

GEOGRAPHY

Paper 9768/01
Geographical Issues

Key Messages

- Clear structure and logical organisation is important in extended writing responses
- A slight difference in standard between physical and human responses was noted
- Time management an issue with a minority of candidates – candidates need to match marks available to time spent on responses

General comments

The paper was a very fair test of candidate's knowledge and understanding at this level and across the broad range of geographical concepts and issues. The majority of the candidates rose to the challenge and excellent marks were achieved by a significant number. It was very encouraging to see an impressive range of knowledge and understanding, coupled with the ability to present a cogent argument. This latter point is important because all questions possessed a component where reasoned assessment was required. This analytical ability not only reflects well on the candidates but also on the teaching. Whereas both Physical Geography and Human Geography questions received excellent responses, there was a slight difference in the levels of knowledge and understanding. In general, the 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. Some of these issues are taken up when specific questions are discussed. The answers to questions in **Section C** were often excellent. The breadth of knowledge and understanding shown by a significant number of candidates was remarkable. This bodes well for the future of geography as a discipline.

Overall the paper was completed by most candidates, although there were occasional indications of poor time management. 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.

Comments on specific questions

Section A

Question 1

- (a) The nature of pyroclastic flows was generally well known and understood. Occasional answers omitted the gaseous nature of the flows and there was some confusion over speed and temperature. But, most answers contained enough accurate information for both marks.
- (b) The graph was quite complicated with three processes and a logarithmic scale. However, most candidates coped admirably with the question. The level of analysis did vary but the main relationships were generally noted with good use made of the quantitative information. If there was a downside, it was a failure to note the range of distances in some movements and the anomalies.
- (c) There were two parts to this question, namely the nature of the mass movements and how far they travelled. Although there were excellent answers, the nature of the movements tended to be ignored with the answers concentrating on the distances moved. Some candidates wrote almost exclusively about lava flows, which was not really appropriate

- (d) The question asked for a discussion about the effectiveness of methods of predicting volcanic eruptions. It was not a question about volcanic prediction, in general, although it could be part of the answer. Many candidates knew very little about the various methods of predicting volcanic eruptions except perhaps looking for bulges and increased gas emission. 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 although many candidates thought that flooding was a secondary hazard. Flooding is a primary hazard of storm surges.
- (b) Most candidates were able to provide convincing answers to this question, the majority stressing the uncertainty caused by sudden changes of direction.
- (c) The description of tropical storm Nargis was thorough but the explanation of the characteristics was disappointing. Few candidates were able to explain the formation in realistic terms. The sea temperatures needed were either ignored or were inaccurate and the role of latent heat in driving the process was ignored by most. However, the importance of the Coriolis force was generally recognised in influencing the paths taken by the storms.
- (d) This question received a mixed response. Most answers concentrated on early warning and evacuation with Hurricane Katrina featuring prominently. The level of detail concerning Hurricane Katrina was often remarkable. Other aspects of mitigation, such as coastal protection, shelters etc., were often ignored. The problems caused by the impact of a storm surge were given scant attention.

Question 3

- (a) Most candidates recognised the main characteristics of a flash flood but a minority failed to mention river discharge, concentrating instead on the rainfall characteristics.
- (b) Good marks were obtained by the majority of the candidates for this question. The thoroughness with which the two maps were analysed was excellent.
- (c) The response to this question was encouraging. Although some candidates failed to recognise the significance of the earlier event, most used the two maps and recognised the importance of antecedent rainfall in saturating the soils and perhaps raising the water table. There were also some very thorough analyses of the overlapping rainfall distributions. Knowledge of the physiography of the British Isles was also good, although not essential to providing a good answer.
- (d) This question posed few problems and most candidates were able to provide a response at least at Level 2 standard. The Indus River floods were often discussed in good detail and often compared with a flood event in the British Isles. Boscastle was quite frequently used as well as Cockermouth and the River Severn floods. The only problem with this comparison was the differing scales between the compared events. Some candidates did recognise the problem with this, but many did not. However, the generic points were well made. The contrast between lives lost and the economic cost was well made in most answers as well as the differences in rescue attempts and rehabilitation.

Section C

Question 4

There were no answers to this question.

Question 5

- (a) Most were able to define infant mortality rate but many forgot the 'per 1000 live births'.
- (b) There was an excellent response to this question with most, but not all, recognising the general relationships as well as the anomalies. Full marks were achieved by many candidates.

