GEOGRAPHY

Paper 0460/01

Paper 1

General comments

The paper was well received, and considered to be an appropriate and fair opportunity for candidates to show what they know, understand and can do. Within each question there were plenty of opportunities for the most able candidates to demonstrate their abilities, however the resources and structured tasks provided all candidates with the opportunity to achieve positively to some extent, as candidates were able to access information from the resources provided. It is evident that 'experienced' Centres have taken good note of previous Examiners reports, and many scripts were seen which demonstrated examples of good practice throughout, with candidates scoring consistently well across their chosen questions. Indeed one Examiner commented on '…candidates writing excellent answers and showing detailed geographical knowledge as well as an enviable awareness of political and environmental issues……'. Where appropriate candidates are developing their answers fully, rather than writing brief, simple points. The use of long lists of undeveloped bullet points, although still evident from some Centres, is now far less common from experienced Centres, as there is an increased understanding that quality not quantity is rewarded in those questions requiring extended writing. The use of levels of response marking in the final part of each question (requiring a single case study), which was introduced for the first time in the examination of May 2007, prevents basic statements from gaining full marks and rewards detailed and place-specific answers. Levels of response marking will be used for ***Section (c)*** of each question in future examinations and candidates should be familiarised with how it operates. In the section of this report which refers to specific questions levels of response mark schemes for each case study question are included for reference. Please note that it is the quality of the response which determines which level an answer achieves rather than the quantity of statements contained within it. However, once assigned to a level, the mark achieved within that level is determined by the number of points made. Levels 1 and 2 are distinguished by whether statements are simple (Level 1) or developed/elaborated (Level 2). A candidate can immediately enter Level 2 by making developed points without making any Level 1 statements. In order to achieve Level 3 a candidate must have already reached the top end of Level 2 – in addition his/her answer should have a clear example (for 6 marks), and if the answer is place specific as well full marks are awarded. Many Examiners commented on the continued improvement in the quality of case studies. Indeed it has to be said that from some Centres the case studies used this year, particularly those which were local to the Centre, were very impressive. Centres are becoming more and more familiar with the need for candidates, wherever possible, to have knowledge of appropriate case studies to back up their generic knowledge and understanding. The syllabus is constructed in such a way that, wherever a Centre is located, there are likely to be opportunities to make use of local case study materials in many parts of the course. Centres are encouraged to further develop their use of local case studies, or at least examples from their own country or continent, and attempt to further reduce the dependence on textbook examples.

Whilst there were many candidates who produced excellent work, great extremes of performance were evident, with the many candidates who produced top quality work providing a stark contrast with many who produced weak scripts. A significant number of candidates, particularly from 'new' Centres, seemed poorly prepared, with poor linguistic skills, and very limited geographical knowledge and understanding, along with an obvious lack of familiarity with the context of questions. Such candidates failed to make a meaningful attempt at the paper overall, with a series of rushed and superficial answers, or simply did not attempt parts of questions, except for those testing simple skills, and those which directly used the photographs and other resources provided. This was especially so where responses required extended writing, particularly the case studies. Weak candidates need to be at least trained to make general points and develop them, even where they have not revised or retained the name of an example.

Generally there were few rubric offences, although a number of candidates, almost all weaker candidates, answered all six questions very superficially rather than selecting three. Clearly this is to their disadvantage, and Centres should emphasise that, in their own interests, candidates should only answer three questions, as inevitably they will run out of time and/or not be able to include the requisite depth and quality of geography in their responses. Time management was generally good, and it continues to improve. Only a

few candidates spent too much time on one or both of their first two questions at the expense of the third question. The standard of English was variable, ranging from excellent to being of very poor quality. Difficulties with reading and writing English obviously contribute to candidates struggling to answer questions effectively. It is imperative that, even candidates with linguistic limitations, are familiar with the common command words used in questions. All candidates need to spend time and care reading the questions, responding to the command words rather than writing all they know about the topic being interrogated.

The most popular questions were **Questions 1**, **4**, **5** and **6**. **Questions 2** and **3** were not popular, nor were they particularly high scoring for many of the candidates who chose them.

The following advice, from previous Examiners reports, should be given to candidates:

(a) Choose three questions with care, ensuring that for each you are confident that you have a case study about which you can write in detail. Answer the three chosen questions starting with the one with which you are most confident, and finishing with the one with which you are the least confident, rather than automatically answering them in numerical order.

(b) Having selected a question, read all parts of it carefully before beginning any answers. Decide which section requires which information, thereby avoiding repetition of information and wasting time.

(c) Take careful note of the command words (and any context words such as 'people' or 'natural environment', 'impacts' or 'causes'), so that all parts of answers are relevant to the question being asked.

(d) Use the mark allocation as a guide to the amount of detail or number of responses required. Be aware of timing, do not devote too much time to the first chosen question, or include too much detail in sections which are only worth a small number of marks.

(e) Aim to develop each idea so that answers do not emerge as a list of simple points, particularly in case studies where place specific information and details should be included wherever possible.

(f) Use resources such as maps, graphs and photographs carefully in order to make use of the detail they include, and do not merely copy out parts of resources.

Centres should take careful note of the following points:

(a) The front page should show full details of the candidates along with an indication of the three questions answered.

(b) There should be a margin of at least 2 centimetres on the left and the right side of each page. Apart from the numbers of the questions and sub-sections candidates should not write in these margins.

(c) Every part of every question chosen should be clearly indicated in the left hand margin.

(d) At least one line should be left between each part of a question, and at least three lines between each question.

(e) All sheets should be loosely tied together, with the sheets assembled in the correct order. Sheets should not be submitted loose, nor should they be tied or stapled together so tightly that they are impossible to turn over in order to read all parts.

(f) All sheets should be numbered by the candidate and placed in the correct order.

(g) Narrow lined paper, or exceptionally thin paper, should not be used.

Comments on specific questions

Section A

Question 1

A very popular question which was generally tackled well.

(a) (i) Generally very good definitions of "immigrant" from most candidates, indicating those people who move 'into' or 'to' a country or area. Simple but not common mistakes were to refer to the migration process or produce definitions which clearly were describing emigrants.

