GEOGRAPHY

| Paper 2217/01 |
| 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 the 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 than death 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 candidates adequately described the characteristic features of Victorian, terraced houses, along with the associated gridiron street pattern, and there were many value judgements, rather than description 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 Burton Joyce commute to work in the city, loss of farmland around Papplewick village due to new housing 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 looking at other opportunities provided by coasts.

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 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 specific details allowing access to maximum marks, particularly those who chose an example of a volcano or earthquake. Whilst there were some good examples of drought (e.g. Darfur), generally those who chose drought wrote simple statements (particularly about the causes) and rarely added the place specific detail included by those who chose an earthquake or volcano. Weak candidates had 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 almost 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:

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

Level 2   (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'.

Level 3   (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 differentiated well, 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:

> *Level 1   (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.)*

Level 2   (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 producing smoke by burning fossil fuels etc.)

Level 3   (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

General comments

Candidates were entered from 40 Centres across 11 countries.

In Section A, **Question 3** and **Question 5** were answered particularly well by many candidates while **Question 2** and **Question 4** were found to be more challenging. **Question 1** allowed good differentiation between candidates.

In Section B the majority chose to answer **Question 7**. A number of candidates started **Question 6** and then decided to delete their answers but those that went on to complete it usually achieved a good score. Only a couple of candidates made a rubric error in attempting to answer both **Question 6** and **Question 7**.

Centres are reminded that they should retain the map extract and photograph for use as teaching resources.

Comments on specific questions

Section A

Question 1

(a)   Candidates focused on the land-use aspect of the grid squares commonly scoring for sugar plantation and/or airstrip in **(i)** and woodland in **(ii)**. Some went on to comment on high land and steep slopes in 2247 but less pointed out the flat and low land of 2942. There were a few exceptionally good answers that pointed out the variations within the slopes of 2247 with comments such as "the SW facing slope is steeper than the SE facing slope".

(b)   Most candidates were looking in the correct square but some answered with the place name, "Johnson Mountain", rather than the specific feature, the church.

(c)   For the grid reference, either 273435 or 273436 were accepted as correct. Most of the candidates gave a grid reference in the correct square but the third and sixth figures were often inaccurate.

(d)   This was a difficult distance measurement due to the sinuous nature of the roads and also the need to determine the shortest route to the coast. Two options were permitted: in a SE direction to the road end in the mangrove swamp in 3039 or NE to the open water of Holland Bay. Most candidates selected to measure to the latter, but with a wide range of outcomes for the distance, some due to inaccurate measurement but some also due to incorrect use of the scale.

(e)   Candidates found it difficult to describe the distribution of settlement. Many wanted to name settlement patterns, but did not go beyond that, except to say that the linear pattern was "along the roads". A few mentioned that settlement was found "on cultivated land" and "near the coast in the north". Some candidates restricted themselves by considering only the area to the north of the Plaintain Garden River label which meant that they were only looking at the western edge of the extract.

(f)   This was done well. There were plenty of coastal features along the section of coastline under consideration and most candidates scored full marks with cliffs, bay, coral, beach and mangrove being the most likely features to attract comment. Weaker candidates concentrated on the coastal vegetation but only one mark was available for this.

(g)   This section gave good differentiation between the candidates. Stronger candidates were able to give detailed comparative descriptions and many pointed out that the A road route was straighter and flatter. However, many of the weaker candidates did not understand the question. A common misinterpretation was to compare Happy Grove to the crossroads.

Question 2

(a)   Candidates found it fairly straightforward to locate the areas of high cost housing next to the coast, public buildings and city centre. They usually related the low cost housing to the industrial areas.

(b)   This part introduced the photographs of Mohammad Nagar. Consequently many candidates went on to describe the area, rather than the location of the area, and wrote descriptions of the photographs, rather than locating Mohammad Nagar at 11-15 km N of the city centre, on the edge of the city.

(c)   Candidates found it easier to describe the disadvantages of living in Mohammad Nagar but many pointed out the proximity of jobs in the industrial area. Lots of candidates made comments about health and hygiene but these were usually based on assumptions, since they did not link their comments to evidence from the resources, such as the waste in the street, or the poor drainage, apparent on Photograph A.

Question 3

(a)   The majority of candidates were able to correctly state Africa's percentage of world oil reserves (6.4%) and world oil consumption (3.6%).

(b)   The majority of candidates correctly listed "Asia, United States, Western Europe and Australasia" as areas with a higher percentage of oil consumption than their percentage of reserves. "Others" was accepted as an alternative. A small number of candidates listed only two areas. This illustrates the point that, although the number of marks allocated to a question is often a useful guideline for what might be required in the answer, it should not be relied upon.

(c)   Most candidates gave an accurate compass direction and many were also able to describe three benefits and three problems that the pipeline would bring. Good use was made of the resource in Fig. 3B and most candidates found plenty to write about. Many candidates scored full marks. Those that did not had often repeated the same idea, expressed in a different way, for two of their points.

Question 4

(a)   The majority of candidates correctly identified the rainy season as May, June, July, August and September.

(b)   Most candidates recognised that Kano's rainfall total for August exceeded 300 mm and estimates between 305 mm and 315 mm were acceptable. However, some appeared to be less familiar with this type of graph. Two common errors were reading the bar against the temperature scale and using the line with the precipitation scale.

(c)   Many candidates made a correct measurement from Kano to the coast, though some misread the question and gave the direction instead.

(d)   Some candidates were very knowledgeable here, referring to the NE trade winds or the Harmattan. Others pointed out that the winds came from the desert in the north and some related this to the fact that the ITF had moved south. Weaker candidates did not go beyond copying the words "hot, dry winds in winter" straight from the map.

(e)   Candidates found this part more difficult. They knew that the wet winds were relevant but struggled to express their ideas clearly.

(f)   Again candidates found this part difficult. Most answers in **(i)** commented on the proximity of the desert which was not relevant. There was also a weakness in the understanding of the terms "cause" and "effects" since some candidates were still discussing the causes in their response to **(ii)**.

Question 5

(a) There were plenty of possible answers here and many candidates scored full marks. In **(i)** some made the question more difficult for themselves by selecting something from each of the days in Fig. 5. Nevertheless it was still possible to gain full marks from this approach. Some of the weaker candidates just copied the key to Fig. 6 and it was clear that some did not understand the word "game" in this context. In **(ii)** some candidates chose two attractions and gave only one reason for each.

(b) Most candidates suggested that tourism would bring jobs which would benefit the people of Kenya. However the second point was often rather vague. Many suggested there would be "more money" but did not suggest how this might be of benefit to the Kenyan people.

(c) Most candidates realised that tourists may stop coming and thus, following on from their thinking in **(b)**, there would be job losses. Some focused more on why tourists would stop coming and thus did not really get onto the problems that this would cause.

Section B

Comments on specific questions

Question 6

(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 *Time of Day*, *Date*. Many candidates stated what they were measuring such as *Width* and *Depth* or features of 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 to 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 7

(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 graph – some just gave vague titles like "*A Graph of Migration*" or made the mistake of referring to "*…those born in Spain*" rather than the coastal town. A number referred to Age Groups instead of Length of Residency which not only invalidated the title mark but also affected their response in (ii). Nearly all candidates could plot the three bar graphs and shade them correctly. A few did not plot them on 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.