- (c) This was a very accessible question but some candidates discussed socio-economic factors very generally with a failure to relate those factors to patterns of malnutrition
- (d) Answers to this question were often very impressive with a good knowledge of strategies across a wide spectrum of countries and environments. For MEDCs, smoking, obesity and alcohol consumption were frequently discussed. For LEDCs, HIV/AIDS was the commonest problem discussed. The discussion of strategies for issues in MEDCs sometimes descended into 'journalese' and there was often little assessment of the success or otherwise of the strategies. The discussion of issues facing LEDCs was often based much more on fact with good assessment of success. The 'ABC' programme in Uganda and other African countries was an impressive example.

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 gaining full marks.
- (c) Although there were some excellent answers, usually focusing on Sub-Saharan Africa, many examined long term environmental degradation in very general and often simplistic terms. The long term aspect was often ignored. The relationship between this degradation and poverty was also sometimes discussed in a very superficial manner.
- (d) There was a good response to this question with good knowledge and understanding of a range of strategies. The contrast between top-down and bottom-up strategies was often stressed, using good examples. The East Africa Ground Nut scheme was quite popular, although the original purpose of this scheme was often forgotten in the 'mist of time'. The role of NGOs was often stressed with good examples. This part of the syllabus seems well taught.

Section C

Question 7

This was not a particularly popular question. The depth of knowledge was often impressive but there tended to be a narrow focus on one particular hazard such as volcanic eruptions or earthquakes. There was depth rather than breadth. The better candidates argued that both should be concentrated on because with better prediction then mitigation strategies are more likely to be successful. With respect to earthquakes, most candidates indicated that earthquakes were difficult to predict therefore money should not be wasted on prediction. This is a valid point, but often the evidence to substantiate the statement was lacking. The hazards chosen depended, of course, on the options taken from the topics covered in **Section A**. This was why flooding was little discussed. This was a pity because flooding, as a hazard, is ideal for discussing the advantages of prediction versus mitigation.

Question 8

Examiner noted in last year's report that it was a pleasure to read most of the answers to the question where candidates had to choose a specific area. The pleasure was repeated this year. The level of knowledge and understanding of the chosen area was impressive. The most common examples chosen were again Los Angeles and especially the Caribbean with Haiti to the fore. The only fault with some of the answers was a failure to address the success of the various strategies that were discussed. Also, there were some very detailed maps showing a variety of issues, but many of these issues were not discussed in the answers. The description of the issues was often extremely thorough and it was good to read about some of the human issues as well as the issues related to the physical environment. The specific demands of the question were mostly met and sketch maps and diagrams were used effectively and appropriately. Most answers possessed a logical organisation with candidates, in general, demonstrating good analytical qualities. There was much 'good' geography in these answers.

Question 9

There were good discussions concerning the nature of development as an introduction to the questions, although a few candidates launched into the question without setting the scene. As might be expected hazards were discussed in greater detail than issues and a sizeable number of answers failed to discuss issues at all. Therefore, this limited the mark that could be awarded. This is a good example where candidates should read the question carefully. The question asked for both hazards and issues and not either/or. But, there were excellent, well-structured answers, with conclusions based on the discussion and the evidence provided. It must be remembered that the overall structure of the answers is an important major criterion in awarding a mark. It is good to be able to report that in most cases the structure of the answers was good.

Concluding remarks

It is important to reiterate what was written in the General Comments at the beginning of this report. Many answers demonstrated wide-ranging, detailed and accurate knowledge and clear, high order understanding of the subject content. Examples were generally used effectively and were relevant and detailed, although there were some ill-understood and irrelevant examples. Most answers were logical and with clear organisation. Most questions were interpreted correctly apart from the occasional lapse such as in **Question 9**. Most candidates were able to provide logical systematic analysis when required, especially in answers in **Section C**. As last year, the only slight concern was the occasional difference in standard between the Physical and Human Geography answers. The general impression is that candidates had found the teaching and the syllabus stimulating. There is, clearly, much good geography being taught.

GEOGRAPHY

Paper 9768/02
Global Environments

Key Messages

Knowledge

Overall knowledge is generally secure and does not seem to pose a problem for most candidates. For most options the subject matter is well known. For instance, candidates know about the process of longshore drift and its relation to the depositional landforms such as spits, salt marshes and barrier islands and the causes of monsoons. Less successful were answers to semi-arid landforms where sand dunes typical of arid environments tended to creep in and candidates seemed less secure about landforms such as hoodoos, piping, wadis, debris fans and relict hills. However it is in the application of such a concept to the landform that candidates are less successful. This was true of several of the most frequently answered questions.

