wrong) the most common choices. As previously noted in the examiner's report too many candidates spend up to 50% of their answers describing the river – its length, history etc. Few candidates identified 'upper river' so were unlikely to get into the higher levels. Those that chose the Mississippi clearly were referring to its lower channel course rather than an upper catchment:

The Mississippi river has had levees built alongside it to prevent flooding and wing dykes act to slow the water and so reduce erosion.

Most candidates saw the why as attempts to reduce flooding but those that chose the Tees gave a more varied and more 'upper river catchment' approach:

The Tees rises on Cross Fell and the surrounding area has been afforested to slow run-off and increase transpiration. This reduces the flashiness of the river so reducing flooding further downstream. The construction of the Cow Green reservoir further helped control the flow but also stores water for the cities further downstream such as …

Sadly the candidate then quoted Newcastle and Durham. Others suggested the management of the area around a waterfall for tourism or whitewater management for recreation. Those that went beyond simply flood control tended to score more highly. The 'How' aspect was all too often – *They built a Dam.* The Aswan Dam featured strongly but candidates could not go much further as they didn't know of any other catchment management strategies in the area. Often this resulted in irrelevant asides as to how the dam had produced both good and bad impacts on the area below the dam:

The dam now traps silt that once flooded onto the fields making them fertile. The loss of silt means the Nile delta is shrinking which in turn has caused problems for local fishermen.

This was not the focus of the question and so could gain no credit. It was a rare candidate who recognised that catchment did not mean the river and its channel. Yet another example where the correct reading of the question would have boosted the mark.

3   Coastal Systems and People

(a)   Study Fig. 3, an OS map of Selsey Bill. Using map evidence describe how human activity can modify coastal landforms.   [9 marks]

This was very disappointing as so few read the word 'modify' so most produced a list of ways human activity makes use of the coast:

This is an area for tourists as shown by the pier in 8692, holiday village in 8295 and caravan site in 8494

This candidate did at least use map evidence and more candidates did seem able and willing to refer to the map. This candidate then went on to describe how tourism can damage the coast such as trampling on the dunes causing erosion. This did suggest modification so did gain some credit. Other more successful candidates did focus on the sea defences:

There are groynes (8393) that trap sand that is moving along the coast with the longshore drift. This has built up the beach but has stopped sand adding to the spit across Pagham Harbour which is now being eroded.

Not entirely correct but it was a clear attempt so show modification and the 'knock-on' effect of human activity. Candidates often saw that the nature reserve of Pagham Harbour was a modification but then referred to it as conservation. Few looked around the map so ignored the Marina in 8301 and very few really focused on 'coastal landforms' as such.

(b)   With the aid of diagrams, explain the formation of two different coastal landforms.   [9 marks]

This was often done very well with a good use of annotated diagrams. Others offered explanations no better than those at lower school level. Some tried to pass off different stages in the formation of a stack as two landforms and others saw a cliff notch as a landform. The chief limiting factor was the lack of detailed explanation:

Here is a coastal spit, this has been formed as sand from further up the coast has been deposited where the water is hardly flowing. This has formed the spit.

This is a very low level response – no explanation of the movement, why it slows or how the spit develops. All too often this type of answer is accompanied by a map with a spit extending at 90 degrees to the coast suggesting that formation is not understood.

It was the candidates who explained in detail that scored well:

If a headland has a weakness such as a fault running through it then the sea will erode it. Hydraulic action and corraision will work on the weakness until a cave forms.

So few candidates explained that for the arch stack sequence there should be a headland with some weakness let alone refer to the marine processes. There were some good answers on geos but wave cut platforms defeated many candidates who saw them as depositional features. Candidates did run out of space to answer this question so frequently wrote on the extension at the back of the exam answer booklet or used additional sheets.

(c) For a named stretch of coastline that you have studied explain why coastal management is necessary. **[12 marks]**

This was another disappointing question. All too many saw this as a question requiring them to describe how coastlines can be protected from erosion so gave detailed descriptions of hard and soft engineering solutions. This question clearly asked for an explanatory approach. Most chose Holderness or North Norfolk as their named stretch of coastline but some got confused over the detail:

Flamborough Head is made of soft glacial till that is eroding at 2 metres a year making it the fastest area of coastal erosion in the world.

Most candidates explained the need for coastal management in terms of reducing the rate of erosion so protecting property from collapse. It was the higher achieving candidates who suggested that there were other reasons for coastal management:

Studland sand dunes are a major tourist attraction. All those visitors could trample the dunes and destroy them without careful management by the National Trust.

Coastal management is necessary as often one sea defence scheme leads to increased erosion elsewhere as the sediment cell has been disrupted.

So again candidates need to read the question carefully and be prepared to go beyond the most obvious to achieve at the highest level.

Section B

It is noticeable that in nearly every examination more candidates answer question 4 than 5. In this case the imbalance was quite extreme with perhaps only 10% attempting Q.5. Did this mean Q.5 was seen as more difficult or do candidates see they can do the first question they come to so read no further? If so this is a poor strategy.

4   **With reference to named examples show how human activity may produce unintended impacts on natural systems**.   **[30 marks]**

This proved a very popular question and on the whole was answered well. Candidates are reminded that when the term 'natural systems' is used then at least the three systems referred to in the specification are expected. Some tried a single case study approach such as the attempts to control the Mississippi or the 'death' of the Aral sea. These are unlikely to get above a level 3 range of marks as it is a single system.

The majority of candidates saw it as a tale of negative impacts resulting from well intentioned efforts to control a natural system:

People can also affect the coast. In Cromer the building of coastal defences such as sea walls and groynes has trapped sand so the rate of erosion is reduced. Yet by stopping erosion in one place it may increase it in another as their sand has been trapped at Cromer.

although some saw this as more balanced:

Part of the dunes is used for military training. This can do great damage to the eco-system but equally it has protected the area from tourism so conserving much of the area

Most candidates gave good examples of human activity from river management, coastal defence and global warming or acid rain. Where detailed examples were given candidates scored well. The higher achieving candidates did discuss whether they were unintended or simply that they were a side effect more than offset by the gains:

It can be argued that humans could stop global warming as the causes have been known for some time but few people want to give up their car or electrical gadgets.

It was a pity that candidates didn't go on to look at the impact on the various elements of the system – stores, flows, inputs and outputs. In fact few candidates rose to the level of systems and instead tended to describe and explain the impact on individual areas or features:

5   Flooding is not just the result of climatic phenomena. Explain this statement with the aid of named examples   [30 marks]

This was an unpopular question but those that chose it often did very well with many good answers looking at the causes of river flooding, especially those taking place as the exam was sat:

It has been the building of homes and roads on floodplains that has led to the current flooding in areas such as Worcester and Tewksbury. The addition of these impermeable surfaces, loss of woodland, construction of drains that flow into the rivers such as the seven means that any heavy rain is transported quickly into the river channel.

