GEOGRAPHY

Paper 0460/01

Paper 1

General comments

This proved to be a very successful examination paper, in that it gave students of all abilities the opportunity to demonstrate what they knew and could do. A full spread of marks was achieved, from single figures to near maximum marks. The best candidates wrote some fantastic Geography, proving that they had been very well taught and had a thorough understanding of the subject matter. They were able to quote relevant case study material in good detail, using many examples which were local and familiar to them. Weaker candidates were able to make good use of all of the stimulus material which was given to them. Where their Geographical knowledge may have been lacking they were able to pick up marks with their Geographical skills. There was a real improvement seen in terms of interpreting graphs and maps. There was, however, a lot of evidence that candidates did not plan their time properly, spending too much time on the first question attempted, leaving themselves rushed in subsequent questions.

As the marking period progressed, it was clear that those Centres who have been entering candidates for this examination for a while had an advantage, in that they have experience in knowing what the Examiners were looking for in the responses. We have seen some Centres progressively improve each examination session. New Centres are again urged to study past examination papers, the published mark schemes and the Examiners report. These contain a wealth of invaluable information which will enable candidates in these Centres to improve their marks next time.

However, as always in reports such as this, it is useful to emphasise the general advice, given in previous Examiner reports, which should be given to candidates:

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

(b) Read the entire question carefully before beginning an answer. Decide which section requires which information, thereby avoiding repetition of answers and the time that is wasted. You will not gain double credit for saying the same thing twice. Each question has been carefully prepared to test different parts of the syllabus.

(c) Take careful note of the command words so that answers are always relevant to the question. Highlighting command words on the question paper is a useful strategy; however, candidates must be familiar with their meanings, something which can only be achieved by the use of past questions and mark schemes in preparation for the examination.

(d) Use the mark allocation as a guide to the amount of detail or number of responses required. Be aware of timing and 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. The inclusion of irrelevant materials is self penalising, in terms of the time which is wasted. The case studies are often used as an opportunity to `write as much as I know about….` and this is not helpful to candidates. At best they waste valuable time, at worst they overlook what the real task is and their marks suffer.

(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 to give case studies authenticity.

(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. Wherever possible use statistics to back up an answer, but aim to interpret them and add comment rather than simply listing figures read from a table or graph.

In terms of their administration of the examination, Centres should take careful note of the following points:

(a) Invigilators should ask candidates to write the numbers of their chosen three questions on their first answer sheet on the cover of the answer booklet which they use. This is a useful time to remind candidates only to answer three questions, rather than all six. There are too many candidates who do not follow this simple instruction and answer all six questions. They cannot benefit from such an approach as time will not be sufficient to write good quality answers to questions. In November 2008 fewer candidates attempted all questions than before.

(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

This was the most popular question. The results were varied. Candidates had a lot of graphical information to absorb and problems quickly became evident.

(a) (i) The economically active are the working population. Almost everyone got this correct even though answers were many and varied.

(ii) The greater percentage of elderly as evidenced by the wider top to the pyramid was appreciated by most. However, in B, birth rate was often confused with young dependents. Some failed to give comparative answers in one or both parts. It would be very much appreciated by Examiners if candidates wrote about comparisons, such as “the pyramid had a wider base”, rather than writing two separate sections and then leaving the Examiner to draw out the comparisons.

(iii) Most candidates could get at least one mark by reference to “more young dependents in Indonesia”, some calculated totals correctly but few scored the third mark. Lots of candidates gave figures for individual age ranges rather than total young dependents.

(iv) Most answered with reference to the high birth rates in the LEDCs and this was a perfectly appropriate approach. Candidates should remember that extra credit can be awarded for developing ideas, so should be discouraged from simply writing a list.

(b) (i) Most were able to make some sort of comparison, and the question seemed to differentiate well, with a reasonable number scoring the full three marks. Marks were lost however through inaccurate figures. Many candidates used end figures i.e. 2025, but the question limited the time period to 1970-2005.