Physical Processes

These are essential to all answers whether the question focusses on landforms, coastal protection, ecosystems or sustainable management of ecosystems.

Application of concepts and theories and case study material poses more of a challenge.

The relationship between process of longshore drift and how the landform is produced, or the role of water in semi-arid landscapes for example is not always made clear and explanation of processes is not always included. In order to achieve the higher levels of attainment, this is an essential part of the answer. Sustainable management is another concept which was not always made clear in relation to the case studies chosen for discussion.

Scale

Scale which was an integral part of **Questions 8** and **10** was not always made clear. It is also important to remember when discussing larger scale distributions applicable in **Questions 7, 9** and **11** especially differences within as well as between areas can point up 'other factors' For instance, in **Question 11** relief, continentality and ocean currents may cause local variations within global climatic zones which are principally governed by the vertical and horizontal transfers of energy.

Diagrams

These are needed when responding to the majority of questions and the best examples are well-labelled, appropriate and integrated into the response e.g. maps of the Indian subcontinent to illustrate the wind and pressure belts which characterise the monsoon seasons.

Conclusions

These are a pre-requisite for an answer in order to access the higher levels of achievement. However, a conclusion which is merely a repetition of what has already been included does not illuminate merely draws a line under the foregoing argument. It is better to attempt to take the argument forward by the introduction of another aspect of the question. For instance, the conclusion for **Question 5** might suggest that if longshore drift is modified by coastal protection measures such the building of groynes, the supply of material on which spits depend for their formation may be cut off and so the spit will be more easily eroded and decline over time, e.g. Spurn Head. The candidate is then reinforcing a point which will have been made in the foregoing argument about the necessity of a supply of material moving along the coast for spit formation.

Comments on Specific Questions

Arid and Semi-arid environments

This option is one of the least popular and **Question 1** attracted more responses than **Question 2**.

Question 1

There was knowledge of the correct landforms but less assurance about the role of water. Some candidates discussed past pluvial periods to account for such large-scale features such as wadis but did not reinforce the point with suggested dimensions which would have addressed the 'distinctive' nature of the landforms required by the question and therefore have achieved higher level marks.

Question 2

Vegetation clearance was usually interpreted as deforestation and seen as the only threat to the sustainable future of arid and semi-arid environments. Well-located case study material was not always evident and often not applied to the concept of sustainable futures. There was a spatial and temporal aspect to this question awareness of which was not always evident. Candidates do need to be able to apply their knowledge to the object of the question to access higher level credit.

Glacial and Periglacial Environments

Questions 3 and 4 were not answered.

Coastal Environments

Question 5

Longshore drift is a depositional process occurring **along** the shore and this needs to be made clear initially with the aid of a clearly labelled well integrated diagram. By the use of designations such as 'Fig. 1 shows' this is easily done. The key word in the question was 'how' which necessitates *explanation*. This skill was not always in evidence and it should be stressed that this skill is a basic requirement at this level.

Spits were the most common landform used as evidence but salt marshes and barrier islands were usefully added to reinforce the process. Those candidates who could write with authority about tombolos and bars could add to their answers but few did this effectively. It should be noted that spits with re-curved laterals (compound spits) were a useful way of demonstrating that longshore drift whilst instrumental in the formation of the feature was not the only controlling factor in its form.

Question 6

Coastal sand dunes was the most common choice of ecosystem and there were some pleasing answers using this example. However many candidates might have included more detail about increasing height of plants and increasing biodiversity within the system as well as the controlling factors such as aridity, salinity, acidity, wind speed and water table heights. Some mentioned human activities but this aspect was not always effectively exemplified or developed (e.g blow-outs). There were some detailed answers to salt marshes. Detailed knowledge could go a long way to contribute to a successful answer to **Question 6**.

Tropical Environments

Question 7

Most candidates had knowledge of tropical lowland rain forests and considered that they dominated based on area covered. They might have considered their dominance in terms of biodiversity too although this was less apparent. However these responses although aware of the variations within the tropical belt of other major forest types such as montane did not recognise variations within which might have brought to light such concepts as sub-climaxes and plagioclimaxes. Recognition of the savanna as a response to long term human occupation would have attracted higher level marks.

