GEOGRAPHY

Paper 9768/01
Geographical Issues

Key messages

The response of most candidates was highly informative and wide-ranging. Many answers demonstrated detailed and accurate knowledge with clear, high order understanding of the subject content. Examples were sometimes partial and not relevant but in general they were used effectively and were relevant and detailed. Most answers were logical and with clear organisation. Most questions were interpreted correctly apart from the occasional lapse. There were a few instances of bad time keeping with some unfinished answers. As noted in the introduction, an increasing number of candidates answered a question in ***Section C*** before attempting ***Sections A*** and ***B***. This could be a useful strategy but it still requires an accurate assessment of the length of time required to answer individual questions. There is still a slight concern about the difference in standard between the Physical and Human Geography answers. The overall impression, on reading the answers, is that candidates had found the teaching and the syllabus stimulating. There is, clearly, much good geography being taught.

General comments

The paper was a very fair test of candidates' knowledge and understanding at this level and across the broad range of geographical concepts and issues. The majority of the candidates performed well and excellent marks were achieved by a significant number. As in previous years, it was very encouraging to see an impressive range of knowledge and understanding, coupled with the ability to present a cogent argument. It is impossible to stress the last point too highly as many questions possessed a component where reasoned assessment was required. This is especially true of the essay questions in ***Section C***. This analytical ability not only reflects well on the candidates but also on the teaching. Both Physical Geography and Human Geography questions received excellent responses, but, as in previous years, there was a difference in the levels of knowledge and understanding between the two components. Answers to the Physical Geography questions were sometimes deficient in some respects. This may reflect the different nature of the questions and perhaps a lack of realisation of the precision needed when discussing physical topics. The deficiency often involved an understanding of basic concepts and physical processes. The interaction between physical processes and human activity was better understood. However to evaluate this interaction, it is important to possess a thorough understanding of the operation of the physical processes. Some of these issues are taken up when specific questions are discussed. The answers to questions in ***Section C*** were often excellent and the breadth of knowledge and understanding shown by a significant number of candidates was remarkable.

Overall the paper was completed by most candidates, although there were occasional indications of poor time management. As noted previously, some candidates failed to match the marks available with the length of time required for sub-questions. This led to the answers to questions in ***Section C*** sometimes being rushed. There was increasing evidence this year of candidates attempting ***Section C*** before answering the ***Section A*** and ***Section B*** questions. This can be an efficient strategy but, in a few cases it was apparent that this lead to the last question, usually in ***Section B***, to be rushed and to be unfinished.

Comments on specific questions

Section A

Question 1

(a) The understanding of secondary earthquake hazards was excellent and most candidates achieved full credit.

(b) The map of earthquakes and earthquake depths appeared to be quite straightforward and there were many excellent answers describing both the variation in depths and the spatial patterns.

(c) This question posed more problems and was a good differentiator. It was clear that a knowledge and understanding of plate tectonics was highly variable. Whereas understanding of earthquakes along the 'Pacific Ring of Fire' is good, knowledge of plate tectonics in other parts of the world was less substantial. Thus, few candidates knew anything about the tectonics of the Mediterranean and Europe in general. Answers either suggested that there were no plate boundaries or that all the boundaries were conservative. A minority of candidates did understand that the Himalayas represented a collision boundary with no subduction and thus fewer deep earthquakes. More candidates understood the nature of the San Andreas fault in western North America, even though some thought it was the result of subduction.

(d) Most answers to this question were lacking in the detailed knowledge of techniques employed to attempt a prediction of earthquake activity. Thus, it was very difficult to provide a reasoned assessment of the question. Most candidates asserted that it was very difficult to predict earthquakes but without the evidence to substantiate such an assertion. Thus, many answers failed to achieve marks much above the lower zone of Level 2. There were, of course, exceptions with some very knowledgeable answers with detailed exemplification.

Question 2

(a) This question posed few problems and some candidates were very ingenious in the hazards they produced in their responses.

(b) Most candidates were able to provide good descriptions of the pattern of blizzard events and injuries in Wisconsin as well as noting the major anomalies.

(c) Answers to this part were also convincing with candidates discussing most of the possible reasons noted in the Mark Scheme. Few candidates struggled with this question and some very good credit was awarded.

(d) This question received a mix response. The greatest disappointment was the limited range of hazardous weather that was offered. Usually hurricanes were dealt with quite efficiently as well as tornadoes, However, apart from a few exception, other types of hazardous weather received less attention. Most answers concentrated on early warning and evacuation with Hurricane Katrina and Super Storm Sandy featuring prominently. The level of detail concerning both was often impressive. However, aspects other than warning and evacuation were often ignored.

Question 3

This question posed a number of problems. It was clear that many candidates had little knowledge and understanding of the three main components of a storm hydrograph. Most candidates seemed to be aware of base flow but the other two components, throughflow and quick flow, were less well known. Throughflow, the focus of the question, seemed to have escaped the understanding of most candidates.

(a) Good marks were obtained by the majority of the candidates for this question. The thoroughness with which the pattern of high flood frequency was analysed was admirable.