(ii) Here, too many candidates involved themselves with a contrast between Indonesia and Japan. The question was designed simply to provoke reasons for the over 65s to increase. Good candidates pointed to longer life expectancy, better treatment of disease and improved healthcare facilities. Many were aware of the importance of improved diet, access to a clean water supply and improved sanitation. A significant number did not understand the question.

(c) Too many candidates decided that this question concerned overpopulation. As a result, there were many answers which covered China's One Child Policy. Few answers were seen which scored full marks, though most candidates could score something provided they understood "concern". There were lots of good developed references to increased dependency and lack of workers.

Question 2

(a) (i) The vast majority correctly identified model A.

(ii) Most associated X with the CBD but fewer identified Y as the industrial zone.

(iii) Few failed to gain credit; most achieved 1 or 2 out of the 4 marks which were available. Good answers concentrated on the land use models themselves. For example, they both had a CBD in the middle; both had an industrial belt flanking a main road. Squatter settlements were present in A but not in B and so on. There were lots of references to the quantity of specific land uses rather than the pattern / distribution within the model.

(b) (i) This was done well with many gaining full credit. Connection with the main roads such as the Pan-American Highway, the rivers and the highland margins were the main components of a good answer. Fewer commented on the clustering in the north and in Cono Sur to the south. There were some inaccuracies –"outside the CBD" instead of "the outer edge of the built up area", but, on the whole, a good attempt.

(ii) Far too many candidates here referring to positives (e.g. near river for water supply) rather than showing understanding that squatter settlements occupy land which is not required for other uses or of poor quality. Lots of references also to agriculture and `hiding from the authorities in the hills`. Others tried to account for the existence of squatter settlements rather than answering the question which had been set.

(iii) Better responses generally than **(ii)**. Some good details of rural-urban migration, and pull factors, such as jobs, along with references to being unable to afford alternative housing. Also some good references to lack of investment in housing by the authorities.

(c) Most candidates could score at least at Level 1, though many progressed into Level 2 with some simple development of their responses. There were some Level 3 answers gaining full marks which were impressive, especially if local examples were used. There were some superb answers relating to Rio de Janeiro and the favelas found there. The self help schemes were carefully detailed and there was considerable knowledge, not only of simple electricity and water provision, but also the ambitious Rocinha development.

Section B

Question 3

(a) (i) The vast majority correctly named the Stevenson Screen.

(ii) Most identified the thermometer and the barometer.

(iii) Many candidates knew the reasoning behind A, B and C. It was clear that candidates had been well taught and had done their revision carefully.

(iv) This question differentiated well, with full marks being scored by a fair number, though 1 or 2 was the norm. Most scored a mark for referring to `open space`, often repeating it in a different way such as `away from trees`. Some gave good reason for this. Fewer references were made to `on grass` or `fenced compound` although some candidates gave the reasoning `to keep animals out`.

(b) (i) Generally well answered, either by reference to trends or by use of figures.

(ii) As **(i),** most answers scored well. However, some candidates ignored the two times and just generally described trends over the whole time period shown. Many accurate figures were given to support answers. Only wind direction was troublesome. Most could not interpret degrees in terms of direction.

(c) Most candidates understood what they had to do and wrote something about effects of drought. A number however read drought as `flood`, and a few tried to write about causes, usually referring to global warming. Some wrote at length about impacts of high temperatures, rather than lack of water. Well prepared candidates realised the importance of developing their answers, but from other Centres points made were brief and simple. There were good answers on the Sahel, where many examined the link between lower than average rainfall and resulting low crop yields which would cause malnutrition or starvation. Other good answers made reference to MEDCs. Candidates stressed problems such as shortages of irrigation water, increased costs of winter feed, water rationing and so on. Parts of Australia and New Zealand were quoted as relevant case studies.

Question 4

(a) (i) The river with the largest volume was 7C, and whilst this was the most common answer given, a significant number of candidates got it wrong.

(ii) Many candidates did not make a comparison and some failed to confine the differences to valley shape and referred to other features such as alluvium. Good candidates noted the steeper valley sides in A and As V shaped cross section, compared with the more open or “U” shape of B.