Question 8

This question attracted several candidates but their interpretation was along the lines of scale within the tropical environment. Consequently they discussed the sustainability of small-scale subsistence farming as opposed to large-scale commercial plantations. However the application of these farming systems to the concept of sustainability was not always clearly stated thus whilst knowledge was fine the application and conclusion was not convincing. Case study material needs to be clearly located and applied as well as recounted in detail. Candidates need to be clear about how and when it is appropriate to use their case studies. Most candidates did not recognise the importance of the local, national, regional and global scales and appropriate organisations such as NGO's etc. The syllabus requires study of community level groups up to international legislation. This was intended to be the main thrust of the question although the scale of choice for most candidates was accepted as a legitimate interpretation.

Temperate Forest and Grassland Environments

Question 9

Candidates needed to be able to refer to more than one temperate environment and also to refer to more than just precipitation in order to evaluate the statement effectively. Most candidates successfully interpreted this question as factor-based which is to be applauded and they handled the material well to demonstrate that precipitation is not the only factor. What was especially pleasing was that the candidates appreciated that precipitation amount was only one aspect of that factor and that intensity and reliability also plays a role. 'Other factors' such as fire and soil and human activities appeared and could be related specifically to adaptations of vegetation in order to demonstrate the crucial links. There were some successful responses to this question.

Question 10

Candidates who chose this question tended to write organisation based answers to demonstrate scale. Sometimes responses did not emphasise the relationship between the part played by the organisation and the functioning of the ecosystem in order to achieve the desired aim of sustainable management. This is a good case of a lack of application to the question. It also demonstrated the need for these types of questions about management to focus on discussion of physical processes in addition to the role of human activities per se.

Atmospheric Environments

Whilst this is a popular option **Question 11** was not commonly chosen and of these the responses were not secure in terms of knowledge or the evaluation of the 'relative contribution of vertical and horizontal transfers of energy' across the globe. Most candidates could draw a diagram of the general circulation and knew that the Equator has a heat surplus and the poles a deficit and why this is the case. However, their discussion often lost its focus and the role of the wind and pressure belts were not well explained in relation to clearly defined climatic zones. The best answers were those who handled the material and focused their answers on the question and who could see that 'other factors' are significant.

Question 12

This answer attracted the most responses of any on the paper and there were some pleasing well-illustrated answers. Good candidates tried to balance the physical processes which cause monsoons with their hazardous nature whereas others tended to focus on the human dimensions of the atmospheric conditions and therefore were less successful in attracting the highest levels. The hazards are physical (i.e. large amounts of rain and rainfall intensity, flooding in the 'wet' monsoon and drought in the 'dry' monsoon). Several candidates referred to the unreliability of the monsoon which was entirely appropriate and contributed to its hazardous nature. Several candidates tended to suggest continentality and the mountain ranges play a greater role than the movement of the ITCZ in producing the seasonal changes. It is a question of emphasis but it seems appropriate to discuss the movement of the ITCZ and the pressure and wind belts and the onshore and offshore winds as the key control.

Concluding Comments

It is clear that most candidates have the knowledge base for success but need to ensure that they have deconstructed all aspects of a question and can draw upon and apply clearly located case studies at different scales and appropriate landforms to illustrate their answers.

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.

General Comments

This third examination of Cambridge Pre-U Geography saw another significant increase in candidates from 2011, yet 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 a single essay seen on **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 two) 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. One response of exceptional quality achieved 25/25 marks in Level 5. 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

The majority of responses were to **Question 1**.

Question 1

Internal migration is a broad and readily defined field which gave candidates good scope to organise and develop their responses. Features of higher-scoring work included an ability to genuinely classify material into “factors”; to follow the command word “Examine” and go well beyond the descriptive; the deployment of detailed examples and case studies which showed a sense of contemporary realities (several candidates would have benefitted from giving an accurate timeline to distinguish between different migrations); and the thorough integration of theories, e.g. Ravenstein, Lee, etc. (although some critique of such simplistic – and old - theories may have been profitable).

Sadly, no genuinely impressive responses were seen. Too many responses fell back on GCSE-style classification and focused on push-pull, rural-urban (with many Brazilian cities still filling by the day) and urban-rural descriptions with few contemporary and detailed examples of counter-urbanisation. A number of candidates failed to stick to the clear scale in the question and wrote extensively (with little credit) on **international** migration.

