

GEOGRAPHY

Paper 9768/01
Geographical Issues

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 satisfactorily 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. Most candidates performed well on the interpretation of the resources, showing a good ability to analyse often contrasting methods of displaying information. Good marks were usually achieved for these questions.

Some Physical Geography and many 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, especially Hydrological Hazards, questions were sometimes deficient in some respects. Knowledge and understanding was better with respect to Hazardous Weather. This discrepancy between Physical Geography and Human Geography seems to reflect a lack of the precision needed when discussing physical topics. The interaction between physical processes and human activity was better understood. However, it needs stressing that 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 sometimes excellent and the breadth of knowledge and understanding shown by some candidates was remarkable. However, compared to last year there were fewer excellent answers. Many answers were ill-structured with minimal conclusions. The range of geographical knowledge was sometimes limited and there were instances where the full implication of the question was missed. This was especially prevalent in answers to **Question 8**. This issue will be discussed later.

Overall the paper was completed by most candidates, although there were occasional indications of poor time management. As noted previously, some candidates did not 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. However, the volume of information provided by many candidates was very impressive. As with last year, a significant number of candidates attempted **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 led to the last question, usually in **Section B**, being rushed and unfinished.

Comments on Specific Questions

Section A

Tectonic Hazards

Question 1

- (a) This caused few problems although it was occasionally called a tidal wave.
- (b) Answers were sometimes disappointing in terms of the geographical coverage. Candidates tended to concentrate on certain areas rather than providing a world-wide coverage. The trend shown by areas such as western South America was missed by most candidates.

- (c) Although there were some excellent marks, a lack of geographical knowledge of the nature of plate boundaries around the world limited the marks that some candidates received. Many candidates seemed unaware that there were plate boundaries in Europe and the collision boundary in the Himalayas was largely ignored.
- (d) Answers were generally sound with most candidates attempting to answer all three components of the question. The focus of the question was on the efficacy of prediction techniques and there were many good accounts of these.

Hazardous Weather

Question 2

- (a) This question posed very few problems.
- (b) Most candidates were able to provide a good analysis of the two maps. Some answers were very thorough and were awarded full marks.
- (c) All candidates realised that global warming was somehow involved in the changing nature and distribution of the tropical storms. However, detailed understanding of the factors responsible for hurricane formation tended to lack detail and therefore caused some problems for the attempts to explain the changes. This discrepancy has to be balanced with some very good explanations.
- (d) It was not surprising that the effects of Hurricane Katrina were often used as an example and contrasted with Tropical Cyclones Sidr and Nargis that hit Bangladesh and Burma respectively. This comparison focused on the relative economic developments of the respective countries and underpinned the assessment. This approach led to some very good answers. However, some answers were diminished by not describing the complete range of hazards from tropical cyclones; storm surges and high precipitation amounts were often ignored. Only the better candidates differentiated between primary and secondary hazards.

Hydrological Hazards

Question 3

- (a) The number of candidates who did not identify interception for part (i) was somewhat surprising. Some candidates got it almost correct by describing it as a vegetation store. All candidates identified throughflow.
- (b) This was very competently answered by most with a good coverage of the full length of the River Mississippi.
- (c) Most candidates recognised that this was a generic question and not necessarily based on the Mississippi, although many candidates did use the river as a basis for their generic answers. No prior knowledge of the river or North American geography was required. The emphasis was often on the nature, or lack, of hard engineering procedures at various points. Some candidates did discuss the possibility of localised rainstorms in different parts of the basin or role of major tributaries entering the main river. However, answers were mainly concerned with hard engineering or the lack of it rather than natural processes. This reflects the statement made in the introduction that candidates seem more familiar with the effects of human activities rather than natural processes.
- (d) There were some excellent answers using the current drought in SW USA as an example. This example was used to examine the interaction of both natural processes and human activities. However, some candidates struggled with the idea of water deficit, always equating it with drought. The idea that water deficit could occur without a drought was hardly mentioned. Also, the fact that there is a very precise meteorological definition of drought was not realised. Drought is a term that is used far too simplistically.

