

GEOGRAPHY

Paper 0460/11

Paper 11

Key messages

- write only on the lines provided, not underneath the final line or elsewhere on the page (e.g. in any area of unused space at the bottom of a page)
- continue any answers which they do not have space for on the lined page(s) at the back of the booklet. If they do this they must indicate that they have done so (e.g. by writing `continued on Page XX`) and carefully write the number of the question at the beginning of the extra part of their answer. They should only use extra loose sheets of paper if this extra space has been used up.
- teachers should try to provide frequent opportunities to practice the use and interpretation of a variety of resources, including maps of various types, graphs, diagrams, extracts and photographs. Candidates need to study the resources carefully, using appropriate facts and statistics to back up an answer and interpreting them by making appropriate comments, rather than just copying them
- it is important to read questions carefully before starting a response
- use the mark allocations in brackets as a guide to the amount of detail or number of responses required, not devoting too much time to those questions worth few marks, but ensuring that those worth more marks are answered in sufficient detail.
- candidates should try to do as much practice from past papers as time allows to illustrate the importance of reading questions carefully, to ensure that answers are relevant. Teachers should share mark scheme principles with candidates and spend some time teaching exam technique, ensuring that candidates are fully conversant with the meaning of all command words used
- learn geographical vocabulary and to use this wherever possible in responses
- in questions where extended writing is required candidates should try to develop each point fully rather than writing long lists of simple, basic points. In case studies it is better to fully develop three ideas rather than write lists consisting of numerous simple points. Candidates should know how to use the mark allocations in brackets and the space provided in the examination booklet as a guide to the amount of detail or number of responses required.

General Comments:

Paper 11

This was the second May examination in which candidates used a combined question and answer booklet to write their answers. This format is now familiar to Centres, therefore in the vast majority of cases candidates made effective use of the space provided. It seems that this session the candidates managed the space more effectively. It was unusual to see many pages of extra writing as most seemed to use the additional page well. As question and answer booklets will continue to be the format used it is important that candidates are made aware of the key messages above.

A high number of candidates presented work of a very high standard which was pleasing to see. There were only a few candidates who did not fully comprehend what was required in the question. Candidates also generally made good use of the resources provided.

Many candidates made use of the additional pages at the end and all candidates should be encouraged to do this if they need extra space to write their answer rather than trying to squeeze it onto the same page when the lines have run out or at the sides of the page, as it becomes difficult to read (see above).

The examination paper gave a wide spread of marks allowing for positive achievement for all but also allowed for sufficient challenge for the most able.

There are still a few candidates who attempt all questions instead of following the rubric.

There are still a few candidates/Centre's who are learning case studies from previous mark schemes which is not really conducive to candidates' understanding of the geography involved. Candidates who tend to do well on case study questions are the ones that use local case studies because their knowledge and understanding really shines through and they score good Level 2 or high Level 3 marks. The use of local case studies that candidates can write about in detail with place specific information or even visit them should be encouraged as opposed to learning about distant case studies that have no/or very little relevance to candidate's everyday lives. It is recognised that this is not always possible for example when teaching about the impacts of a volcanic eruption a distant case study will probably have to be used – so teacher judgment is the key here to determining which case studies are most suited to their candidates and Centre. Also to select up to date examples that may have been in the news recently tend to offer a wealth of information and resources that can be used in the classroom when teaching about these examples/places which candidates will find more interesting and relevant and most importantly they will be able to write about them in detail in the examination.

The following items of general advice, which have been provided previously in this report, need to be given to future candidates who should:

- 1 make the choice of questions with care, ensuring that for each question they choose they have a named case study about which they can write in detail and with confidence.
- 2 answer the three chosen questions in order, starting with the one with which they are the most confident, and finishing with the one with which they are least confident (in case they run out of time).
- 3 highlight the command words and possibly other key words so that answers are always relevant to the question.
- 4 study the resources such as maps, photographs, graphs, diagrams and extracts carefully, using appropriate facts and statistics derived from resources to back up an answer and interpreting them by making appropriate comments, rather than just copying parts of them.

The following detailed comments for specific questions will focus upon candidates' strengths and weaknesses and are intended to help Centre's better prepare their candidates for future examinations.

Comments on specific questions:

Question 1

Question 1 was by far the most popular question selected by candidates.

- (a) (i)** The vast majority of candidates answered 'Ghana' correctly for 1 mark.
- (ii)** Many candidates calculated this successfully, or at least got one mark by showing some appropriate working out even if they did not go on to give a final figure as they did not seem to have access to a calculator in the exam. The most common error was to ignore 'natural' and calculate overall growth by adding net migration.
- (iii)** Generally well answered with the majority of candidates gaining full marks for correctly identifying: 'Spain, Ethiopia, Ethiopia'.
- (iv)** This question was high scoring and posed few problems for candidates. Many well expressed, relevant ideas were seen. However, there were typically some undeveloped references to 'living conditions' or 'education' that were not credited which meant that some marks were lost. All mark scheme ideas were seen.

- (b)(i)** Again, this was generally well answered, many referring to periods of increase and/or decrease, quoting statistics to score either 2 or 3 marks. Some inaccuracies were seen particularly with regard to dates that tended to spoil what otherwise were good answers.
- (ii)** Whilst many candidates gave good reasons for predicted population decline some did not describe the change and could only score a maximum of 4 marks. Most candidates focused on population decline resulting from reductions in birth rate in LEDCs and gave several acceptable reasons for this, whilst a few also referred to possible rising death rates. War, AIDS/HIV and drought/famine were acceptable ideas, however references to poor sanitation, hygiene, water supply for example missed the point of the question as they were reasons for the original high death rates and unlikely to cause an increase in them in the future.
- (c)** Varied answers were seen here, however most scored at least Level 1 for referring to a variety of pull and push factors, which were usually economic in nature. Mexico to USA was by far the most common case study however the brevity of some of the points made by many candidates was disappointing and resulted in many Level 1 answers as candidates failed to develop ideas to reach Level 2. Some of those who did however were able to add place specific detail or statistics to achieve full marks.

Question 2

This was another popular question selected by candidates.

- (a)(i)** This question was generally poorly answered with few candidates making the obvious comparative points. The majority of candidates scored just 1 mark here, some struggled to be accurate enough with their language and many preferred to describe in relation to urban or suburban areas rather than focusing on the differences between the housing shown in the photographs.
- (ii)** The majority of candidates were able to identify photograph 'D' and scored the mark.
- (iii)** The majority of candidates, but not all, could make at least one point to explain why redevelopment has taken place and, from more perceptive candidates there were some well thought answers, typically referring to old areas being in need of repair/renovation and/or the need for new housing, business development or transport networks. There were some excellent responses referring to the development of brownfield sites as opposed to further urban sprawl taking place. Most candidates were able to gain marks on this question.
- (iv)** Most candidates understood what was required here and wrote relevant answers at different levels of detail, thus this question provided good differentiation. Most mark scheme ideas were seen but the main conflicts often referred to by candidates included ideas such as: 'Noise during construction will disturb people; there will be traffic congestion; people may not be able to afford the prices or increased rents of the new properties; historical buildings may be lost' to quote just a few ideas seen.
- (b)(i)** This question was generally less well answered with very few candidates referring to the section or wedge in their description and many described (and explained) their ideas by referring to proximity to residential land rather than the reasons for the location of the industrial zone. The key to the development of industrial zones is accessibility, and the wedges in this model grew around transport routes such as roads, railway lines or canals, but this point was overlooked by most candidates. Most candidates ignored the describe command and jumped straight into weak reasons for the layout of the whole city. Transport accessibility was the most frequent idea credited here and most candidates scored 1 mark or less.
- (ii)** Some good ideas from a few well prepared candidates were seen, with some being well expressed and developed for high marks; however the bulk of candidates struggled to include much material of relevance. Many candidates did not understand what the question was asking them to do. Some gave descriptions of expected patterns in cities in MEDCs and LEDCs. Very few addressed the idea of 'relevance' in the question. In many ways the question was open for candidates to respond in a variety of ways which could have been credited for example: 'there are usually zones of specific land use in cities; such as industry; some cities may have a more concentric pattern; lower quality housing in MEDC's tends to be found in inner city zones/areas; whereas in LEDC's higher class residential tends to be found in these zones ; however, redevelopment has made

models like this irrelevant in some cities/cities no longer follow these patterns or zones because ...'. The above gives a few ideas of what was expected here.

- (c) Some excellent answers were seen here, however, disappointingly many were brief and simplistic with little attempt to develop the description and much inclusion of irrelevant explanation, including reasons for the migration to cities where there are squatter settlements (occasionally a repeat of 1(c)). Some candidates wrote about how quality of life has been improved in squatter settlements, a question which was asked in a previous examination. In the main candidates wrote a lot on squatter settlements but were not specific enough in their writing, some were distracted by location, poverty and jobs, whereas the emphasis needed to be on the settlements themselves. It is important that candidates focus on the precise question wording rather than writing pre-prepared answers which are not always relevant in the examination.

Question 3

This was not a popular choice made by candidates.

- (a) (i) Most candidates were able to correctly name one of the four tributaries from: 'Stort, Ash, Rib, Beane'. However, a few incorrect choices were made by some.
- (ii) Some good answers referring to more tributaries joining the river and the greater distance downstream but many weak responses were also seen which often got X and Y mixed up i.e. some candidates thought that Y was the mouth of the river.
- (iii) This was not particularly well answered with many candidates writing about the river rather than the valley which is highlighted in bold in the question. Most of those who wrote about the valley tried to compare, a reasonable number successfully referring to greater width at X and/or less steep sided with a flood plain at X to gain the marks.
- (iv) This question was generally well answered, with many relevant benefits given such as: 'fishing; irrigation; water supply; HEP and transport' to name a few. Flooding was usually the sole disadvantage provided.
- (b) (i) Most candidates could define the key terms accurately, despite poor wording from some weaker candidates. Only a few mixed up corrasion and corrosion and some wrote the same definition for both terms. Most scored 2 or 3 marks here.
- (ii) Many good responses were seen here with most being well developed and clearly linked with the information on Figure 5. Most frequently, responses included ideas such as: 'there is more rapid erosion of less resistant rock; the hard rock is undercut; the power of the falling water enlarges the plunge pool; the hard rock layer becomes unsupported and collapses; the waterfall moves back/retreats'.
- (c) Most candidates were able to score marks at least at Level 1 and many developed their ideas to gain Level 2 marks. Developed ideas were usually seen about where the erosion/deposition occurred and why. Some weaker candidates confused what was happening on the inner and outer sides of the meanders but most recognised that the former meander was cut off to become the oxbow lake. Some candidates may have achieved Level 3 rather than Level 2 had they been able to give more prominence, either in their writing or on their labelled diagram, to the notion that it is erosion, particularly during floods, which is primarily responsible for the cutting off of the former meander and not deposition. Many clear and accurately labelled diagrams were seen which often enhanced the candidates' written response. However, some diagrams had areas of erosion and deposition in the wrong places and did not gain credit.

Question 4:

This was a popular choice made by candidates.

- (a) (i) Almost all candidates answered 'Himalayas' correctly and gained the mark.
- (ii) This was generally well understood by candidates and many full mark answers were seen with candidates often writing more than they needed to.

- (iii) Some candidates scored full marks for this question whilst others scored zero. Boundary C caused most problems for candidates with several peculiar alternatives to conservative/transform seen.
 - (iv) A wide variety of responses were seen showing a varied understanding of the processes shown. 'Subduction; heating; melting and pressure' was a sequence which scored full marks for many candidates. The idea of magma escaping was mentioned by some candidates although not all candidates referred to this being through a line of weakness, crack or fissure. In contrast to this weak candidates had no idea with constructive margin processes being the most common error seen.
- (b)(i) This was not generally well answered with most candidates referring to 'plate boundaries' to gain a mark, but very few went on to score other marks by explaining why this would result in earthquakes. There are still a few candidates who wrote about 'plates bumping into each other'.
- (ii) In contrast to the previous question this was generally very well understood with some detailed and accurate responses referring to a variety of issues, including the quality of buildings, preparation and recovery. Some candidates did not fully read the question and referred to the impacts of earthquakes generally without considering why they are particularly devastating in LEDCs.
- (c) Most candidates could name a volcano and make some pertinent points, varying between Level 1 and Level 2 according to the level of detail and development. Some candidates included place specific detail, however some otherwise very good answers only failed to achieve Level 3 because of the lack of it. Most candidates offered a range of ideas with the frequent themes being the fertility of the soil for farming; for credit at Level 2 this needed to be combined with a reference to higher yields. Similarly others recognised the importance of geothermal energy or the area for tourism.

Question 5

This was also a popular choice made by candidates.