(b) The response to this question was encouraging and it proved to be a good differentiator. Many candidates produced sensible arguments to explain this apparent discrepancy, ranging from the ability of human management to reduce the risk of flooding to the nature of the rainfall throughout the year. Perhaps surprisingly, the role of vegetation in reducing the risk from flooding was ignored by many. However, there were many excellent answers and good marks were generally awarded.

(c) This question posed few problems and most candidates were able to provide a response at least at Level 2 standard. Exemplification was often excellent and many candidates emphasised both the prevention and modification aspects. Hard and soft engineering procedures appeared prominently, although there was occasional confusion over soft engineering techniques. The only disappointing aspect was the failure to recognise that catchment modification can be important. Many candidates emphasised that afforestation could be useful, but stressed planting trees on the floodplain or the river bank rather than in the general catchment The fact that reducing the amount of flooding in this way makes mitigation *per se* easier, was often ignored.

Section C

Question 4

This year, for the first time, there were answers on the topic **The Geography of Crime**. The responses were encouraging and enlightened.

(a) Two characteristics of defensible space were readily identified.

(b) Candidates had little trouble in identifying ways in which the housing development encouraged the incidence of crime.

(c) The candidates rose to the challenge of identifying ways in which the development could be altered to reduce the risk of crime. Good credit was awarded to many responses.

(d) This was a wide-ranging question and candidates had to devise their own strategy to answer it. The response was encouraging with a range of social and economic impacts discussed and analysed.

Question 5

(a) The majority of candidates possessed a general understanding of life expectancy. Some forgot that it was an average figure and many defined it in terms of age at death rather than the number of years since birth. Very few knew the precise definition thus the marking exhibited a degree of flexibility.

(b) There was good response to this question with most, but not all, being able to describe and summarise the pattern of life expectancy shown on the map

(c) The response to this question was often excellent although there was a tendency for the answers to be unbalanced. Analysis of the South American trend was sometimes limited with many candidates concentrating on Sub-Saharan Africa. There tended to be an over concentration on the HIV/AIDS epidemic. Although this is very important and seemed to account for the falling trend in the later years, there are many other issues that account for the differences in life expectancy figures and trend. The better candidates realised this and produced well-balanced answers.

(d) The response to this question was generally very good. Knowledge of non-governmental organisations (NGOs) was substantial, with a good understanding of their role. The 'geography' also tended to be accurate and wide-ranging. However, a minority of candidates knew a great deal about the NGOs but not the countries or areas within which those NGOs operated.

Question 6

(a) The question posed few problems, except that some candidates noted very general issues that were not really indices.

(b) This was also a very accessible question with most candidates providing a very thorough analysis and gained full credit. Most candidates suggested, quite correctly, that there was only a very general relationship and that there were a number of anomalies. Thus most candidates rose to the challenge posed by the phrase 'to what extent'.

(c) This question presented a challenge because there was, apparently, no spatial aspect to the way the poverty cycle was portrayed. The response to the question was excellent and stimulating and demonstrated that many candidates are able to take an abstract concept and apply it to a different situation. Some candidates saw it as reinforcing the core-periphery concept whilst others argued that areas caught in the poverty cycle would not receive inward investment, possibly by Trans-National Corporations. Thus, analysis was at a variety of spatial scales from local areas to regions and even to countries.

(d) This was a very broad question which meant that candidates had to devise their own strategy in answering it. Most did this very efficiently. Top-down and bottom-up strategies were well understood with examples taken from a wide variety of examples and countries. The detail in the answers was often excellent. Many answers did rise to the challenge of the 'critically examine'

although some simply described some approaches without this assessment. As noted last year, this part of the syllabus seems to be well taught and candidates appear to have been stimulated by this teaching.

Section C

Question 7

This was not a particularly popular question. Responses, however, were usually well-informed. Most candidates recognised that many, if not all, geographical issues are multi-faceted and that there was not a simple cause-effect relationship. This being so, strategies needed to incorporate a variety of aspects and approaches. The depth of knowledge was often impressive but sometimes there tended to be a narrow focus on one particular issue. The countries most favoured for analysis were Haiti, Botswana and Nicaragua. The depth of geographical knowledge was often impressive and was frequently reinforced with some very detailed maps. Detail on the strategies was sometimes less well known and understood

Question 8

This was, overwhelmingly, the most popular question in this Section, and received a good response. A variety of geographical hazards were chosen to illustrate the discussion. Earthquakes and volcanoes were most frequently discussed and there were good comparisons between hazards in MEDCs and LEDCs in relation to the severity of their impacts. Although answers tended to concentrate on situations where the severity of the impact had been increased by human activity, many candidates did recognise that the severity of the impacts could be reduced. Most answers possessed a logical organisation with candidates, in general, demonstrating good analytical qualities. A minority of candidates produced no introduction and the conclusion was often minimal if present at all.