Whilst others went for coastal areas:

The rising sea level due to global warming is threatening to flood low lying coastal areas such as much of the coast of East Anglia

Most candidates followed the spirit of Q4 and saw flooding as an unintended side effect of a range of human activities – usually river management. Others did look at the hydrological cycle and suggested the role of a number of factors:

The underlying geology is important. Flooding is more common in areas of impervious rocks such as granite as water can't infiltrate so rapidly runs off to cause flash flooding as in the case of Boscastle.

Exemplification was effective and often wide ranging offering comparisons. Many candidates did not ignore climatic phenomena but showed how they can produce flooding in their own right. Some candidates made comments more in line with those expected at A2:

Flooding is a natural process and human activity doesn't so much cause it as make it worse or more likely.

Candidates should be given practice in this extended writing, as the longer essay gives the examiner the opportunity to assess the quality of written communication to a greater degree than the shorter answers. This examination suggested that candidates performed better in such answers than in the shorter section ones. Crucial in this is the ability to read the question carefully and respond in a focused way to the key concepts or terms used. Fluent use of geographical terminology, the logical structure of the essay, and the ability to draw together elements from all three of the study units of the Specification fulfil the requirement to synthesise knowledge throughout the AS course, and provide a good foundation for the higher level skills required in the synoptic paper at A2. It also provides confirmation of progression beyond GCSE in both knowledge and understanding of the subject. In this examination the essay questions scored more effectively than the structured answers where, all too often, answers were not well focused on the actual question set.

Reading the question carefully and answering it in a relevant and focused way remain the keys to success.

2688 Human Systems

General comments

As is usual, the entry was much smaller than for summer. There were few very poor scripts, these usually with parts of questions unattempted. One such script answered two sub-parts from Section A, along with an essay from Section B. The answers given were actually of quite good quality, and it may be that the instruction at the top of page 2 was misunderstood. There were still some instances of rubric error, with answers given to all the Section A questions. It was evident in these cases that the Section B answer was over brief. Other instances of time difficulty were extremely rare.

Most answers showed some good geographical understanding and knowledge, with this more evident across most answers for better candidates. English expression was clear for the majority, but there were some scripts which did not contain proper sentences, or lacked capital letters, full stops and other punctuation, or had many errors in spelling.

It was good to see that over half of the candidates used the space on page 11 to plan the Section B essay. These questions demand that ideas from across the Human Systems section of the specification are drawn together, and that an argument is constructed to a perspective that may not have been thought about before. The best answers reflected the outline structure that had been devised before writing the actual answer, and gained higher marks.

Examiners commented on a greater use of examples. There was a wider range in part c)s, and often place reference given in parts a) and b). Points of description and explanation often come out much more clearly when set in a real context.

Comments on Individual Questions

1(a)   Weaker answers just copied or re-wrote information from the resource. Most candidates went further and showed how the regional economy was benefitted (usually), going beyond what was given by describing a multiplier effect.

(b)   Almost all candidates included negative (usually) impacts. Weaker answers just listed these, better candidates did explain them. Many mid-range answers tended to dwell on either the context, or just the economic, or sometimes environmental, consequences. The best answers were explanatory and showed impacts on the community itself. Many good answers were helped by reference to good examples, Corby, Consett and Longbridge being the most common.

(c)   The best answers were quite specific about government policies, usually giving detail of incentives offered. They were also specific about economic activities that had emerged, often overlooked in moderate answers. Where full marks were not gained it was usually because little detail of incentives or outcomes were given. A number of answers dwelt almost entirely on the exploitation of LEDC employees and the risks of MNCs withdrawing from LEDC economies.

2(a)   Most candidates were able to make some sound comments on the distribution. Those awarded Level 1 almost always made one simple comment, 'it is higher in the middle', then devoted the remainder of the answer to giving reasons for this. The best answers made use of directions and the scale provided to give a thorough description.

(b)   There were a few good answers which usually explained the improvement of inner city areas and a change from occupants employed in secondary jobs to those in tertiary and

quaternary work. Most answers were less good and did not identify any pattern and did not try to show any change.

A small number explained a model of an urban area, usually Burgess, and sometimes wrote little on the residential aspects of the model, and little on change.

(c)   This was usually very well answered. In most cases a relatively local example was used, or one that may have been studied in fieldwork. Issues were usually well to the fore, and because of good knowledge of detail, both description and explanation came out well. Some weaker answers did occur where sound knowledge was lacking, and in some cases candidates wrote down what they could remember of a case study without much attempt to direct the information to answering the question.

3(a)   Good answers focused well on relationships. These usually started by noting the differences in population and area and often referred to population density or spread out/crowded. The best incorporated other measures, often commenting on optimum population. Level 1 answers just put the resource information into words without mentioning any relationships.

(b)   Many mid range answers explained why populations might grow, but did not really address why these produced overpopulation. Very good answers often started with a definition of overpopulation, mentioning resources and often the level of technology and standard of living. Once that context had been set, explanatory points easily answered the question. There were few weak answers, those that did occur mainly listed factors without explaining them.

(c)   Very few weak answers were seen. Place knowledge was sound on the whole. Where candidates did not score highly was because either the 'how' or the 'why' was neglected. 'How' was usually provided, although the amount of detail varied from sketchy to quite full. The best answers made quite clear why action was necessary. This was usually best in examples of encouragement of birth rates, with clear explanation of old age dependency, small working populations, taxation burdens, feminisation of employment and rates of replacement.

4   Good answers considered examples of settlement and population problems from both LEDCs and MEDCs with sufficient detail given to make a judgement. Those not reaching the highest marks had one or more of these components missing. Population was often neglected. Some answers dwelt only on MEDCs (or LEDCs), and some gave no support and wrote only generic answers. Most candidates made a sound attempt and there were very few low scores. These were usually from candidates who had written less than intended because of lack of time.

5   There were a number of valid ways in which to approach this question. Some good answers contrasted increasing development in Asia with relative lack of progress in Africa. Others considered how development was confined to just a few centres, such as major cities of India whilst rural areas remained unchanged. Others considered how global shifts benefited LEDCs but much less than MEDCs where parent MNCs tended to be based. All these and other possible approaches were creditable, what distinguished good answers was knowledge of a range of specific examples of shifts and their consequences, and information that helped make a judgement. Question 5 was answered slightly less often than question 4, but was usually answered to a better standard.