(iii) Well prepared candidates gained three easy marks here.

(iv) This question differentiated the candidates well. Some excellent descriptions were given, often accompanied by simple diagrams. Unfortunately, other candidates mixed up erosion and transportation and / or just listed the names of the processes.

(b) (i) Largely disappointing responses were given, with few full mark answers seen. Many candidates simply wrote what they knew about waterfalls and their formation rather than what they could see in the photograph.

(ii) Benefits were generally well done but not problems. It was rare for any candidate to score a mark on problems, with all sorts of erroneous answers about flooding, erosion, dying and disadvantages of tourism!

(c) The responses given to this question were generally weak, with poor case studies chosen. Some made basic reference to “heavy rainfall” but very few candidates developed themes connected with process. Specific examples were rare. There was often a tendency to be sidetracked on to the effects of the flood rather than the causes.

The Lynmouth flood of 1952 would have been a good example to quote here. The storm over Exmoor lasted 14 hours during which time 230 mm of rain fell. The impermeable nature of the catchment and the steep slopes led to the rapid transmission of water into the River Lyn.

Section 3

Question 5

(a) (i) This question was usually answered correctly, although a significant minority failed to include “millions” with the 680.

(ii) Europe and Asia-Pacific were commonly identified correctly.

(iii) A range of sound answers were evident, with many candidates scoring 2 or 3 marks, typically by reference to increased affluence, increased leisure time and the development of specified tourist facilities. A few candidates confined their response to the advantages of tourism to an area, which did not answer the question so failed to earn marks.

(b) (i) Virtually all of the candidates who chose to answer this question scored well in this part. The advantages of tourism were clearly understood.

(ii) The problems which international tourism cause for people who live on Mahé were less well understood. Pollution came to the fore here, especially littering and also noise. An adverse cultural impact and crime were also mentioned. However, the seasonal nature of tourist based employment with its low pay and negligible career prospects were rarely mentioned. Even the best candidates rarely gained the fourth mark available, as no reference was made to the information sources given.

(iii) In this question the candidates were specifically asked to refer to Fig. 9 and photographs B, C and D, which they did with skill. There was a wide range of acceptable answers which allowed many candidates to achieve maximum marks. With the wealth of visual resources given, vague answers were not seen as creditworthy. Candidates needed to be specific, for example "sandy beaches" and "clear sea" rather than just "beach and sea".

(c) Unfortunately, candidates who had scored well throughout the rest of the question failed to score as well in this part, largely because they did not answer the question posed. The crucial thing was to understand that the question referred to "….maintain, improve and conserve the quality of the environment". Too many candidates did not move beyond the idea of "putting in more litter bins" or "cleaning the beach". A few candidates, who live in tourist areas, produced some amazing answers, with a huge amount of local detail. Writing from personal knowledge always provides an advantage and usually a better response.

The most common error with this question was to write about what tourist attractions were available in an area, or what was being done to attract increasing numbers of tourists to the area.

Question 6

(a) (i) There were a few good definitions given by those candidates who recognised that fossil fuels are derived from plants / animals. However, too many candidates failed to score in this question because they either gave examples of fossil fuels or they said that they were non renewable energy sources from underground.

(ii) Most correctly identified Asia/Pacific and Africa although the other continents were also widely quoted by candidates who did not understand how divided bar graphs work.

(iii) This question was universally done very well, with the vast majority of candidates scoring maximum marks.

(iv) Generally disappointing answers were given to this question, especially in contrast to the previous part. Good candidates recognised the availability of resources, like oil in the Middle East. The level of development was an important factor explaining why fuelwood is so important in many LEDCs. Others made reference to Government policies e.g. Nuclear power being banned in New Zealand. Weaker candidates gave vague answers which largely failed to earn credit, and some did not understand the question and either wrote about the importance of finding other sources of energy when fossil fuels run out, or what should be done to combat the impacts of global warming.

(b) (i) Few candidates simply copied straight from the source without showing signs of understanding. There were some excellent references to ideas such as increased production / transport costs and the fact that the increased cost of imports will be likely to have significant negative impacts on economic growth.

