CONTENTS

GEOGRAPHY

| Paper 0460/01 |
| Paper 1 (Core) |

General comments

The mark distribution for this Paper showed a wide range in the performance of candidates. On the whole candidates had been correctly entered for this Paper, with relatively few at the upper end of the mark distribution who might have profited by being entered for the Extended Level Paper (Paper 2).

Candidates generally appeared to understand and interpret questions successfully although as the second part of this report will demonstrate, some candidates did not always heed the command words used in questions. Attention to the sub marks could be improved. Some candidates did not pay sufficient attention to these in giving guidance as to the detail and length of responses required. More notice is, however, being paid to both the general paper rubric and internal rubric requirements. Candidates from some Centres do persist however in answering more than the required three questions. This practice is not to be encouraged because clearly candidates do not allow themselves sufficient time to cope with the demands of individual questions which contribute to the script totals. In general the use of time available in the examination was very good with three relatively balanced answers characterising most scripts.

Encouraging use was made of the variety of resources offered within questions. The only exception to this was in interpreting Fig. 10 (a triangular graph) in **Question 5**. The photograph presented in **Question 3** was well used but some included a great deal of extraneous information for which there was no photographic evidence.

Questions where detailed reference was required from case studies were often poorly answered. In the syllabus mention is made of the importance of case studies. Previous reports on this examination have also underlined the significance of these studies in providing candidates with detailed information to assist in the answering of certain part questions within the Paper. Unfortunately candidates seem reluctant to include such specific information in answering these questions and in consequence responses are often very general, earning relatively low marks. This was particularly evident in many answers to **Question 2 (b)**, **Question 5 (c)** and **Question 6 (d)**. It is in the interest of candidates that they are made aware of the significance of case studies in preparing for and responding to certain questions on the Paper, such as the ones mentioned.

Comments on specific questions

Question 1

This was the most popular question on the Paper and it was often well attempted. In **(a)(i)** many candidates accurately stated the length of time needed for the global population to double from the total of 1.5 billion in 1900. A number of candidates however did not observe that the graph showed when the world's population doubled again to 6 billion, namely in 1999. Some candidates could see how different situations of birth and death rates could result in three different estimates for future population growth in **(a)(ii)**, others found difficulty with X and Y. Graph Z was generally well analysed. There was a tendency on some scripts for candidates to comment on birth rate and death rate separately without relating this information to the three estimates of population shown on Fig. 1. Those who had prepared thoroughly for a question concerned with population developments responded well in all three parts of **(b)** showing good knowledge of reasons for high birth rates in **(b)(i)**, concern expressed by governments as a result in **(b)(ii)** and reasons for the decline in death rates in **(b)(iii)**. A number of candidates in **(b)(ii)** described how birth rates were being lowered rather than explaining why many governments attempt to lower birth rates in many developing countries. Others wasted time in **(b)(iii)** by commenting on increases in the death rate, when the question was only concerned with decline. Many could interpret Fig. 2 (the population pyramid of a developing country) successfully in **(c)** to identify the relevant age group in **(c)(i)** and describe the main features of the population pyramid in **(c)(iii)**. Candidates generally understood the meaning of the term 'dependent population' in **(c)(ii)** although some did not specifically refer to economic dependence. Useful attempts were seen in **(c)(iv)** when candidates suggested how the population of the country concerned might change over the next 50 years. Suggestions on some scripts were not always allied with appropriate reasons as required by the wording of the question.