2689 Geographical Investigations 1

General Comments

The overall standard of the responses to this paper was similar to January 2007 and May 2007. Candidates were generally able to address all the assessment objectives of the Report. Where a choice existed (Questions 1 to 3), Questions 2 and 3 were almost equally popular choices and overall they were answered well. Few Candidates answered Question 1, for which most of the responses were answered moderately well. Question 4 presented the challenge of a varying format and content of question between sessions. Most Candidates responded moderately well to both parts, which required knowledge of how to graph several variables measured across a sand dune in an appropriate manner and justifying additional data that could be collected for this type of study.

The Report
Guidance given to Candidates: It is common practice for AS Level for all Reports to be guided by the Centre or a field centre with group collection of data, therefore to some extent the outcomes reflect the expertise of the Centre or field centre. The assessment criteria achieve differentiation by outcome, although there is necessarily commonality in the Reports and subsequent marks at each Centre. There was sufficient differentiation between Candidates at most Centres to suggest that an appropriate level of support had been offered to Candidates. Nearly all Centres stated how Candidates had been assisted, usually by selecting the general topic, study location and sampling points. Candidates contributed to developing the methodology for planning, undertaking data collection and analysing the outcomes.

Length of Report: As in the last few years, there were not many rubric infringements of the 1,500 word limit. Candidates that substantially exceeded the word limit were penalised under the guidelines given.

Supporting figures: A maximum of two pages of relevant figures in support of the text is required in the guidelines. Overall most Centres adhered to the guidelines, without any detrimental impact on the mark awarded since credit is awarded for presenting the most appropriate data in the most appropriate formats, e.g. enabling like for like variables to be compared readily on the same page. Figures should not be photocopied and reduced in size in order to submit excessive quantities of data. The inclusion of raw data such as field notes and completed questionnaires is not required. However, templates for data collection are useful, e.g. a blank environmental quality survey form.

Content: A maximum of three hypotheses gave the most successful outcomes, as this enabled deeper analysis and evaluation than was possible with more than three hypotheses. Data collection and analysis should relate to the aims and hypotheses that the Candidate has proposed at the beginning of the Report: a description of the data collection for variables that are not part of the hypotheses is irrelevant. Average and good Candidates now produce little irrelevant material. As in previous years the majority of Reports covered physical topics, typically rivers, coasts or psammomeres. Human geography Reports were mostly based on the CBD or urban environment.

Benefit from experience: If re-sitting, it is a good opportunity for Candidates to improve the Report submitted or even to submit a new one based on a different topic or improved data collection.

Preparing for the Report: A good set of field notes can provide valuable explanations for the outcomes of the data analysis – particularly any anomalies that are present.

The Written Paper

The answer booklet clearly states that material from the Report is to be extended and not repeated in Questions 1/2/3. Repetition of the Report remains a characteristic of lower ability Candidates. For January 2008 repetition from the Report was a risk for Questions 1 and 3.

Question 1 was the least popular question. Few Candidates reached Level 4 or 5; most stayed in Levels 2 and 3. The better quality answers linked the results directly with expected geographical theory, demonstrating a clear understanding of the causes. Weaker Candidates did not understand the geographical theory or tended to repeat it from the Report with little additional discussion.

Question 2 was the most popular choice of question. Many Candidates reached Level 4; quite a few entered Level 5; few stayed in Levels 1 and 2. The most able Candidates produced a balanced answer that referred to the collection of data and the results of the Geographical Investigation. They understood the difference between simple changes in variables as a result of the weather as opposed to anomalous results. Weak Candidates did not understand the definition of weather.

Question 3 was almost as popular as Question 2. Many Candidates reached Level 4; a good number entered Level 5; very few stayed in Levels 1 and 2. More able Candidates considered measures taken to reduce errors during planning and data collection, established how successful they had been and suggested additional measures. Weak Candidates often repeated a large amount of material from the Report.

Question 4a was reasonably well answered as some Candidates reached Level 3; most entered Level 2; quite a few stayed in Level 1. Good Candidates remembered the essential features of graphs, chose appropriate techniques that allowed direct comparison between the variables and suggested suitable scales on the y axes. Weaker Candidates did not suggest several of these features and did not understand that distance inland and site number should be on the x axis.

Question 4b was also reasonably well answered. Some Candidates reached Level 3; many reached the middle-top of Level 2; quite a few stayed in Level 1. More able Candidates suggested appropriate additional data that could be collected and gave sound reasons for doing so. Lower ability Candidates offered less or inappropriate justification and/or suggested fewer appropriate data sets.

All Candidates attempted all parts of the paper and followed the rubric. None appeared to mismanage the time available. There was still inconsistent quality between questions, even by intermediate and high ability Candidates.

Detailed Comments

The Report

The following comments regarding the Report have been made for previous examinations. Many Candidates have the potential to benefit substantially by addressing the issues outlined below, most of which are simple to act upon.

1) Coursework Cover Sheet CCS205

    (a)   CCS205 was used by nearly all Centres. It is needed to identify the context of the studies, the conduct of group work and special circumstances relating to the conduct of the study.

(b) Centres should ensure that the following information is provided:
- ☑ The number of words in the Report. Titles and headings are excluded from the word count. Text presented as sentences or detailed notes in tables are included in the word count.
- ☑ The Reports are signed and dated individually, i.e. not photocopied, by a member of staff at the Centre.

2) Authentication Sheet CCS160

The use of CCS160, introduced in November 2003, is compulsory: not all Centres used it. Marks will not be ratified without a signed CCS160.

3) Overall performance

(a) The vast majority of Candidates entered Level 2; very few Candidates remained in Level 1. Stronger Candidates produced well organised Reports that linked their outcomes with their initial expectations when accepting or rejecting their hypotheses and also considered geographical theory. Weak Candidates included little analysis and the structure was poor, with weak hypotheses that were not clearly referred to throughout the Report.

(b) Most Reports represented a substantial development from GCSE, showing independent thinking when analysing and evaluating outcomes.

4) Presentation

(a) The ***standard*** of presentation in the Reports was generally good. Good characteristics were:
- ☑ Easy to read text.
- ☑ Use of the third person rather than the first person.
- ☑ The sheets were in the ***order*** in which they should be read. ***Page numbering*** was used.
- ☑ Figures and tables were ***cross-referenced*** at the appropriate place in the text.
- ☑ If graphs and other ***materials were scanned*** in, care was taken to maintain quality (legibility/clarity).

(b) The use of ***excessive text*** describing data collection and the evaluation of the method in a tabular format can attract a penalty against entering Level 3 if the word count is not adhered to. However, this technique was highly effective when used carefully.