Question 9

There were good discussions concerning the nature of socio-economic issues although a few candidates launched into the question without any introduction in which to set the scene. The environmental aspect of the issues was less well addressed and the discussion of them was implicit rather than being explicit. Discussion was sometime speculative and conclusions were often assertive and not based on the provision of rational argument. However, there were some good, well-structured answers, with conclusions based on the discussion and the evidence provided. As stressed last year, it must be remembered that the overall structure of the answers is an important criterion in awarding a mark. It is good to be able to report that in most cases the structure of the answers was good.

GEOGRAPHY

Paper 9768/02
Global Environments

Overall the standard of answers was of a lesser quality than previous years although on a Centre basis there was evidence of improved performance and a greater understanding of the demands of the assessment.

Key messages

1. Detailed factual knowledge needs to be supported by a clear understanding of the physical processes which are then related to the question being addressed.
2. Knowledge; understanding and case studies must be analysed evaluated and APPLIED to the question asked. The first three without direct application cannot reach the higher levels of the GMS. This skill comes via careful deconstruction and practise of questions.

Topics

Some areas of the syllabus are not studied by any Centre, notably, Glacial and Periglacial environments. This year the most popular questions came from a narrow range of both topics and questions within those topics. Most Centres study Coastal Environments and the Atmospheric Environment. Within those topics **Questions 6** and **12** proved the most popular.

Approaches and knowledge and understanding of Physical Geography

It is important that candidates are aware that this paper tests their knowledge and understanding of physical processes. Some questions test physical processes alone, for instance, **Question 1**; **Question 3**; **Question 7**; **Question 9**; **Question 11**, whilst the other questions require a knowledge and understanding of the interaction of physical processes and the human environment. In most instances the physical Geography should be the springboard for discussion of the way in which these processes may be are influenced by human activities. Fundamental to any successful answer (i.e. those achieving the highest Levels of 4 and 5) should be Physical Geography. This should be borne in mind by candidates when approaching questions such as **Question 6** and **Question 12**. Without an outline of the greenhouse and/or enhanced greenhouse effect when discussing Obama's wide-ranging statement about climate change, it is difficult to convince the Examiner that it is an effective physical geography response. Equally a detailed exposition of what is meant by strategies such as managed retreat, holding/advancing the line, coastal realignment and hard and soft engineering without reference to coastal processes does not produce an effective answer on a physical Geography paper. Candidates can be prone to overplaying their discussion the economic/aesthetic and social pros and cons of different coastal protection strategies and forget that these very strategies have an impact of the physical processes of erosion, transportation and deposition along a stretch of coastline/within a sediment cell. Similarly it is easy to talk about climate change in general terms assuming the Examiner understands the term, knows what it means and how it occurs without definitive written evidence in the answer.

However, the advantage of questions such as **Question 12** is that it is a wide-ranging question which offers candidates a variety of approaches so that provided the idea of increased atmospheric temperature, caused by the enhanced greenhouse effect and its possible effects and impacts in relation to natural disasters on a global scale were addressed, then the response was successful. Often much of this was taken for granted so many candidates failed to address Obama's statement directly.

If these comments appear question specific it is for two reasons: **(a)** they were overwhelmingly the most popular and **(b)** they raise similar general issues.

Diagrams and maps

These continue to be omitted from many answers. Where they appeared this year many were tagged onto the end of the answer or the end of the script, although some of these were integrated by means of figure number which was fine but many did not enhance the answer because they were basic, not fully labelled and/or inaccurate. Poorly executed coastal configurations with few landforms, little labelling and little indication of the processes operating are of little value. It should be noted that well-labelled diagrams can stand in place of paragraphs of prose description and explanation and this in itself is a demonstrable skill.

Essay organisation and structure

It is now becoming evident that Centres are aware that the response should have a clear introductory paragraph which relates directly to the question asked and there should be a middle section demonstrating knowledge and understanding and a conclusion. Many candidates preface their final paragraph, 'in conclusion' or 'to conclude'. This is a way of signalling clearly and definitively to the Examiner that they are coming to the end of the discussion. This is effective and sensible. See comments on **Question 10**, **11** and **12** for elements which constitute higher level conclusions.

However, this year, there were many instances of a lack of a clearly set out introduction with definition of 'managed retreat, for instance or the context of coastal protection generally, or an awareness of the aspects of Obama's statement that needed to form the basis of the discussion. Climate change seemed to be the trigger words and often candidates completed their answer without mentioning Obama's quotation from the question.

Analysis/ synthesis/ evaluation/ application

Knowledge and understanding alone are not sufficient for a response to be awarded credit at the highest levels, there needs to be evident analysis, evaluation and application of the subject and object of the question. This needs to be done in relation to factors which are not mentioned also and all of these aspects of the assessment needs to be in relation to the physical environment. For instance, it is not enough to analyse methods of hard engineering economically, aesthetically and socially. Without some reference to the ways in which man-made structures interact with wave action, erosion, transportation and deposition, the answer will not fulfil the criteria demanded for high level mark in the Generic Mark scheme used with this paper.