- (a)(i) Almost all candidates correctly answered 'February' to gain the mark.
 - (ii) Again this was generally well answered with many scoring both marks for the calculation: '29.5 – 28' and the correct answer '1.5' (C).
 - (iii) Many good answers were seen here as candidates interpreted data well. Some references to 'small range of temperature' did not go quite far enough for a mark and rainfall references were considered irrelevant. The climate graph does not support the notion that the climate is 'hot and dry' as stated by some candidates.
 - (iv) Candidates made good use of the photograph provided. Some answers were written as if for a travel brochure but never the less many observed valid attractions and high marks were scored.
- (b)(i) Many full mark answers were seen here although there were some inaccuracies in quoting statistics (25 000 and 40 000 were not close enough to gain a mark). Some who quoted correct statistics scored 2 marks for that but not the third mark as they did not interpret them (i.e. there are more tourists in November). Many included irrelevant speculation about why there are more tourists in November but the question did not ask for an explanation.
- (ii) Most candidates did focus on people not the natural environment although a number did make this error. Some very good answers covering a wide range of valid benefits and disadvantages were seen. However, weaker candidates typically listed ideas which lacked in development and focus for example: 'noise, pollution and overcrowding' which did not gain any credit.
- (c) The focus of this case study was the natural environment and most candidates recognised that. However, as in the previous question a number of candidates did write about people (in some cases repeating ideas from their previous answer) for which they were not credited. A huge range of responses were seen, in terms of case studies chosen and quality of response. It is encouraging that some candidates are using local case studies, as in all the case study answers the degree of development and inclusion of place specific material determines the level of answer.

Question 6

This was not such a popular choice made by candidates.

- (a) (i) The majority of candidates gained the mark here as almost all candidates could define the term 'commercial farming'.
- (ii) Again this was generally well answered however, some candidates did not write comparative answers. 'Describe two differences' requires a comparative approach (e.g. there are **more** vines within 2 km of the village) rather than discrete descriptions of the two areas.
- (iii) This question was not so well answered as few candidates understood the ideas as to why a farmer may use the land in different ways as distance from the village increases. Very few references were made to appropriate ideas such as the amount of attention needed by the crops or availability of space or land.
- (iv) A wide variation in the quality of responses was seen to this question. Many candidates scored 4 marks whilst others who had obviously never encountered the term 'physical factors' scored zero. Many offered too generic ideas e.g. 'climate' candidates needed instead for example to identify the aspect of the climate such as, temperature, precipitation or number of frost free days; many recognised the idea of relief. Some were distracted into including more human factors.
- (b) (i) This question was well answered and most candidates were able to gain 2 or 3 marks relatively easily.
- (ii) This question was also generally well answered with some excellent developed answers, typically relating to the impacts of loss of habitat and the impacts of agricultural pollution of water courses. Weaker answers simply referred vaguely to 'damage to the environment', 'air, noise or water pollution', without any attempt to relate this to farming. Many candidates scored 4 or 5 marks here for the predictable idea of loss of hedgerows and a suitable development i.e. loss of habitat; another very frequent response was the idea of fertiliser run off into streams with marks being awarded for the growth of algae as a development point and for eutrophication.
- (c) Many candidates did not read this properly and answered the question which had been previously set on inputs, processes and outputs. Whilst there were some detailed descriptions of processes, few candidates really got to grips with describing those in detail and developing their ideas. Many simply filled the space with details about inputs and outputs, using their pre-prepared answer rather than focusing fully on the wording of the question. Shifting cultivation (slash and burn) and rice growing were the common examples where candidates had thought of appropriate case studies to use but many could not get themselves away from a description of inputs and outputs therefore processes were difficult to credit. Some candidates who did identify processes usually described the tools with which the processes were carried out and this earned Level 2 credit however, the majority scored between 2-4 marks here with this being a relatively low scoring **section c** response.

GEOGRAPHY

Paper 0460/12

Paper 12

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The examination was considered appropriate for the ability range of candidates and a high level of differentiation was achieved throughout. Few candidates made rubric errors and most had sufficient time to complete all answers. Many excellent responses were seen and candidates of all abilities were able to show what they knew, understood and could do. Inevitably there were some candidates who for a variety of reasons performed poorly in the examination (e.g. lack of understanding or linguistic difficulties), however these were relatively few in number.

Many candidates attempted to use geographical terminology appropriately and where balance was required in an answer it was generally achieved. Well prepared candidates were able to recall case studies in detail, particularly when they chose case studies local to them or from within their own country. Many candidates were able to give detailed Level 2 responses and to improve further they should try to also include place specific detail in order to achieve Level 3. Candidates who tend to list their responses in bullet point form or

make simple, brief points are only able to gain marks in the Level 1 range. In order to improve their performance they should try to develop each point which they make.

In particular:

- Candidates should be reminded of the need to use units with statistics
- The use of key geographical skills to describe a location should be practised – for example, compass points, use of scale, latitude and longitude is an area for attention
- Ability to describe a distribution or a route is not always well developed
- A focus on how to develop answers would be beneficial. For example, rather than just writing `air pollution` or `water pollution`, candidates need to spend time explaining how this will impact on people
- Building up glossaries of key terms and definitions for each topic would be useful so that candidates can confidently define and use subject specific vocabulary.
- Candidates would benefit from being prepared to draw precise, clear and well annotated diagrams.
- Attention to scale in the question – is it local, national or global?
- Attention to context in the question – does it require an area or a country?
- Attention to impact in the question – is it on people or the environment?

Comments on specific questions:

Question 1

- (a) (i)** The vast majority of candidates correctly identified a state with a population density of 800 people or more. Bihar was the most popular choice.
- (ii)** The task of calculating population density was generally well understood. There was some inaccuracy, however, in the final calculation although this tended to be due to incorrect rounding of answers. It was quite common for candidates not to include the relevant unit – i.e. people per square kilometre – though candidates were not penalised for this in this instance.
- (iii)** Almost all candidates identified the correct two states but many could not locate them, wrongly stating north-east or that they were close together. There were very few correct references to the lines of latitude and longitude which were inserted on the map to facilitate description of location.
- (iv)** The quality of answers for this question was variable. Most candidates identified the idea of the availability of work and the other most common responses were migration and a high birth rate. There was little mention of the fact that much of the farming and industry in LEDCs is labour intensive.
- (b) (i)** Most candidates could identify the aridity in A or B and steep relief in B or C but many scored two marks only. Typically Photograph C was not well done as many vaguely suggested that it was no good for `agriculture` (rather than arable) or simply stated that it was cold. Ideas relating to remoteness/isolation or lack of resources/employment could have applied to all photographs, however they were not commonly seen. Some candidates repeated the same idea twice rather than using a different one for each photograph.
- (ii)** Candidates did not perform well on this question with a considerable number not gaining any marks. This is because they wrote very general answers about the reasons for initial settlement growth – for example, close to fertile land, water supply etc. and most related their answer to why some towns, or areas of towns, had low population densities, or why people moved to areas of low population density. The majority of marks scored were gained for reference to mining and tourism.

There was some good use of examples by higher scoring candidates but a lot of candidates failed to interpret the question and what it required correctly.

- (c) Candidates achieved well on this question with many entering Level 2. Most answers were well developed and candidates showed a good knowledge of the reasons for a high birth rate. However, place specific detail was generally lacking. A common error was to use China as the case study and then link this example with detail about how the birth rate can be controlled.

Question 2

- (a) (i) The majority of candidates answered this correctly.
- (ii) Most candidates achieved a mark for correctly naming a bank. However, some lost the next mark because they tended to give examples of shops or services rather than giving a type.
- (iii) Most candidates coped well with this question and gained either 2 or 3 marks, using evidence such as banks, the pedestrianised area and shops. Some suggested high land values and good access but neither of these could be seen on the photograph or maps.
- (iv) Although candidates understood what the CBD was they appeared less sure about 'sphere of influence'. Consequently there was little reference to distance travelled, comparison goods, specialist shops or high order goods and the question was not answered well. There was generally a lack of understanding about the factors affecting the sphere of influence, beyond the idea of good transport links and people travelling to use services.
- (b) (i) Many candidates found this question difficult and few scored all 3 marks. Many did not seem to be familiar with describing a route and descriptions were often weak and sometimes just a list of areas which the tram line passed through. Few gave the length of the route, for instance, or its direction which would be a useful starting point for a question such as this.
- (ii) This question was done quite well by candidates who read that the question was about people and focused their answer on that. Few developed their points but many gained high marks for separate ideas. The influence of air pollution was rarely linked to problems for people though it was frequently mentioned. There is much scope for development of answers in questions such as this, as some candidates tend to put one word answers without explaining the benefit or problem for people. In all questions 'pollution' without any reference to a source or an impact does not gain credit.
- (c) Highly achieving candidates provided some detailed case studies of urban sprawl and clearly showed its impact on the surrounding area. However, a considerable number of candidates wrote vague answers and not all choices of urban area were appropriate (e.g. London Docklands, Manhattan). Many candidates did not understand the term 'urban sprawl' and there was some confusion with urban renewal in the CBD or inner city. Where candidates did focus on the surrounding area many simplistic answers focused on removal of trees, loss of farmland, and death of wildlife with little attempt to develop the points. Other answers focused on shanty towns and their problems, which was acceptable if it was made clear that these changed the surrounding area rather than the city itself.

Question 3

- (a) (i) Most candidates correctly described the V- shape of the valley.
- (ii) Most candidates scored at least one mark here although some did not focus on the river but on the valley referring to interlocking spurs or regarding the slight bends as middle-course meanders. Correct answers mentioned the debris/deposition in the river, or the irregular long profile (usually referring to small waterfalls or rapids) and it being narrow and/or shallow.
- (iii) Most candidates know the processes of river erosion well, many gaining their marks by using the technical terms hydraulic action, corrosion and corrosion. Either the use of terms or appropriate description of the processes was valid. A few wrongly gave transport processes here, such as traction, which were then duplicated in (iv).

- (iv) Many candidates scored full marks here but for some there was confusion between processes of erosion and transportation. Many candidates seem to know the terms but descriptions were less clear.
- (b)(i) This was generally well answered although there is a need for a little more precision in questions such as this (e.g. `tree roots grow in rocks` was often written rather than `in cracks`). However most could follow a logical sequence through here for 2 or 3 marks.
- (ii) The responses to this question varied enormously and there were a few accurate and detailed answers which gained 4 or 5 marks. Many responses however saw inappropriate focus on exfoliation and freeze-thaw weathering. Many failed to score beyond the simple ideas that high temperature means more plant growth and the presence of water leads to chemical weathering.
- (c) This was generally well answered with a good number of candidates making it into Level 2 by developing or at least linking ideas. A common misconception was that seasonal change occurred rather than daily change in temperature and some confused freeze-thaw with exfoliation. Diagrams tended to not add new information but gained access to Level 3.

Question 4

- (a)(i) Virtually all candidates gave the correct height.
- (ii) Candidates coped well with this question with most identifying the clearing and/or growing crops such as the bananas, manioc or cassava.
- (iii) Most candidates were able to describe the characteristics of the vegetation, though a few focused wrongly on the rain forest climate. There were some attempts at explanation which was not required.
- (iv) Many candidates were able to explain adaptations with the most common answers being about emergents and/or lianas, drip tip leaves and large leaves. Some referred to buttress roots though many did not relate this feature to climate. Indeed some thought that trees had long roots to get to deep water.
- (b)(i) This was well answered and candidates made effective use of the source material though many candidates tried to make the entire diagram relevant to their answers. A clear focus on nutrient cycling often lead candidates to three marks. A number wrote about leaching, even though that is not part of the nutrient cycle back into the trees.
- (ii) The impacts of deforestation were well known with many candidates making a range of relevant, developed points. Some missed the `local` aspect of the question and wrote about climate change and global warming, whilst others ignored `natural` and wrote about its impacts on people.
- (c) There were some good responses here with most candidates entering L2. Most used the case study of the Amazon though there was little place specific information. Sometimes candidates wrote too much about one point (e.g. tourism creating jobs and economy) rather than trying to clearly develop more ideas.

Question 5

- (a)(i) The vast majority of candidates answered this correctly.
- (ii) Virtually all candidates identified Poland and most identified Singapore.
- (iii) Some candidates dealt with each country in turn and did not give a generalised comparison point of Europe and Asia. The most common reasons were an increased reliance on the tertiary sector or mechanization in Europe and cheap labour leading to industrial growth in Asia.
- (b)(i) Candidates still seem to find the skill of describing a distribution difficult and there were a number of vague answers. The idea of the zones being unevenly distributed (or clustered) was rarely mentioned. Too many candidates just combined together the locations as `they...` rather than distinguishing the three in the South and the one further north, however almost all recognised the link to railways.

- (ii) Very few candidates gained full marks and several gained no marks. Many described the distribution but did not explain it as the question required. Attempted explanations were usually related to the urban areas and transport links but many did not explain their importance (i.e. for a labour supply/market and for transport of raw materials/finished products).
 - (iii) Most candidates made some valid points on this question and scored some marks, typically for brief reference to the benefits of jobs and the consequent improvement in quality of life. However many did not develop their points to good effect, particularly in relation to the disadvantages – for example, many candidates wrote about air and water pollution without explaining how this will be a disadvantage for people.
- (c) This was fairly well answered by many candidates though some wrote about the causes of the problem and not the impact, and others wrote about the impacts on people rather than the natural environment. There were lots of answers that had a country as a case study rather than an area resulting in a maximum of five marks only being possible. There were a small number of exceptionally good place specific answers which scored full marks.