(c) The recommendation for two pages of ***supporting material*** was not adhered to by all Candidates. These figures should:
- **(i)** Provide evidence of the data collected.
- **(ii)** Relate to the stated aims and hypotheses of the investigation.
- **(iii)** Show an awareness of appropriate methods of representing data, e.g.:
  - ☑ One map extract of an appropriate scale (not the UK) should show the location of the investigation and/or sampling sites.
  - ☑ Insert figures/tables at the appropriate place within the text so that they complement rather than detract from the text.
  - ☒ Do not photocopy and excessively reduce the size of figures in order to add more information in the recommended space: this leads to loss of quality in information.
  - ☒ Do not spread graphs over a number of pages, making it difficult to compare like for like variables, e.g. if 10 river cross sections are made, they should be presented on the same page using the same scale.
  - ☒ Do not use more than one technique to present the same data.

(d) ***Word processing skills*** were generally good, but ***proof reading*** was often neglected. In a few cases the standard of English was weak.

5) Length

(a) At a few Centres some Reports exceeded 1,500 words. The word count must be adhered to and an accurate word count stated. Fairness for all Candidates is paramount. Candidates should think carefully about how to use the word resource effectively.

(b) As noted in 4)(b), the use of tables to describe and evaluate data collection may be used to "save words" – but such tables with continuous text are part of the word count.

6) Format

Most Candidates used a recognisable format based upon the Specification: introduction, aims and/or hypothesis, data collection, analysis, and evaluation. The essay style approach without headings was seldom used – it often made the structure of the Report more difficult to understand and was symptomatic of lower quality Candidates.

7) Content

(a) The ***subject matter*** of Reports was nearly always appropriate. At AS level Candidates have not covered a great variety of topics. Physical studies such as rivers, psammomeres, spheres of influence and definition of the CBD are very popular and suitable topics. Reports were predominantly related to physical geography.

(b) ***Specific topics*** selected within these subject areas need to be chosen with care, e.g. the comparison of two sites along a river, one being on a straight and one on a meander, is unlikely to demonstrate typical downstream river changes.

(c) Many Reports continued to have a weak ***introduction***. It should be short and balanced, summarising the context of the study by stating: (i) where the study is based; (ii) something about the study area; and (iii) why it was selected.

(d) The ***aims*** were given in nearly all Reports, but in some cases the ***hypothesis*** was not given or it was not clearly linked to the aims. Some even had no hypotheses at all, these being replaced with an unachievable or lengthy or inappropriate wish list of expectations. A simple hypothesis demonstrates an understanding of what is expected to happen, according to theoretical knowledge, e.g. the velocity of a river will increase downstream; larger shopping centres have a greater sphere of influence. Additional justification can be given here. Expectations presented here can be used to explain the results later in the Report. The purpose of the null and alternative hypothesis, when stated, is sometimes misunderstood. *The null hypothesis should state that there is not a relationship expected between two variables, whilst the alternative hypothesis should state that a relationship is expected, and preferably indicate the direction/nature of this expected relationship.*
All relationships to be analysed should be stated clearly in this section.

One or two hypotheses are adequate. Highly diverse and/or numerous hypotheses do not lend themselves to an easily managed Report, often leading to lengthy methodology and limited data analysis / evaluation sections.
The hypothesis must precede the methodology, otherwise it is not possible for the reader to know whether appropriate variables are being collected.

(e) The ***method*** was usually presented well (as in previous years). Appropriate methods of enquiry were used. The following are good characteristics:
- ☑ How the sites/transects for measurement were **selected.** *However, many Candidates did not **justify** the site selection.*
- ☑ **Type of sampling** used (random, systematic, stratified – *Candidates often confuse these definitions*).

☑ **Sample size** for each sampling site was clearly stated. *However, this was frequently omitted. An **appropriate** sample size is important, e.g. three sites along a river will not yield useful results, nor will 20 questionnaires for a sphere of influence study.*

☑ The data collected was **relevant** to the aims/hypotheses, *otherwise the analysis would not be relevant to the aims. When groups collect many variables, individual Candidates should only refer to variables relevant to their chosen hypotheses both in data collection and analysis.*

☑ A precise **definition** is given for the variables.

☑ Template of **questionnaires** and **survey forms**, e.g. environmental impact.

☑ **Field notes** made whilst collecting data, to be referred to in explanations of results.

(f) *Analysis* was of variable quality, as in previous years. Good characteristics included:

☑ A clear indication of the hypothesis being discussed.

☑ Text describing the results of the investigations was linked to graphs, tables, figures or photographs.

☑ The results of **statistical tests** were discussed within the text.

☑ Theoretical knowledge was used to explain the outcomes.

☑ **Anomalies** were looked for and an attempt made to explain them by referring to **secondary knowledge** and **field notes**. The source of the explanatory material was stated.

☑ The outcomes from more than one hypothesis/aim were linked – *this is a Level 3 type response*.

☑ **All the data** collected was referred to and was relevant to the hypotheses, e.g. a questionnaire may be a relevant supplementary to the investigation, but if carried out, it should form part of the analysis. Conversely, irrelevant data should not be collected, e.g. pH and soil moisture are not relevant to wind speed across dunes.

☑ The source of **supplementary data** (i.e. secondary and anecdotal evidence) was used to support the interpretation of data. *This was often omitted with coastal management schemes and responses to questionnaires.*

☑ **Statistical tests** carried out well included:

- An appropriate test was carried out. *If a mean is taken of 10 readings at each of two locations, the appropriate test is the difference of means not Mann-Whitney.*
- Numerical evidence to demonstrate that a test has been carried out.
- Careful use of the term "significant". The **level of statistical significance** of a relationship (if any) was stated when carrying out a suitable test such as Spearman's Rank Correlation.
- Calculations checked carefully. *A logic check by the Candidate will quickly reveal unrealistic results, e.g. the direction and strength of an appropriate relationship based upon Spearman's Rank Correlation should be checked against scatter graphs. Units should be checked, e.g. discharge is often miscalculated.*
- Appropriate formulae used to calculate results, e.g. the calculation of velocity based on the number of propeller counts or the time taken for a float to travel over a given distance must be converted to metres per second.
- Make sure *both* variables are ranked from high to low (or low to high) for Spearman's Rank Correlation.

☑ The Conclusion does **not repeat information** verbatim from the analysis.

☒ Candidates should be aware of geographical theory, e.g. velocity increases with distance from the source of a river; rain on the day preceding data collection does not make the results inaccurate or incorrect.

(g) Nearly all Candidates *evaluated* the project by considering two main aspects: (i) difficulties in selecting the sample and field data collection, and (ii) possible modifications and extensions to the study. Weaker Candidates stated that the study went well and that the outcomes were as predicted. Most studies could be linked to a geographical theory, but this third area of evaluation was usually not mentioned *or* the theory stated early in the Report was not returned to in the outcomes – particularly in the case of land use models.