(ii) Whilst many candidates were successful a surprising number were not, perhaps finding it difficult to interpret the key of the map, or not being familiar with the use of flow arrows of this type.

(iii) and **(iv)** were generally tackled well. Generic responses to (iii) were usually appropriate although some were inconsistent with the chosen country and some lacked precision (e.g. "better climate", "better life"). In **(iv)** whilst there were many good responses, some candidates described effects on the migrants rather than the cities, and others would have been improved if points had been developed – too many were resorting to "overcrowding" or "pollution" or "crime" with inadequate development of these statements.

(b) (i) The photographs were well used and there were many excellent answers scoring maximum marks.

(ii) This was a challenging question and many candidates were quite unprepared for the knowledge required to answer it. Many could not understand what the question wanted and wrote generally about why towns grow up, or why people live in sparsely populated areas. More perceptive candidates, who did achieve a measure of success on the question, generally referred to settlements which had developed in sparsely populated areas as a result of mining or tourism. The following extract from the mark scheme lists possible ideas:

Ideas such as:
Around an oasis in a desert;
Around rivers where they flow through arid areas;
Mining settlement/production of oil;
Growth of tourist resorts;
Market towns;
Route centres/junctions of major highways/gap towns;
Towns of strategic importance;
New Towns/government policy (specified);
Dry area in otherwise marshy land;
Valley in otherwise highland area etc.

5 @ 1 mark or development (or named examples)

(c) A straightforward and familiar question which differentiated well. Many candidates were confident with the topic. Most were aware of the main factors creating a high birth rate but a number of answers were spoiled by inadequate development of ideas needed to take statements into Level 2. Factors affecting death rate were not always clearly related to it – some wrote about better health care, sanitation etc. without referring to these reducing death rate. Bullet lists lacking development were too frequent. Whilst well prepared candidates were able to reach Level 3 by making appropriate statements and naming a country, relatively few did enough to achieve full marks by making their statements specific to that chosen country. There were some poor examples such as the UK and Germany. China's one child policy was regularly mentioned, though irrelevant here. A significant minority answered the question as if it were on population density rather than natural increase, or gave detailed reasons why it attracted a lot of migrants.

The following extract from the mark scheme illustrates how levels of response marking was used to assess the quality of answers. Note how statements need to be developed to reach Level 2 and place specific information is required to reach Level 3:

Level 1 *(1-4 marks)*
Statements including limited detail explaining high rates of population growth.
(e.g. because there is no contraception, because of their traditions, birth rate higher tha rateto send children out to work, etc.)

Level 2 *(3-5 marks)*
More developed statements explaining high rates of population growth.
(e.g. to send children out to work to earn money working in the towns, because contraception is not easily available in rural areas, because men are considered of higher status if they have more children etc.)

Level 3 *(6 or 7 marks)*
Uses named example at any scale (e.g. Swaziland).
Comprehensive and accurate statements including some place specific reference.
(e.g. to send children out to work to earn money working in the towns like Mbabane, because contraception is not easily available in rural areas, because men are considered of higher status if they have more children, polygamy is allowed - even the king has many wives etc.)

Question 2

This question was one of the least popular on the paper, and many attempts at it were disappointing, showing unfamiliarity with the context of an urban area in an MEDC. Many candidates, especially those from LEDCs, appeared to draw on their own built environment experiences to provide responses that were not acceptable.

(a) (i) Mostly correct though some weak candidates merely repeated the words 'owner' and 'occupied'.

(ii) Most candidates correctly identified Area A as Brickfields, but quite a few incorrectly put Brickfields again for B. Whilst at least one, and often both, of the areas were successfully identified some candidates quoted actual percentages instead.

(b) (i) A surprisingly high number missed out on simple skills marks here, usually by offering value judgements rather than referring to actual features shown in either the photographs or maps. The wide, tarred road was often mentioned, though this is not particularly indicative of a suburban area. More should have been made of the modern, detached houses with drives/garages. The low street density shown on the map was rarely mentioned.

(ii) This differentiated well, there were some excellent answers, perceptive and well balanced, whilst many showed little real understanding of the issues relating to outer city estates such as that shown in the photograph, and significant numbers of candidates even offered disadvantages more usually associated with squatter settlements in LEDCs.

The following extract from the mark scheme lists possible ideas:

Advantages *such as:*
modern design;
contain all amenities/electricity/water;
brick built or implication;
space to park cars;
availability of local services or example(s);
*relatively low cost * ;*
gardens/space/close to open space/play areas;
no air pollution as there are no nearby factories;
close to workplaces in urban fringe;
good public transport access/main road access to CBD etc.
Disadvantages *such as:*
*High cost of rent/to buy * (only credit once);*
Many deprived families living there or implication;
Close proximity to neighbours/noise implication;
No off street parking;
Crowded houses;
High cost of getting to workplaces/shops in CBD/inner city;
Crime rates high (if developed) etc.
2 + 2 marks on each of advantages/disadvantages (4)

(iii) Again answers were generally quite weak, though there were notable exceptions. Few adequately described the characteristic features of Victorian, terraced houses, along associated gridiron street pattern, and there were many value judgements, rather than desc based on the evidence.

In **(iv)** the concept of urban renewal seemed unknown to many and the question required the ability to look at why improvement/renewal would be more acceptable to people than comprehensive redevelopment. The question was challenging and most candidates struggled and either wrote in vague terms, or outlined the inadequacies of such inner city areas, without referring to the benefits of renewal over redevelopment. The words "rather than…" in the question seemed to be missed/ignored by most.

The following extract from the mark scheme lists possible ideas:

Ideas such as:
older houses add character/retain culture/image;
old houses are often large/well constructed;
reduce idea of 'dead heart';
convenient residential location close to workplaces/CBD
social advantages of improved housing rather than flats
people have lived there for many years;
can't afford to move;
community spirit;
area has convenient corner shops/pubs etc.
cheaper option for local authority;
to restrict outward expansion;
disruption caused by demolition;
specified problems caused by new land uses etc.