Question 6

- (a) (i) Most candidates identified one of the two rivers which have their source in Guinea but flow to the sea through Sierra Leone.
- (ii) Most were able to give at least one reason for this. Many recognised issues of ownership, upper course pollution into the receiving country and consequences of the upper course country putting a dam across the river.
 - (iii) Again this was well answered with many candidates writing about the benefits of clean drinking water, better hygiene and sanitation and the fact that less time would be consumed by fetching supplies of water giving time to do more constructive things, such as going to School or work.
- (b) (i) This was well answered with good use being made of the source material. Whilst many candidates scored three marks, the most common omission was why the demand for water was high in the south.
- (ii) Performance on this question was variable and there was repetition of dams and pipes despite `other methods` being stated in the question. Many candidates offered little more than using water tankers and building reservoirs though well prepared and astute candidates referred to ideas such as using the aquifer, desalination and even cloud seeding. Some candidates missed the distribution aspect of the question - `...to supply water to areas that need it` and so wrote about methods of saving or cleaning water such as water butts, tanks or sewage treatment which were more pertinent to the following question.
 - (iii) Some candidates clearly do not understand the term sustainable and wrote general answers about how water is used for a variety of purposes. Those who understood the term gave well thought out, practical ideas, many of which gained 4 or 5 marks.
- (c) This was well answered by those candidates who were able to enter Level 2 by giving a detailed description of how one type of energy is produced and in some cases some pleasing place specific information was incorporated. HEP was a popular choice, along with wind power, geothermal power and solar power. Some candidates wrote about nuclear power in France or Japan whilst others used an example of a thermal power station. However, weaker candidates struggled to include detail on one type of energy and therefore did not progress beyond Level 1.

GEOGRAPHY

Paper 0460/13

Paper 13

Key messages

- write only on the lines provided, not underneath the final line or elsewhere on the page (e.g. in any area of unused space at the bottom of a page)
- continue any answers which there is not space for on the lined page(s) at the back of the booklet. If this is done candidates must indicate that they have done so (e.g. by writing 'continued on Page XX') and carefully write the number of the question at the beginning of the extra part of their answer. They should only use extra loose sheets of paper if this extra space has been used up.
- make the choice of questions with care, ensuring that for each question chosen candidates have a named case study about which they can write in detail and with confidence
- answer the three chosen questions in order, starting with the one with which they are the most confident, and finishing with the one with which they are least confident (in case they run out of time)
- read the entire question first before answering any part, in order to decide which section requires which information to avoid repetition of answers
- highlight the command words and possibly other key words so that answers are always relevant to the question
- use the mark allocations in brackets as a guide to the amount of detail or number of responses required, not devoting too much time to those questions worth few marks, but ensuring that those worth more marks are answered in sufficient detail
- consider carefully their answers to the case studies and ensure that the focus of each response is correct, rather than including all facts about the chosen topic or area, developing each point fully rather than writing extensive lists of simple, basic points. It is better to fully develop three ideas rather than write extensive lists consisting of numerous simple points
- study the resources such as maps, photographs, graphs, diagrams and extracts carefully, using appropriate facts and statistics derived from resources to back up an answer and interpreting them by making appropriate comments, rather than just copying parts of them.

General Comments:

Paper 13

The examination was considered appropriate for the ability and age range of candidates as there was a good response to the May 2012 examination paper. The majority of candidates were able to answer in full and even weaker candidates attempted most sections of their chosen questions.

A high number of candidates presented work of a very high standard which was pleasing to see. There were only a few candidates who did not fully comprehend what was required in the question. Candidates also generally made good use of the resources provided.

Many candidates made use of the additional pages at the end and all candidates should be encouraged to do this if they need extra space to write their answer rather than trying to squeeze it onto the same page when the lines have run out or at the sides of the page, as it becomes difficult to read (see above).

The examination paper gave a wide spread of marks allowing for positive achievement for all but also allowed for sufficient challenge for the most able.

There are still a few candidates who attempt all questions instead of following the rubric.

There are still a few candidates/centre's who are learning case studies from previous mark schemes which is not really conducive to candidates' understanding of the geography involved. Candidates who tend to do well on case study questions are the ones that use local case studies because their knowledge and understanding really shines through and they score good Level 2 or high Level 3 marks. The use of local case studies that candidates can write about in detail with place specific information or even visit them should be encouraged as opposed to learning about distant case studies that have no/or very little relevance to candidate's everyday lives. It is recognised that this is not always possible, for example when teaching about the impacts of a volcanic eruption, and a distant case study will probably have to be used – so teacher judgment is the key here to determining which case studies are most suited to their candidates and Centre. Also to select up to date examples that may have been in the news recently tend to offer a wealth of information and resources that can be used in the classroom when teaching about these examples/places which candidates will find more interesting and relevant and most importantly they will be able to write about them in detail in the examination.

The following detailed comments for individual questions will focus upon candidates' strengths and weaknesses and are intended to help centres better prepare their candidates for future examinations.

Comments on specific questions:

Question 1

This question was by far the most popular choice made by candidates.

- (a) (i)** Most candidates showed understanding and gained the mark. However, responses could have been better phrased as some weaker candidates tended to just swap the order of the key words in the question and then did not gain a mark. Some irrelevant references to 'birth rate and death rate were seen.
 - (ii)** The majority of candidates gained both marks by correctly identifying a) stage 1 and b) stage 4. For those candidates who gained only 1 mark the mistake was usually made on part **(b)**. However, the question was generally well answered.
 - (iii)** Many candidates were sidetracked here by making frequent reference to birth rate, death rate and life expectancy. However, those who correctly focused on either describing changes in population structure (or the pyramids) tended to score two or three marks. Many other candidates who had focused on birth and death rates often scored a mark for identifying that there were more in the working population/economically active group.
 - (iv)** This was a high scoring question which clearly posed few problems for candidates as they were able to identify the reasons why the population structure had changed. Some candidates however, gave reasons for the structure in stage 1 rather than focusing on change and development.
- (b) (i)** Mixed responses were seen here with some candidates approaching the task in a clear and logical order with many referring to different rates of increase and quoting statistics to score either two or three marks. However, there are still a large number of candidates who fail to read the statistics accurately or fail to use them to show changes. Few candidates stated the simple change of 'both have increased'. Some candidates would benefit from practicing how to write their answers to questions such as these with greater clarity as there is a tendency to be somewhat confused.
- (ii)** This question was generally well answered with many high scoring responses. Most candidates mentioned the government (or taxes), health care and pensions, the latter being phrased in many different and unusual ways. Similarly when care homes were mentioned it was not particularly well phrased. All mark scheme ideas were seen but charities, extended families and specific

services were seen less frequently. Many references were made to reduced fares on transport which was fine but extended accounts of modifications to enable access were tangential to the question asked. Weaker candidates' responses tended to lack specific detail and made reference to 'services for the olds' which was too vague or made comments such as 'they have social welfare', also some inaccurate statements were made like 'they're given free houses' or 'free toothbrushes', some candidates even suggested that there were 'foster homes for the elderly'.

- (c) A wide range of responses were seen here, however most candidates scored something for referring to issues such as greater dependency ratio, lack of workers, difficulties of financing etc. There were lots of attempts to develop ideas which reached Level 2, although relatively few added anything place specific to achieve full marks. Overall, the question differentiated well between candidates. Often the name of the country appeared to be random. Japan and China were the country's most often chosen, with some good place-specific knowledge displayed – especially China. A number of candidates chose East Devon as the "country" and then answered as if East Devon functioned as an independent country rather than as part of the UK. This would indicate that some candidates should try to adapt their knowledge to the question asked rather than giving rehearsed answers.

Question 2

The second most popular choice made by candidates.

- (a) (i) The majority of candidates correctly answered '25%' with very few getting it wrong.
- (ii) Most candidates gained the full two marks for correctly naming Australasia and Africa. However, some candidates lost marks by writing 'Australia' rather than 'Australasia' despite being asked for a continent and it being named on the map.
- (iii) Many candidates, but not all, could recognise that urbanisation was progressing more rapidly in Africa where figures were increasing most rapidly. Good use was made of statistics by many, although not all candidates gave comparative statistics for both countries (some just gave figures for one) so this could not be credited.
- (iv) A well understood question with many candidates gaining all four marks. Where they failed it was usually because of vagueness e.g. 'better way of life', 'better living standards' or 'better houses' which were not credit worthy. Also some candidates focused wrongly on push factors rather than pull factors.
- (b) (i) Many candidates gained all three marks here by making full use of the source. Some candidates lost out by using vague terms such as 'unplanned', 'overcrowded', 'over populated' despite all the specific information that was provided in Figure 4.
- (ii) Some good ideas were seen overall, with many being well expressed and developed for high marks. Weaker candidates were too reliant on simply repeating the problems from the previous answer and adding the word 'improve'. Candidates needed to say how these issues were improved but instead a number gave vague comments such as 'provide jobs'. Many candidates also gave rather lengthy answers which concentrated on adopting a one child policy which gained no credit. Better responses included how improvements could be made for example 'government builds brick built housing which would provide people with jobs in construction', or 'ensuring that rubbish is collected weekly' or 'build more Schools/hospitals', simply stating 'improve healthcare or education' was not enough to gain credit.
- (c) This was the least well answered sub part (c) question on the paper. Few candidates really understood what the rural-urban fringe was, and simply described general problems of urbanisation. Others wrote about shanty towns and favelas. Many answers referred to LEDC cities, or else applied LEDC problems to MEDC cities. It is fair to say that candidates did not really understand the question.

Question 3

This was not a popular question with very few candidates selecting it.

- (a) (i) Mixed responses were seen here with a surprising number of wrong answers mainly wrongly selecting 'wave cut platform'.
- (ii) On the whole this question was generally well attempted. Most candidates could define the key terms and relatively few reversed them.
- (iii) This was generally well answered. Many candidates concentrated on the formation of caves/arches and undercutting with the cliff retreating to gain full marks.
- (iv) Most candidates were able to gain at least two marks for 'longshore drift' and 'constructive waves' which were well understood, yet many candidates were unable to develop their response any further to gain full marks.
- (b) (i) Most candidates gained marks for simple observation, referring to fish, colourful and large variety of species etc. However, many missed easy marks by attempting to explain rather than describe. Many also made reference to 'divers' and 'shallow seas' which did not gain any credit.
- (ii) Varied responses were seen to this question and many responses noted clearly the difference between the three reefs, expressed it well and backed up their comments with appropriate diagrams. Some diagrams were poor and not always labelled and in some responses there was much confusion between the 3 types of reef amongst some candidates.
- (c) Most candidates were able to gain marks here and those who gained Level 2 did so generally because they included appropriate statistics to back up the points they were making. There was much explanation which the question did not ask for and often candidates would develop their responses in terms of explanation rather than description. The most popular choice selected by candidates was the Great Barrier Reef and some candidates were able to gain full Level 3 marks by including some place specific detail.

Question 4

This question was more popular than **Question 3** but still selected by relatively few candidates.

- (a) (i) Many candidates were able to recognise that the feature was a 'meander' but surprisingly many candidates did not recognise the feature and instead stated 'River Severn' or 'Ox-bow lake'.
- (ii) This was another simple task which many candidates misunderstood or did not use the key correctly. The candidates who named the land use as 'open space' tended to go on and score the second mark but many candidates named examples in the first box rather than quoting a land use as indicated in the key and therefore only scored one mark.
- (iii) Very few candidates scored full marks here. There were many references to rainfall seen as per the first and second line of the mark scheme but relatively few mentioned snow melt. Many candidates mentioned flat land but few of them developed the idea of it being alongside the river. Some good references were seen to urban growth/vegetation clearance which showed a good understanding of the processes involved.
- (iv) This question was generally well answered, using evidence from the map, although too many candidates tended to focus narrowly on transport issues. It was evident that many candidates did not understand what an 'Agricultural Showground' was.
- (b) (i) Good use was made of the resource and this question was generally well answered with the majority of candidates gaining at least two marks with many scoring full marks.
- (ii) This question was generally very well understood with some detailed and accurate responses which showed an understanding and development of the ideas identified in Figure 6. Marks were easily gained for ideas such as 'not enough water for crops', 'livestock not having enough food or water' and 'livestock die'.

- (c) A wide range of marks were seen for this question but overall it was poorly answered in general with too many responses being wrongly focused on exfoliation and/or freeze thaw weathering, neither of which are predominant in humid tropical regions.

Many candidates gained simple Level 1 marks for ideas such as 'there is more rainfall in humid tropical regions'. To then gain Level 2 marks candidates then needed to show that 'more rainfall encouraged more chemical weathering to take place'. In order to extend this into Level 3 they would then extend the idea of chemical weathering by including ideas such as 'carbonation or oxidation taking place' some candidates included a chemical equation showing good understanding. Other ideas included biological weathering with some candidates focusing on plants or animals with some candidates giving examples of both.