Section B

The Geography of Crime

Question 4

- (a) Most candidates were able to state two types of crime.
- (b) Candidates had little trouble in analysing the patterns for homicide rates with a good geographical coverage.
- (c) Most of the elements in the mark scheme were discussed but often with variable detail. There tended to be an emphasis on gun laws, with the USA being used as an example, and lack of policing.
- (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 ideas presented. The fact that the media concentrated on the more serious types of crime was mentioned by all. Thus, there will be incomplete perception of the mix of crimes. The better candidates attempted to differentiate between the various types of media and their reporting of crime.

Health and Disease

Question 5

- (a) This caused no problems.
- (b) There was a good response to this question with most candidates being able to describe and summarise the data shown on the figure. The most exhaustive answers even calculated percentages to substantiate their discussion of numbers.
- (c) There were several ways of answering this question. Many candidates recognised it as being essentially the vicious cycle of poverty and that the relationships could occur both ways, i.e. poor health leading through to poverty and poverty leading to ill health. The emphasis was always on the poverty aspect. Very few candidates interpreted it in the obverse way with high socio-economic status leading to better health and lack of poverty. There was much emphasis on AIDs leading to poverty.
- (d) Some of the responses were extremely impressive with an unbelievable amount of detail. In some cases it was a pity that only nine marks were available. Although there tended to be an emphasis on LEDCs with government initiatives and the role of NGOs, the welfare aspect was also examined with reference to campaigns against smoking, alcohol and drugs. Health care provision tended to dominate over welfare and some answers were a little unbalanced.

Spatial Inequality and Poverty

Question 6

- (a) Some candidates misread or misinterpreted the question and stated multi-criteria indices rather than single criterion indices.
- (b) Most candidates were able to provide a good comparison; a very few, however, described the wrong trend line.
- (c) The only problem with answers to this question was that some candidates interpreted it as how levels of inequality vary within a country rather than how they might change. Thus there was no temporal component to the answers. Most used the core-periphery idea to underpin their answers.
- (d) Some candidates did not address the global aspect and concentrated on development gaps within countries. Some did not explain what the development gap was. Many concentrated on describing the UN Millennium Goals but without explaining how they reduced the development gap. Both top-down and bottom-up strategies were described.

Section C

Question 7

This was the most popular question. Responses were usually well informed even if based on a limited range of hazards. The better candidates used a variety of hazards to underpin their arguments. Volcanic and earthquake hazards were commonly used as examples. A wider range of hazards would have enabled the discussions to be more substantial. The key to a good assessment involved the use of relevant and accurate examples. This was sometimes lacking. As noted in the introduction, the scope of answers in this section was disappointing with little structured argument. Unfortunately, this was true of answers to this question. Many candidates in discussing volcanic hazards missed a good opportunity to stress that, although volcanoes are relatively easy to identify as hazards, what is more difficult to identify is the specific nature of any future eruptions and the risks they pose such as comparing pyroclastic flows with lava, tephra, etc. Discussion of earthquake hazards concentrated on mitigation with the construction of earthquake proof infrastructure. The contrast between LEDCs and MEDCs in reducing the impacts of hazards was the focus of many discussions, irrespective of which hazard was being discussed.

Question 8

Questions asking candidates to use their knowledge of a specific area that they had studied has always received a good response with a range of issues discussed. Unfortunately, this was not the general response this time. There were a few excellent accounts with an impressive range of issues raised with respect to the specific area studied. However, the level of geographical detail was sometimes extremely limited. Some candidates used several geographical areas or regions, thus the range of issues discussed with respect to one area was diluted. The question asked for an area and not several areas.

Question 9

This was the least popular of the questions in this section. It was quite a challenging question and, interestingly, produced some excellent, well thought out answers. There was a good balance between issues and hazards and the assessment was sensible. Answers were well structured with conclusions based on the evidence provided in the argument.

Concluding Remarks

In conclusion, it is only necessary to reiterate comments made in previous years. The responses of many candidates were informative and wide-ranging; however, the overall standard seemed a little lower this year. 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. Most questions were interpreted correctly. There were a few instances of bad timekeeping with some unfinished answers. 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 and understood.