5 @ 1 mark

(c) This proved to be the one of the most difficult of the case studies. It was not always clear which part of the city/rural area candidates were talking about – many did not put their answers into the context of the urban fringe. They wrote about reasons why cities were expanding without necessarily mentioning the problems caused by the expansion, which was the focus of the question. Squatter settlements and their associated problems were mentioned by many candidates, but they could have been anywhere in many cases, as no link was made with the rural-urban fringe. Whilst the examples may have been appropriate, in many the problems likely to occur were missing. Reference to squatter settlements on the rural-urban fringe rarely referred to associated problems such as loss of farmland and loss of habitats, focusing instead on the generic problems faced by people living within them.

The following extract from the mark scheme illustrates how levels of response marking was used to assess the quality of answers. Note how statements need to be developed to reach Level 2 and place specific information is required to reach Level 3:

Level 1 (1-4 marks)
Statements including limited detail on problems likely to occur in rural-urban fringe.
(e.g. traffic congestion, loss of farmland, atmospheric pollution, growth of squatter settlements on edge of city)

Level 2 (3-5 marks)
More developed statements on problems likely to occur in rural-urban fringe.
(e.g. traffic congestion as many people who live in new developments commute to work in CBD, loss of farmland due to new housing developments/road construction, atmospheric pollution from increased traffic, growth of squatter settlements on edge of city where disease spreads rapidly etc.)

Level 3 (6 or 7 marks)
Uses named example (e.g. Nottingham).
Comprehensive and accurate statements including some place specific reference.
(e.g. traffic congestion on radial roads into city as many people who live in villages like E... Joyce commute to work in the city, loss of farmland around Papplewick village due to new hous... developments, atmospheric pollution from increased traffic along A60 etc.)

Question 3

This was the least popular of the questions. Whilst many attempts were very weak and indicative of a very poor grasp of coastal geomorphology, there were notable exceptions, particularly in ***Section (c)*** where candidates from some Centres produced outstanding case studies.

(a) Mixed responses were seen even here. North and NW were common wrong answers instead of NE for **(i)** and cave instead of arch in **(ii)**.

(iii) This differentiated well – answers varied from those who were familiar with the topic to those who knew nothing about it, writing vague or irrelevant details. From very capable candidates there were some very good, well annotated diagrams, worthy of full credit even without text. The idea of a 'discordant coastline' was occasionally mentioned, more candidates understood the principles of differential erosion, though it was rare to see the term itself used.

(iv) Whilst there were significant exceptions, generally this was answered poorly. Many candidates thought that waves (particularly longshore drift) were directly responsible for dunes, and failed to develop the role of wind action in producing them. Few got beyond the idea of the wind blowing and picking up sand particles, and some digressed onto desert dunes shapes which is no longer on the syllabus – Barchan/seif etc.

(b) (i) Apart from simple references to shingle and pebbles, many candidates made poor use of the clues in the map and field sketch. It was rare to see reference to the orientation of Slapton Sands or its length. Despite the clear command to 'describe' the main features, there were many irrelevant explanations, and many included descriptive and/or explanatory comments relating to the marshes or lagoon which did not gain credit.

(ii) This question was, by design, challenging, however, in general, responses to it were more disappointing than expected. Large numbers of candidates did not even recognise the significance of longshore drift, despite it being highlighted on Fig. 5A, and many who did so failed to explain its role in shaping the coast, or even demonstrate a simple understanding of the process itself, indeed some gave lengthy accounts of marine erosional processes despite the reference to deposition in the question.

The following extract from the mark scheme lists possible ideas:

Ideas such as:
longshore drift occurring South – North (SW-NE);
swash moves materials at oblique angle;
backwash at right angle;
materials move in zig-zag fashion;
causes sand bar to gradually extend further across former bay;
eventually extends all way across/increases in length;
blocks off Start stream's route to sea;
formation of lagoon;
sedimentation reduces size of lagoon;
growth of salt marsh vegetation etc.

5 @ 1 mark

(c) This case study differentiated well, there were some excellent answers, detailed and place specific, usually relating to small areas of coastline. Most candidates were at least able to achieve marks in Level 1 by making simple points recognising port, fishing and tourist potential, though many answers made vague references to an entire country's coast rather than focusing on an area familiar to them, and including place specific details. Some candidates restricted their answers to

opportunities presented by tourism, writing far too much detail on this, rather than lo… opportunities provided by coasts.

The following extract from the mark scheme illustrates how levels of response marking was used to a… the quality of answers. Note how statements need to be developed to reach Level 2 and place spec… information is required to reach Level 3:

Level 1 *(1-4 marks)*
Statements including limited detail describing opportunities for people who live in coastal areas.
*(*e.g. *fishing, tourism, ports etc.)*

Level 2 *(3-5 marks)*
More developed statements describing opportunities for people who live in coastal areas.
*(*e.g. *ports can be set up and people make a living from inshore/deep sea fishing, tourism industry can be established giving jobs in hotels, ports grow up and industries will be attracted there to use the raw materials imported/export finished products)*

Level 3 *(6 or 7 marks)*
Uses named example (e.g. Californian coast).
Comprehensive and accurate statements including some place specific reference.
(e.g. ports like Monterrey have grown up and people make a living from inshore/deep sea fishing, tourism industry has been established in San Francisco giving jobs in the restaurants along the Old Fisherman's Wharf, Oakland is a major port dealing with container traffic from Japan, Hong Kong and China)

Question 4

This was a popular question which differentiated well. There were some excellent responses overall, including the case study, in contrast others were superficial, and demonstrated little other than the ability to use the resources provided in an elementary manner.

(a) (i) While many got this correct a considerable number put either the wrong state or a port.

(ii) Again ports were wrongly identified by some weak candidates, but most answers were correct.

(iii) Generally this was well answered, and many candidates scored either two or three marks, usually by writing about roads, ports/harbours and bridges. Some candidates included irrelevant information about housing, or referred to problems with power supplies, without relating this to the transport infrastructure.

(iv) This differentiated well, some excellent answers were seen which showed a perceptive understanding of the information in Fig. 6, whilst at the other extreme some candidates just lifted text seemingly indiscriminately, without using it to answer the question (e.g. "water up to 6 metres high"). Whilst it may seem obvious that this would lead to the need to evacuate the city, candidates need to be explicit in their answers, and aware that a copy of a piece of text alone is unlikely to gain credit.