Question 5

This was the third most popular choice made by candidates.

- (a) (i) Virtually all candidates correctly stated '150 000' and gained the mark.
- (ii) Again, this question was very well answered with many candidates scoring both marks by correctly identifying 'Sweden or Denmark' for A and 'Finland or Italy' for B. A few candidates named the same country for both A and B.
- (iii) Many good answers were seen to this question although some candidates scored zero as they missed the point and focused on the specific attractions people are seeking e.g. sunshine or scenery rather than generic reasons for the increase in international tourism as specified in the mark scheme e.g. 'increasing affluence', 'larger planes/cheaper flights', or 'increased holiday time'.
- (b) (i) Most candidates scored at least two marks mostly for ideas related to 'work/jobs' or 'increased trade' and 'development of the economy' being the most common answers. Some candidates wrongly focused on the attractions or benefits of the hotel for the tourists.
- (ii) Some good responses were seen and most candidates did focus on the natural environment (rather than human) and some high marks were gained. Weaker candidates tended to give brief comments e.g. 'scares animals', 'pollutes water' or 'litter dumped' without enough detail or precision to gain any credit.
- (iii) As for the previous question most candidates did focus on what they were asked which was people this time rather than the natural environment although not everyone did. Again some very good responses were seen, particularly relating to cultural issues. Some weaker responses were seen which gained no credit e.g. crowded, polluted, noisy etc.
- (c) This question was generally poorly answered compared to the previous sections of **Question 5**. Many responses consisted of undeveloped, simple ideas which were relevant for Level 1 e.g. 'beaches and hot weather' but there was also much irrelevant detail on how the authorities could attract tourists (e.g. through publicity) or on what the advantages of tourism are. Whilst it is encouraging that there appeared to be many attempts to use local case studies in many of them it was difficult to find just a few simple ideas from them so that some credit could be awarded.

Question 6

This question was the fourth most popular question selected by candidates.

- (a) (i) Answers were mostly correct with zone C being correctly identified. The most common incorrect answer was zone D.
- (ii) This question was also generally well answered with the vast majority of candidates gaining the full two marks. Some candidates named 'tree crops' which did not gain credit.
- (iii) Most candidates understood the question and as such the question was well attempted by candidates. Marks were credited for 'small plots', 'high yield' and lots of inputs.
- (iv) Mixed responses were seen to this question. Many candidates were sidetracked into answering the question by referring to subsistence and commercial farming rather than looking at more

pertinent issues, such as the amount of land, irrigation, relief and soil quality etc. However, there were some good references made to land availability and water availability (from the river) from more perceptive candidates. The majority of marks were awarded for 'E was forested', 'D had more land' and 'D had access to water'.

- (b)(i)** Again varied responses were seen to this question with some candidates using the resource well and demonstrating a good understanding and thereby gaining two or three marks. However, some candidates did not use the resource well and gained no marks as they merely lifted statements from the resource such as 'low income', 'less food' or 'subsistence' without further clarification.
- (ii)** As stated above variable responses were seen to this question. Some full mark answers were seen covering many of the mark scheme ideas and/or developing them. Weaker answers simply referred vaguely to 'better methods', 'training/educating farmers' or 'the government spending money' therefore candidates needed to qualify their answers in order to gain any marks.
- (c)** Many candidates did not read this question properly or misunderstood it. They therefore answered it in relation to inputs, processes and outputs which had been set on a previous examination paper. Whilst there were some descriptions of the land use very few candidates were able to explain it or to develop their points. Better responses developed ideas about the climate to gain Level 2 marks by including statistics. However, responses were general not that strong and often credit could only be given to simple ideas amongst a lot of irrelevant ideas that were not credited.

GEOGRAPHY

Paper 0460/21

Paper 21

Key Messages

- Candidates should make sure that they understand clearly the different meanings of the command words such as *describe* and *explain* in questions.
- The key of a survey map sometimes lists several features on one line but each feature has a different symbol.
- The syllabus requires candidates to know the links between vegetation and climate in the two ecosystems listed.
- In photograph interpretation questions it is important to describe what can be seen *in the photograph*.

General Comments

There was a wide range of responses to the paper. There were some really excellent scripts which scored well and only a small number of weak ones. Generally, handwriting was legible and diagrams and graphs were usually carefully drawn.

Good answers were focused on the question asked and were often concise, making excellent use of the resources provided in the paper.

Almost always, candidates answered the questions within the spaces provided and avoided the use of additional sheets. Candidates were able to complete the paper in the allotted time.

Question 1

- (a) Most candidates scored full marks in this section as they understood the terms *services* or *functions*. Marks were lost when candidates strayed away from the area around Chinhoyi but Examiners did credit answers from a generous area of the map.
- (b) In part (i), some candidates did not identify the common feature here (the trigonometrical station) and copied all the information from the three summits. In parts (ii), (iii), (iv) and (v) many candidates scored well and it was pleasing to see that they had a good grasp of basic map-reading techniques.
- (c) In part (i), there were some difficulties in relating the cross section to the map but most candidates scored at least one mark. Harmony Hill was marked on the cross section to show candidates the preferred method of labelling and most followed this. In part (ii), *cultivation* was identified by most candidates but there were a wide range of incorrect answers.
- (d) Most candidates scored 3 or more marks in completing the grid. Few had any trouble with the first three points. The most common mistake was for *river flowing west* and many candidates struggled with the direction of flow of the river.
- (e) Candidates often correctly identified meanders, rapids, islands, tributaries, the wide river and its varying width. Candidates were sometimes confused when more than one feature is shown on one line of the map key. They sometimes gave expressions such as *rapid waterfall* which were not given credit. Again, some candidates struggled with the direction of flow of the tributaries and it was a common misconception that tributaries flow away from the main river.

Question 2

- (a) In part (i), there were some good responses and many candidates scored full marks for noting the area between 10°N and 10°S of the Equator, on the west coast with more in the northern hemisphere. Phrases such as *above and below the Equator* did not gain credit. Other candidates thought that the 10° latitude lines were the Tropics of Cancer and Capricorn. In part (ii), excellent understanding was reflected in a good range of correct answers. A number of candidates in both part (i) and part (ii) failed to read the questions accurately and thought that a comparison of Figs. 4 and 5 was required.
- (b) This question was based on knowledge and understanding of the link between tropical rainforest vegetation and the climate to which it is adapted. Answers were generally disappointing. In part (i), the aspects of climate leading to rapid growth were high temperatures and rainfall (or hot and wet) and not warm, sunny, etc. In part (ii) drip tips allowed heavy rainfall to be shed from the leaves and in part (iii) the lack of seasons led to continuous growth in the forest. In all sections, explanation was necessary to achieve the marks.

Question 3

- (a) There were some good responses in this section though time was wasted by some in including details of the processes occurring in the area. This was a *describe* question only and candidates who concentrated on what could be seen in the photograph scored well. Candidates gave a range of answers such as mountains, cliffs, steep slopes, scree, lack of vegetation, ridge, valley, patches of vegetation on lower ground, pond.
- (b) Most of the candidates who attempted this question scored well and knowledge of the freeze-thaw process was good. Many candidates, however, did not attempt this question at all but should not have been put off by the need to draw a diagram (or diagrams). Simple, individual diagrams were quite acceptable, textbook versions were not necessary.

Question 4

- (a) This was extremely well-answered and knowledge of the three settlement patterns was clearly good.
- (b) This proved to be much more challenging. Many candidates attempted to answer by background theoretical knowledge and not on information provided in Fig. 6. In part (i), the road junction or the bridging point were only identified in about half of the scripts. Vague statements about roads passing through were not given credit. In part (ii), the stream or river was named by most candidates as the source of water supply. In part (iii), only a small number of candidates were able to relate the nucleated settlement to its position on a gentle, south-facing slope and explain the benefits these would give.

Question 5

- (a) For most candidates, this was a very straight forward question and the four correct answers (finance, research facilities, government influence and quality of life) could be quickly identified from Fig. 7.
- (b) This was another high-scoring question. Bar graphs were usually well drawn though candidates should be advised to take a ruler into the examination for greater accuracy. Only a handful of candidates failed to draw a bar graph or confused the axes and a small number had difficulty with the choice of vertical scale.

Question 6

For most candidates, this proved to be the most challenging question on the paper. It was necessary to study the resource, including the key, in some detail to be clear what it was showing before embarking on the questions.

- (a) Some candidates confused part (i) and part (ii) and muddled the evidence. Brief answers could have scored the marks – *large urban areas* in part (i) and *low rainfall* in part (ii).

- (b) The key word here was *location*. Many candidates considered advantages of the dams (which did not score) but not the advantages of the location of the dams. A greater number did realise that the major disadvantage of the location of the dams was that they are distant from the urban areas. There was some confusion over the scale of the map with a significant number of candidates considering that the dams were near the urban areas.
- (c) Candidates should have used the evidence in Fig. 8 for this question but many talked generally about the problems of canals and dams so many answers were too vague and did not score well. The best answers related to the long length of the canals (Los Angeles and San Diego have 300-600 km transfers) resulting in the expense of construction and maintenance, leakage and evaporation losses and the fact that the water comes from a distant and already dry area.

GEOGRAPHY

Paper 0460/22

Paper 22

Key Messages

- The key of a survey map sometimes lists several features on one line but each feature has a different symbol.
- Care is required when giving bearings which are greater than 180° .
- The correct method of describing the third and sixth figures of grid references is described in the syllabus.
- Where questions ask for differences it is important to have some comparison in the answer.
- In photograph interpretation questions it is important to describe what can be seen *in the photograph*.

General Comments

There was an excellent response to the paper with many candidates scoring high marks. Overall there were no questions which candidates found particularly difficult. Parts of questions which caused difficulties for some candidates are listed within this report but, in the main, the report describes the good practice seen in answers.

Question 1

- (a) This part of the question tested candidates' ability to locate features on the map and then identify them. The best answers listed A as a railway, B as dams, C as seasonal marsh, D as mine dumps, E as bush (Examiners did not distinguish between the types of bush here) and F as an aerodrome landing area. Good candidates were aware that sometimes the key listed more than one feature on a line so they realised that the railway did not have an embankment, cutting or tunnel and that the features at D did not include mining or prospecting trenches, quarries or excavations.
- (b) It was encouraging to see that almost all candidates followed the rubric and did not tick more than four statements. Most candidates were able to identify the islands and rapids, however the dam and the river between 100 and 500 metres wide proved more difficult.
- (c) In many recent examinations candidates have been asked to label the positions of features on a cross section. The gravel road was identified on the section to show candidates the preferred method of labelling and most candidates followed this example. In some answers the labelling was ambiguous so no marks could be awarded. Perhaps surprisingly, many candidates failed to label the flood plain in the lowest area of the cross section. Examiners gave credit to a track labelled in any of four positions.
- (d) Many candidates scored full marks on this part of the question. The most frequent correct responses were, for transport the railway and tarred roads, for power the power lines and fuel tanks and for labour the huts or staff quarters. Candidates almost always followed the instruction to use map evidence in their answers.
- (e) Parts (i) and (ii) were challenging for some candidates. Bearings more than 180° often prove more difficult as was the case here where the correct answer was 233° . Candidates appeared to have little trouble in finding the point where the tarred road came to an end. Those candidates who used the correct method of measuring six figure grid references gave the correct answer of 974 (or 5)731. The road continuing to the edge of a map was a gravel or earth road, although some candidates read the whole line from the map key and answered gravel or earth *bridge*. Most candidates recognised that the main land use either side of the last 3 km of road was cultivation.

Question 2

- (a) The vast majority of candidates completed the paragraph by adding the missing plates: Caribbean and Nazca.
- (b) Candidates generally recognised the plate margin off the coast of Chile as being destructive. They explained the cause of the earthquake as being due to a plate collision, subduction of the Nazca Plate, friction, fracturing and release of energy. This was answered much better than similar questions in the past.
- (c) Candidates generally focused on the shallower focus and the shorter distance to the nearest large town in the case of Haiti. Some candidates could have produced better answers if they had not simply copied figures from the table or if they had referred to differences between the earthquakes. Some candidates ignored the instruction to use information in Table 1 only and suggested differences in economic development as the cause.

Question 3

- (a) This part of the question was based around the horizontal scale of the pyramids showing population in millions rather than population as a percentage of the total. Candidates could generally give the correct male population aged 15 – 19 in the Philippines as being 5 million and they could see that Germany had the smallest population. Few realised that a horizontal scale expressed as a percentage of the total population allows easier comparison with other countries or other pyramids. Many candidates thought wrongly that Brazil had the greatest percentage of young dependents but most realised that Germany had the greatest number of old dependents.
- (b) In relating the pyramids to the demographic transition model, the correct sequence was Stage 2 Philippines; Stage 3 Brazil; Stage 4 Germany. The most common error was to reverse the first two stages.