Comments on Specific Questions

Arid and Semi-arid Environments

Question 1

Most candidates who tackled this question are aware of the influences of the general circulation, ocean currents, mountains and continental interiors in producing deserts. They used appropriate examples but the details were not always accurate. There was confusion about the winds and pressure belts that influence the Patagonian and Atacama deserts and the relative roles of mountains and ocean currents in those deserts in South America. The knowledge was not always secure.

However a minority of candidates went beyond defining these deserts in terms of rainfall. Few engaged with the 'characteristics of' deserts. Few quoted temperatures and none mentioned evaporation; transpiration ratios in relation to water availability. There was little detail about variability, reliability, regularity and seasonability of rainfall in relation to the different factors determining the location of deserts.

Altogether the knowledge and understanding was not secure in this answer.

Question 2

It is quite possible to take the line of argument that human activities are not constrained by climate but there are constraints and although an optimistic approach is clearly preferred it should be noted that credit is given for a more balanced point of view and or at least some evidence to the contrary. It is good to see that candidates are not deterministic per se but there are examples of where is difficult to produce more than a subsistence standard of living because of the climatic constraints although remoteness and lack of physical

and economic infrastructure may also militate against commercial success (e.g. in the Sahel). The prolonged drought whether natural or human-induced may also be a climate-related constraint.

Coastal Environments

Question 5

Knowledge of relative sea level change was familiar to those candidates who tackled this question. However, there was often a lack of awareness of the range of drowned river valleys and how a eustatic rise produces these and modifies a river valley. There was often little attention to the details of landform modification and morphology of the coastline as a result. A raised beach was mentioned in some responses but without the effect that the relative change has had on the cliff line. Raised beaches were not described in detail in order to demonstrate their unmistakable characteristics. This was a straightforward knowledge based question with scope for 'examination' therefore comparative size, scale and dimensions etc. would have been appropriate as would a range of well-integrated diagrams. Sadly neither was offered.

Question 6

Managed retreat is one of a range of strategies now adopted along coastlines in an attempt to control recession. As one candidate suggested the term 'coastal realignment' is a more appropriate term for a range of strategies which could include holding the line by means of hard engineered structures, softer methods such as replenishment, mangrove conservation, salt marsh buffers or advancing the line by means of reclamation.

Some candidates were not secure in their knowledge of the term 'managed retreat' and could not define it clearly. The best examples for instance, Abbott's Hall Farm on the Blackwater estuary in Essex, offered several candidates a means to an end by describing exactly what has been done there. However, only a small number of responses could explained that the deliberate breaching of the sea wall and allowing the area behind to flood and due to plant succession create a salt marsh is what managed retreat means. The fact that salt marshes serve a dual purpose in that they offer a natural buffer against erosion as they dissipate wave action and in many cases prevent waves from reaching the inland area which not mentioned in many responses. They also provide as an adjunct a wetland site i.e. areas of fragility which are endangered in this country and sites for wildlife which can double up as tourist and conservation assets.

A blanket statement about 'terminal groyne syndrome' is not the most detailed way of explaining the down drift implications of longshore drift along the Holderness coastline. The implications for Cowden and Spurn Head could have been dealt with in much more detail. Then the relative merits and disadvantages of holding the line as opposed to managed retreat could have been assessed.

Tropical Environments

Question 7

This was not a popular question and the few who chose it did not address the concept of biodiversity strongly. Plant and animal species were needed and it is possible to dispute the statement by reference to the wide range of small and micro-organisms found on the forest floor. Few candidates seemed aware of this. Detailed knowledge was the principal omission in these answers.

Question 8

There were some pleasing answers to this question. They were rooted in knowledge of both subsistence i.e. argued as sustainable, and commercial argued as the reverse. Also there were appropriate and detailed case study material included and some balanced discussion. Most candidates were able to relate the human activity and its scale to the physical processes which operate within the tropical rain forests they discussed. Clearly familiarity with the environments assisted candidates appreciation of the topic but these answers were encouragingly well-structured and fulfilled the GMS requirements for Level 3 and above.

Temperate Grassland and Forest Environments.

Question 9

Soils are never an especially popular topic and several answers although adequate on the conceptual aspects of the question could not illustrate the concepts of functioning via nutrient cycling to produce a zonal soil for particular latitude. Analysis and evaluating required some notion that anomalies exist and therefore sub-climaxes may produce variations within. Soil-profile diagrams were missing from most answers. However, there were one or two promising answers in terms of knowledge and understanding of nutrient cycling and the functioning of the ecosystem which was encouraging but only a partial answer. The subject of the question was 'zonal soil'. Hence the focus of the answer should have ben chernozems, brown earths and podzols. Of course, human activities could and have played a role in these environments.