(b) (i) Many candidates used appropriate ideas from the article in Fig. 7A to make credit-worthy comments, and commonly at least two marks were scored. As in (a) (iv) some candidates copied out sections of the resource, without necessarily relating the points made to 'long term impacts' (e.g. "two drilling rigs were drifting on the open sea").

(ii) This differentiated well and most candidates gained some credit, in the case of weaker candidates typically for reference only to the availability of sufficient finance and/or expertise to rebuild. Many restricted their answers by thinking only in terms of this particular hazard event (i.e. Katrina) rather than the broader context of natural disasters, however the more perceptive candidates discussed the significance of issues such as the ability to predict, prepare and plan for disasters, in addition to the varying qualities of buildings and infrastructures in MEDCs and LEDCs.

(c) Some candidates were well prepared for a case study of this nature, giving very s[illegible] allowing access to maximum marks, particularly those who chose an example of a [illegible] earthquake. Whilst there were some good examples of drought (e.g. Darfur), generally th[illegible] chose drought wrote simple statements (particularly about the causes) and rarely added the specific detail included by those who chose an earthquake or volcano. Weak candidates particular difficulty in accurately naming a disaster event, and their knowledge and understanding of the causes of tectonic events was generally poor or non-existent. Terms like constructive/destructive plate margin were sometimes used, but not always accurately in relation to the event being discussed. Some missed out on Level 3 either by not giving any details of cause, or not giving the name of an example – they gave the country. Impacts of events were tackled somewhat better, but some candidates went beyond what was required into human responses or the advantages of living near volcanoes, often at the expense of the inclusion of relevant details.

The following extract from the mark scheme illustrates how levels of response marking was used to assess the quality of answers. Note how statements need to be developed to reach Level 2 and place specific information is required to reach Level 3:

Level 1 *(1-4 marks)*
Statements including limited detail describing causes and/or effects impacts of a volcanic eruption, earthquake or drought.
(e.g. plates move, people killed, housing destroyed, roads and railways damaged etc.)

Level 2 *(3-5 marks)*
More developed statements describing causes and/or effects impacts of a volcanic eruption, earthquake or drought.
(e.g. Plates converge and subduction occurs, people killed by hot lava/suffocation by toxic fumes, 61 deaths, housing buried by lava/layers of dust, communications disrupted by lava covering roads/railways, devastation of lumbering industry by destruction of forests etc.)

Level 3 *(6 - 7 marks)*
Uses named example (e.g. Mt St Helens volcanic eruption).
Comprehensive and accurate statements including some place specific reference.
(e.g. Convergence of North American and Juan de Fuca plates, 61 deaths/suffocation by toxic fumes , logging camps destroyed, communications disrupted by floodwaters washing away roads/railway bridges, loss of fish in a hatchery on Toutle River etc.)

Question 5

This was a popular and, for well prepared candidates, a high scoring question, to which most candidates related well. All parts differentiated well, however compared with the other questions the case studies were generally a little disappointing.

(a) (i) A surprising number failed to name a correct continent, naming a country instead. As Australia is a country, not a continent, it was unacceptable. Also 'America' was not acceptable. The continent is North America.

(ii) As always many candidates struggled with the task of describing a distribution. Whilst one mark was available for naming an appropriate continent where average daily consumption was below 2500 calories per person full marks were only available if candidates made a valid general descriptive point such as 'between the tropics' or 'in the south'. The use of the terms 'above' and 'below' in relation to the tropics is not impressive in a geography examination and should be avoided.

(iii) This question was well answered by many candidates, particularly **part A**. As in many other questions marks were lost by those candidates who wrote very brief answers such as 'natural disaster', 'war' or 'poverty' without developing the points sufficiently to make the explicit link with the question asked. In contrast there were some very good political points about government influence, particularly from southern African Centres making specific reference to Zimbabwe. Many were also aware that cash crops were often grown in countries where there is a food shortage, rather than food crops for the home market.

(b) (i) The word 'output' was almost universally known and this question was well answered by all candidates.

(ii) This was also well answered by many candidates, though it did produce a number of low scoring and superficial responses from weaker candidates, and some described the generic advantages of international aid. Realising that the question was worth five marks, well prepared candidates were able to write about this specific aid programme producing more food, thus the people would be healthier/less starvation and income would potentially be available, to spend on setting up businesses or educating children or similar. Some candidates made impressive use of the term 'sustainable' whilst others clearly recognised that it would enable the people to become independent of aid in the future.

(c) Some candidates failed to make clear at the outset what type of farming they were selecting along with a clearly named example. It was insufficient to simply state a generic type such as 'small scale subsistence farming' or 'large scale commercial farming' as a specific example was required. Typically those who chose subsistence farming selected either shifting cultivation in the Amazon Rainforest or rice farming in a country in South East Asia, whilst there were various examples of commercial farming, including plantations and dairy farming. Without doubt the best examples were those which were local to, and therefore familiar to, the Centre. Some experienced Centres had clearly prepared candidates very well as they gave specific details of the number of cattle on the ranch, the number slaughtered each day, the number of labourers, the precise location of markets etc. Disappointingly, however, the bulk of candidates merely listed inputs, processes and outputs, sometimes in table form with little or no development, thus were unable to progress even into Level 2. Candidates need to be made aware that the command word "describe" means more than simply "list".

The following extract from the mark scheme illustrates how levels of response marking was used to assess the quality of answers. Note how statements need to be developed to reach Level 2 and place specific information is required to reach Level 3:

<u>Level 1</u> (1-4 marks)
Statements including limited detail describing a farming system.
(e.g. soil, harvesting, cereal crops)

<u>Level 2</u> (3-5 marks)
More developed statements describing the chosen farming system.
(e.g. deep, fertile soils, harvesting using combine harvester, cereal crops exported for bread making)

With no clear example of a specific farming system = max L2 (5)
e.g.. candidate just states 'large scale commercial farming' or 'small scale, subsistence farming'.