Question 4

This question was intended to test candidates' photograph reading skills as well as their ability to apply their knowledge of coasts. Able candidates coped well and frequently scored six, seven or eight marks. Examiners accepted a wide range of responses including points related to the sea such as waves breaking and low tide; points related to coastal landforms such as cliffs, wave-cut platform, rock layers, beach, rocks, vegetation growing on cliffs, headland and rock pools; points related to land use such as agriculture and buildings and even descriptions of the clouds in the photograph. Some candidates took the two photographs in turn and described them while others produced a single account, either being acceptable to the Examiners. Some candidates ignored the instruction to *describe the geographical features* and gave long accounts of the processes of formation of cliffs, wave cut platforms and discordant coastlines.

Question 5

- (a) Almost all candidates correctly plotted the bar graph for potatoes to show 8 ten fields. A wide range of reasons were given as to why the number of fields may not be a useful way of showing the importance of the different crops on the farm. These included: the size of the fields, the different yields of the crops, crops of different market value, crops with different inputs such as labour and crops with different space requirements.
- (b) Most candidates were able to correctly shade the area between 220 and 230 metres above sea level and mark on the map the shortest road route between the water pump and the offices. Only a small number of candidates drew a straight line route.
- (c) Candidates clearly understood that water was supplied from the dam to the fields by the pipelines. Many realised that the potato area would be the hardest to irrigate because it was higher than the dam, furthest from the dam when compared to other crops and because it covered a large area.

Question 6

- (a) This question was very well-answered by most candidates. Generally they concentrated on attractions and activities *shown in the photographs* rather than what might be possible in the areas. For Photograph C the most common responses were the historic buildings, shops and cafes. For Photograph D the most common response was wildlife or safari. For Photograph E candidates noted the swimming pool, sunbathing, hotel, viewing coastal scenery and the beach. Examiners gave credit to photography as an activity.
- (b) Again the response was very good. The most common suggested disadvantages caused in the area by tourism were congestion, litter, noise, higher prices and loss of culture.

GEOGRAPHY

Paper 0460/23

Paper 23

Key Messages

- Candidates would benefit from reading the question more carefully, particularly where a point of view is requested. The comments on **Question 3(c)** and **Question 6(b)(iii)** later in this report illustrate this.
- Candidates also need to be careful with use of compass directions, not only in the map work question but also in relation to wind directions and, in this paper, the ocean current. The comments on **Questions 1(d)** and **Question 6** later in this report illustrate this. Candidates should remember that winds are named by the direction that they blow from, not to.

General Comments

Many excellent scripts were received. **Question 1(a)**, **Question 2(a)**, **Question 3(a)** and **Question 4(b)(i)**, along with the graph completions were answered very well. Candidates found **Question 1(c)**, **Question 1(d)(iii)**, **Question 5 (b)(i)** and **Question 5(b)(ii)** more difficult. **Question 6** was a demanding question, with a large amount of data to digest. However, the mark scheme allowed for a variety of interpretations provided appropriate reasoning was given.

Question 1

- (a) Fig. 1 indicated a small section of the map extract with features to identify. The height at the minor trigonometrical station **A** was 206 m, **B** was the powerline, **C** was the Rivulet Lovard, **D** was a track and **E** was a water tank. Many candidates identified all of these correctly. The most common error was to put pipeline for **B**. A few put Rivulet Perrot for **C** and some had road-other instead of track. Candidates may find it helpful to pencil in the edge of Fig. 1 on the map extract so as to reduce the risk of looking back to the wrong area for later parts of the question.
- (b) The area in Fig. 2 was subdivided into 3 zones: 1 - Tea, 2 - Riverine trees and 3 - Scrub. Many candidates did show understanding of the term *relief*, with appropriate comments such as gently sloping valley side for tea, low valley floor for the riverine trees and steep north-facing slope in the higher hill area for scrub. Many candidates scored well in this section. Other candidates did not appear to understand the meaning of the term *relief* and produced irrelevant answers.
- (c) The road route between 083820 and 093826 was indirect, leaving much scope for description and explanation. Candidates tackled this in several different ways all of which were given credit. Some relayed the sequence of bends and directions, NE to N to SE to N, often with distances too. Others described the land use the road was passing (sugar plantation and scrub) and noted the river crossing. For explanation candidates usually referred to the relief, either describing where the road went (around the hill, across the slope) or where it did not go (avoids steep slopes, avoids hill). It was necessary to interpret the map, so no credit was given when candidates said that the road *follows the contours*.
- (d) The Eau Bleue Reservoir could not expand to the east, due to the steep hill, and southwards it is contained by the dam/embankment. Thus the correct answer to part (i) was *westwards*. In part (ii) some candidates gave reasons why the reservoir could not expand to the east or south, while others pointed out the flat marshland to the west and the extension of the dam in that direction allowed expansion in that direction. Either approach was valid. There were some good answers, although a number of candidates seemed to be confused between east and west.

In part (iii) candidates noted the reservoir and the steep land giving a good head of water down the slope. Some also commented on road access. Again there were some good answers. A common error was to assume that the River Perrot was the water source, with the pipeline to the reservoir for the outflow.

Question 2

- (a) Candidates were referred to Fig. 4 on the Insert. Kilauea was the volcano not near a plate boundary, while Chaiten was formed by the Nazca plate interacting with the South American plate. On the date in question, 9th May 2010, there were no eruptions on the Nazca plate, the Cocos plate or the Antarctic plate. Only one of these was needed and most candidates chose the latter. The constructive plate boundary eruption was in Iceland, as a result of the North American plate and Eurasian plate separating. Candidates generally did well on this section. Errors were usually where two plates were required.
- (b) Most candidates spotted that the volcanic eruptions on the African plate occur along the uncertain plate boundary. For a second mark it was necessary to locate this, either in East Africa or on land. Many candidates scored both marks, though some went on to also include the activity in Southern Europe, which was not necessary, being beyond the edge of the African plate.
- (c) Most candidates correctly selected *ash* as being the volcanic hazard that had prevented aircraft crossing Europe. The most popular incorrect answer was lava bombs. Ash affected mainland Europe since it was blown there by the wind and many candidates suggested this. Others tried to base a suggestion around possible consequences of Iceland and Europe being on the same plate.

Question 3

- (a) Photograph A gave a lot of scope for a descriptive analysis of the river and its valley. Candidates readily referred to the waterfall and the steep-sided V shaped valley. Other possible valley points included interlocking spurs, gorge, narrow and deep; while for the river, a meandering course, rapids and spray could be seen. It was also valid to mention the distant forest and the sparsely vegetated valley slopes with bare rock and scree. Many candidates did well in this section.
- (b) Candidates then had to annotate Fig. 5 to describe the long profile drawn there. Most candidates labelled the waterfall and some also labelled the plunge pool or the rapids, or commented on the smooth slope with gentle gradient above the waterfall and the uneven slope with gentle gradient below the waterfall. Some candidates tried to subdivide the profile into upper, middle and lower course, while others tried to label features of a cross-profile such as floodplain.
- (c) A variety of suggestions were acceptable. Some commented on the loss of natural beauty; others wrote about the effect on plants and animals or people living in the area. A large number of candidates misread the question and wrote about why it would be a good place to build a dam.

Question 4

- (a) Most candidates successfully completed Fig. 6, with a bar for UAE showing 550 000 emigrants from the Philippines. Reading from the graph for part (ii), answers of 215 000 to 224 000 were acceptable for the number of temporary migrants to Qatar. The most common error was to omit the extra zeros needed to show the figure in thousands.
- (b) The countries from Fig. 6, listed again in Table 1, all showed high GDP, much higher than the Philippines, as evidenced by the dollar total and also the world ranking. They also all had English either as the official language or widely spoken. Almost all candidates noted one of the points and many referred to two ideas and scored both marks.

Using the distances from Table 1 and the number of emigrants from Fig. 6, candidates were able to notice that, for Kuwait and USA, distance has little effect on the number of migrants. Many indicated that they had selected appropriate figures to compare and noted that the number of migrants for these two countries was almost the same. Those that reached a different conclusion had usually looked at the wrong pair of countries or even all of the countries. A few compared the population figures from Table 1 rather than the number of migrants.

- (c) Most candidates correctly completed Fig. 7, with a divided bar, to show 59% of total temporary emigrants were to the Middle East. A few candidates opted for two individual bars, like a horizontal bar chart.

Question 5

- (a) Many candidates successfully completed Fig. 8, dividing the remaining segment and shading in accordance with the key.
- (b) For (i), candidates had to focus on the map in Fig. 9 only. This showed the main transport routes and the proximity of the university to Bangalore. However, it was necessary to do a little more than simply point this out. Thus railway (or expressway / airport) for transport of products (or raw materials/employees/customers) and university supplying a well-educated workforce or for research were the sort of developed points that were needed.

With the focus in part (i) on the transport choices, many candidates went on to part (ii) with the idea that lots of options and competition would drive down the cost of transport. Relatively few pointed out that the components or raw materials or products were light in weight and low in bulk. However, in part (iii) most realised that the reason for high labour costs was due to the need to attract a skilled workforce.

- (c) Due to the shortage of land in Singapore, land costs there are high making it comparatively cheaper in Bangalore. Labour costs are also lower in Bangalore and financial incentives from the Indian Government add to the advantage of the LEDC location. Many candidates noted some of these economic benefits, while some pointed out that an electronics company in Bangalore would benefit from access to the large market in India. A few candidates were still focussing on transport issues.

Question 6

- (a) The oil leak in the Gulf of Mexico could not be measured accurately since it was 1500 m deep, and the resulting slick was hard to assess since it covered such a large area and was constantly being moved by the current and winds. Estimates could also have varied if the leak was gradually worsening. Many candidates had some sort of idea as to what was required here but some answers were a little vague and needed further explanation.
- (b) Although the oil first reached the Louisiana coast, a variety of answers were accepted, if they were backed up with good reasoning based on oil drifting east with the ocean current and being blown onshore by the wind. For Louisiana, Mississippi and Alabama, reasoning needed to be based on it being near(est) coast with SE onshore winds. For Florida and Cuba, the oil would be brought offshore by the ocean current and then carried onshore by NE winds (Cuba and Florida's east coast) or SW winds (Florida's west coast). Florida was the most popular choice of answer and most candidates noted the likely effect of the current. However the wind direction was not always given correctly, nor was its effect clearly stated.

In part (ii) candidates were asked to focus on Florida's east coast. Again the current would bring the oil offshore and the prevailing winds from the NE could drive it onshore. Many candidates noted this, though some wrote instead about the effect of the oil on the tourist beaches.

Finally in part (iii) candidates were asked to suggest two groups of people who would object to future oil drilling and give their reasons. A popular approach was to describe the effect on some aspect of the tourist industry and then either the objection of fishermen or conservationists to the potential destruction of the marine environment, with loss of fish stocks etc. Again some candidates misread the question and gave either one group for drilling and one against or, less commonly, two groups in favour of drilling.

GEOGRAPHY

Paper 0460/03
Coursework

General comments

Most Centres now seem to have made the adjustment to the new syllabus successfully. Individual Centres should receive feedback on the strengths and weaknesses of their own work, but there are some general comments that apply to more than one Centre that are worth noting.

In the initial steps of setting up questions to guide the work, or devising hypotheses, it is worth being fairly precise about what is to be investigated. The most successful Centres devised five or six questions, or hypotheses, and asked candidates to choose some of these. They usually offered the opportunity to their candidates to devise a further question or hypothesis, and this helped their more able candidates to distinguish themselves. It really helped candidates to achieve good marks if they briefly explained the geographical thinking behind their questions or hypotheses at the outset. For example, if investigating retailing, and the idea being investigated was that there are likely to be more comparison shops in an urban centre and more convenience shops on the outskirts, it helped if the reasons for comparison shops clustering (potential shoppers can compare features and relatively high prices of infrequently purchased goods, before making a purchase, and that stores which are isolated lose out on this) and convenience shops being isolated (their goods are frequently bought and of low cost, so that the cost of travelling far to buy them cannot be justified), could be made explicit. This gave candidates something solid to discuss in their analyses, and to refer back to when writing their conclusions. Lengthy histories of settlements and what they were famous for, add little to the Geography or credit that could be awarded.

Methods of investigation were almost universally sound and hardly any Centre did not give good guidance to their candidates here. Many successful Centres issued documents to candidates giving guidelines over these methods of collection, and most of the advice was of a high quality.

Fewer Centres gave advice on the range and complexity of methods of presentation that could be used to show the findings. Most candidates approached this section with some background in understanding pie and bar charts, and could make tables and use photographs. It was easy to make attractive pie and bar charts using Excel or other computer programs that many candidates went no further. These techniques were a vital starting point, but mapping (dot, located pies, choropleth, isoline and desire line for example) and slightly more complex techniques, such as plotting a scatter graph, were often overlooked. In the example of comparison and convenience stores mentioned above, a distribution map of each type of store to compare locations, or the number of each type of store recorded with distance from an urban centre, could express so much more and give lots of information that can be picked up in an analysis. Photographs can be a great aid, but they were often accompanied with only a brief title and little or no explanation. In the study of retailing being considered, some annotation for instance, to indicate several comparison stores close together, or showing a convenience store in isolation, would help make the photographs work for answering the question set, or testing the hypothesis, much more fully. The logical organisation of the work was very rarely a problem, and the advice that was currently being given by most Centres should be continued.