(ii) For good candidates this was a straightforward question. Oil spillages and oil combustion producing air pollution, lead to a whole host of environmental problems, which were well understood by many. Alaska was used very well as a case study. There was some evidence of some candidates beginning to run short of time by this point. Some candidates who had been developing their answers well ceased doing so here.

(c) Generally this case study was not well understood so the question was poorly answered. Many candidates confined themselves to Level 1 by simply listing the different kinds of renewable energy which are available. Where details of a specific scheme were given, candidates had to be very careful to use their knowledge to answer this specific question. The advantages and disadvantages of a particular scheme were not asked for here. Those candidates who chose to write about New Zealand had a huge amount of relevant information at their fingertips and wrote some superb responses.

GEOGRAPHY

Paper 0460/02
Paper 2

General comments

Some excellent scripts were received, with many candidates achieving more than 50 marks out of 60. Nevertheless, all candidates found certain aspects of the mapwork question demanding and marks of over 56 were rare. The question/answer booklet format for this paper is now well established and is providing weaker candidates with more guidance on how to structure their answers. Most candidates found the paper accessible and there were very few poor scripts or incomplete scripts. With the exception of **Question 1** and **Question 3 (a) (iv)**, full marks were common on all of the questions. Candidates found **Question 5** relatively straightforward but otherwise there was a reasonable balance to the responses to the individual questions. In general, candidates' skills on the various graphical questions were very good, with accurate plotting and labelling.

Question 1

Part (a) was intended to be a fairly easy opener, testing candidates' abilities to locate features on the map and to use the key. A large number of candidates failed to score full marks, usually by failing to identify the *cultivation and other plantation* in (iv) or the *Main B* road in (vi). In **part (b)**, the majority of candidates were able to identify the flow direction of the River Sèche as *west to east* and the shape of the river's course as *meandering*. The distance measurement was relatively difficult and therefore Examiners gave credit to answers within a relatively wide tolerance of 3 200 to 3 800 metres; nevertheless there were many incorrect answers. In plotting positions on the cross section in **part (c)**, many candidates gave extremely accurate answers. A disappointingly large number of candidates failed to use arrows which pointed clearly to the topographic profile; these candidates were penalised. The response to **part (d)** was very variable. Many candidates scored full marks but others scored just 1 mark out of 4. There was no discernible pattern to the correct and incorrect points within the part of the question. Answers to **part (e)** were disappointing with full marks rarely scored and many candidates scoring no marks. Generally, candidates did not refer to the natural harbour, sheltered bay, the gap in the reef or the route focus. They occasionally referred to export of sugar but often wrote in very general terms without reference to map evidence.

Question 2

Part (a) produced a very varied response. Many candidates scored full marks but the weaker candidates often only scored the mark for (ii), a place where plates are moving towards each other, where either *3* or *5* were given credit. Answers to **part (b)** were generally good. In (i), candidates quoted a variety of volcanic hazards from Fig. 4 such as pyroclastic flows, ash, mud and collapse of the lava dome. In (ii), candidates referred to converging plates, the plate margin and subduction. Melting within the subduction zone was generally not referred to. Some candidates wrote in general terms without reference to Fig. 3 and others referred, irrelevantly, to Fig. 4.

Question 3

In **part (a)(i)**, many candidates plotted the temperature and rainfall for October very accurately, completing the line and bar graphs. Weaker candidates sometimes failed to attempt this part of the question. In **parts (a)(ii)** and **(iii)**, the response was variable but the majority correctly recognised that the climate graph was from the southern hemisphere and correctly calculated the annual temperature range of 12^0C. There were very few correct answers to **part (a)(iv)**. Candidates noticed that high temperatures coincided with low rainfall but very few went on to explain that it is the lack of cloud cover which links the two. In **part (b)**, credit was given to candidates who referred to the grass and trees (or savanna), the fact that the grass was yellow, in tufts and covering the ground only sparsely, and that the trees were scattered, with little foliage, umbrella shaped, and widely spaced. Many candidates easily scored these points. Others failed to follow the instruction to "…. refer only to features seen in the photograph.", and wrote about small leaves, thorns and the roots.