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Paper 9768/02
Global Environments

General Comments

The performance was similar to last year. The majority of Centres chose to answer questions on Coastal Environments and Atmospheric Processes. Only one Centre selected Glacial and Periglacial Environments and the same Centre were the only entries for Temperate Grasslands and Forest Environments.

It should be noted that both Arid and Semi-Arid Environments and Coasts lend themselves appropriately to case study material which when illustrated and applied correctly aids answers. For the first time for some years there were no answers to Tropical Environments.

In terms of the structure of answers this is an area that could be addressed. Whilst most candidates include both an introduction and a conclusion to ensure targeting the highest levels, introductions fail to include all aspects of questions and conclusions often merely re-iterate the arguments used.

An introduction should aim to demonstrate incisive interpretation of all aspects of a question. For instance, **Question 6**, which was one of the most popular. In this answer the introduction needed to demonstrate awareness that the subject of the question was 'coastal protection' and the object, 'coastal ecosystems'. Many candidates considered that the question concerned ecosystems rather than coastal systems. Ecosystems are merely one method of coastal protection and hard and soft engineering strategies were expected. The command word in this question is 'discuss' whether these natural systems are 'invaluable'. The conclusion could have usefully and appropriately emphasized the word 'invaluable' and perhaps concluded that they can only form part of coastal management where they exist. This aspect should not be ignored, especially in the light of forecast climate change, possible changing sea levels and increased storm activity globally. The conclusion would then have extended the argument into unknown but likely future events. This means that candidates would have seen further than the question. It would have speculated based on evidence and demonstrated higher order thinking. **Question 6** therefore may serve to provide a concrete example of how questions may be deconstructed and answered.

Comments on Specific Questions

Question 1

The question on climatic determinants was well done. It was answered with sound factual knowledge and examples like rain-shadow areas, cold currents and the sub-tropical high-pressure belt. However, the incisiveness of explanation was often lacking. More importantly the question demanded some reference to 'other factors' most of which were missing. On balance, candidates omitted the need to respond to the word 'relative' in the question either by reference to the factors mentioned above or to other factors such as climate change, human activity, altitude etc.

Question 2

Candidates wrote well about the role of human activities in arid and semi-arid environments but less cogently about soils. Soils have long been an area of Physical Geography that candidates perceive to be less accessible whilst, in fact, it is straightforward provided soil names and profiles are included to illustrate answers.

This was not an especially popular question but there were one or two good answers because of the application of case study material. A valid conclusion may have been to suggest that most human activities have a feedback mechanism into both soils and, therefore, people demonstrating that all systems are inter-related.

Question 3

Weathering and mass movement are not the only two processes that operate to produce periglacial landforms. Whilst both of these processes needed discussion and integrated illustration with scale, landscapes and form it was necessary to include ground ice and the implications of climate change. Diagrams are very useful in answers of this type and they should be integrated and not added as an afterthought.

Question 4

The aspects of the impacts of human induced climate change that were discussed were accurate and appropriate. However, often the approach to this answer was not as broad as anticipated and the organisation of answers under such headings as economic, physical, social was not especially evident. Answers tended to be less organised with candidates writing what they could remember rather than being on top of aspects like the physical landscape, shipping routes, oil and mineral resource exploration and lifestyle change.

This is a physical Geography paper and candidates should try to demonstrate an awareness of the physical landscape in advance of changes to the human landscape. So the distribution of permafrost landscape processes and their implication could have formed the foundations of the answer and any human implications tied closely to the physical environment. After all, they are inextricably linked.

Question 5

Beaches, the subject of this question are not a favourite aspect of coastal ecosystems. They are stretches of deposited material which take a variety of form which can be observed by cross-profiles i.e. from the back of the beach to the tide lines and, in plan, which means looking down on the beach from the air. Awareness of these definitions was often omitted from responses. Illustrations of both were an essential part of the answer. Many candidates focused on learnt case studies such as Hurst Castle Spit and its sediment cell without direct application to the question. Wave action is not the only factor but it seems that candidates were distracted by plan and profile to the extent that the factors could not be discussed conclusively. There were some diagrams of longshore drift but the outcomes needed to be added to prove the argument about plan. Beach profiles appeared in a handful of answers only.