Question 2

Responses to this question were mostly disappointing, with very few attempts to define “urban” and “rural” (and their widely differing international variants), which would have provided a framework for higher quality responses. A number of candidates failed to stick to the clear development level in the question and wrote (with little credit) on countries at **lower** levels of development. Particularly weak knowledge was revealed of genuinely rural areas in HICs. They are not all full of retirees and “rural” is not synonymous with “suburban”.

Trade, Debt and Aid

Question 3

This was a popular question, although arguably the harder of the two on this section, requiring a broad view and strong synthesis skills. There was a full range of answers through each Level. The weakest were descriptive and limited in the development of examples. Candidates often missed the focus on ‘exports’ and concentrated, instead, on the problems and benefits of manufacturing or TNCs and FDI with ideas implicit in the trade that might follow on from these. A few answers were more Economics-based than Geography, concentrating on a review of economic theories at the expense of a spatial element. Whilst generally creditable, candidates must take care to distinguish between approaches in these two closely-related disciplines. There were several vague references to ‘China in Africa’ without specific trade examples in particular countries of Africa. At best, answers were fluent, with well-developed examples from HICs, LICs, and NICs and impressive critical evaluation.

Question 4

Oddly, this was the less popular question, but included some of the best answers of the whole paper. Candidates were possibly put off by the word “motivations”, but this allowed a wide-range of responses and was liberating rather than constraining. Very good knowledge and understanding of the different types of aid were shown and gave more able candidates the opportunity for in-depth analysis and commentary on different motivations. Weaker candidates again referred loosely to “Africa” and the “Chinese” without a detailed case study or comment on motivation. Otherwise, examples of aid were varied and detailed. This was one question where a clear introduction with a review of different types of aid and the suggestion of varied motivations helped to set the scene for a good answer.

The World of Work

No responses were received on this topic

Section B

Energy and Mineral Resources

The one candidate offering this topic chose **Question 7**.

Question 7

In a contemporary course such as Pre-U, Fukushima (and its wider implications) understandably dominated the single response seen. Ideally, responses would have split the “future”: short-term increased nuclear energy may be essential in order to bridge the energy gap and bring rapid reductions in carbon emissions, whilst in the longer term, a genuinely sustainable form of renewable energy may emerge.

Question 8

This question was not chosen.

The Provision of Food

Question 9

This was the more popular question in this section again requiring a broad view and strong synthesis skills. The weaker answers tended to concentrate on a relatively few ‘constraints’ and missing, on the whole, the various physical factors limiting food production. Most candidates considered the population/resource relationship with some very good understanding and commentary on the theories of Malthus and Boserup. While most candidates appreciated the historical context of these and reflected on neo-Malthusian ideas, some did not! A few candidates drew and discussed the ‘Optima’ model effectively.

Although no candidate would have been expected to cover the wide range of physical, economic, social and political constraints, the best answers were broad-based and were especially effective in discussing those issues pertinent to the 21st century (a “futuristic” tone was key to accessing the higher Levels) and future food security, such as water constraints and the impact on food production from specific types of climate change. The best examples and use of case studies referred to specific regions such as the Sahel or Ethiopia and outlined the particular constraints in that area. Others referred loosely to “Africa” or “America”.

This was a question which lent itself to diagrams and a large number of candidates included a diagram or two, notably of the Malthus and Boserup graphs. Many, however, were not integrated closely enough to the text or clearly labelled to be fully effective in the answers.

Pleasingly, many responses referred accurately to fishing issues, plus the non-food constraint of growing biofuel production.

Question 10

This was quite a discerning question in that candidates who did not really understand the term “post-productionist” scored poorly. This is a specific topic in the syllabus and many responses concentrated answers on the post-War policies in the UK and Europe and described the methods used to increase productivity. The more able often referred to this period at the start of their answers as a way of explaining why “post-productionist” occurred. The better answers outlined the variety of more recent policies such as farm diversification, stewardship etc.

Any discussion of the Green Revolution was not appropriate here but was referred to by several candidates.

Some of the best answers “assessed” as requested and suggested the benefits and problems long term from these specific policies including the issue of rising food insecurity (and could have profitably speculated that we may need to enter a new productionist phase in the near future). Examples were also relevant and thorough in the higher level answers.