Question 2

Fig. 3 was well used to answer all eight components of **(a)** with the descriptive responses being better than the explanatory. In **(a)(i)** candidates generally opted for the 'rural-urban fringe' rather than the CBD. An appropriate reason was often seen in answers to **(a)(ii)**. Many could successfully complete the diagram (Fig. 4) showing a shopping hierarchy in the town area shown in Fig. 3. Two alternative answers were accepted here because unfortunately residential shading had covered the symbol showing the single shop halfway between the CBD and the rural-urban fringe. As a result 8 or 9 was credited as the right answer depending upon whether the candidate had included this particular shop or not. In **(a)(iv)** candidates did not always appreciate the significance of size, sphere of influence and order of services in framing their responses. In **(a)(v)**, however, differences were recognised and in **(a)(vi)** good reasoning was generally seen justifying the location of the superstore at X. Differences in the road pattern were sometimes correctly described in **(a)(vii)**, but other candidates failed to note differences shown on Fig. 3. Candidates were even less sure about a possible reason for the difference recognised in **(a)(viii)**. In **(b)** candidates were often reluctant to refer to a named town or city, as requested, opting instead to answer in general terms. Opportunity was given in this question either for candidates to comment on a town/city they had studied from a textbook or to give details from their own or a neighbouring town/city. Reference to such examples is to be encouraged so that candidates might achieve a sense of realism in their geographical studies. A number of candidates only selected one option rather than the two required. In **(c)** candidates were more familiar with the causes of the selected problem in **(c)(i)** rather than with measures used to try and overcome the problem in **(c)(ii)**. Traffic congestion was the most popular choice from the three problems provided and was often well attempted.

Question 3

Questions on the natural environment, such as this one, are becoming more popular with candidates. Answers were often very satisfactory with good knowledge in **(a)** and sound interpretation and explanation of Fig. 5 in **(b)**. Definitions in **(a)(i)** were generally well made and many candidates could identify three ways in which a river transports its load in **(a)(ii)**. There was a certain amount of confusion here on some scripts with candidates stating three methods of river erosion rather than transportation. In **(a)(iii)** candidates were not always sure about a condition which might encourage a river to deposit some of the load it was carrying. Reference was often made to stage instead of to precise river conditions which encourage deposition to take place. The impression created in some responses was that no deposition takes place in the upper stage of a river's course, it all being concentrated throughout the lower course of a river. When a meander was referred to it was not always evident that deposition was concentrated near to the inner or convex bank. Fig. 5 was often satisfactorily used in **(b)** to identify the change about to take place at X in **(b)(i)**. Often the wrong selection was made in **(b)(ii)** with consequent inappropriate reasoning in the rest of the answer. Description often replaced reasoning in **(b)(iii)**. In **(c)** relatively few could successfully state the direction in which the camera was pointing when Photograph A was taken in **(c)(i)**. In **(c)(ii)** candidates did not always note the instruction contained within the question to give their answer to the nearest kilometre. Recognition of river and valley features was satisfactory in **(c)(iii)** and often influences of the river and its valley upon the lives of people in the area were well made in **(c)(iv)**.

Question 4

Candidates did not always take sufficient care in stating the climatic details required in **(a)(i)**. Either the interpretation of information contained within Fig. 7 was inaccurate or candidates were failing to present two features on each of temperature and rainfall. Completion of the boxes below Fig. 8 was also disappointing in **(a)(ii)**. Many candidates did not appear to know the features of the tropical rain forest illustrated, although in **(a)(iii)** most could explain the limited amount of undergrowth characteristic of much of the forest. Apart from vague references to the competition between forest components for the available sunlight and adaptations as a result; little was often revealed in **(a)(iv)** in relating forest features to climatic features. Some candidates had however thoroughly prepared this topic and produced better descriptions than in previous years when similar questions were included in the Paper. By contrast the newspaper extract (Fig. 9) was used reasonably well when candidates responded to the first three parts of **(b)**. Reasons were sometimes sparse or missing in **(b)(iii)**. There was a satisfactory response in **(b)(iv)** when candidates described problems for the environment resulting from deforestation, most candidates concentrating upon loss of habitat and species and global warming. Useful reasoning was also evident in **(c)** when candidates gave their views about the need to protect natural environments. Clearly this is a topic which stimulates a great deal of interest amongst candidates.