(h) The presentation of *maps* was reasonable, e.g. title, scale and key. *Few Candidates used the map to show precise locations of sampling sites on, for example, rivers or sand dunes. Furthermore, many did not include any map – yet they are a fundamental part of Geography!*

(i) *Graphs*: Candidates usually selected appropriate ways of presenting data, but most made one or more of the following errors:

  ⌧ More than one technique used to present the same data.

  ⌧ Poor choice of scale for variables with small variations.

  ⌧ Variable scales for the same pairs of variables on different graphs, so that comparisons were difficult and/or misleading.

  ⌧ Axes not labelled or inaccurately labelled.

  ⌧ Two types of graph used to represent the same variables at two different sites, thereby making comparison difficult.

  ⌧ Independent variable placed on y-axis.

  ⌧ Set of related graphs on successive sheets made it difficult to compare like with like, e.g. river cross sections.

  ⌧ Line graphs erroneously purported to show a link between qualitative descriptors such as types of land use or a set of 10 randomly selected pebbles on a river bed.

  ⌧ Titles stating "A graph to show……" The graph obviously shows something!

  ⌧ Graphs and diagrams not relevant to the variables used.

  ➲ Use Question 4 from January 2006 as an exercise in selecting and presenting appropriate graphs.

The Written Paper: Comments on Individual Questions

Choice of Question 1 or 2 or 3

Very few Candidates remained in Levels 1 and 2 and many entered at least Level 4. Questions 1/2/3 must be read carefully by the Candidate to ensure that they understand what the question requires – rather than attempt to use an answer that has been rehearsed as part of examination preparation.

Questions 2 and 3 were approximately equally popular choices, with far fewer attempting Question 1. Most Candidates generally understood the requirements of the questions. The level of attainment for Questions 2 and 3 was good, with most responses entering Level 3 and a good number entering Levels 4 and 5. The level of attainment was lowest for Question 1.

1) Few Candidates reached Level 4 or 5; most stayed in Levels 2 and 3

Indicative content: This question is looking for unexpected results that did not match geographical theory. Commonly accepted theory is stated and is directly related to the anomalies discussed, e.g. pedestrian flows should decrease with increased distance from the city centre; discharge increases with increasing distance downstream. Unexpected (anomalous) results are described, e.g. pedestrian flows decrease then increase then decrease with increased distance from the city centre in one particular direction only; discharge is highly variable with increasing distance downstream. Explanation for unexpected results could be in terms of experimental technique: e.g. poor sampling methodology, data collection errors (poor/inappropriate equipment, inexperience collecting data, inconsistent collection of data within and between groups, method used, impeded by weather conditions) incorrect calculations and poor choice of diagrams; or the explanation could be in terms of local conditions: e.g. historical town building restrictions affect shop

locations; river/coast affects functional distribution; variation in rock type and vegetation type affects river flow.

Qualities of A grade Candidates: *Either* results of the investigation that did not match commonly accepted geographical theory are discussed quite well or more results are discussed in less depth. Well developed answers are likely to consider the effect of experimental techniques used as well as local site conditions. The answer is generally logically ordered and well.

Other Comments: The better quality answers linked the results directly with expected geographical theory, demonstrating a clear understanding of the causes, such as poor experimental technique, e.g. inappropriate site selection, or the impact of local conditions, e.g. man made adaptations to a sand dune. These Candidates were aware of the difference between factors over which they did and did not have control. Middle ability Candidates showed less breadth, being likely to concentrate on either experimental techniques or local conditions. Geographical theory was not always clearly stated. Weaker Candidates often repeated a large amount of material from the Report. Some discussed how geographical theory was met before moving onto where it was not matched. Others did not understand the geographical theory.

2) Many Candidates reached Level 4; quite a few entered Level 5; few stayed in Levels 1 and 2.

    Indicative content: The discussion of actual weather conditions and possible weather conditions was acceptable (i.e. what might/would have happened if data collection had taken place during inappropriate weather conditions.) Factors affecting collection included: rain, e.g. could/may not get anyone to answer on-street questionnaires; difficult to read field instruments; snow, e.g. ground is covered up; wind, e.g. knocks instruments over; lose data collection sheets. Factors affecting the results included: rain, e.g. biased ratings for an environmental impact survey; intermittent rain affects air temperature and soil moisture; snow will lead to an incomplete data set; wind, e.g. there may be an incomplete data set; gusts of wind makes it difficult to see the impact of shelter and exposure on a transect.

    Qualities of A grade Candidates: The impact of possible and actual weather conditions on the investigation are discussed quite well. Well developed answers consider collection of data and the results. They may be expressed in terms of being anomalous results or simply how they affect the data, e.g. increased or decreased river flows. They will not confuse anomalous results with the non-anomalous impact of changing weather conditions on the variables being measured. The answer is generally logically ordered and well presented.

    Other Comments: The most able Candidates produced a balanced answer that referred to the collection of data and the results of the Geographical Investigation. Where the weather had not affected their own investigation, they offered sensible impacts that could have taken place. Lower ability Candidates were confused about the impact of the weather: whilst it may affect the results, e.g. high or low rainfall leads to high and low river levels, it does not mean that the results are incorrect or anomalous – they are just the water levels that result from the amount of rainfall. They did not understand the temporal impact of the weather, e.g. a single sunny day does not determine the number of saplings in woodland. They tended to respond in terms of the practical impacts rather than the results. The weakest Candidates did not understand what weather is, e.g. sea levels are not weather per se, whereas storm surges result from the weather conditions; pH and soil moisture are not the weather, although over a period of time they could be affected by it.

3) Many Candidates reached Level 4; a good number entered Level 5; very few stayed in Levels 1 and 2.

    Indicative content: Various aspects could be considered as follows: the appropriateness of the type of sampling used; the sample size: too large or too small (planned or actual), (e.g. the number of interviewees, the representativeness of interviewees, number of river depth measurements); the type of data: its appropriateness, the collection of redundant variables. Other potential errors include the inability to sample from the planned locations (e.g. no

access, tide in, river too shallow). A pilot survey may have been carried out in order to reduce error, e.g. a site visit would check accessibility; and equipment could be used to check that it works; the collection technique could be piloted to check that students knew how to collect the data.

Qualities of A grade Candidates: Either the success in reducing two or more planning and collection errors are discussed quite well *or* more errors are discussed in less depth. Well developed answers consider both planning and data collection. The answer is generally logically ordered and well presented.