Question 4

Candidates were generally able to complete the bar graphs very well, although, as in **Question 3(b)(i)**, weaker candidates sometimes omitted the question. In **part (a)(ii)**, candidates generally noted the decrease in numbers moving for asylum and the overall increase in economic migrants. Some candidates compared the numbers moving for the two reasons and failed to answer the question. In **part (a)(ii)**, the other reasons given for moving were often natural disasters such as drought or famine, education or medical treatment. In **part (b)(i)**, the majority of candidates correctly gave the percentage of migrants from the Americas as 25 and the percentage from Africa as 12. The completion of the pie chart in **part (b)(ii)** was excellent, with many accurate answers received. The only criticism is that a small minority of candidates failed to follow the instruction to use the key provided.

Question 5

Many candidates were able to score full marks for this question. In **part (e)**, where candidates were required to suggest two means of reducing air pollution in cities, Examiners accepted a wide variety of correct responses. The most common of these were schemes to limit the number of vehicles in cities such as car pooling, developments in vehicle designs such as catalytic converters, improving the servicing of vehicles, development of public transport, stopping burning and open fires, the use of green fuels and legislation to control emissions by industry. There was some confusion with damage to the ozone layer, global warming and sustainable/renewable fuels but answers were generally good.

Question 6

In **part (a)**, Examiners accepted answers to the height difference in the area of between 850 and 950 metres. The majority of candidates were able to produce answers within this range and, encouragingly, quoted the units in their answers. **Part (b)** presented candidates with a very unfamiliar style of presentation of information but they coped very well. The description of, and reasons for, the location of the villages quoted by candidates were proximity to cultivated land, nearness to tracks, rivers and springs and exposure to sunshine. Less frequently quoted were gentle slopes, north facing aspect and steep slopes for defence. Examiners gave credit for points quoted as description of the location and for reasoning. Candidates often failed to appreciate the scale of Figs 9 and 10 and the River Senqunyane was often quoted as an influence despite the fact that it is 300 – 400 metres below the altitude of the villages. Candidates coped well with **part (c)**, generally saying that land is unused because it is too high, steep, inaccessible or without water supply.

GEOGRAPHY

Paper 0460/04
Alternative to Coursework

General comments

Most candidates found this examination accessible; even the weather and climate question was tackled well such that marks were fairly equal between the two questions. There were some excellent performances from individual candidates with a substantial number scoring over 40/60 marks and a significant number gaining more than 50/60 marks. Few scored less than 25/60.

There is less need for general advice on areas for improvement this year . As there are no choices to make, it is difficult to miss sections out, and there were no reports of time issues as the booklet format does not allow or encourage over-writing of sub-sections. Most points for teachers to bear in mind when preparing candidates for future Paper 4 questions relate to misunderstanding or ignoring command words, although there were some topics this year which were universally not well answered. These included systematic sampling, sphere of influence and range, and relief rainfall.

Command words tell the candidate exactly what is required. Too often they appear to be ignored as irrelevant. For example ***Q*uestion 1(f)** requested a conclusion regarding the Aim and two Hypotheses but candidates often ignored the Aim and referred to only one or no hypotheses. **Question 2d (iii)** required candidates to ***"Describe the pattern..."*** but far too many just listed the number of days wind blew on the wind rose.

Comments on specific questions

Question 1

(a) (i) This was done well by virtually all candidates. Occasionally candidates chose high for the first space. A small number chose their own words but these were extremely rare.

(b) (i) It was surprising how many variations in layout were provided. The best candidates asked a question about transport used, gave at least three realistic choices and gave boxes for ticks by either the questioner or the questionee or asked them to indicate their choice e.g. underlining. Weaker candidates asked irrelevant questions e.g. where do you live? Some gave unrealistic choices (e.g. boat, train or planes) and others filled in the questionnaire. The biggest shortcoming was not asking a question as stated in the stem.