<u>Level 3</u> (6 or 7 marks)
Uses named example (e.g. Large scale cereal growing in Canadian Prairies).
Comprehensive and accurate statements including correct reference to a named area.
(e.g. wheat farming in the Canadian Prairies - deep, fertile, chernozem soils, harvesting using combine harvester, cereal crops exported for bread making via Great Lakes ports)

Question 6

This was another popular question, set within a context familiar to many candidates. It differentia producing a number of excellent answers.

(a) (i) Almost all candidates successfully identified a dam which had already been built, either the Katse Dam or the Mahale Dam.

(ii) Despite the simple nature of the question and resource many candidates had problems with describing the location of the Malatsi Dam, and many attempts were vague at best. Candidates should be trained to look for clues such as the scale line at the bottom to help give distances; compass directions to say which part of the country it is located in etc. Many wrote points such as 'near the Senqunyane River' or 'near the reservoir' which were not accurate enough. Some misinterpreted the question and wrote about why was the dam was built and gave details of how the water from the reservoir would be used.

(iii) Whilst there were some good answers to this question, generally it was quite poorly answered with too many candidates not relating their responses to '*increasing*' demand, or considering supply of water rather than demand, with many irrelevant references to a dry climate and polluted rivers.

(iv) Attempts at this were generally more successful. Many candidates scored high marks by referring to the many water sources (dams, rivers and reservoir), and including details about the mountains, high rainfall and the small internal demand for water in Lesotho.

(b) (i) Most candidates were able to comment on the fact that HEP is a 'cleaner form of energy' or make a similar statement about its relatively small impacts on the natural environment. Many also referred to the fact that it is renewable, and will not run out, unlike fossil fuels. The many references to it being 'cheap/cheaper' and 'more reliable/better' were too vague for credit. It needed to be clear that the low cost was for the running and/or maintenance. Some candidates quoted the positive effects of the scheme (see (ii)), which were irrelevant in this section.

(ii) Many candidates scored very well on this part, they used the resource well and showed an excellent understanding of the issue. Some relied on vague terms e.g. ' environmental damage', however they generally gained three marks for positive effects. A few weaker candidates did not understand 'positive' and 'negative' effects and/or did not produce an answer which was balanced, however in general the response to the question was pleasing.

(c) There were very few detailed accounts of specific cases of water or air pollution, though candidates were able to reach Level 2 for developed general statements about causes and effects of their chosen type of pollution. Quite a few missed out on Level 3 by giving a country, rather than a location or area which was more specific. A significant number ignored the instruction to choose either Air or Water pollution and wrote about both. Causes were often brief and poorly backed up with knowledge other than "waste from industry going into the river" or similar simple statements, however effects were usually more fully described. Many candidates included references to greenhouse gases, global warming, acid rain and ozone depletion, and sadly there was much confusion between them. At the other extreme some excellent answers were seen, these varied from answers which gave specific detail about air or water pollution created by factories, such as sugar processing, to air pollution caused by vehicles in urban areas, however what these excellent answers had in common was that they were usually based on an example in an area close to where the candidate lived.

The following extract from the mark scheme illustrates how levels of response marking was used to assess the quality of answers. Note how statements need to be developed to reach Level 2 and place specific information is required to reach Level 3:

<u>Level 1</u> (1-4 marks)
Statements including limited detail describing causes and effects of air or water pollution.
(e.g. kills people, makes it hard to breath, factory smoke etc.)

<u>Level 2</u> *(3-5 marks)*
More developed statements describing causes and effects of air or water pollution.
(e.g. increased rates of lung cancer, asthmatics have difficulty breathing, factories p… smoke by burning fossil fuels etc.)

<u>Level 3</u> *(6 or 7 marks)*
Uses named example (e.g. air pollution in Cubatao in Sao Paulo State, Brazil).
Comprehensive and accurate statements including some place specific reference.
(e.g. Fumes from Latin America's biggest petrochemical complex; fumes from industries such as a fertiliser factory/a cement works/there are about 30 major industrial facilities in the vicinity; 473 tonnes a day of carbon monoxide; 182 tonnes a day of sulphur; 148 tonnes of polluted dust and particles; 41 tonnes of nitrogen oxide; the infant mortality rate is significantly higher than anywhere else in the country; about 8% of all children born in the area suffer from abnormalities such as spinal problems and missing bones; 44% of the Vila Parisi population have some kind of lung disease; no local smoke control regulations; Air pollution, adjacent to a fertilizer plant, has devastated tree growth; resulting in severe erosion and flooding in the barrio of Villa Parisi.)

GEOGRAPHY

Paper 0460/02

Paper 2

General comments

Candidates used the paper to demonstrate some excellent geographical skills. **Questions 2** and **4** were found to be relatively easy, with **Questions 5** and **6** a little more challenging. Many candidates found **Question 3** to be more difficult, together with the mapwork question, **Question 1**. The overall degree of difficulty was on a par with that of last November's paper, with the exception that the most able candidates found it difficult to score more than about 53 marks. This was largely as a result of difficulties with **Questions 1** and **3**. Almost all candidates made a commendable attempt to answer the paper, even those with comparatively low scores. The range of marks seen was from 1 to 57. Totals below 25 were rare.

Comments on specific questions

Question 1

Responses to the question were very varied. It proved to be a good discriminator. Few candidates gained in excess of 15 marks and the mean mark was about 11.

(a) (i) This was answered well, although some candidates suggested services such as sports field that could be found in any settlement of this size.

(ii) This often gained full marks but some candidates merely gave grid references or described the appearance of symbols. Candidates were expected to use the map key and make precise references to, for example, wide tarred roads or aerodrome landing area. Some candidates suggested that only one road led to the falls, rather than routes focusing on the town of Victoria Falls.

(b) (i) This provided some very interesting answers (such as constructive and destructive margins!), but was generally correctly identified as an international boundary.

(ii) Responses were variable. Some candidates merely repeated the information given in the question, such as deep or steep sided, but others noted the zigzag, south easterly course, narrowness and tributary gorges. A few candidates noted the vegetation on the sides and the jagged nature of the gorge.