Question 5

Most candidates found **(a)** very difficult. In **(a)(i)** a considerable number of candidates were unable to accurately interpret data from the triangular graph presented in Fig. 10. It was comparatively rare to see two correct statistics in both A and B. On the other hand candidates were more adept in noting the broad differences in employment structure between the developed and developing countries shown on the graph in **(a)(ii)**. Reasoning for these: differences in **(a)(iii)** was, however, generally superficial and often irrelevant. A number of candidates included reasons in answering **(a)(ii)** when only description was required. Often these candidates then did not answer **(a)(iii)** or perhaps only produced one reason with a consequent loss of marks. Candidates were more at ease in responding to the various parts of **(b)** concerned with the motor vehicle assembly industry. This is stipulated as a topic for special study to illustrate an industrial system in Theme 3.2. Satisfactory to good understanding was revealed on many scripts in dealing with the demands of this part question. The real disappointment in responses to **Question 5** was part **(c)**. In **(c)(i)** relatively few could name an example of a small-scale cash crop farming system. The majority confused the relevant system with subsistence and occasionally large-scale systems of commercial farming or did not even name a farming system at all. Needless to say the accurate naming of a system in **(c)(i)** had a significant influence on the other two parts of **(c)**. When it was apparent that only a general appraisal of farming was being described, very few marks could be awarded. It is important that candidates are made aware of the prescribed illustrations required by the syllabus and thoroughly prepare information via detailed case studies. Candidates were often unsure of the meaning of the term 'farming processes' in **(c)(iii)**.

Question 6

All parts of **(a)** concerned with changes in global energy use were generally well attempted. Candidates used the information contained in Fig. 12 to good effect in guiding individual responses. By contrast most candidates seemed unsure in **(b)** as to why oil is still the most widely used source of energy in the world. Answers here often: included reference to the use of oil as a raw material for the petrochemicals industry rather than answering the question set which was only concerned with its use for energy purposes. In **(c)** very effective use was often made of the data provided in Fig. 13 in commenting on the information provided concerning the development and use of nuclear power. Most expressed the information in their own words as requested by the question. Part **(d)** was based upon a study of tourism. Advantages in **(d)(i)** were usually satisfactorily stated. In **(d)(ii)** the naming of an area was often missing in **A**. In **B** candidates were generally short of ideas on eco-tourism, even though it was defined in the stem to the question.

> **Paper 0460/02**
> **Paper 2 (Extended)**

General comments

The upper end of the mark distribution on this Paper contained scripts of excellent quality where candidates displayed a very sound understanding and knowledge of concepts assessed. This was often combined with good interpretation in using the resource materials presented on the Question Paper. A number of candidates at the other end of the mark distribution produced scripts which revealed certain limitations in interpreting and responding to the questions selected. It was noted that a number of candidates at the lower end of the mark distribution would have been better entered for Paper 1 (The Core Paper) than this Paper. These candidates produced limited responses with little of the extended writing anticipated on the Extended Paper. It cannot be overemphasised that it is important for candidates to be entered for the Paper most suited to their abilities both in interpreting and responding to the different styles of question set on each.

Generally candidates were well prepared for this Paper. Most candidates observed the general paper rubric in answering three questions. Inevitably there were a certain number who attempted more than the prescribed number of questions. This resulted in ineffectual responses lacking in the detail anticipated. There was a wider selection of questions this time when compared with former examinations for this Paper. Whilst candidates from certain Centres are often encouraged to attempt particular questions, it was not uncommon for candidates to display variety within Centres in their question selection. The questions on Population and Settlement (**Questions 1** and **2**) were as usual the most popular selections, especially **Question 1**. However both questions on the Physical Environment (**Questions 3** and **4**) were more popular than formerly. Good use was sometimes made of well annotated diagrams in responding to part **(c)** of **Question 3** and labelling to Fig. 6 was often effective in part **(a)(ii)** of **Question 4**. **Questions 2** and **5** were often poorly attempted for reasons which will be discussed later in the report. If these two questions were selected it frequently reduced the overall Paper mark. Candidates selecting their three questions from the other questions on the Paper generally fared better.

The layout of responses and the standard of English was generally satisfactory to very g_____r candidates demonstrated effective elaboration of ideas in part questions where this was encourag____ the nature of the question and the sub mark on offer. Improvements were also noted in the gen____ made of the sub marks printed on the Question Paper and in the interpretation of command words____ within questions. The better candidates were often very good at interpreting the command words use____ questions, differentiating between 'describe' and 'explain'. A number below this upper group of candidate_ seemed to lack the confidence to restrict themselves to the basic requirements and often drifted outside the parameters of individual questions. This sometimes produced a number of lengthy answers containing little of relevance.