Other Comments: More able Candidates considered a range of measures that were taken to reduce errors during planning and data collection, they established how successful these measures had been and identified those that should have been taken. Even Candidates that had produced a good evaluation in the Report were able to perform well with this question. The responses of middle ability Candidates were narrower in focus rather than being incorrect or irrelevant, typically discussing either what went wrong or what went well. They frequently considered the operability of equipment used and user competence. They tended to be repetitive around their chosen points. Weaker Candidates often repeated a large amount of material from the Report with no development of the material.

4) **a)** Some Candidates reached Level 3; most entered Level 2; quite a few stayed in Level 1.

Indicative content: The diagram should show: title, scale and units, axes labelled, key as appropriate. Possible methods of representing the data include the following. Ideally, the diagram is a set of three parallel graphs along the dune profile – conventionally the profile showing height goes at the bottom of the page. The x axis is either site number or distance from the start of the transect or a combination of both. All graphs have the same horizontal scale. It is acceptable for the data plotted as discrete graphs without common scales. It is also feasible to locating diagrams onto a map. Height: the vertical exaggeration should not be too great (if possible). Measured heights should be joined in a line (smoothed out, or set of straight lines joining the points); vegetation cover is also acceptable as pie charts, proportional circles or bar charts. The y axis scale should be readable and indicate the number of species, percentage vegetation cover and height.

Qualities of A grade Candidates: The method of representing the data is described moderately well. The response will demonstrate that it is possible to compare the variables directly, either by using an integrated graph or parallel graphs. The scales will be appropriate, so that number of species and height of land can be interpreted readily from the graphs. Distance inland will not be plotted against site number. All variables will be graphically represented, i.e. not just numbers written out. The answer is generally logically ordered and well presented.

Other Comments: A large range of techniques was suggested, in addition to line graphs there were bar graphs, kite charts (few chose this appropriate method for vegetation cover), symbols, and bars that combined cover and number of species. The most able Candidates remembered the essential characteristics of graphs: title, labelled axes (units and a scale of values) and an appropriate choice of data representation. The graphs were integrated or parallel to each other. They suggested suitable y axis scales, giving a separate one for at least vegetation cover (with its higher values than height and number of species). They recognised that distance inland and site numbers are independent variables which are represented on the x axis, whereas middle and low ability Candidates did not. Middle ability Candidates selected mostly appropriate forms of representation, e.g. two of the three variables were appropriate (poorer responses being scattergraphs for the variables which were not only difficult to read but not the recommended method for these data). The graphs were not necessarily directly comparable. Weaker Candidates resorted to rewriting the numbers on the graph, especially for the number of species. They suggested wholly inappropriate graphs, e.g. vegetation cover against number of species. Some justified their suggestions – this was irrelevant to the question.

b) Some Candidates reached Level 3; many reached the middle-top of Level 2; quite a few stayed in Level 1.

Indicative content: More fieldwork that could be undertaken by the AS students included: additional transects so that more of sand dunes are covered; surveys for blow outs, litter, fencing, footpaths, boardwalks, (re)planting, non access areas; repeat surveys in the summer when more flowers identifiable; transects to consider abiotic influences (temperature, soil moisture, wind speed, pH); and the collection of photographic evidence. Secondary data included: accessing a management plan – showing what has been done, what is planned, costs, benefits, problems; any of the additional variables that the students could collect may also have been collected by other organisations; and organisations with available to the public, e.g. the National Trust or the local council.

Qualities of A grade Candidates: The justification of relevant additional data is considered moderately well. Justifies data in an appropriate way, e.g. litter survey is a descriptive measure of human impact showing distribution on the day data was collected (seasonal measurements would not show seasonal impact as litter is cumulative and affected by other factors such as removal by wind and people). The answer is generally logically ordered and well presented.

Other Comments: A good range of data types were suggested, although few Candidates mentioned making more transects on the same dune system. More able Candidates suggested appropriate additional data that could be collected and gave sound reasons for doing so. Typically they suggested three or four additional data types that included different variables measured across the dunes, repetition in different seasons and secondary data concerning the human impact on the dunes. Lower ability Candidates also chose several data types but the justification was less well developed. Quite a few included inappropriate suggestions, such as the gradient of the dunes which would have already been collected in order to determine the height and distance inland of the dunes. Their justification for otherwise appropriate suggestions was sometimes poor as they did not understand the cumulative impact of some variables, e.g. litter surveys throughout the year would not necessarily reveal when littering took place as it blown around and may be removed by the land owner. The inter-relationship with the already collected variables was often poorly understood, e.g. precipitation levels on a single day will not affect pH and vegetation cover. They deviated into discussing how to collect the data.

2690 Geographical Investigations 2

General Comments

The standard of work for this session was high with candidates submitting well presented, original material.

Marking, for the most, was well within the acceptable tolerance limits and accurate around the grade boundaries. As usual the marking at the very top end tended to be a little generous and marking at the bottom end a little harsh. Many of the lower level candidates did merit some more marks for their efforts.

Most Centres have a grasp on the format required for the investigation. Those Centres who choose to encourage their candidates to write in chapters rather than report form may well disadvantage their candidates as the line of enquiry leading to critical analysis and evaluation is often lost. A few Centres are still to encourage their candidates to formulate an aim and some hypotheses or research questions. Candidates who fail to follow this format do not score well in design and find it difficult to maintain focus throughout the investigation.

There is still a tendency to award level criteria without due consideration for correct use and context. Mention, in a candidate's report, of a particular word or phrase as set out in the criteria does not necessarily mean that they have attained that level. The word, for example, anomaly, must be explained and used in the correct context thereby highlighting criticism in the analysis. Merely mentioning it does not constitute the awarding of that level of criteria.

Choice of topic was satisfactory in the majority of cases. Many candidates clearly pursue subjects of personal interest and are wisely guided towards topics that will yield abundant data. Those who conducted pilot studies were particularly successful.

Investigations based wholly on the collection of secondary data are still plagued with problems. Collection of secondary data is perfectly acceptable providing the data can be handled in some way. Merely quoting the data and analysing existing graphs does not fulfil the data processing criteria. Secondary data that can be sampled in some way and displayed in a variety of original ways is what is required.

Those candidates who used statistical tests applied them well and clearly understood the meaning of significance. Putting statistical tests in for the sake of it is of little value and does not aid the candidate's understanding in any way.

General presentation skills were sound although a number of bi-polar surveys could have been presented in more interesting ways thereby showing some skills rather than just being left as tables of data. With the advent of IT, mapping skills have tended to deteriorate and many maps lacked sufficient detail. Of particular note was the absence of display of pedestrian and traffic flow data. Isoline and flow line diagrams show a high skill level and make interpretation much easier for candidates. Perhaps these skills could be encouraged.

General Comments – Administration

Administration, for the most, was efficient for this session.

MS1 forms do require a little care. Please ensure that the figures and the underscoring are clear.