(iii) The estimation of distance was found difficult by many candidates but many gave answers within the permissible range of 17 to 22 km.

(iv) Most candidates correctly identified the retreat direction of the waterfall. Some suggested "eastwards" or "southwards", which was not given credit.

(c) This was a good discriminator. Some candidates failed to use symbols, while others drew them perfectly in very accurate locations. Many drew every embankment on the railway, while the cutting caused most problems.

(d) (i) This part of the question was found to be challenging. It was clear that many cand guessed the locations. Bush was correctly located by many, plateau occasionally but a area of low drainage density were usually either incorrect or not attempted.

(ii) The majority of candidates did not place an arrow to show the direction of river flow. Most w drew an arrow did so correctly. Presumably the others failed to see the question as they could have had 50/50 chance of a successful guess.

(e) Answers to the grid reference were disappointing. Many candidates appeared to fail to locate the southern tip of Princess Victoria Island while others failed to measure the third and sixth figures correctly by the method described in the syllabus.

Question 2

Able candidates had few problems with **Question 2** and maximum marks were common. The most frequent errors were failure to include a minus sign for **part (a)(iii)**, the inclusion of an area above 4000 m in the shading for (b) and, the most common error, an incorrect calculation of the temperature range for Halley. Some gave the range for Faraday. For (d), only a few candidates suggested distance from the sea, rather than altitude, as the reason why Vostok is colder than the South Pole.

Question 3

(a) This proved to be a good discriminator. Whilst almost all candidates correctly identified the flood plain, the other features were not well-known. Flat areas on the flood plain were, very frequently, labelled as a plateau, and the various areas where features came to a point were labelled as spurs. Those candidates who recognised the features sometimes failed to position their arrows carefully so that their answers became ambiguous. This was especially so with the spur where many arrows seemed to point to the floor of the tributary valley on the right of the photograph.

(b) Although many of the more able candidates were able to describe the landscape features from the photograph and achieve full marks, others wrote at length and scored very few marks. Many candidates still fail to discriminate between physical and human features. The bridge, track, road, pasture and houses were not prominent features but they were frequently mentioned. The better candidates achieved their marks by referring to relief, drainage and vegetation. Some candidates only scored by describing vegetation, although some descriptions were limited to the colours. Often candidates incorrectly identified levees, mountains and oxbows.

Question 4

(a) Strong candidates scored highly by carefully differentiating which parts of the town and which proportions of the residential area would be flooded by each successive rise in sea level. A few thought that the industrial area would not be flooded by a 2 m rise because of the sea wall. It was fairly commonly considered that the whole of the residential area and the CBD would flood with a 4 m rise but most correctly stated that the whole town would flood with a 6 m rise.

(b) (i) F was usually positioned correctly but a few placed it outside the town boundary or just inside the residential area below the 2 m contour.

(ii) Most realised that the purpose of the sea wall was to protect the industrial area but only about half the candidates scored the second mark by noting its protective effect on the residential area, or the lower value of recreational land, or why the industrial area should be protected.

(c) The majority of candidates mentioned ice caps melting or global warming. Some referred solely to the greenhouse effect, or to CO_2 emissions, or tsunami, or the hole in the ozone layer. Weak candidates interpreted the question incorrectly by stating the results, not the cause, of a rise in world sea level.

Question 5

(a) This caused few problems, except where candidates used the key and suggested, for e... Asian City rather than Singapore.

(b) The standard of response was variable. Although some gained full marks, some candidates failed to give figures in support or gave inaccurate ones, particularly for population density, because they failed to notice the difference in scales for the axes. A surprising number did North America or Asia instead of Australia. Irrelevant discussion of the reasons for the differences was often given.

(c) Only the more able were able to give two valid reasons. Many speculated, with little success, on how population density differences might be responsible. It was commonly stated that the densely populated cities had frequent traffic jams and therefore most people did not use cars. Others referred, irrelevantly, to the distance between cities or to the size of the countries. Differences in public transport, lifestyle and cost of fuel were common correct responses.

Question 6

(a) Almost all candidates answered this correctly.

(b) This part of the question proved to be a better discriminator. Many of the types of graph suggested were incorrect for the purpose. Examiners were anticipating candidates using those types of graph listed in the syllabus but various others were, usually incorrectly, suggested. Of the inappropriate responses, line graph in **(i)** and pie chart in **(ii)** were common. Some candidates did not attempt this part of the question. Instead of naming the type of graph, some candidates wrote a title. In **(ii)** the different crops, rather than the dates, were often placed on the x axis. The better candidates produced some very impressive, accurate, well-labelled graphs were produced.

GEOGRAPHY

Paper 0460/03

Coursework

General comments

As is usual, the number of entries for the November session of the examination was much smaller than that for April. However, from these, a number of useful points emerged.

All studies conformed to the descriptions set out in the proposals that had been submitted by Centres. This is very sound practice as it allowed candidates to score according to their ability, and some very impressive work was submitted. Hardly any pieces of work that would fall below a grade G were seen.

Some Centres had made a copy of the mark scheme for each candidate, and had put the mark for each Assessment Criterion in the range of marks for the Criterion, often adding a very brief comment to justify the given mark. This was particularly helpful in demonstrating how the mark had been arrived at, and helped in confirming the marks awarded.

Selection of candidates was mainly good, covering the range of marks awarded. There were some instances where a number of candidates shared the same mark, but no candidate on that mark was selected, but a single candidate close to that mark was chosen instead. If a number of candidates do cluster, it is helpful to choose one on that point. It should be remembered that both pieces of work produced by a candidate should be sent in for moderation, and that only ten candidates work needs to be sent when the entry is under fifty, unless the entry is under ten.

Individual Candidate Record Cards for selected candidates were sent in all cases. This is most helpful and avoids the need for reminder requests.

In some cases no copy of the mark scheme used was included, nor was there an outline of the work undertaken by candidates provided. On the whole it was possible to use the generic mark scheme from the syllabus to see how the marks had been arrived at, but occasionally it did present problems to Moderators on aspects of the work that were unique to the circumstances or study area of the Centre involved. It is helpful if a copy of at least the mark scheme is included.