Question 10

Without a stated awareness of the natural environment under discussion in these responses the answers are bound to founder to some extent. Many candidates managed to write a response without mentioning a species of tree, shrub or plant. Some responses also did not make clear enough reference to their chosen environment. Admittedly 'landscape' can be interpreted broadly but nevertheless at the functioning level of coppicing, introduction of new species, fires and recreational activities, it is thought that some awareness of the species that constitute forests and grasslands is required. Not only that, but the functioning i.e. the physical processes which operate is an essential part of a complete, comprehensive answer. Therefore, concepts such as nutrient cycling and plant succession were expected to be applied. Without them a significant aspect of the GMS cannot be accessed. There was evidence of potentially detailed case-studies and examples within these answers but, in most cases, the development of the argument and application of the principles was not sufficient to fulfil the higher level demands of the GMS. It was noticeable that there was intelligent and imaginative handling of both knowledge and conceptual material in many responses. However, there was rarely enough detailed development of argument. Higher level conclusions would project the role of human activities into the future perhaps suggesting that nowadays conservation will tranquilise some human activities within these environments.

The Atmospheric environment

Question 11

Without a sound grounding of factual material about the influence of both air masses and depressions on cool temperate maritime climates such as the UK's climate, these answers would not be successful. Equally unless the question of 'short-term variation' is addressed, then the higher levels of the GMS cannot be accessed. This was the principal characteristic of most the answers to **Question 11**. Even in the best answers there was a preponderance of details about each and every air mass accompanied by an appropriate map, less detail about depressions, some awareness of blocking anticyclones but a lack of connection between a blocking anticyclone and reference to the air masses which were described at the beginning of most answers. These lack of connections suggest learnt factual material but a slight lack of appreciation of the connections and atmospheric dynamics in temperate latitudes. This was more evident when it came to the attempt to relate the surface conditions to upper air movements in the form of jet streams. Good knowledge was evident but there was an overall lack of understanding of the three dimensional nature of the atmosphere and the dynamics and processes within. The variability results from depressions to some extent and no candidate **explained** the scale and changing weather conditions across a depression from warm front, to warm sector and then the cold front. There were few explanations of the actual contributions of depressions to cool temperate weather. Good answers could have concluded with a projection of the evidence for more variable extreme weather both now to some extent and in the future.

Question 12

This was probably the most wide-ranging open-ended question on the paper. It needed some careful deconstruction before being tackled. Some candidates saw reference to 'climate change' and wrote an essay offering their knowledge without reference to Obama's statement referred to in the question. No response suggested that his statement represents the 'doomsday scenario' a stance often adopted by those proponents of human-induced climate change. What was needed was a direct engagement with 'the 'reality' of the change, i.e. evidence for; 'frightening' perhaps, certainly 'global', 'new' possibly and 'man-made disaster'. The words 'man-made' indicate that candidates would be expected to define their interpretation of

man-made probably via the enhanced greenhouse effect. Correct terminology of long and short wave radiation and the identification of greenhouse gases beyond CO_2, their location and their role were needed.

There were many approaches that could be taken so credit was given on the merit of each answer. However, engagement with the question, physical processes and evidence of climate change with some accompanying statistics reinforced the better answers of which there were some more imaginative approaches which was pleasing.

GEOGRAPHY

Paper 9768/03

Global Themes

Key Messages

- Knowing the content of the Generic Mark Scheme (GMS) and understanding its application is fundamental to success. All pieces of extended writing for Paper 3 are assessed using this framework.
- The skills of deconstructing the question set and planning to address all its elements are highly valuable.
- As extended writing, Paper 3 essays need to be of appropriate length in order to develop in both depth and detail. Short pieces of work (in most candidates' handwriting, two sides of an Answer Booklet or less) are unlikely to achieve high Level awards. The vast majority of essays this year were of an appropriate length, including some long pieces.

General Comments

This fourth examination of Cambridge Pre-U Geography saw a slight increase in candidates from 2012, and the cohort remained relatively small. Coverage of the syllabus is uneven in terms of choices, with no essays on one Theme, **The World of Work** and only one Centre preparing candidates to answer questions on **Trade, Debt and Aid** and **Energy and Mineral Resources.**

Knowing and understanding the GMS is foundational to achievement on Paper 3. Teachers are encouraged to use the GMS with candidates throughout the teaching programme, both as a measure of achievement for a piece of work and as a means of demonstrating areas for improvement.

All the questions on Paper 3 (bar one) were one sentence essay titles. One way to enhance performance is to develop the skills of deconstructing the chosen title into its constituent elements, e.g. command word to follow, subject area, key idea(s). Then a candidate can plan to answer the actual question set, and to cover all aspects of the question. This both assures success with the bulleted descriptor in the GMS concerning focus and keeps the response away from irrelevance or the tendency to go off into straight recall of learned material.

Rewards to individual essays were made using all 5 Levels of the GMS, with Levels 2–4, as expected, being used the most intensively. There were no responses of exceptional quality seen this year. At this Level, there was some very impressive quoting of relevant texts, recent articles and often a clear account of the relevant theories. Several essays were awarded marks in Level 1 usually for failing to follow the advice in the previous paragraph.