Clerical Errors still tend to creep into submissions. Such errors will only delay the moderation process. Amendment forms should be returned to the moderator as soon as possible.

Comments Cover Sheets should be used where possible. Comments enable moderation to remain a positive process and are most helpful as Centres know their candidates best. Their use is to be encouraged.

Despatching Sample Material. If there are 10 or fewer candidates for a Centre then all investigations can be sent to the moderator complete with MS1 form, coursework assessment form and any other correspondence. There is no need to wait for samples to be requested.

2691 Issues in the Environment

General Comments

The most popular questions were questions 1 and 7. The remainder of the questions were all attempted, some by very few candidates. The majority of candidates completed the paper in the time allowed – only a few candidates appeared to run out of time. There were a very small number of rubric errors.

The examination paper performed effectively in producing a wide range of marks. The quality of responses was variable; however, most candidates showed some awareness of the expectations of the questions and there were few very poor responses.

At the higher levels candidates showed a good level of understanding and used detailed locational knowledge to develop effective responses. At the lower levels responses were increasingly descriptive and vague – often not fully addressing the question commands.

Comments on Individual Questions

Question 1

(a)   The majority of candidates used the resources very effectively and were able to identify a wide range of factors which make Boscastle vulnerable to flooding. In some cases the article was used in more detail than the map, in others the map was seen as the most useful resource. In either case candidates were able to identify enough information to fully address the question.

At the highest levels candidates went on to use other examples of areas that had been affected by floods and made comparisons in relation to what make each area vulnerable to flood events. This was often a useful approach and provided the basis for clear discussion about the 'extent' to which Boscastle illustrated the vulnerability of settlement to flooding.

A number of candidates simply described other flood events (often Bangladesh), with limited reference to the question; this tended to be self-limiting.

It was evident that a number of candidates had very little awareness of scale, seeing events in Bangladesh or the Mississippi floods as a comparative event to the flooding in Boscastle.

(b)   (i)   Responses to this question were variable, but often provided some very impressive understanding. A significant number of candidates were able to show a clear understanding and considerable knowledge about both the distribution of tectonic hazards and the processes involved. Many used diagrams to explain plate movements and a high level of technical language was used effectively. In some cases candidates used the question to describe events rather than explaining them in relation to their location, this tended to be self-limiting.

A very small number of candidates clearly did not understand 'tectonic', using flood or hurricane events to address the question.

(ii)   Responses to this question generally fell into two types; firstly those candidates who were able to fully address the question by considering the distinction between short and long term aid and secondly, those candidates who simply discussed aid in general terms. Both of these approaches produced satisfactory responses, especially when supported by adequately detailed locational examples. The first approach, however, often gave candidates the opportunity to fully address the

question and have a broader discussion. Those that did this often produced very impressive and sophisticated answers.

Question 2

(a) Candidates used the resource well, in many cases identifying a wide range of factors which supported the idea of global warming. The points about glacial retreat, melting permafrost, flooding and general environmental change were usually picked up, with a number of candidates developing these ideas by bringing in comparative examples. From this point there were often two avenues of approach. One was to simply accept the resource as clear evidence of climate change and often no real debate, an approach which was often self-limiting. The second approach was where candidates entered a broader debate, considering that the resource was only one example and to get a better view more information over a longer time period would be required. This approach often led to very detailed and thoughtful responses.

(b) **(i)** The word 'challenges', was interpreted in different ways, but in most cases the chosen interpretation provided a useful avenue through which to address the question. The most common approaches to the question were the economic development approach and the technological approach. The first of these approaches suggested that climate change may well affect production systems and demand for particular products while the second considered that climate change will lead to technological change, especially in terms of the supply and use of energy. The economic development approach often led to vague responses and did not always consider development in a global way. Consequently, considering countries at different levels of economic development was generally overlooked. The technological approach often gave candidates a useful avenue into the question, many responses identifying a number of ways in which technology may respond to the threat of climate change. The most popular considerations in this context were about energy generation and transport systems.

(ii) Candidates generally shared a sound awareness of climate hazards but were not always able to discuss the idea of 'short term' or bring in appropriate examples. This tended to be slightly self-limiting and often meant that the 'effects' were considered in a general way, lacking depth and detail. Those candidates that focused on particular events (The European heat wave was a common example) often produced more detailed responses.

Question 3

(a) Candidates used the resource effectively to express the way that the physical landscape (including flora and fauna) was important in attracting visitors to Alaska. A significant number of candidates then went on to bring in a wide range of comparative examples, often using locations which were used for winter sports activities. This provided a useful means of developing the response more effectively and often led to very good answers. A small number of candidates also considered that cultural factors were an attraction in some areas, providing thoughtful and interesting debate.

In some cases candidates drifted away from the key idea of the question and focused on environmental issues in cold environments. Unless this was seen in the context of making the landscape less attractive it was often self-limiting.

(b) **(i)** Responses often tended to describe the environmental threats, usually associated with mineral/oil development or large scale tourism development. This approach, when well documented with detailed locational knowledge was useful in expressing how fragile cold environments might be, but often failed to fully explore the idea of

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'extent'. Some candidates considered that the level of 'threat' was variable and that sustainable management techniques in some areas are reducing the threat. This type of debate often led to very thoughtful and sophisticated responses.

(ii) The majority of candidates who attempted this question had a good understanding of both process and landform. Most were able to name and describe in depth a range of depositional features, the majority using diagrams effectively to explain the range of processes involved in their formation. A number of candidates then went on to identify specific locational examples of the features used throughout their answer.

Question 4

(a) Candidates used the resource effectively to identify evidence of environmental degradation caused by logging. A significant proportion of candidates developed this idea further by debating the issue of sustainable development expressed in the resource in relation to selective logging. While this provided a good opportunity to consider exploitative forestry it did not fully address the question in terms of the 'extent' to which the example used represented the range of issues associated with development in tropical environments. At the higher levels candidates developed the debate by bringing in examples of both exploitative and sustainable development.

(b) (i) Candidates showed a good understanding about the basic characteristics of tropical ecosystems. Climatic factors were generally described in considerable detail, often with a considerable amount of accurate background explanation. Understanding of other elements of the chosen ecosystems was variable. Factors such as soil, flora and fauna were often considered in general or vague terms or not mentioned at all. Candidates who had an appreciation of the complete ecosystems produced very effective responses.

(ii) Very few candidates attempted this question. Responses were generally descriptive and often focused on examples of exploitative agricultural systems. Candidates who focused on small scale examples were often more able to show a better understanding of sustainability. A very small number of candidates used detailed examples of small scale traditional systems to show how understanding the physical environment plays a significant part in their long term survival. This approach was often very effective.