Question 6 has been commented upon extensively. Please see general comments.

Question 7 and **Question 8** were not answered.

Question 9

Whilst candidates appreciate the meaning of 'functioning of ecosystems' i.e. the nutrient cycles, they are less familiar with the word 'structure'. Consequently, little was discussed about the layers in a temperate forest e.g. canopy, understory and ground layer and the fact that grasslands have fewer distinct layers but, nevertheless, exhibit a distinctive structure. As a result the answers were not a clear relevant response to the question of inextricable links between structure and functioning. The idea that the latter may well dictate the structure could have been a possible conclusion whilst consideration of human factors cannot be ruled out in many of these well-populated global temperate ecosystems.

Question 10

The sustainability of temperate ecosystems is a popular topic but candidates did not seem able to illustrate with reference to the physical environment by including details of the ecosystem whilst at the same time addressing the idea of what sustainability involves. This word needed clear definition in the introduction. In the conclusion perhaps, some reference to the future would have been appropriate. Like all physical systems, the spectre of climate change hangs over any policies and effectiveness of sustainable projects currently under consideration or implemented. Scale from global to national to local was addressed by some candidates which is a pleasing and effective way to approach such a question.

Question 11

It was not the subject of ocean energy transfers as a factor in climate zone distribution but the appreciation of global climatic zones that perplexed some candidates. These are latitudinal, horizontal bands of generalised climates around the globe. Discussion of the consistent climate of the equatorial zone compared with the vagaries of mid-latitude climate could be an effective starting point to this answer. The single stable influence of the ITCZ compared with the clash of sub-tropical and polar air over the mid-latitudes could have made the point decisively and then been supported by reference to the seasonal movement of the ITCZ to influence the seasonality of the monsoon and savannah climates. Included in this approach would have been the importance of ocean energy transfers and candidates who suggested that they are important in both horizontal and vertical transfers of air demonstrated a good analytical knowledge of the atmospheric system. It is complicated, of course, by many other factors which were not universally recognised by candidates, which could have formed a useful aspect of the conclusion. Once again climate change would be one of those factors. Many candidates referred to climate change but its implications were less clearly explained.

Question 12

Monsoon climates are familiar to candidates and this was a popular question. However the subject of the question was the management strategies, which, of course, had to be put into a monsoon context. Few responses mentioned that a monsoon is a seasonal wind and definitions at the outset were not articulated.

Generally, little clear distinction was made between short and long-term strategies but answers tended to be full of factual knowledge and case study material and, in some cases, statistics. However, without awareness of the monsoon climate, its attendant rainfall onset, amounts and the current unreliability of the rains in the sub-continent and the possible reasons for these and the measures being taken to counteract the problems, answers tended to lack breadth and structure.

Final comments

Candidates would benefit from choosing both questions at the beginning of the examination then planning responses before writing them. A good way to plan an answer is to write the question down and underline its various requirements before writing down the points relevant to answer effectively.

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 sixth examination of Cambridge Pre-U Geography (the last of the current syllabus) saw a slight decrease in candidates from 2014, 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 **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.

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 3–4, as expected, being used the most intensively. There were few 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. A small number of essays were awarded marks in Level 1, usually for not following 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 (this has notably improved over the lifetime of the syllabus), outstanding work being seen in the vocabulary for and expression of analysis, evaluation and argument in particular. Candidates showed a knowledge base ranging from sound to impressive. The best candidates focused clearly on the demands of the question and showed a mature understanding of the subject matter, supporting their discussion with appropriate and located examples.

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 accurately 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

This was the marginally less popular question on this topic. Too many candidates focused on a narrow discussion of commuting. Candidates who did tackle the two parts of the question generally scored well, although very few convincing examples of seasonal population movements (none on nomadism or transhumance) were received. Several tried to frame their answers within the mainstream migration theories, for example, Ravenstein or Lee, but once again provided no critique of how simplistic and old these theories are. Others profitably used Gravity Models or distance-decay theory as a basis for their response. Features of higher-scoring work included an ability to genuinely classify material into 'factors' (particularly emphasising the role of technology in facilitating contemporary commuting patterns); to follow the command word 'Examine' and go well beyond the descriptive; and the deployment of detailed examples and case studies.