In assessing responses, the GMS is used along with indicative content for each question. This indicative content is prepared from the syllabus content and from contemporary geographical thought, research and publications. Whilst the GMS captures the essential qualities of responses in 5 mark bands, the indicative content is what the name implies: some indication of the probable content or possible approaches to the questions and titles set. Examiners do not expect to find all the indicative content in any one response and candidates are free to develop their own approaches in their essays.

The quality of written communication was satisfactory to excellent. Outstanding work being seen in the vocabulary for and expression of analysis, evaluation and argument in particular.

Organisation is one of the assessment criteria for extended writing in Pre-U Geography. Well-structured responses tended to have a discernible beginning (introduction), middle (evidence, analysis and argument) and an end (conclusion). As last year, the quality of introductions proved a good discriminator. A purposeful targeted start, which defined key terms in the question generally led to a well-structured, focused essay. Many effective conclusions were seen, that drove home the candidate's position and did far more than

simply recap the key points of the essay. All essays need a conclusion (the seventh bullet point in the GMS) and those that lacked one were marked down.

Comments on Specific Questions

Section A

Migration and Urban Change

Question 1

'Population mobility' means more than just migration and '21st century' gives the question a clear time element. Sadly, many candidates regurgitated a standard push-pull account of migration with non-contemporary examples. Candidates who did tackle the two parts of the question mentioned above invariably scored well. Few deployed detailed examples and case studies which showed a sense of contemporary realities. Several tried to frame their answers within the mainstream migration theories, e.g. Ravenstein or Lee, but once again provided no critique of how simplistic and old these theories are. The majority of responses focused disproportionately on causes and the breadth of coverage (and depth of knowledge) of constraints was disappointing.

Question 2

This was a question which should have produced a wide range of responses given the possible interpretations of the key word 'spoils'. Sadly, many candidates showed a narrow understanding of counterurbanisation with a focus on economic issues and often merely generic content on social and environmental consequences. The question clearly required a debate and the weighing of evidence, and these were often lacking.

Trade, Debt and Aid

Question 3

Better answers used a time frame and discussed more than one NIC and constantly referred back to the impact on changing patterns of trade. There was some good discussion of post-colonial and neo-colonial patterns of trade well exemplified by the specific type and direction of the trade. Weaker candidates seemed confused as to which were the NICs and perhaps only discussed one in any detail. Often 'Africa' was used in context of trade patterns by weaker candidates while others carefully documented Chinese involvement in specific African countries. Few candidates mentioned the role of trade blocs or the impact of a growing demand for consumer goods within the NICs themselves as factors of trading change.

Question 4

There were some really strong answers to this question. Fewer candidates gave a detailed Economics answer as in previous years, but used their knowledge and understanding of FDI in an effective geographical way. Again, stronger candidates detailed the impact of Chinese investment in individual countries rather than 'Africa' and gave a balanced view of the advantages and disadvantages of both the recipients and donors. Some weaker answers were descriptive and not very accurate about FDI with little evaluation of the impacts. Few candidates (even the better ones) considered aid in their reviews but this did not exclude them from the higher marks. One or two candidates discussed the role of trade which was not considered relevant in this response.

The World of Work

No responses were received on this topic

Section B

Energy and Mineral Resources

Question 7

This question was not chosen by any candidates.

Question 8

It was nice to have a Centre preparing candidates for this topic for the first time. Responses to this question were reasonable, but mostly lacked the detail necessary. There are many relevant contemporary examples, e.g. North America (Deepwater Horizon, Alaska, tanker accidents, tar sands, fracking), Russia (gas), Central Asian Republics (transnational pipeline plans) and Chinese energy demand.

The Provision of Food

Question 9

This was easily the most popular question for candidates. Approaches were very broad and all candidates showed good knowledge and understanding. There were some very good, detailed case studies which were relevant and illustrated clearly the ethical and economic issues. A review of Fair trade was generally appropriate and thoughtful. Few candidates discussed conservation of the countryside, some covered sustainability in their answers especially in the context of fishing. A few weaker candidates confused 'ethical' for 'environmental' while others wrote rather emotively of breeding and housing conditions for certain groups of animals. Many candidates included Malthus and Boserup in their evaluation but only the more able candidates used the theories and diagrams to effect.

Question 10

This was least popular but 2/4 answers were very thoughtful, detailed and well exemplified and scored Level 4.

Tourism Spaces

Question 11

Very few candidates attempted this question and those that did struggled to produce the discursive response sought.

Question 12

This is a relatively straightforward question, but the command term 'evaluate' was a good discriminator and was largely ignored by weaker candidates, who produced descriptive answers. Sadly, as in previous years, too many responses fell back on GCSE-style descriptions of the economic impacts of tourism. It would be good to see some genuinely contemporary detail on Benidorm and The Gambia (or other tourism spaces) and answers on this topic matching the high level of academic rigour that other topics achieve. Lack of in-depth examples (and data) was a shortfall of a number of responses. Some theory was well-used (e.g. enclaves), but some candidates were desperate to use Butler and struggled to make this relevant.