Tourism Spaces

Question 11

Sadly, few genuinely impressive responses to this question were seen. Too many responses fell back on GCSE-style descriptions of the rise and fall (although few give accurate evidence of the latter) of Benidorm plus an example of “eco-tourism” (some thought-provoking critiques of this niche area were offered). Few truly embraced the wide variety of reasons for changing demand. Once again, several candidates would have benefitted from giving an accurate timeline to distinguish between tourism phases.

Too many Tourism essays appear to imply that “mass” tourism is dead and we all go to Costa Rica, Cambodia or Nepal (what is the actual scale of such “niche” tourism?). A little more perspective (and accurate data) would be welcome. Few referred to the post-credit crunch phenomenon of the “staycation”.

The integration of theoretical content varied in its effectiveness, whether for example applying Butler’s temporal model spatially, or seeking to consider the implications of Plog’s allocentric and psychocentric tourists in terms of tourism spaces.

Question 12

Another interesting question, requiring a broad view and strong synthesis skills. It did implicitly invite a clear definition of sustainability in the opening paragraph and possibly a discussion of the relative age of the quote, i.e. have things got better in the last 22 years? Comments on **Question 11** also relate to this question, including the narrower view taken by many candidates – the question should have stimulated a wide-ranging discussion.

GEOGRAPHY

Paper 9768/04
Research Topic

Key messages

- Whilst time management issues were not apparent for most candidates it is crucial that candidates tailor responses to the number of marks on offer for that question to avoid spending too much time writing lengthy responses to questions that command few marks
- When candidates choose studies relating to this paper attention should be given to possible exam questions that could be asked on that particular study. This will help both the studies themselves and the preparation for the examination
- In the data response questions on this paper precise answers are required when quoting figures from resources. Some responses showed a lack of clarity using words such as 'around' and 'about' when quoting figures and this lost candidates marks
- The evaluative element is key to the longer response 10 or 15 mark question as opposed to just descriptive responses

General Comments

The cohort coped well with the specialised demands of this paper. All three topics produced responses with a similar range of quality – there was no evidence that one topic produced better scores than any of the other two. There was also little evidence that candidates ran out of time, but this is a paper where candidates need to be particularly aware of time management. They should be guided by the mark allocation for each question. In one extreme case a candidate wrote well over 3 sides for the 10 mark question, but then wrote just over one side for the following 15 mark question. Such mismanagement will almost certainly cost a candidate a grade on the paper.

As ever, it is interesting to view the range of personal investigations and candidates' enthusiasm for their chosen subject is often evident in their responses, especially where candidates are free to choose their own topic for investigation. It is a matter of some comfort that Geography continues to stimulate and interest young candidates. Centres and candidates are to be congratulated on their efforts.

When choosing their question or hypothesis candidates should pay some attention to the questions they are likely to be asked in the exam. Investigations should be manageable for candidates, but also provide sufficient challenge for them to respond to the 15 mark question they will have to answer in the examination. Single hypothesis investigations seem to work best – this enables candidates to focus on depth. Multiple hypothesis investigations tend to encourage candidates to focus on breadth of analysis at the expense of depth which, at this level, does not stretch candidates' understanding to an appropriate degree.

The skills questions do require candidates to be precise about data taken from the resources. In **Questions 1(a), 5(a) and 9(a)** phrases such as "around 12.00", "about 11.00", "just under 24°C" and "approximately 10" do not gain credit. A number of candidates attempted to explain trends/patterns identified on the resources – such explanation is not expected nor required on this paper and attracts no credit.

In the 10 and 15 mark questions there is usually an evaluative component to the question. This year there was a tendency evident for candidates to focus on description and, in some cases, to completely ignore the evaluative element required to access the higher levels of the mark scheme.

Comments on Specific Questions

Section A Microclimates

Question 1

- (a) Those who were precise had little trouble identifying the correct times as 12.30 (not 12.00) and 05.30. A tolerance of plus or minus 15 minutes was allowed.
- (b) The best responses made good comparative statements and supported their comments with data taken from Fig. 1. Weaker answers simply described the two lines separately with no attempt to compare.
- (c) This was quite a challenging skills question, with candidates required to study the two figures and identify a relationship between them. Credit was also given if candidates wrote that there was no obvious relationship. Good responses expressed an opinion and supported this with data taken from the two graphs.
- (d) The best answers to this question focused on assessing the value of the resources and on the “intensity of the heat island”. A discussion of the pros and cons of each resource followed by some comment on what else might be useful (e.g. a map, synoptic charts, building materials and density among others) would raise the answers into the top level of the mark scheme. Simple descriptions of what the resources show, or attempts to explain the trends, gained little credit.