Very effective use was often made of resource materials included within the Paper. However a number of candidates are still reluctant to produce relevant details from case studies they should have made in their preparation. The syllabus clearly defines topics for special study such as the industrial and agricultural systems named in Theme 3. The syllabus also comments on the importance of specific case studies. However details from such case studies was often missing when candidates attempted **Question 5 (b)** and **(c)**. General statements substituted on a number of scripts. It is vital that candidates are made aware of the significance of detailed case studies both in their preparation and presentation of certain responses on the Paper. Detailed references as to the use made of the various resources and case study information is given later in the report.

Comments on specific questions

Question 1

This question was very popular and parts were well attempted. The majority of candidates successfully answered **(a)(i)** to earn two or three of the marks available. Where candidates sometimes did not do themselves justice was when they produced a brief statement as to how a diagram such as Fig. 1 is constructed rather than analysing the main details revealed by the latter. In **(a)(ii)** most candidates could describe the difference between the two estimates X and Y but many failed to suggest a reason for the difference recognised. A number of candidates found difficulty in **(a)(iii)** in suggesting why the future growth of the world's population might be as shown by estimate Z. In both parts of **(b)(i)**, candidates could usually explain why changes may occur from time to time in countries in both birth rates and death rates. Where candidates wasted time in responding to this question was when they concentrated on explaining the prevailing situation in a country without recourse to *changes* which may have taken place. It is important for candidates to fully comprehend the command words used in questions. The word changes was emphasised in the stem to this part question to guide candidates. Very good responses were usually forthcoming in **(b)(ii)** when candidates attempted to explain why governments may be concerned by a rapid growth of population. Here various facets of the problem of overpopulation were frequently well described. In **(c)** candidates in the main sought to balance their answers between description and reasoning as requested. If there was a weakness on the part of some candidates, it was in offering reasons at the expense of description of the population pyramid provided.

Question 2

This was not a popular question but the uptake was strong from candidates in certain Centres. In both parts of **(a)(i)** reasoning was generally sound in accounting for the locations of the large superstore and the district shopping centre, labelled X and Y respectively on Fig. 3. In **(a)(ii)** candidates did not always refer to the importance of the types of goods associated with different shopping areas shown in the hierarchy on Fig. 3 or to their relevant threshold requirements. In **(a)(iii)** there was a lack of explanation for the different road patterns in area Z (Inner City) when compared with the road pattern in outer residential areas. Some candidates did not always appreciate the emphasis on reasoning in all three parts of **(a)** and sometimes lapsed into describing what was shown on Fig. 3. Reasoning was often sound in **(b)** in explaining the two urban land uses selected. There was, however, a reticence on the part of a number of candidates in naming a specific town or city. Other candidates were content with the name of town or city without further elaboration as to the locations within it. Answers here were often of a very general character. Useful comments were however usually presented in answering **(c)** concerned with controlling developments which may take place within the rural-urban fringe of towns and cities. A number of candidates had difficulties in defining the term 'rural-urban fringe' even though an example was shown and named in Fig. 3.

Question 3

Good responses were generally offered in both parts of **(a)**. Only a minority of candidates failed to the four main processes of river transport in **(a)(i)**. Useful interpretations were often made of Photograph A and Fig. 4 in describing most of the main river and valley features shown. Some candidates however paid little attention to the illustrative materials presented and wrote detailed accounts of river and valley features including in their responses a great deal of irrelevant information. Others included irrelevant references to features of the human landscape in answering this part question. In **(b)(ii)** candidates concerned themselves with various facets of the influences on transport, employment and the harnessing of the river for the production of hydro-electricity. Very full accounts characterised most of the responses to **(c)** in explaining how both the work of the river and the rock structure influenced the formation of a waterfall, such as the one shown, and its retreat upstream. Often candidates made effective use of supportive labelled diagrams in answering this part question.