Very few candidates at this level of study and age range understood what was required of them in an analysis. Even able candidates were often unsure of what to do unless they had been given some guidance. If some advice about this could be included in a brief guidance document for candidates, it could have improved the quality of what was written enormously. If this advice could be expressed in as much detail as that given by most Centres for data collection, a much higher standard could be achieved by a greater number of candidates. If candidates had explained the Geography behind their questions or hypotheses earlier on, it would have given them a framework to discuss the results that they were finding. In particular, it helped candidates when they were faced with anomalous results. If they were familiar with the reasoning behind their investigation, it often gave them clues as to thinking of possible explanations for results that both fitted their expectations, or seemed to contradict them. It was a section worth twelve of the sixty marks available, but it was one that was often glossed over, neglected altogether, or approached with little understanding of what was expected.

Many Centres did give candidates advice over how to write a conclusion and an evaluation. This usually helped candidates to produce an appropriate account at this stage. But as with other sections, if not given, most candidates, even able ones, did not have a clear picture of what was required of them. For many youngsters, this was the first time they have had any experience of producing a lengthy piece of writing reporting on work they have done and so had little grasp of the purpose of such a conclusion. Once again, if they had clarity in explaining what they were investigating initially, along with the geographical theory behind it, they had a framework for expressing their conclusions. Even so, some written guidance to refer back to their questions and hypotheses, and to assess how far they have been answered or confirmed, gave a good steer over what should be written.

It was in evaluation that some of the biggest contrasts between Centres were often seen. They ranged from statements such as "I think I have done the best I could in this study", to detailed reflections on the methods they had used, with the benefit of hindsight, and went on to express who, or which interest groups, may find the results of help or interest. Some good candidates often showed what further questions had been thrown up by their findings. This was often the case when anomalies had been found that initially seemed to contradict the theory behind what had been discovered.

Some of the most successful Centres addressed each of the sections, or stages in the route to geographical inquiry, briefly but informatively, in a guiding document for candidates of about two to three pages of A4. It is intended, with the permission of the Centres involved, to display some of these on the CIE web site as examples of good practice. Furthermore, and given the same proviso over permission, it is intended to show some examples of work on the web. These should give ideas over additional help candidates can be offered and the standards that can be achieved.

Almost all Centres have submitted proposals for the investigations they intend to undertake, as advised in the syllabus. Moderators noted that where Centres were undertaking work that was not giving candidates access to the full range of marks available, or that the assessment of the work was not fully in line with the standards expected, it was often the case that such a submission had not been made. If any Centre has not yet submitted proposals for future coursework, they are encouraged to do so, as the feedback is never critical, and is always supportive in helping Centres to get the very best from their candidates.

In a very high proportion of the work submitted, the assessment was quite appropriate, and the number of instances of Moderators recommending changes to the marks submitted was fairly small. Where changes have been made, they tended to fall into one of two groups of reasons related to the changes made. A few Centres had not shown a full appreciation of the nature of the content of each of the sections required in the work. It is hoped that the content of the preceding paragraphs may help here. In other cases, the work was largely appropriate, but the 'yardstick' being used to assess the marks for the work was out of alignment with the majority of Centres. Another purpose of putting some further examples of candidates' work on the web is to help Moderators in Centres gain some further insight into the standards required for the mark ranges.

One possible source of inconsistency was that a few Centres were still using a mark scheme of their own devising, albeit based on the one in the syllabus, but often adapted to take account of the likely content of their own investigation that had been chosen. This could sometimes lead to different standards being applied. It should be noted that only the mark scheme published in the syllabus should be used. A few Centres did submit their own mark scheme in this session. Now that this has been reported back for two sessions, this should not continue in the future.

The number of over-length studies was relatively few, and usually came from Centres where most of the candidates had submitted over-length work. Slightly over-length studies usually created few problems, but those going over by more than say, 500 words, usually contained superfluous and irrelevant material, and limited the overall credit that could be awarded accordingly. In a few cases, it was noted that Centres stated that they were aware of the problem and were acting to correct it. This is to be welcomed, as candidates will benefit from such adjustments.

Reports such as this one inevitably dwell on shortcomings and ways in which improvements can be made. It should be noted though, that the majority of work was very sound, was appropriately assessed, contained interesting Geography, and reflected a good deal of enjoyment on the part of the candidates in undertaking the work.

GEOGRAPHY

Paper 0460/41

Alternative to Coursework

Key messages

- Some candidates still omit graph completion questions and lose marks as a result. This is an area where candidates should take care to read all rubrics and questions so that these questions are not missed.
- Evidence was seen on this paper that candidates are still writing too much on some questions. The numbers of lines provided for a response should be a guide to the length of response required and candidates should tailor responses to the number of marks on offer for that question.
- Candidates should pay particular attention to command words to ascertain what is required of any response and to limit misunderstanding of questions
- Knowledge of fieldwork equipment and techniques has always been a key part of the Alternative to Coursework paper and as such should be an important part of preparation for this examination

General comments

Most candidates found this examination enabled them to demonstrate what they knew, understood and could do. The overall range of marks showed a slightly narrower range than previous years - with weaker candidates scoring on the practical questions, such as drawing and interpreting graphs and tables, and candidates of higher ability scoring well on the more challenging sections requiring explanation and judgement especially regarding hypotheses. Overall **Question 2** proved to be slightly easier than **Question 1**.

There is less general advice to be given on areas for improvement with this paper compared with others. As there are no choices to make, it is difficult to miss sections out, although some candidates omit graph completion questions which are usually 'easier' to answer. Although there were no significant reports of time issues some candidates do write too much in some sub-sections. They should be encouraged to answer more succinctly and perhaps give more thought to their answers. Most points for teachers to bear in mind, when preparing candidates for future Paper 41 questions relate to misunderstanding command words and familiarity with fieldwork techniques and equipment. Particular questions where candidates did not score well often related to them not carefully reading the question, for example **Question 1(c) (ii)** where candidates were instructed to use evidence from the Figure. Unlike some previous papers there were no questions which required candidates to develop their own hypothesis or investigation methodology. However, these questions are frequently included on this paper and are an area which Centres should practise with candidates.

Centres need to realise that, although this is an Alternative to Coursework examination, candidates will still be expected to show that they know how fieldwork equipment is used and appropriate fieldwork techniques even if they have only limited opportunity for fieldwork within the Centre. For example **Questions 1(a) (i) and (ii), 1(d) and 2(a) (i), (ii) and (iii)** focused on specific equipment and techniques, commonly used in fieldwork.

Comments on specific questions

Question 1

- (a) (i)** Most candidates gave sensible suggestions of different tasks to be included in measuring the depth of a footpath. The better answers had a logical order to the sequence of tasks.
- (ii)** The ability of candidates to answer the question depended on whether they had been given the opportunity to use a quadrat in doing a piece of fieldwork. Those candidates who were familiar with the equipment scored high marks with detailed, well labelled diagrams. Some candidates did not

draw the quadrat with a square grid pattern or draw only a small number of grid squares, such as four. The most common division of a quadrat is a ten grid square. If candidates did not know what a quadrat looked like they drew a pie chart or divided rectangle for which they gained no credit.

- (b)(i)** The cross-section was completed accurately by most candidates.
- (ii)** This question differentiated well. The best answers were comparative and accurate in their statements about width, depth and steepness of the sides of the cross sections. A common error was to refer to distance as if this was along rather than across the footpaths. Also some candidates had difficulty in making clear that their comparison between the gentler or steeper slopes referred to the sides of the cross section not the gradient of the footpath.
- (iii)** Most candidates correctly agreed with the hypothesis and backed up their decision by saying that the paths were deeper in the Centre. Few candidates included data to support their decision.
- (c)(i)** Most candidates completed the kite diagram accurately. The most common omission was not shading the percentage of vegetation cover.
- (ii)** Candidates were told that hypothesis 2 was correct and did not gain any credit for re-stating this. The question required supporting evidence for this conclusion from the two kite diagrams. Many candidates failed to use evidence from the diagrams such as percentages of vegetation cover at different points across the footpath. Instead they gave interpretive comments such as 'less vegetation in the Centre' which merely re-stated the reverse of the hypothesis.
- (iii)** The question was challenging but achieved good differentiation between candidates. The best answers made relevant points about width or depth of the footpaths and developed these ideas for full marks. Many candidates failed to heed the instruction to use the information in Fig. 1 for help in answering the question. This map gave a context to the two footpaths from which differences in erosion could be deduced. The best answers made use of the contour pattern on the map and the evidence of a viewpoint at the top of the slope. Weaker answers included suggestions about tree roots or amounts of rainfall which were not shown on the map.
- (d)** This question produced variable responses and again proved to be a good discriminator between candidates who had done some fieldwork and those who had not. Most candidates understood that they needed to time the rate at which water soaks into the soil and therefore gained some credit for these ideas. What distinguished the better answers was a reference to something to contain the water as it soaked into the ground rather than generally pouring it onto the paths. A common misconception was that the soil must be dug up and placed into a container to measure infiltration.
- (e)** Many candidates made sensible suggestions of ways to reduce footpath erosion. Many valid answers were credited, with common responses referring to creating artificial paths, restoring existing footpaths, and restricting usage to allow time for recovery.

Question 2

- (a)(i)** Some candidates do not understand the concept of sampling which is a basic fieldwork technique. The most popular choice of technique was systematic sampling with most answers including a justification that it would remove bias from the sample.
- (ii)** The task was simple but challenging and again tested a fieldwork technique. Candidates who had used a questionnaire realised that the age groups should be specific and not overlap. This is the type of work that Centres can do in preparation for this examination.
- (iii)** The questionnaire was completed correctly by nearly all candidates.
- (iv)** Most candidates correctly identified two water sources, with the most popular suggestions being a river, a well and bottled water.
- (v)** Most candidates recognised the possible illegality of getting electricity by unofficial cable.

- (b)(i)** Most candidates completed the divided bar graph accurately.
- (ii)** Nearly all candidates accurately completed the bar graph
- (iii)** The question was a good discriminator. Almost all candidates agreed that the hypothesis was correct and many gave valid, comparative answers, either by using the statistics or interpreting them. The best answers extracted information from the three data tables in turn to produce a well-ordered answer.
- (c)(i)** Most candidates completed the pie chart correctly, although some did plot the dividing line too close to the 60% division. A common mistake was to reverse the segments. This was not accepted as the order of the segments should be the same as the adjoining pie chart.
- (ii)** Most candidates scored both marks, probably helped by the provision of alternative answers. Nevertheless candidates still had to interpret the data to reach the correct answer.
- (iii)** The key was completed accurately by most candidates. The only common error was to reverse the order of the key rather than putting it in the same order as the pie charts.
- (iv)** This question was generally answered well. Candidates used the data accurately and made comparative references to homes with different numbers of people living in them, especially contrasting homes with 1, 2 or 3 people and those with 4 people living in them.
- (v)** Whilst most candidates correctly disagreed with the hypothesis, they did not explain their reasoning by referring to the number of people and the number of rooms per home.
- (d)** Many candidates made sensible suggestions about possible difficulties. The most popular responses were about possible dangers to the candidates and the reluctance of people to answer the questions.

GEOGRAPHY

Paper 0460/42
Alternative to Coursework

Key messages

- Some candidates still omit graph completion questions and lose marks as a result. This is an area where candidates should take care to read all rubrics and questions so that these questions are not missed.
- Evidence was seen on this paper that candidates are still writing too much on some questions. The numbers of lines provided for a response should be a guide to the length of response required and candidates should tailor responses to the number of marks on offer for that question.
- Candidates should pay particular attention to command words to ascertain what is required of any response and to limit misunderstanding of questions
- Knowledge of fieldwork equipment and techniques has always been a key part of the Alternative to Coursework paper and as such should be an important part of preparation for this examination
- When answering Hypotheses questions that ask whether you agree or not, always give your opinion first before any supporting evidence. This will usually be Yes, No or Partially/To some extent.
- When giving figures in an answer always give the Units if they are not stated for you

General comments

Most candidates found this examination enabled them to demonstrate what they knew, understood and could do. The overall range of marks was of a similar wide range to June 2011 - with weaker candidates scoring on the practical questions, such as drawing graphs, calculations and diagram completions and those of higher ability scoring well on the more challenging sections requiring explanation and judgement especially regarding hypotheses. The mean mark was in line with June 2011 and the Paper was deemed to have been appropriate for the candidates taking it.