Question 2

Responses to this question were mostly disappointing, with no candidates discussing natural increase/decrease and several giving inaccurate definitions of 'urbanisation', which then led the candidate in inappropriate directions. The word 'trends' in the question clearly requires a temporal response, yet candidates showed a very poor appreciation of HIC urbanisation (often jumping straight to a discussion of contemporary counter-urbanisation) with very little awareness of past (and present) slum conditions and the historic rate and causes of such urbanisation. Responses were also notably lacking in detailed, relevant examples backed up by statistical support.

Trade, Debt and Aid

Question 3

Candidates were generally able to select from their knowledge and use this material in a way relevant to the question, which required a broad view and strong synthesis skills. Many wrote at length and with understanding about colonial and neo-colonial trade and the impact of the World Trade Organisation and trade blocs such as ASEAN, supporting their comments with appropriate examples. A review of Fair Trade was generally appropriate and thoughtful. Although knowledge was wide ranging and sound, only the better candidates addressed the evaluative elements of the question, i.e. the terms 'exploitative' and 'inevitably'. Those who did scored very well. The handful of weaker responses went little beyond description. A few answers contained too much Economics-based material (particularly graphs), which was poorly integrated into a Geography response. Whilst generally creditable, candidates must take care to distinguish between approaches in these two closely-related disciplines.

Question 4

A slightly more popular choice than **Question 3**, it was generally tackled quite well. The best responses discussed the role of both governments and NGOs in the aid process, exploring the issues of top-down approaches such as tied aid and the 'white elephant' types of project, and contrasting those with the effectiveness of bottom-up approaches such as increasing access to potable water. Examples of aid were varied and detailed. Weaker answers tended to focus too much on corruption and/or focus on the role of TNCs such as Nike (of peripheral relevance at best).

The World of Work

No responses were received on this topic

Section B

Energy and Mineral Resources

Question 7

Responses to this question were reasonable, but some lacked the ability to go beyond a description of the classifications to an evaluation. Inevitably, less relevant descriptive material crept into weaker responses. Most focused on energy resources with better responses able to include minerals. A few answers contained too much Economics-based material (particularly graphs), which was poorly integrated into a Geography response. Whilst generally creditable, candidates must take care to distinguish between approaches in these two closely-related disciplines.

Question 8

Some good responses were seen to this question, balanced and supported by detailed examples. Some weaker candidates gave inaccurate definitions of 'International commodity organisations', which then led the candidate in inappropriate directions. Few presented a discussion of the rise in importance of OPEC (for example, the relevant events of 1973) plus its recent fragmentations as member nations become politically unstable leading to production and supply issues (for example, Libya, Iran, Iraq). There is much contemporary evidence in support of the statement (for example, North American shale gas and tar sands, and Russia's use of gas and oil supplies as a geo-political tool). Many candidates included a relevant discussion of the Kimberley Process and its efforts to reduce trade in 'blood diamonds'.

The Provision of Food

Question 9

This question was the less popular option. Good answers wrote in detail about physical factors controlling the location of major marine fish stocks, such as the role of ocean currents (for example, the Humboldt upwelling and the impact of El Nino events on nutrient supply). They then continued to discuss factors affecting the location of marine fish farms, such as salmon farms in the sea lochs of Scotland. Weaker responses, though aware of the relevant factors, lacked the detailed locational support. Some candidates quickly moved off the factors that positively influence the location of major marine fish stocks onto the flipside of the question: an examination of why areas are no longer the location of major marine fish stocks (overfishing). This could be profitably included, but only after a clear discussion of location and why they once did have major marine fish stocks. The same applies to the management of overfishing (CFP, Exclusion Zones); this needed to fit clearly into a response focused on the question.