Question 5

(a) Candidates used the resource effectively and generated a range of interesting responses. The most common response was to see under-nutrition as fundamentally an LEDC problem and use the data to support this view. More sophisticated responses tended to discuss the issue in a broader way, seeing the problem in a global context in an increasingly interdependent world. A small number of candidates took this debate further by considering that even in the wealthiest countries there were problems of under-nutrition and consequently it was an issue of poverty rather than location. Any of these approaches, when supported by adequate locational studies, were able to provide the basis for an impressive response.

(b) (i) Very few candidates attempted this question.

Responses were often quite superficial with vague references to particular natural environments and only limited understanding about how physical conditions impact upon food production.

(ii) Candidates showed a good understanding of the question and used a range of appropriate locational case studies in their responses. 'Technology' was interpreted in a number of ways, observations about transportation, agricultural machinery, use of irrigation schemes and agricultural chemicals were common. A significant number of candidates used examples such as The Green Revolution or The Gene Revolution to express a range of technological inputs. This was often quite a useful approach, especially when considered against the basic idea of increasing production.

At the highest levels candidates debated the idea of 'extent', by considering other factors that may influence agricultural production, government policies, the physical environment and the influence of large scale business were all seen as significant factors.

Question 6

Very few candidates attempted this question.

(a) Candidates generally used the resource effectively to identify the 'challenges' expressed in the article. The challenges were often broken down into specific social, economic and environmental observations, with candidates showing a sound basic understanding. The idea of 'rapid urbanisation' was not always well considered, and other examples brought in were not always appropriate since they were not in a rapid growth phase.

The key idea of 'extent' was often ignored; responses tended to be very descriptive rather than analytical and consequently lacked any real comparative discussion.

(b) (i) Candidates generally had little understanding about the impacts that governments can have on the management of urban areas. Responses were often vague, with generalised references to 'building houses' or 'building roads' – often with only a superficial level of locational background detail. A number of candidates appeared to think that just about every building was 'built by the government'. There was very little understanding about planning, private-public partnerships or the part played by private enterprise in the redevelopment process.

(ii) This question was not attempted by any candidates.

Question 7

(a) This question produced some very impressive responses, with the majority of candidates using the resource effectively to identify a range of potential impacts of tourism development. A wide range of additional examples were used to develop the ideas further, often with considerable depth and detail. At the highest levels candidates entered a clear discussion about the impact of tourism – often making sophisticated judgements in terms of the impacts being largely dictated by the effectiveness of management and planning.

The concept of 'economic development' was approached at two main levels; at the basic level candidates translated 'economic development' into 'jobs' and 'money', while at the higher levels candidates considered 'economic development' in relation to broader 'socio-economic' conditions. Ideas here included points about the multiplier and national balance of payments (trade) observations.

A small number of candidates ignored the command 'LEDC' in the question and used MEDC examples. Unless set in a historical, developmental context, this was often self-limiting.

(b) **(i)** Responses to this question were often either quite general or very historical, with a number of candidates talking about the growth of seaside towns in Victorian times. This approach tended to be rather self-limiting and frequently turned into a detailed description of change rather than a discussion about the reasons for change.

A number of candidates took a different approach which highlighted a range of both supply and demand based factors and then went on to make relative judgements about these factors. This often led to a more detailed discussion, the conclusion of which was that there are a range of influences upon the provision of tourist facilities. In some cases candidates made a strong point about technology and price playing a significant part in demand led tourist facilities, often bringing in a number of appropriate case studies.

(ii) This was a very popular question and it was evident that candidates had a good understanding about both the economic benefits and environmental costs of tourism. This understanding was frequently supported by a wide range of well documented and appropriate case studies.

There were three main approaches to the question. Firstly, some candidates tended to ignore the 'economic' part of the question and focus their attention on the 'environmental costs' element. This often provided interesting information and some excellent case studies but did not fully address the question. The second approach was largely descriptive, exploring both economic benefits and environmental costs through the use of examples but failing to fully discuss the idea of 'balance' expressed in the question. The highest levels were achieved by those candidates who used case studies to analyse both economic benefits and environmental costs and make relative judgements about these factors. Many of these candidates then went on to consider the importance of management and planning in reducing costs, often using examples of ecotourism to make particular points.

Question 8

(a) Candidates generally used the resource effectively to identify a range of negative points about globalisation in relation to LEDCs. The majority of candidates then considered the issue of employment, often with direct quotes from the resource. A number of responses then went on to use examples from either: particular industries, individual companies, or countries to develop their ideas. At the higher levels candidates adopted a more balanced approach, seeing globalisation as a way of improving socio-economic conditions, whilst recognising the potential human and environmental concerns.

(b) **(i)** Very few candidates attempted this question. Those that did often had a narrow view of 'communications', either focusing on telecommunications in a general way or transport (often related to tourism). In either case responses were often very generalised and superficial and were consequently self-limiting.

(ii) Most candidates selected an appropriate example and were able to identify (often with great accuracy) the global spatial distribution of the company. In many cases the focus was on change; candidates often considering the growing outsourcing of manufacturing companies or the striving for new markets in the retailing industry. Responses were generally thoughtful and showed a sound awareness of the changing nature of international business activities. At the higher levels both locational detail and general explanation were very impressive.

Grade Thresholds

Advanced GCE (Subject) (Aggregation Code(s))
January 2008 Examination Series

Unit Threshold Marks

Unit		Maximum Mark	A	B	C	D	E	U
2687	Raw	90	54	48	43	38	33	0
	UMS	90	72	63	54	45	36	0
2688	Raw	90	70	63	57	51	45	0
	UMS	90	72	63	54	45	36	0
2689	Raw	60	43	39	35	31	27	0
	UMS	120	96	84	72	60	48	0
2690	Raw	90	72	63	54	46	38	0
	UMS	90	72	63	54	45	36	0
2691	Raw	90	70	63	56	49	42	0
	UMS	90	72	63	54	45	36	0
2692	Raw	120	-	-	-	-	-	-
	UMS	120	96	84	72	60	48	0

Specification Aggregation Results

Overall threshold marks in UMS (ie after conversion of raw marks to uniform marks)

	Maximum Mark	A	B	C	D	E	U
3833	300	240	210	180	150	120	0
7833	600	480	420	360	300	240	0

The cumulative percentage of candidates awarded each grade was as follows:

	A	B	C	D	E	U	Total Number of Candidates
3833	23.33	46.67	70.00	83.33	96.67	100.00	30
7833	0.00	0.00	100.00	100.00	100.00	100.00	1

31 candidates aggregated this series

For a description of how UMS marks are calculated see:
http://www.ocr.org.uk/learners/ums_results.html

Statistics are correct at the time of publication.