All Centres included the Coursework Assessment Summary Forms which was a great help to Moderators, as it is essential to see the range and distribution of marks in a Centre.

The only problem that cropped up several times was repeated rounding up of marks on the Individual Candidate Record Cards. This was a problem when rounding was applied for each Assessment Criterion, and then the averages were added from left to right to arrive at the Total Mark. By so doing, it is possible to inflate a candidate's final Total Mark by up to two marks. The correct way to arrive at the Total Mark is to add the totals for the two studies and divide by two. If that answer ends in a half, then it is at that point where rounding up should take place. A modified version of the Individual Candidate Record Card will appear in the 2010 Syllabus which will be set out to avoid this problem. In the meantime, if this point can be borne in mind for the 2008 and 2009 sessions, it would be a great help in achieving fairness and accuracy of results.

Points that are relevant only to individual Centres are sent on the Centre Copy of reports that will be received.

Many candidates indicated enjoyment of the work undertaken, and hopefully this will apply to candidates currently undertaking their coursework.

GEOGRAPHY

Paper 0460/04

Alternative to Coursework

General comments

There was a full range of marks seen on this Paper in this session. **Question 1,** on the physical geography of rivers and associated fieldwork, proved difficult for many candidates who generally scored fewer marks than on **Question 2**. However in both questions there were clear examples of misreading leading to candidates scoring fewer marks than their ability deserved. It was surprising how many of the more practical skills questions were missed out completely.

Comments on specific questions

Question 1

(a) Most candidates selected the correct choices of *"increase"* and "*deeper".* However a number gave the opposite combination of words i.e. they did not check that the question stated *"…as distance increased from the source."* Reading the stem of a question carefully before answering is essential. A number gave the correct width but the wrong depth.

(b)(i) It was clear that many candidates had carried out this exercise in the field and could correctly draw two ranging poles each side of the river with a tape measure between them. The best candidates also took care to put each ranging pole on the edge of the river on the bank. Other candidates either missed this out, drew the poles and tape, or created a diagram that used the ranging poles along the river. Some did not draw in the river. The question asked for a labelled diagram; some gave a diagram with no labels which limited credit. Some used the measuring tape or pole to measure the depth.

(ii) It was disappointing to see how many candidates did not attempt the line graph. Those that did usually plotted the first two points correctly but less so 1.4. Some plotted the points down the graph instead of along. A small number plotted Site A data on the Site C graph. Those that understood what to do plotted all three correctly and linked them for 3 marks.

(c)(i) A range of 6.5-6.7 was accepted for 2 marks; outside of this 6.3-6.9 for 1 mark. Many candidates gained both marks but a significant minority produced figures that were incorrect by a long way – the most common being 3.5. Some added the depth figures for Site C; others added the two wetted perimeter figures above. The question referred to Fig. 1 to calculate the wetted perimeter; too many candidates tried to produce it using data in Table 1.

(ii) Few candidates linked wetted perimeter to the effect of friction e.g. a large wetted perimeter slowing the river down due to increased friction ***or*** less friction so speed increased. A number said the wetted perimeter would change the speed but not how or why. This expression did not seem to be understood by many candidates.

(d) (i) The Examiners were looking for fairly straightforward additions to the table such as *Date*. Many candidates stated what they were measuring such as *Width* and *Depth* or the measuring e.g. *weight of float.*

(ii) Candidates need to be aware that *"to be more accurate*" is not enough in this type of question gain credit. To obtain an average of the five measures or to give some indication that the speed could vary so repeating the exercise five times will give a surer, fairer or more reliable indicator is necessary.

(iii) Although most candidates attempted this, with varying degrees of success, too many just missed it out completely. Given there was a 3:1 chance of "*guessing"* the answer, it was surprising how many did not even circle one of the possibilities. The term *"cross-sectional area"* may have not been well understood.

(e) This was done well by most candidates. Most obtained 3 marks for identifying the changes and many gave 3 sets of data to support their statements. Depth was not always done as well as Width and Discharge; often candidates referred to depth across the river instead of from Site A to Site C. Some confused Discharge with Velocity or Deposition. Note that it is good practice to add the units after a figure e.g. 6.42 metres instead of 6.42, although this was not penalised in this session.

(f) Here again some candidates confused Discharge with Velocity but most recognised there would be an increase. Processes were not well understood. Examiners were looking for references to process changes such as increased erosion and transportation; too many candidates referred to width or depth changes.

(g) (i) Not many candidates could provide new ideas to improve the experiment other than repeating it several times or using more sites. Some suggested measuring it after a storm, which had just been done in (f); others suggested changing some of the stream characteristics! A few recognised the worth of measuring it in a different season and could explain why; some also suggested a different stream for comparison or measuring one of the streams where no tributaries were added.

(ii) In this Paper conclusions to investigations should refer back to the hypothesis being tested. Not all candidates realised this and gave general conclusions about the experiment and how to improve it. Those that did understand this could agree that the hypothesis was correct and then repeat or rewrite the statement. Unfortunately candidates who did not give the correct hypothesis at (a) may have agreed with it and repeated the incorrect statement.

Question 2

(a) Candidates who read the question carefully did well on this referring to affluence, longer holidays and specific increased attractions as reasons for the growth in worldwide tourism. Some gave the advantages of tourism rather than reasons for growth. A significant minority of candidates gave reasons for a rise in population growth in the last 40 years i.e. high birth rates, immigration. Reading the question carefully would have prevented this.

(b) (i) Once again candidates did well if they read the question. This referred to **Question 1** only in the questionnaire given which was "*Were you born in this coastal town?"* – useful to identify migrants. Too many candidates referred to the country/Spain and tourists which is not the purpose of the first question.

(ii) Candidates did well with advantages i.e. access, reliable - but less so with disadvantages although those that referred to privacy issues/illiteracy were credited. Less than expected mentioned the issue of "*bias"* with only parents at an international school being asked.

(c)(i) To gain the mark for the Graph Title candidates had to refer to two features of the g… just gave vague titles like "*A Graph of Migration"* or made the mistake of referring to *"… in Spain"* rather than the coastal town. A number referred to Age Groups instead of L… Residency which not only invalidated the title mark but also affected their response in (ii). … all candidates could plot the three bar graphs and shade them correctly. A few did not plot them … the left side of the pairings, though.