There is less general advice to be given for areas for improvement with this paper as with others. As there are no question choices to make, it is difficult to miss sections out – though candidates do (especially completion of graphs) - and there were no reports of time issues as the booklet format does not allow or encourage over-writing of sub-sections. This year, however, many candidates chose to write longer answers than before and frequently wrote down the sides of the pages or added 4- or 16-page booklets at the end. Future papers may add an extra page of lines at the back as with Paper 12 for the convenience of candidates and Examiners. Most points for teachers to consider, when preparing candidates for future Paper 42 questions, relate to misunderstanding or ignoring command words and the use of equipment in fieldwork. Particular questions where candidates did not score well also often relate to them not fully reading the question. Such failings mean that some candidates do not obtain a mark in line with their geographical ability and is an area that Centres should work on.

Centres should be aware that, although this is an Alternative to Coursework examination, candidates will still be expected to show that they know how fieldwork equipment is used even if they have only limited opportunity within the Centre. **Question 1** required candidates to have experience of measuring a gradient with specified equipment, drawing dispersion graphs, bar graphs and pie charts as well as applying their knowledge to changes in bedload as you go down a river bed. **Question 2** required candidates to have experience of creating questionnaires, as well as drawing divided bar graphs and analysing and making judgements from tables.

Comments on specific questions

Question 1

- (a) (i) Few candidates gained all 3 marks on this question despite the information given in the resource. The key was to describe how the candidates measured the slope. While many realised that the two poles should be vertical, on the ground, and down the slope, too many wanted to insert the poles into the ground or put them across the wadi bed instead of along it. Some, unrealistically, wanted to put one on the upper course and one in the lower course or at the top and bottom of the valley. The majority did locate the poles in suitable places 10 metres apart. The use of the clinometer varied. Some thought it could measure the distance between the poles; others knew it measured the angle but could not explain it well enough missing the key point about locating it on the top of one pole and lining it up with the top of the other pole. Some thought it measured the slope or gradient rather than the angle.
- (ii) This was done well; most candidates calculated 22.5 though a few worked out a different answer and a number missed this question out completely.
- (iii) Most candidates gave a good reason for calculating the figure four times including to be more reliable, make it a fair test, to calculate an average or to mask the impact of an anomaly. A few gave the answer “*to be more accurate*” which on its own was not credited.
- (iv) Agreement with the hypothesis was the majority response here and most candidates followed it up by quoting data, as the question asked, mostly referring to the fall in the average angle from 27.5 to 22.5 to 11.5 degrees. A few did not make a decision on the hypothesis and a surprising number just described the change of angle downstream despite the question asking for data from Table 1.
- (b) The candidates were clearly directed to the equipment on the Insert however a number decided to use their own bringing in callipers to measure the size plus string and tape measures for various measurements. It was not enough to identify which piece of equipment would be used; *how* it would be used was the key. As there was one reserve mark for each of the three categories, with one floating mark, a candidate could score two marks on any one of size, weight or roundness. The size answers were disappointing, many answers stating that you would measure the size with the ruler. The best answers mentioned that you would place the rock against the ruler and measure its length in millimetres or centimetres. Weight measurements were discussed well although a few did suggest hooking the rock on the balance instead of putting it in the bag. This category scored two marks on most occasions. While most candidates did suggest comparing/estimating the roundness with the chart, a few also suggested using their eyes or putting the rock in a plastic bag then feeling it with their hands or even checking the rock against the ring on the balance. The use of the plastic bag was often imaginative in all three categories. Candidates must understand that if they are referred to a set of equipment, they must only use that and not bring in other types they may be familiar with to measure these factors.
- (c) (i) A lot of inaccuracies were seen on this graph. The majority could plot the two points though a few plotted 13 right and 9 elsewhere. A number (7%) did not attempt this question at all. While it might be understandable that the question might get “lost” in the surrounding graphs, candidates need to be trained to look for such questions in the layout. This is in the candidates’ best interests because there could be knock-on effects to judgements made based on these graphs in later questions though Examiners try to ensure that this will not happen.
- (ii) Most candidates could plot 10, 3 and 1 here though some misread the vertical scale and others miscounted the number of stones in various weight categories leading to incorrect plotting. As with (i) though again a surprising number missed this out. Although shading was not credited on this occasion, it should be pointed out that many candidates did not shade their bars or, if they did, used a shading that was not the same as the provided graphs.
- (iii) Occasionally pie charts are credited even if they are done the “wrong way round”. However on this occasion, where the key clearly ran sequentially from Class 1-5, credit was only given if the line was plotted at 80 and the shading was in the order of the key. Many candidates did this well, though some of the shading, especially the horizontal lines, was marginal. Others did it the wrong way round and some (8%), as with the rest of the graphs in (c), did not attempt it at all.

- (iv) Questions are set such that, even if graphs have been incorrectly completed or just missed out, there will not be a knock-on effect on later questions as far as possible. All the graphs set so far referred to the Middle course. Here the hypothesis was about the bedload becoming smaller and rounder downstream so the river graphs for the Upper and Lower course would be the best ones to look at giving evidence to support the hypothesis which most candidates correctly did for one mark. As the hypothesis referred to small and round there was one reserve mark for each of these with one other which could be used for a weight comment (Fig. 4) or other evidence for smaller/rounder pebbles. This was done well. Most gave evidence using statistics especially for roundness classes. The importance of units must be stressed e.g. cm in size comments and grammes in weight comments. Most compared upper to lower and many scored 4 marks on this. A small number disagreed with the hypothesis. A number did just repeat the hypothesis in other words as their evidence.
- (v) This question was about the effects of erosion on bedload as it was transported downstream. Consequently what was expected was a description of attrition and/or abrasion, hydraulic action or corrosion. Too many candidates focused on the velocity of the river or deposition rather than erosion. Those that mentioned the erosional processes did not always describe them but credit was given to those that described the process that reduced bedload size. Attrition was the most common response though not always described. This section gained the lowest marks on **Question 1**.
- (d) Although this is a paper that covers fieldwork techniques, there is a degree of knowledge required and given the topic of dry river beds in a desert, it was logical to ask a pure knowledge question on exfoliation which is in the syllabus. Many candidates gained all three marks referring to large diurnal temperature ranges, heat causing expansion, cold causing contraction and the stresses of this causing layers to peel away. Others brought in moisture and confused exfoliation with freeze-thaw or wind erosion.
- (e) The key to success on this final part of **Question 1** was to note that the question was about how the candidates could have improved their data collection methods when investigating these two hypotheses; in other words how could they have done this investigation better. Consequently suggestions that referred to doing it in other seasons, on other rivers and in different weather conditions were irrelevant as they are ways to widen the research not to improve what they had just completed. Suggestions such as using more sites along the valley, collecting more rock samples, using better (named) equipment, carrying out a pilot study were all good ways that would have improved this investigation. A number gave three different pieces of named equipment for the three suggestions but this was restricted to a maximum of one mark to credit broader answers.

Question 2

- (a) (i) This was done well by those candidates that noticed the emboldened **questions** in the command line and focused purely on the weaknesses of those. Vagueness, general questions, irrelevant questions, reasons not asked for, were all mentioned however some widened their answers beyond the questions to the style/layout of the questionnaire e.g. it had a poor introduction, was too aggressive, was intrusive and impolite, did not have tick boxes. It was surprising that many candidates thought some questions were too open-ended when they were the opposite – closed - eliciting only yes/no responses.
- (ii) This was done well, Most candidates commented on the fact that the second questionnaire did ask for reasons, had relevant questions, had an informative introduction and gave choices. They also recognised that asking for age/gender would help in analysing whether different groups held different opinions. Some suggested it would be quicker but another look at the first questionnaire should demonstrate that that would not be the case as all 4 questions could be answered yes/no; this also counteracts the suggestion that the second questionnaire would involve less writing. Although issues of politeness were not credited; it was heartening to see how many candidates thought that politeness to interviewees was crucial to many successful investigations.

- (iii) The advantages of systematic sampling are that it is easy to organise by taking every nth person/house and avoids bias/candidate choice thereby ensuring a fair test. This was by far the most successful and common answer given. A few candidates wrote about stratified sampling but did not mention its name e.g. taking sub-groups of age/gender. There was some confusion among those that chose Random sampling as they did not define whether it was the formal type involving random numbers or the “loose” type where you just asked anybody you saw. Consequently it was difficult to credit the random description and the reason for choosing it unless candidates made clear which type they would use. This is an area for Centres to clarify but sampling answers have improved in recent years.
- (b)(i) By far the majority chose the correct answer regarding the turbines only working “*when it is very windy*”.
- (ii) This was plotted and shaded well by most candidates especially the 19 plot which required careful judgement.
- (iii) Almost all candidates agreed that the Hypothesis was supported and also gave data as required e.g. 72% or 72/100 or 72 supported it but 28 did not. A number of responses just gave 72 which, on its own, cannot be credited and others, while agreeing with the hypothesis, described the support when the question clearly asked for data
- (iv) The key to a successful answer here was to read the question and notice that it asked for reasons “*not shown in Table 4*” – in other words not repeating wind power is renewable, would not cause pollution, is free etc. Too many candidates ignored this and gave the reasons seen in Table 4. Those that scored marks said that they were low maintenance, can be in remote areas (not everywhere), have low noise (not no noise), create jobs (but not in the local area), avoid the need to mine fossil fuels. Answers that referred to them being cheap (must relate to cost of others), good to look at, attracted tourists and also did not contribute to global warming (indirectly linked to pollution), did not harm the environment (effects on birds/habitats) were not credited here. This section yielded the lowest marks on **Question 2**.
- (c)(i) A good deal of correct plotting was seen here with most candidates gaining 3 marks. The middle shading was not always clear as some just matched the provided lines. As with all graphs on this paper, a number (6%) missed this question out completely.
- (ii) Almost all chose the statement about “*few jobs*” though a few responses added “*a*” to it which slightly altered its meaning. A very small number just wrote “*Statement 5*” or “*the last statement*” which was the right choice and was credited but it would have been better if they had written the statement out.
- (iii) A careful look at the table gave clear evidence that there were many people for the wind turbines and many against for different reasons. For many candidates this correctly pointed them to the judgement that the hypothesis was *partly true* or *true to an extent*. Once that decision was made, most then gained the other marks for quoting the higher percentages of either argument with one mark reserved for one argument for and against. As an exception, credit was also given if the candidate stated the hypothesis was true and referred to *60% against as the turbine would spoil the view* as the hypothesis did end with “*on the hilltop*”. Too many candidates made a bold judgement that it was true or false with no midway position; as the evidence clearly pointed that was not the case, no marks were credited. Marks were credited for valid evidence if there was no hypothesis decision made. The evidence needed to state the largest figure e.g. 90% agree that there would be a lot of noise (made up of 70% agree strongly and 20 agree); some in this example just said 70% agree which was wrong. Too many said “*lots of people*” or “*many*” or just said “*they*”; answers were credited if they referred to the larger percentage or “*Most*”. Candidates need to be trained into considering giving a partial agreement as well as true/false to hypotheses. Candidates who looked clearly at the evidence did this and consequently gained the full 5 marks.

- (d)(i)** This was done well with HEP, solar power and geothermal power being the most common. Candidates needed to state an example of renewable energy as asked so weak answers such as sunlight, water were not accepted. Some gave wood, gas, coal, thermal and nuclear power but the majority by far gave two acceptable examples as listed in the syllabus.
- (ii)** There still appears to be a lot of confusion over how global warming occurs. Centres need to carefully differentiate between the existence and importance of the ozone layer and the effect of pollution on the “blanket” that prevents long-wave radiation leaving. Many used the extra penetration through the ozone layer as an influence. The best answers made no mention of the ozone layer and followed the sequence of short-wave radiation coming in, reflecting off the earth’s surface, being trapped by the blanket and bouncing back to create heat and increase temperatures. Most marks were found in the second half of the answer as too many candidates insisted on describing the causes of global warming for which there was no credit.

GEOGRAPHY

Paper 0460/43

Alternative to Coursework

Key messages

- Some candidates still omit graph completion questions and lose marks as a result. This is an area where candidates should take care to read all rubrics and questions so that these questions are not missed.
- Evidence was seen on this paper that candidates are still writing too much on some questions. The numbers of lines provided for a response should be a guide to the length of response required and candidates should tailor responses to the number of marks on offer for that question.
- Candidates should pay particular attention to command words to ascertain what is required of any response and to limit misunderstanding of questions
- Knowledge of fieldwork equipment and techniques has always been a key part of the Alternative to Coursework paper and as such should be an important part of preparation for this examination

General comments

Most candidates found this examination enabled them to demonstrate what they knew, understood and could do. The overall range of marks was a similar range to previous years - with weaker candidates scoring on the practical questions, such as drawing and interpreting graphs and diagrams, and candidates of higher ability scoring well on the more challenging sections requiring explanation and judgement especially regarding hypotheses. Overall **Question 1** proved to be slightly easier than **Question 2**.