(ii) A disappointing response here. The majority of candidates did not clearly indicate what systematic sampling was; reference to a pattern or order needs to be qualified as random sampling could fit these weak definitions too. The best answers referred to such terms as "every 5th person" or "every 10th house". A few referred to asking questions on a questionnaire in a particular order which was a misreading of what was required.

(iii) Credit here for advantages depended on understanding what systematic sampling was. Good candidates explained how it avoided bias and why it was easy and quick. Weak candidates just stated it was easier without explaining why. A number pursued the questionnaire slant e.g. it was quick if carried out in the street.

(c) Apart from a very small number of candidates, the bar graph was completed for full marks by virtually all.

(d) (i) Candidates who gave between 2-2.5 km as an answer were not providing the precision expected at this level but just stating the distance of the two outer rings. The bottom C on the chart is the maximum range – acceptable distances were 2.2/2.3 km.

(ii) Candidates scored well here. Most measured distance carefully and referred to patterns e.g. linear for buses, scattered for cars. Those that did not measure gave weak descriptions with no distances e.g. "from everywhere". Again measurements were not always made especially for cars and buses and the nearest ring distances were used with weak answers.

(iii) Explaining the patterns gave various responses. The best candidates referred to issues of cost, health and avoiding car parking/congestion for walkers or bikers; distance and time were also mentioned for those using cars. The access to bus routes was referred to. Weak candidates just said walking or biking was easier or more convenient or not far to walk,without elaborating on the reasons behind these statements.

(e) (i) For reasons that still remain a mystery, far too many candidates missed this out completely; maybe its location at the bottom of the paper did not help. Only a small minority outlined a sphere of influence which went around the outside of the C positions and came in substantially on the west to at least the 4 km ring. Some did the latter but left the 10 km ring as the edge of the sphere! Some just drew a complete circle at 9.7 km. This is clearly not well understood and had some impact on following questions.

(ii) Candidates either gave reasons related to the Sports Hall or other more generic reasons which were acceptable as the question said 'any service'. Most recognised that lack of income or access could be a reason; lack of settlements due to mountains or the sea were possibilities. Another sports centre was a good response. An answer such as "nobody liked sport", given the size of the area, was unlikely!

(f) This was well done. Candidates needed to read the question carefully. It required a judgement on both hypotheses, a decision as to which service had the greater range or sphere of influence with two reasons supported by data from the resources. Many candidates did all of this. Others only referred to one or no hypotheses. Some gave no data at all. A few thought the market hall had the biggest range because it had more visitors. The sphere of influence and range are areas for teachers to work on in future.

Question 2

(a) (i) Most candidates gained a mark here suggesting location in the ground (though not underground) or not on a post or reference to funnels and shape or measurements on the side. Candidates needed to be careful when they refer to "it" to make sure it was clear which instrument they meant.

(ii) The vast majority did get the order 2,1,4,3, correct though a few were confused.

(iii) This was not done well. Too many suggested line or scatter graphs and suggested rainfall and wind direction on the axes. Others suggested a three-way graph for rainfall, wind direction and date or month. The best candidates suggested bar chart or histogram with rainfall and time on the axes.

(b) Answers in general were too vague here. The arrow "shows where the wind is blowing" without adding to or from is unclear; the letters represent the compass directions not "south" because the example is this; the vane is not on the roof "for more or stronger winds" but to avoid obstacles to get maximum exposure to wind; the paddle is not wide to "get an accurate reading" but to maximize surface area as it turns at the slightest wind to show the direction.

(c) This was disappointing. Almost all candidates could make reference to the presence of the sea and winds picking up moisture via evaporation, but it was only the minority that noted the height of the School at 400 m and linked this to an explanation of relief rainfall. Others referred to ocean currents, frontal rainfall and land cooling the winds, none of which were relevant to this example. Candidates must look carefully at the resource before starting their answers.

(d) (i) Too many candidates thought that the prevailing wind was the strongest wind or thought that it comes from the sea rather than the wind direction from which most wind comes during the year.