(ii) Many identified that most/69% were born in the town however answers were spoilt by constant reference to ages or age-groups or young/old instead of Length of Residency. Those that understood the graph usually scored all three marks here.

(d)(i) Careful plotting of 3 mm and 1 mm widths yielded two marks for most candidates however some of the 1 mm lines for Thailand were too thin. A small number of candidates did not attempt what should have been a straightforward piece of graph work.

(ii) The perception of Europe from a number of Centres in Africa was of some concern. Reasons given for migration to Spain included wars, poverty, natural disasters, hunger and disease in other European countries. A number also referred to visiting Spain and reasons for tourism when the question was about migration i.e. to live there. Centres with a more accurate perception of Europe and the EU did refer to access, similar cultures and relative costs. A number assumed the language was the same in European countries!

(iii) The hypothesis referred to here was the one at the start of **Question 2** on page 6. Many candidates did well agreeing with the hypothesis and giving reasons relating to countries being close to Spain and supporting this with evidence and data. A small number referred to the hypothesis in **Question 1** and others to the graph on page 8. Improvements were well done with suggestions to widen the population sample or ask more questions. Some suggested a random or systematic sample as an improvement but, without a reason, it was difficult to see how either would improve the investigation

(e)(i) Most candidates understood secondary data as that which had been found/researched by other people; a few used the vague expression "*second-hand*" data. The two examples given often covered books and newspapers, radio and TV. Although credited it would be better if two different types of examples were given in future examinations. The vague word *"media"* was often paired with an aspect of the media so could not count as a second example. The Internet was not allowed as the question asked for "…*two other examples…"*

(ii) Most candidates could select two pull factors from the passage. A number underlined most of the passage or the "*small fishing and market town*". If the first two underlined were wrong, credit was not given for further underlining.

(iii) The key to this question was the statement *"…why people moved to live in the town?"* Candidates who did not read this provided many questions, none of which were relevant to this request. The question also required their question to be written in the style of **Question 2** on the questionnaire - some just copied **Question 2**; others did not give enough choices or put the boxes on the right-hand-side as required.

GEOGRAPHY

Paper 0460/05

Computer Based Alternative to Coursework

General comments

Generally candidates coped well with this examination/simulation. Candidates seemed to find the questions which involved matching up, labelling and completing graphs relatively easy (the Computer marked sections). However, with the answers that required a description or an explanation (the Examiner marked sections) more detail, depth and use of data was often required.

The simulation was based on the impact of a sports stadium. It included a study of the traffic, noise, damage litter and sphere of influence.

Comments on specific questions

Question 1

This question was aimed at 'setting the scene' for the location of the simulation. Candidates had to interpret the location map. Most candidates answered this quite well, the majority getting two or three marks.

Question 2

This question was to get the candidates to think about the value of land in relation to the distance from the CBD. Two thirds of the candidates answered this correctly.

Question 3

This question was to identify the reasons for measuring traffic congestion at particular times. This was well answered with most candidates choosing the correct answer.

Question 4

This question was to complete the bar graph showing traffic congestion. Again, this was very well answered with candidates completing the bars accurately.

Question 5

This question was to describe traffic congestion patterns. Most candidates answered this quite well, the majority getting two or three marks.

Question 6

This question was to suggest practical improvements to the traffic congestion data collection methods. This question was not particularly well answered. Candidates' answers needed to be more specific.

Question 7

This question was to get the candidates to think about traffic congestion and how the use of public transport would affect it. Most candidates answered this quite well, understanding that there would be less traffic and that management would be easier and gaining two marks.

Question 8

This question was to complete the radar graphs for the environmental survey. This was well answe most candidates completing the graphs accurately.

Question 9

This question was to study a photograph to look for evidence of environmental damage. This was well answered with most candidates gaining maximum marks.

Question 10

This question was to make a comparison of the environmental quality, before and after the match. Most of the candidates did this well, gaining full marks. Weaker candidates seemed to find the choices given rather similar to each other.

Question 11

This question was to choose a conclusion for hypothesis B. Candidates found this rather difficult and only half of the candidates got the correct answer.

Question 12

This question was to design a recording sheet for surveying pedestrians. Most candidates gained two or three marks on this question. Most commonly, marks were lost by not including the 'tally marks' and 'student name'.

Question 13

This question was to write some instructions to complete the pedestrian survey. Some candidates answered this well, gaining mostly three marks. However, some candidates incorrectly wrote about taking photographs and interviewing pedestrians.

Question 14

This question was to produce bar graphs to show the results of the questionnaire. Again, this was very well answered with candidates completing the bars accurately.

Question 15

This question was to write a conclusion to hypothesis C. This was reasonably well answered but few gained high (four or five) marks. Marks were lost by not including data in answers or not making a clear decision.

Question 16

This question was to classify data sources. About half of the candidates gained full marks but some were unsure of the difference.

Question 17

This question was analysing an employment data pie chart. Again, about half of the candidates gained full marks but some were unsure of the employment sectors.

Question 18

This question was to identify the meaning of the term 'inconclusive' in relation to evidence. Most candidates answered this correctly.

Question 19

This question was concerned with the positive and negative impacts of the sports stadium businesses. Generally, this was quite well answered but some candidates were unsure where to plac work is very seasonal' label.

Question 20

This question was concerned with measuring the distance and working out the direction of the settlements from the hotel. Some candidates had some difficulty with this question –mainly because of the direction of the north arrow. Most candidates gained two marks.

Question 21

This question was concerned with choosing the correct definition for 'sphere of influence'. Most candidates chose the correct definition but some clearly did not know and chose the 'influence of the local area' answer, possibly because it had the word 'influence' in it.

Question 22

This question was concerned with describing and explaining the sphere of influence of the hotel. Candidates found this question quite difficult. Most candidates only gained a maximum of two or three marks. Answers needed to be more specific, using directions and distance, for example.

Question 23

This question was concerned with whether the map and hypothesis C were linked. Many candidates found this question difficult and very few gained full marks.