There is less general advice to be given for areas for improvement with this paper compared with others. As there are no choices to make, it is difficult to miss sections out, although some candidates omit graph completion questions which are usually 'easier' to answer. Although there were no reports of time issues some candidates do write too much in some sub-sections. They should be encouraged to answer more succinctly and perhaps give more thought to their answers. Most points for teachers to bear in mind, when preparing candidates for future Paper 43 questions relate to misunderstanding or ignoring command words and the use of appropriate fieldwork techniques. Particular questions where candidates did not score well often related to them not carefully reading the question, for example **Question 2(a)** where they had to explain rather than describe land use and 2 (d) (i) where a representative sample was the focus. Unlike some previous papers there were no questions which required candidates to develop their own hypothesis or investigation methodology. However, these questions are frequently included on this paper and are an area which Centres should practise with candidates

Centres need to realise that, although this is an Alternative to Coursework examination, candidates will still be expected to show that they know how fieldwork equipment is used and appropriate fieldwork techniques even if they have only limited opportunity for fieldwork within the Centre. For example **Questions 1(b) (i), 1(c) (i), 1 (d) (i) and 2(b) (i)** focused on specific equipment and techniques, commonly used in fieldwork.

Comments on specific questions

Question 1

- (a) Generally sensible advice was suggested with particular emphasis on the dangers of waves, slippery rocks, and the need to wear suitable clothing and footwear. Answers which were not credited included wearing life jackets and the need for swimming lessons. Some weaker answers showed little appreciation of what the fieldwork would involve, that is working on the beach or at the shoreline.

- (b)(i)** Most candidates suggested using a stopwatch, counting the waves, giving a specified time, and taking an average of measurements. Various suggestions were made for checking when the wave reached the beach, using candidates' shoes, ranging poles and bottles.
- (ii)** Most candidates correctly completed the bar graph.
- (iii)** Many candidates showed good knowledge of the features of destructive waves. The best candidates wrote in detail about wave frequency, swash and backwash, and height. Weaker answers were typified by vague descriptions such as powerful, lots of energy, dangerous and big or strong.
- (c)(i)** The question differentiated well between candidates. There were some detailed descriptions of how the profiles would be measured, which were probably based on actual fieldwork. The inclusion of a diagram to show the measuring equipment helped candidates to focus their answers. Many candidates did not refer to the clinometer being held at a fixed height on a ranging pole and being pointed at the same height on the other pole. Also many candidates believed that the poles should be positioned at either end of the transect rather than a measured and consistent distance apart. Some candidates showed unfamiliarity with the equipment and suggested that the poles should be placed in the sea and the clinometer could be used to measure the waves.
- (ii)** Almost all candidates calculated the average angle of slope accurately.
- (iii)** Most candidates concluded that the hypothesis was correct and gained the second mark either by use of appropriate paired data or a comparative description.
- (d)(i)** The answers were variable in detail. A small number of candidates suggested using a quadrat to identify which stones to collect, but most ignored this aspect of collection. Some candidates did not realise that seven stones were collected. The better answers referred to measuring the longest axis or length of the stone rather than just the size.
- (ii)** Most candidates correctly plotted the correct symbol. The most common error was to position the plot lower down the scale, not realising that each horizontal line on the scale represented 4 mm.
- (iii)** This question also discriminated well between the quality of answer. There were many well thought out conclusions which used the evidence to conclude that the hypothesis was partially true. This conclusion was reached where candidates recognised that the relationship was true until 12 metres away from the low water mark where there was an anomaly in the results. However, some candidates wrongly concluded that the hypothesis was incorrect just because of the one anomalous result.
- (e)** Many suggestions were made about how to improve the measuring task. The most common suggestions were to collect more than seven rock samples, and to do the profile measurements at more locations on the beach or on different beaches in the area. Weaker answers were typified by statements such as 'make more measurements' and 'repeat the experiment'.
- (f)** Candidates who had studied coastal protection and management described ideas such as groynes, beach replenishment and breakwaters. However, many candidates ignored the scale of the effects and suggested minimal influences such as bathing in the sea, building sandcastles on the beach, and walking along the beach. They gained no credit for these ideas.

Question 2

- (a)** Many candidates failed to answer the question because they described different areas of land use rather than explaining why areas of a city differ. Candidates described the CBD or inner suburbs but did not consider why these different areas grew up. Candidates who answered the question correctly usually wrote about cost and availability of land, or availability of space within the city. Only the most able candidates included ideas based on transport routes or physical features.
- (b)(i)** If candidates were familiar with using perception study recording sheets they wrote confidently about making a decision about each category and recording their decision on the recording sheet. However, some candidates thought that these recording sheets should be given to people in the area which is not the correct idea of a perception study.

- (ii) The inclusion of 'trial' in the question appeared to assist candidates and directed them away from the common misconception that a pilot study is concerned with an aeroplane. Most candidates recognised the benefits of doing a practice survey before beginning the real thing. Many suggested that it would be useful to practice technique and improve the recording sheet. Weaker answers focused on the convenience of doing the pilot study near the school, and a few weak answers suggested the pilot study would be useful to check equipment, but the only equipment needed for this investigation was a pen and the recording sheet.
- (c) (i) Most candidates plotted the bi-polar graph correctly. Two plotting errors were to continue the line to zero at the bottom of the graph and to draw a solid line rather than a dashed line.
- (ii) Most candidates made a good attempt to justify and support the conclusion given in the question which did differentiate well between the qualities of answer. Weaker answers only referred to the overall environmental score in the different areas whilst the best answers included much more evidence from the bi-polar analysis, including reference to anomalies. Whilst weaker candidates compared two areas but did not explain which was nearer or further from the town Centre.
- (iii) Better candidates recognised weaknesses of the fieldwork technique and explained that one road would not be representative of an area and that the scoring system of a bi-polar survey is subjective. Weaker candidates included statements such as 'the fieldwork would be inaccurate' which were not credited.
- (d) (i) Many candidates did not focus clearly on one sampling technique. Their answers were rather vague about the methodology of doing a questionnaire. The key word in the question was 'representative'. Although candidates gained one mark for describing random or systematic sampling, the answers which focused on stratified sampling were the most appropriate to acquire a representative sample.
- (ii) Almost all candidates correctly completed the survey sheet.
- (iii) Many answers were well thought out and candidates included ideas about different walking speeds or methods of transport, or that the people questioned would not know an exact time but that peoples' perception of time taken would vary.
- (iv) Most candidates completed the accessibility index correctly. The main error was not including the score which the candidate had worked out in the total score, so calculating an answer of 17 rather than 20.
- (v) Most candidates correctly plotted their index score on the dispersion graph.
- (vi) Despite being told that the median value is the middle one, some candidates circled the wrong value.
- (vii) Answers were variable in quality although most candidates realised that the hypothesis was not true. They then attempted to use the evidence from the dispersion graph to support their conclusion. The most common weakness was not referring to the median value but just the value or score in general. Better answers also included evidence about the range of results from the three areas.
- (e) Some candidates did not understand that the question focused on differences in one area rather than differences between the areas. Consequently they repeated ideas from **d(iii)**. The more perceptive candidates did recognise that people would live at different distances from services or use different service providers if there was choice.

GEOGRAPHY

Paper 0460/05

Computer Based Alternative to Coursework

Key messages

- ensure candidates learn the key terms
- read the question carefully
- back up answers with data
- include detail in their answer
- as an Alternative to Coursework examination candidates need to know how to use fieldwork equipment in detail (and ideally have some experience of using it).

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, an explanation and knowledge (the Examiner marked sections) more detail, depth and use of data was often required.

The simulation was based on an investigation into the impact of tourism on a village. Two hypotheses were investigated. The first related to the use of the shops and services in the village by tourists; the second related to the positive impact of tourism on the village.

Comments on specific questions

Question 1

This question involved the completion of sentences relating to tourism. Almost all candidates correctly identified a tourist as being a person who visits places away from their home for enjoyment and most candidates were able to say that selling clothes was in the same industrial group as tourism. However, although some candidates correctly identified tourism as a tertiary industry, some incorrectly thought it belonged to the secondary sector.

Question 2

This question involved the candidates interpreting a line graph showing the world growth of tourism. Most candidates correctly identified that there were 300 million tourists in 1980 and that this grew to 880 million in 2010.

Question 3

In this question, the candidates had to give reasons for the rapid growth of tourism since 1980. Most candidates did well here, most gaining at least two marks. Common answers included the increase in income, faster air transport and the increase in leisure time. Vague answers, such as "better transport", gained no credit.

Question 4

In this question, the candidates were asked to give benefits that tourism brings to an LEDC. Most candidates answered this well and many gained full marks. Good answers included the increase in jobs, the increase in income for the country and the improvements in the infrastructure of the country.

Question 5

In this question, the candidates had to match up the photographs with their land use category. Most candidates found this question relatively straight forward and gained full marks, for correctly identifying that Photograph A was a shop (D), Photograph B belonged to other services (F) and Photograph C was a cafe/restaurant (A).

Question 6

This question involved the results of the land use survey. Most candidates were able to identify the counting method as a tally system/tallying and correctly count the number of houses (33).

Question 7

This question involved the candidates completing a bar graph showing the land uses in the village. Almost all candidates dragged up the bars to the correct heights (8 for other services and 33 for houses).

Question 8

This question considered the method used to calculate the percentages for the different land uses. Most candidates were able to correctly say that the calculation was the number of shops/total number of shops and services x 100.

Question 9

This question required the working out of the missing percentages for two of the land uses. Most of the candidates were able to correctly say that the percentage for the tourist attraction was 8.8 (or 8.82) and the percentage for the other services was 23.5 (or 23.52).

Question 10

This question asked candidates to classify two shops. This was well done and almost all candidates correctly identified the gift shop as being mainly used by tourists and the grocer as being mainly used by local people.

Question 11

This question considered the first hypothesis 'The shops and services in the village are mainly used by tourists'. Most candidates correctly supported the hypothesis and gained two further marks by giving an example of a shop (e.g. the gift shop) and an example of a service (e.g. a hotel) that were mainly used by tourists. However, few candidates gained full marks for recognising that some services (e.g. the cafe) would be used by locals and tourists.

Question 12

This question relied on the candidates' knowledge of high and low order goods. Some candidates got their answers the wrong way round and so scored no marks. Good answers included the idea that high order goods were expensive, not bought often and customers would travel a long way for them. In contrast, low order goods were cheaper, bought often and customers would not travel a long way for them. Bread was therefore an example of a low order good.

Question 13

This question was concerned with the classification of the impacts of tourism. Most candidates correctly identified footpath erosion as environmental and jobs as economic. However, candidates found parts (c) and (d) more challenging. More services for locals was a social impact (some candidates thought it was economic) and noise was environmental (some candidates thought it was social).

Question 14

This question involved the candidates completing a bar graph to show the benefits that tourism brings to the village. Almost all candidates completed the bar correctly (5 for money and 12 for jobs).

Question 15

For this question, the candidates had to use the traffic survey simulation in the Information File. Most candidates correctly counted 17 vehicles and came to the correct total of 34.

Question 16

This question involved completing a line graph showing the number of vehicles in the survey. Most candidates found the title challenging, including the word cars rather than vehicles or traffic. The plots were well done by most candidates (7 at 11.00, 17 at 14.00 and 10 at 17.00). Some candidates mixed the x and y labels up and others did not gain the mark for the y axis as they referred to the number of cars (rather than vehicles).

Question 17

For this question, the candidates needed to explain the negative impacts of tourist traffic. This question was quite well done but some candidates missed the word traffic in the question and so wrote about the negative impacts of tourists generally (e.g. litter). Good answers referred to the increase in noise pollution resulting from more traffic, the increase in air pollution from exhausts and the increased traffic congestion.

Question 18

This question considered the second hypothesis 'Tourism has a positive impact on the village'. The candidates needed to comment on the extent that they agreed with the hypothesis. Most candidates gained at least two marks here for giving two examples of benefits (such as more jobs and more money being brought into the village). Some candidates also recognised that there were also some negative impacts (e.g. more noise or more vandalism). Only the most able candidates gained the full four marks for also including data in their answer (that 75% or 15/20 thought tourism had a positive effect).

Question 19

This question dealt with explanation of methods used to reduce the negative impacts of tourism in the village. Some candidates found this question quite difficult. A number of candidates explained the methods but without explaining how this would reduce the negative impacts of tourism. Able candidates showed understanding that a park and ride scheme would reduce the amount of traffic congestion in the village and that clearly marked footpaths would reduce soil erosion. Some candidates did not realise that the information Centre provided education about how tourists should act in the village and thus not cause a negative impact.

Question 20

This question involved suggesting (and explaining) three improvements for the investigation. Most candidates found this question hard and few gained more than four marks. Some suggestions were too vague, such as "get more results" and some explanations were incorrect, such as to be "more accurate". It must be remembered that collecting more data makes an investigation more reliable, but not more accurate. Some candidates incorrectly said that the tourists should be interviewed. However, there were some good answers with improvements such as taking the traffic count at more times during the day (to make the data more reliable), interviewing more people than 20 (to make the survey more reliable), using a systematic sampling method (in order to gain more representative data).