GEOGRAPHY

Paper 9768/04
Research Topic

General Comments

This is the fourth sitting of this paper and candidates seem to have been well prepared for the demands of this component, coping well with having to use their geographical knowledge and skills in unfamiliar contexts. It was pleasing to see that, on the whole, candidates have taken on board the advice given in previous reports and Centres are to be congratulated on this.

Key messages

A few general points are worth re-iterating:

1. Precision is both expected and required, especially when taking data from the resources. Phrases such as 'around 35' or 'about 35' gain no credit. It is an important part of the skill that candidates take time to ensure they use the data precisely.
2. **Questions 1(a)**, **(b)** and **(c)** along with **Question 2(a)** and their counterparts in ***Sections B*** and ***C*** are entirely data response questions. No marks are awarded for offering reasons or explanations for the patterns and trends identified. It is encouraging to see that candidates have certainly improved over the years in this respect, but Centres should be aware that there are still a handful of weaker candidates who attempt such responses.
3. There was little evidence that candidates ran out of time, but occasionally their use of time was brought into question. For example, one candidate wrote 3 full sides for a question worth only 5 marks (**Question 6 (a)**). The mark allocation is on the question paper and candidates should use it as a guide to the amount of time they should spend on each question.
4. The syllabus states that "candidates will be expected also to carry out secondary research, both in support of their individual research investigation and in making a wider study of their chosen topic". **Questions 2(b)**, **6(b)** and **10(b)** are opportunities for candidates to show what they have learnt. However, the responses tended to focus on description without addressing the evaluative part of the question. Exemplar support, crucial to accessing the higher levels of the mark scheme, was too often lacking.
5. In the 15 mark questions (**Question 3**, **4**, **7**, **8**, **11** and **12**) candidates should be encouraged to use detail from their field investigations to illustrate the points they make. Descriptive answers are common here – candidates must address the evaluative aspects of the question to gain good credit.
6. Investigation titles warrant some comment. The multi hypothesis approach has, thankfully, almost disappeared. Titles should be expressed as either a question or a hypothesis and should follow the guidelines given in ***section 1*** on page 11 of the 2013 syllabus. Titles such as "Urbanisation leads to a reduction in Green Areas" lack both scale and location and are virtually impossible to research, (How can urbanisation be measured satisfactorily? What exactly are "Green Areas" and how can they be measured?)

Comments on Specific Questions

Section A Microclimates

Question 1

(a) Candidates had little trouble here with the vast majority gained full marks.

(b) Most scored well here, linking the height of the land to the wind speed and making a judgement about the strength of the link. A judgement anywhere on the spectrum between a strong or a weak link was acceptable as long as candidates used examples from the resource to support their judgement.

(c) Usually well done, this was an opportunity for candidates to use detailed information from the 2 maps. Better answers focused on the evaluative nature of the question and supported their opinion with evidence drawn from both resources. The golf club, the farm, the national trail, the nearby residential areas, the nature reserves and the nearby industrial estate were usefully used by many. On Fig. 1 most identified the relatively low wind speeds whilst others suggested that the range of wind speeds was quite small anyway and consequently unlikely to make much difference to the location of the wind turbine.

(d) A common approach to the question was to identify what was missing from Fig. 1 (e.g. time of year, time of day, date/season, are these maximum gusts or average wind speeds?). The general synoptic situation when the readings were taken is also missing. How frequently do the winds reach these speeds? From which direction do they blow? The wording of the question allows a wide range of other information which would be useful, such as the opinions of local residents. Any reasonable suggestions were accepted.

Question 2

(a) Candidates had few problems interpreting the graph or, indeed, forming an opinion as to the success of the computer model as a tool for prediction. Unfortunately, many answers lacked precision when quoting data from the graph to support their opinions and this cost candidates important credit.

(b) Many candidates were content to describe different microclimates (urban, forest, coastal for example) but failed to address why they are more developed in some areas than in others. This required candidates to explain why local factors (such as altitude, slope, aspect, shelter, human influences) were more important in some areas than others. The synoptic situation was also generally ignored, yet prolonged periods of high pressure play a critical role in urban areas such as Los Angeles. Additionally, located examples were rarely quoted to support the points made.

Questions 3, 7 and 11

Candidates were required to do two things in answering this question, namely outlining the problems they encountered while collecting their primary data and, secondly, assess the extent to which they were successful in overcoming these problems. Many were able to do the former at some length, but very few went on to evaluate how successful they had been in overcoming the problems.

There is plenty of scope here for candidates to explore, for example, trialling equipment and piloting methods, sampling issues, calibration and limitations of any equipment used, the number of readings and repeat measurements, recording the data collected, as well as issues related to the personnel involved. Not all of these are relevant to each investigation, but even questionnaire only surveys should show evidence that the questions have been trialled and amended and the questionnaire itself has been piloted and amended as a result, as well as discussion of a rigorous sampling strategy. The success could have been judged in terms of improving the accuracy and reliability of the whole investigation and a few candidates were able to do this.