(ii) Pattern is an area for teachers to work on. The best candidates gave overall views such as "most winds are from the south-west and west; none from north- west or north-east" but too many just listed the number of days for each. Reading off what the graph shows is not describing a pattern. A number also wrote about the wind directions in the reverse e.g. most going to the south-west.

(e) (i) Most candidates marked in the plots in the correct place and on the SW line. Weak candidates marked two or three plots correctly then another in the 11 or 13 region! A number put all 4 on the 0 line which is inexplicable.

(ii) As with (d) (ii) the word "pattern" was not well understood. Some just stated the fact e.g. 10 mm from the north. The better candidates recognised there was "only one" reading in the north and it could be an anomaly; also that most rain was from the west and no rain came from the E/SW/S. These overall comparative judgements are part of describing a pattern; not description of individual situations.

(iii) Most candidates agreed with the hypothesis; it was difficult to see how any candidate could choose the other two options given the data on the graph but a number did.

(f) In comparison with similar questions in previous years this was well done. This may be because candidates were not asked to explain how their suggestions would improve the experiment. Suggestions that were acceptable included extending the time, covering other seasons, using a traditional rain gauge and using more instruments at more sites. Using different instruments or measuring other parameters needed explanation in the context of the question. Less acceptable answers were unrealistic, such as measuring several times a day for two years

GEOGRAPHY

Paper 0460/05

Computer Based Alternative to Coursework

General comments

Generally candidates coped well with this examination/simulation but performance obviously varied between Centres. As in previous sessions, 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 urban land use. Two hypotheses were investigated. The first related to building height and land values in a city; the second related to shopping centres and the importance of the CBD.

There was a close correlation between marks gained on this paper and the marks that the same candidates gained on Paper 4. However, there were fewer than usual candidates for this paper, this session.

Comments on specific questions

Question 1

This question involved measuring the distance on the map between the two locations being investigated. Most candidates found this quite easy and answered it correctly (10.5km, with a tolerance of 0.5).

Question 2

This question was to get the candidates to match up the definitions with the terms relating to urban areas. Most candidates did quite well and all got at least two answers correct. All candidates knew that the CBD was the central area of the city with the most shops and offices and most knew that the suburbs were the outer residential area of the city. Some candidates lost marks as they did not know the difference between a brownfield site (land that has been built on before) and a greenfield site (land that has not been built on before).

Question 3

This question was to get the candidates to think about the different methods used to measure the height of buildings. This was reasonably well answered with most candidates gaining 2 marks. Almost all realised that asking the owner would be unreliable. Few candidates realised that it would be very difficult to use a clinometer in the centre of a city. Others seemed to think that the answer would be on the Internet, but the answer would be incorrect (rather than the fact that it would be unlikely that the height of the building would be on the Internet).

Question 4

This question involved the counting of the number of floors in two buildings and then working out the average number of floors for each location. Most candidates counted the number of floors correctly (7 floors and 23 floors) and most were able to work out the averages too (18 and 3.5).

Question 5

This question was to complete the bar graph for the data for the number of floors in the buildings. Most candidates found this quite easy and drew two correct sized bars (18 and 3.5). Most also labelled the y axis correctly, although some forgot to include the word ‘average’ along with ‘number of floors’.

Question 6

This question was to compare the number of floors in each location, by completing a passage. Most candidates found this easy and gained full marks for correctly identifying that building height was *lower* in the suburban area; the tallest building in the CBD had *27* floors but the tallest building in the suburban area had *7* floors.

Question 7

This question was to get the candidates to think about types of data. The candidates found this question rather difficult. Less than half of the candidates knew that collecting land value data from the Council offices was secondary data. A similar amount (but not always the same candidates) knew that looking in a newspaper and using the Internet was the same type of data.

Question 8

This question was to complete the bar graph for the data for the average land values for the two locations. Most candidates found this quite easy and drew two correct sized bars (41 and 3). However, some candidates drew a bar for 30, rather than 3. Most also typed in a correct title, although some answers were rather vague with 'land value', rather than 'land values at locations A and B'.