Question 2

- (a) Those who focused on the “spatial pattern” scored well on this question. Reference to compass points/directions was essential to access the higher levels of the mark scheme.
- (b) There were some good answers to this question, supported by reference to the canyon effect on winds in cities, to frost and fog hollows, to aspect (especially in East/West trending valleys in the northern hemisphere) and to coasts among others. Any scale of human decision making was acceptable down to, for example, the best place for siting a new bench in school grounds.

Questions 3, 7 and 11

The emphasis here was on the extent to which potential errors had been minimised. There were some sophisticated responses, some of which acknowledged that while candidates had tried their best to minimise errors, the limitations of time, equipment and experience had probably combined to mean that they had only been marginally successful in doing so. Less successful answers tended to simply describe what steps they had taken to reduce errors without attempting any evaluation of the success of their endeavours or they attributed most of the problems to human error.

Questions 4, 8 and 12

The emphasis in this question was on the extent to which all of the findings could be explained. A number of approaches were permissible, but commonly the top level responses began with a discussion of the expected results and then moved on to consider the unexpected results and assess how satisfied they were with their explanations. Less successful answers tended to simply describe the findings and advance explanations based on accepted theory but did not go on to evaluate the extent to which they were able to explain all the results.

Section B Conservation

Question 5

- (a) Most candidates correctly identified 1996 as the year in which the difference in catch was at a minimum. A significant number failed to pick up the second mark because they did not give any supporting evidence from Fig. 4 or their answers lacked precision e.g. “approximately 15”
- (b) Most candidates handled this well, providing valid comparisons and contrasts between the two trends and supporting their responses with data taken from the resource.

- (c) Fig. 5 was quite a challenging resource given the amount of information it contained. By far the majority of candidates rose to the challenge and scored well here. Good marks were achieved by those who took each of the PCB concentration categories in turn and then described the population trends and estimates in each category. The best responses went on to give an opinion as to whether the map confirmed the suggested link.
- (d) Most candidates were able to advance a list of strengths and weaknesses of each resource. The better answers acknowledged that conserving natural environments takes a wide variety of forms and in such a context resources specific to one topic (in this case polar bears) have a limited value.

Question 6

- (a) The majority of candidates scored well here by using evidence from the resource to agree with the statement. Often candidates grouped together pH values of 5.01 and above to good effect.
- (b) This question gave candidates the opportunity to discuss the effectiveness of initiatives they had studied to conserve natural environments. A wide range of responses were possible, along with a range of scales from global to national to regional to local. The best responses went beyond description and addressed the evaluative part of the question.

Section C Deprivation

Question 9

- (a) Candidates who were precise in taking data from the graph scored well here.
- (b) Good answers here contrasted the continuously rising trend of IMD in the urban fringe with the rising and falling trend in the villages, supporting their answers with data taken from the graph.
- (c) As with the comparable question in the other sections on the paper, this was a challenging resource but, nonetheless, most candidates scored well here. Careful study of the 2 maps which, at first glance, look very similar enabled candidates to identify differences as well as similarities. The best answers were well focused on the evaluative part of the question.
- (d) The responses to this question generally showed a good understanding of deprivation and its different dimensions. Answers which focused on the value of the resources by tackling the advantages and limitations of each figure and then went on to consider other information which might be useful (e.g. local scale maps, information about other dimensions of deprivation, the number of people involved) reached the highest levels in the mark scheme.

Question 10

- (a) Using Fig. 9 it was possible to argue that there is a close link between poverty and deprivation or, equally, to argue that the link is very tenuous. Either approach was acceptable. Candidates who expressed an opinion and then supported this with evidence from the map scored well here.
- (b) With this question candidates had an opportunity to use case studies from their research into this topic to evaluate the success of initiatives designed to tackle deprivation. The majority of candidates scored well on this question. Some candidates' answers would have been improved if they had focused more clearly on the evaluative aspect of the question. Also, it should be noted that the question asks for "initiatives designed to reduce deprivation" – whilst reference to the Millennium Development Goals may be relevant they are not, in themselves, initiatives.