Question 10

Candidates displayed a wide range of knowledge and generally coped comfortably with the demands of the question. The best answers were characterised by those who considered not only environmental but also other factors such as economic, political and market preferences. This discussion was supported by appropriate located examples. These candidates were then able to use this structure to frame a meaningful assessment of the validity of the statement in the question. Weaker responses, though sound of knowledge, tended to be descriptive without much attempt at addressing the evaluative nature of the question. Several candidates included Malthus and Boserup in their evaluation, but only the more able candidates used the theories and diagrams to effect.

Tourism Spaces

Question 11

Responses on this topic were better this year: more academically focused and analytical. This question was a good discriminator: at the top end, candidates engaged in thoughtful discussion about the key terms in the question and offered contemporary examples which largely supported the direction of the question. The 'blurring of the lines' between these key terms was clear from responses, especially as the tourism market becomes ever more diversified, for example, ecotourism, adventure tourism, business (convention) tourism.

Question 12

This question was intended to elicit discursive responses and this aim did discriminate between candidates: at the lower levels, candidates wrote largely descriptive responses about Butler, supported by the old favourites of Blackpool and Benidorm. At higher levels, candidates engaged in thoughtful examinations of the model including critiques of the 'standard' case studies. Many appreciated and reflected on the dynamism and range of 21st century tourism (for example, health, cosmetic, charity, business and ecotourism). Butler may broadly apply to Blackpool or Benidorm, but not even to all mass tourism spaces; the better candidates often examined this. Several candidates offered adaptations to Butler, particularly in its latter stages. In particular, they recognised that it does not/cannot reflect significant shocks to the economy of a tourism space, for example, the south Asia tsunami or terrorism events in Egypt and Kenya.

GEOGRAPHY

Paper 9768/04
Research Topic

Key Messages

To gain full credit in **Questions 1, 5 and 9** there needs to be accurate and precise use of the data in the resources. Phrases such as “about 2.5”, “just under 4” or “around 7.3” indicate a lack of precision and should not be used.

Responses to **Questions 2(b), 6(b) and 10(b)** need to be supported by case study material drawn from the candidate’s wider study of their chosen topic. The use of only one case study rarely, if ever, allows a realistic assessment to be made – however, the time constraint means that a wide ranging response is not possible. Good answers demonstrate a balance between breadth and depth that enable candidates to arrive at a robust judgement.

The syllabus suggests that questions/hypotheses be “clearly defined with a named location(s)”. Many candidates stated their chosen hypothesis but failed to name a location. Additionally, a small minority of candidates do not word their title either as a question or a hypothesis e.g. “For my investigation I looked at how pH levels varied at different intervals along the sand dune.” This makes it more difficult for the candidate to analyse and especially to draw conclusions from the findings. Additionally, it also makes it more difficult to achieve the level of evaluation required for good marks in the 15 mark questions.

Some candidates identify anomalous readings and then choosing not to use them in their final analysis, stating that they were going to ignore such results since they were clearly anomalies. This practice should be discouraged because attempting an explanation of such anomalies often enables candidates to show their depth of understanding of a topic.

General Comments

There was little evidence that candidates found time an issue. Some candidates attempt the Either/Or questions first, but the danger with this approach is that unless they are disciplined with their timing they spend too long on these questions and leave too little time for the remaining questions.

There was very little evidence of rubric infringements.

Comments on Specific Questions

Section A: Small Scale Ecosystems

Question 1

- (a) Most candidates recognised that pH 7.0 had the largest range of soil moisture, but a significant number failed to get the second mark available by either misreading the scale or being too imprecise when reading off the diagram. The correct reading was 15.2% - 5.9% giving a range of 9.3%.
- (b) Good answers gave at least one comparison and one contrast between the two sets of results and supported their comments with precise data support from Fig. 1.
- (c) There were some good answers here with many candidates dealing comfortably with the resource. The best responses wrote about the varying strength of the correlation in different parts of the graph (for example, comparing the strong correlation from 75 metres onwards to the much weaker

one from 0 to 50 metres). Most candidates identified the anomalous readings between 55 and 70 metres.