A fairly common approach which gained little credit suggested possible improvements that could/would be made if the investigation was repeated at some point in the future – the question is clearly about what was done as the investigation was carried out and the wording invalidates such an approach. Some candidates studying microclimates blamed poor weather conditions on the day. Clearly this is a problem but relatively easy to solve with more careful planning and so attracted little credit.

Questions 4, 8 and 12

The command word “consider” requires an evaluation to be made and to gain good credit in this question candidates had to address this aspect. A notable few were able to provide a balanced judgement based on weighing up the strengths and limitations of the various techniques they had used, but often candidates went no further than simple description.

Several candidates mentioned they had used photographs, but failed to go on to say how or why they had used them or why they had used them in preference to some other technique such as field sketching (which

seems, sadly, to be a dying art). The use of overlays or labels to emphasise geographical features relevant to the investigation were almost universally ignored.

A number of candidates thought that discussion of a single statistical technique (e.g. Spearman's) would suffice. Statistics are, of course, the final stage in the process. In the case of a suspected correlation the data should firstly be tabulated, then a scatter graph drawn to see if there is any visible evidence of correlation before the decision to use a statistical technique is made. This involves three separate techniques (tables, graphs, and statistics) which provide plenty for candidates to get their teeth into. Additionally, all Geography investigations should have a spatial element, giving the opportunity to use at least one of published maps, sketch maps and satellite photographs.

Lastly, a word about computer packages. Whilst they undoubtedly have the benefit of rapid data processing and graph drawing they are be-set with limitations. Tables frequently need careful formatting to make them user friendly, graphs often need to be re-scaled and re-formatted, axis titles and overall titles are often in the wrong place and the key usually needs attention. Additionally, curved lines joining points often rise or fall in an inappropriate fashion. The phrase "I used Excel to produce my graphs" clearly has much scope for development.

Section B Conservation

Question 5

(a) The majority of candidates scored well here by being precise. A small number chose the wrong pair of bars or simply guessed the values.

(b) A full answer needed at least three changes and supporting data from the graph. Candidates should be aware that there is never the opportunity for double credit, so repeating the answer from **(a)** gained no credit. Additionally, simply listing the changes by reading off the graph only gets limited credit. The Examiners were looking for some form of analysis evidenced by phrases such as "a small change", "almost insignificant growth", "increased by more than half".

(c) Good answers here concentrated on the relative contribution of the different causes. Again, a simple list of data taken from the diagram gained little credit. Better answers addressed the "how far" part of the question with statements such as "together agricultural activities and overexploitation of vegetation for domestic use have a similar contribution" or "deforestation in Africa is over 5 times more important than in Asia" supporting their judgement.

(d) An open question giving candidates much scope. Any approach was acceptable, but those which were framed around what is missing from the resources scored well. For example, Fig. 5 gives no information about the cost, the training needs, or the effectiveness of each measure. Some candidates successfully discussed the lack of information about the physical causes of soil erosion, which are not addressed by the resources. Fig. 6 lacks information about the spatial distribution of soil erosion within the dryland regions.

Question 6

(a) The tendency here in responses was to describe. Few candidates went on to evaluate the success of the policy based on the evidence in Fig. 7.

(b) An opportunity for candidates to use their knowledge of the sustainable management of natural environments gained from their individual research. Located examples were thin on the ground, however, and this prevented such responses from accessing the highest level of the mark scheme. The command word "consider" requires an assessment of the strengths and weaknesses of management strategies. Good candidates did address this, but such evaluation was often missing.

Section C Central Business Districts

Question 9

(a) A straightforward question with most candidates gaining full credit.

(b) Most candidates identified an administrative zone in the north of the CBD and a second zone in the south evidenced by the Central Station, the Law Courts and the Cathedral. Only a few candidates identified a commercial zone in the Centre containing the market and the tourist information office.

(c) There were some good responses to this question with most candidates going beyond simple description and focusing on changes in both location and distribution, often touching on the impact that the two metro stations have had on apparently drawing banks and building societies to them. Once again, it is worth pointing out that no credit is given for possible reasons for these changes. A few weaker candidates still attempt this approach.

(d) This question was generally well done with the majority focusing on the advantages and limitations of the resources. Only the best candidates attempted the evaluation required by the command word "consider". The spatial aspects given by the maps were recognised as advantages, The PLVI gives an indication of pedestrian flows and land values. Many candidates sensibly pointed out features not present in the resources but which would be of use to decision makers, such as shop frontages and land values.

Question 10

(a) Candidates generally scored well here. Either map was acceptable as being more appropriate, as long as reasons were given to support the choice. Most opted for the isoline map because of the good visual impression (less so in Fig. 10A), the apparent lack of gaps in the data (unlike Fig. 10A) and the possibility of detecting a gradient to the pedestrian flow (not so easy in Fig. 10A)

(b) Candidates had an opportunity here to use case studies from their research into this topic to evaluate the role of economic factors in accounting for changes in CBDs. The best responses had a clear focus on the evaluative part of the question and were well supported with exemplar material. Weaker answers simply described the changes, wrote only about a limited range of economic factors and were lacking in detailed examples to reinforce the points they made.