Question 9

This question was to describe the pattern shown by the graph drawn in the previous question. Most candidates gained only 1 mark here for identifying that the value of land increases/is higher in the city centre/CBD. However, some candidates did not gain the second mark as they did not expand on their statement or include some data to back it up. Some candidates gave reasons for the pattern, which was not asked for.

Question 10

This question involved writing a conclusion to the first hypothesis. Most candidates found this a little difficult and few gained full marks. Most candidates correctly supported the hypothesis that the buildings and land values were highest in the CBD. However, some did not include data in their answer (such as the highest building in the CBD had 27 floors, whereas the highest building in the suburban area had 7 floors). Some also did not write about building heights *and* land values.

Question 11

This question was concerned with the reasons for the variation in building heights and land values in the two areas. Some candidates found this question difficult. Some candidates were able to gain 1 mark by explaining about the demand for land (with it being higher in the CBD). However, few candidates were able to explain about the accessibility (with it being greater in the CBD) or the availability of space (with it being less in the CBD).

Question 12

This question was to identify the four different land-uses shown in the photograph. Most candidates found this quite easy and almost all candidates were able to do this correctly (with A for industry, B for residential, C for parkland and D for offices and shops).

Question 13

This question was to identify the different transport methods seen in the photograph. Most candidates seemed to find this task easy, gaining full marks for identifying E as boat/ship, F as train/rail and G as road/motorway.

Question 14

This question was to name and explain two methods of reducing traffic problems. There was a wide range of methods suggested and the question was reasonably well answered, with most candidates gaining at least 2 marks. However, some candidates did not explain their method properly. The most common suggestions

included park and ride schemes and improving public transport (both reducing the number of cars on the roads and therefore the amount of traffic congestion).

Question 15

This question was concerned with comparing the two shopping centres. The candidate responses varied for this question. Most gained marks for the comparison of the car parks (none visible for A and large for B). However, some candidates were not as confident with the comparison of the type of land the shopping centres were built on (brownfield for A and greenfield for B).

Question 16

This question was to explain the differences between the two shopping centres. Some candidates found the question difficult and only gained 1 mark. Some thought that the CBD shopping centre was larger because more people *lived* in the CBD, rather than it served more people. Most candidates seemed to understand that there was more traffic congestion in the CBD, so most people travelled by public transport. Only about a third of the candidates wrote that the CBD had more floors because of the higher land value

Question 17

This question involved designing a recording sheet to count the number of pedestrians. Many candidates found this task easy. They correctly placed the labels on the survey sheet with the name, title and date along the top (in any order), the time, tally and total on the top row (in this order only) and the times in order down the left hand side.

Question 18

This question involved the completion of the pedestrian count graph. Again, most candidates found this task easy and dragged the line to 67, 109, 398, 289 and 183 (with tolerance). The candidates also correctly completed the y axis label with 'number of pedestrians'.

Question 19

This question involved the comparison of the pedestrian count results for the CBD and the suburban centre. Most candidates could identify a difference (for example the CBD always has more pedestrians) and a similarity (for example the CBD and the suburban centre both have their highest and lowest pedestrian counts at the same time -11.00 and 15.00). However, most candidates did not include any data in their answer (such as the total pedestrians – 1046 in the CBD and 562 in the suburban centre).

Question 20

This question involved writing a conclusion to the second hypothesis. Most candidates found this a little difficult and few gained full marks. Most candidates correctly supported the hypothesis that the CBD is the most important and busiest shopping centre. However, some did not write in enough detail (they did not write about the importance *and* how busy it was) or include data in their answer. Good answers included the fact that the CBD was most important as it had more shops than the suburban centre (330 compared to 240) and was busiest because it had more pedestrians (1046 compared to 562).

Question 21

This question was asking for improvements to the investigation. The question was reasonably well answered with most candidates scoring 1 or 2 marks. Good answers included taking pedestrian counts in several parts of the shopping centre (not just in the middle) so that the figures are more representative; collecting more land value figures at each location so that the figures are more representative and measure the height of more buildings as 10 is not enough to come to a valid conclusion.