- (d) The best answers concentrated on the advantages and limitations of the resources. Common advantages were seen to be the clear visual representation of the patterns and relationships between the variables shown on Figs. 1 and 2. Many pointed out disadvantages such as the fact that neither graph shows a specific location or a time scale. Additionally, the resources deal solely with abiotic components of ecosystems; there is no indication of biotic components which would be necessary for any study of SSEs.

Weaker responses simply described the data shown on the resources without addressing the value of the graphs themselves, thus gaining little credit.

Question 2

- (a) Good answers focused on the challenges faced in maintaining the ecosystems. Some of the best responses briefly explored the impact of the human activities shown on the map on trophic levels and food webs and other knock-on effects on the ecosystems shown (such as possible eutrophication in the loch). Weaker answers simply described problems without taking the answer into the challenges faced by the managers. Some erroneously described conflicts between different groups of users e.g. the fishermen versus the users of the outdoor wedding area, with no reference to ecosystems.
- (b) The best answers here followed the guidance given under the Key Messages section above. Any sensible definition of “within” and “outside” the ecosystem was accepted, the key point being the quality of the argument and usefulness of the exemplar support. It was not necessary to have equal balance between the two aspects above in order to gain high marks. Some candidates strayed from the small scale requirement of this section, quoting examples from much larger ecosystems such as the Gola Rainforest in Sierra Leone. Weaker responses were largely descriptive with little or no attempt to address the question.

Questions 3, 7 and 11

There were some good answers here, with many candidates heeding the advice given in last year’s Principal Examiner’s Report which meant that they used the material they had in a way relevant to the question. A range of considerations were discussed, including improving the reliability, accuracy and representativeness of the data collected. Other common themes included not having enough time for data collection, ease of access to the locality(ies) used as well as the limitations of both the personnel involved and the equipment available to them. Safety issues and risk assessment, though vital considerations for all field and laboratory investigations, were rarely mentioned. Weaker responses simply described what they had done (often as part of a group data collection exercise) showing little understanding of the question or why they had collected the data in this way.

Questions 4, 8 and 12

This was the more popular question of the two alternatives, but was less well answered overall. The best responses divided their finding into three groups – firstly, those results which were expected and could be explained, secondly those that were unexpected but could still be explained and lastly, those that were unexpected and could not be explained. Such an approach allowed candidates to make an evaluative judgement which was a key component of high level answers. Mid level answers focused on the first two groups of findings and then made a fairly superficial judgement such as “I was very successful”. Some candidates chose to ignore anomalous results, simply because they were anomalous. See the Key Messages section above for more advice on this.

Section B: Managing Rural Environments

There were too few responses to this section to make any meaningful comment.

Section C: Central Business Districts

Question 9

- (a) Many candidates scored full marks for this question. Some candidates correctly identified site 2 as showing the largest increase in pedestrian count from 2010 to 2013, but failed to give evidence from the graph and thus did not gain the second mark.
- (b) Most candidates scored well here. Three valid contrasts with some supporting evidence from the graph was enough for full credit. There was no credit given for similarities.
- (c) Most candidates scored well by identifying elements of both horizontal and vertical land use zoning in the map. The best answers then proceeded to make a judgement about how far Fig. 8 supported the statement. Weaker responses simply described the map, making little reference to land use zoning.
- (d) A deliberately open question to allow candidates the opportunity to suggest information which might be relevant to those responsible for ensuring the sustainability of CBDs. Good answers described other data such as land values, maps of functional zoning and environmental quality assessments, making it clear how such information links to sustainability. Weaker answers simply described other data but failed to refer to sustainability.

Question 10

- (a) There were some good answers here which focused on the differences in land use between the core and other parts of Leicester's CBD as shown in Fig. 9, supporting the points they made with detailed reference to the map. Weaker responses simply described the land uses but failed to draw out the differences as required by the question.
- (b) The best answers here followed the guidance given under the key messages above. The focus here was very much on the edge of the CBD and many candidates scored well by writing about zones of assimilation and discard and/or the dynamic nature of CBDs. A common error was to focus on the boundary between the core and frame of the CBD (perhaps prompted by Fig. 9) which, of course, is not the edge of the CBD.