Question 4

In **(a)(i)** descriptions of the main features of the climate of an area of tropical rain forest as illustrated in Fig. 5 were generally satisfactory to good. Candidates often successfully justified their statements with accurate statistical evidence from the graph. In **(a)(ii)** candidates did not always adhere to the instruction contained within the question to respond only with labels added to Fig. 6. When candidates did note this request some very full labelling was presented, often earning high marks. The relationships between forest characteristics and climatic features described in **(a)(i)** were generally well attempted in **(a)(iii)**. In **(b)(i)** some useful interpretations were revealed when candidates analysed the information contained within the newspaper account (Fig. 7). In **(b)(i) A** some candidates had problems in defining the word 'economic'. Sensitive and thoughtful description and reasoning characterised many of the responses in both **(b)(i) B** and in **(b)(ii)**. Candidates on the whole seemed well versed with various aspects associated with the need for conserving natural environments.

Question 5

This question was often poorly attempted. Whilst the precise interpretation of triangular graphs frequently presents problems for candidates, most were able to identify the main aspects of the employment structure in the developed and developing countries shown in Fig. 8. The main difficulty candidates had in responding to **(a)** was in producing comparative reasoning. All too often they presented two separate accounts relating to developed and developing countries with the interpretation left to Examiners. A further weakness revealed on some scripts was for description to form the dominant theme when reasoning was asked for in the question. As stated in the introduction, candidates are often unwilling or unable to draw upon detail from case studies to aid their responses. This was evident in **(b)** where general information was offered rather than precise detail from the study of a named illustration of a motor vehicle assembly plant. This industry is highlighted for special study in the syllabus and the latter also recommends that recourse be made to specific case studies to illustrate questions such as this one. Where candidates had approached a study of this particular manufacturing industry through a specific case study thorough answers were evident. On the other hand, when candidates adopted a more superficial method of preparing a study of motor vehicle assembly, a much more imprecise response was forthcoming. Limited credit is given for relevant but general information when answering a question such as this. The same could also be said about responses to **(c)**. Many candidates did not even identify a system of small-scale cash-crop farming, with a number producing only a limited generalised elaboration of the systems diagram presented in Fig. 9. When natural inputs were described little more than single words were often given such as 'temperature', 'rainfall' and 'soil'. These were meaningless without further detail as to how they influenced a specific example of small-scale cash-crop farming. There was some confusion on certain scripts between small-scale cash-crop farming and small-scale subsistence farming with the inevitable loss of marks. To some degree there was also confusion between small-scale cash-crop farming and a large-scale system of commercial farming. Whilst a certain degree of tolerance was shown in assessment over the precise interpretation of scale, when it was evident that candidates were clearly describing a large-scale system then marks were not awarded. In general responses to **(c)** were disappointing. As with **(b)** it was the lack of clear detail gained from case studies that was responsible for disappointing answers from many candidates. All too often superficial information was given which could apply to any agricultural system and not specifically to a named illustration of small-scale cash-crop farming.

Question 6

Candidates generally used the guidance offered by Fig. 10 to formulate effective responses to the parts of **(a)** where reasons were frequently very detailed. In **(a)(i)** most were familiar with reasons explained the limited expansion of nuclear energy over the time period shown. Equally there was satisfactory understanding of factors which explained the decline in the use of coal over the period in **(a)(ii)** and the increase in wind power and solar energy in **(a)(iii)**. In the latter part question candidates did not always distinguish between capital costs and running costs. In **(b)(i)** there was a variety in both the examples selected and the details offered by individual candidates accounting for the attraction of the chosen illustration. Some very detailed presentations were seen when candidates were well prepared through a detailed study of a precise example gained either from textbooks or from personal familiarity with a tourist area. The stem to **(b)** contained a definition of eco-tourism to aid candidates in answering **(b)(ii)** and **(iii)**. Some useful ideas were evident in responses to these two questions. As well as general benefits to the chosen area in **(b)(ii)**, there was also consideration in many answers of specific benefits in helping to conserve the natural environment through the development of eco-tourism. Some candidates were familiar with the concept of eco-tourism and responded well in **(b)(iii)** as to how it may be developed, others were unsure about its meaning in spite of the definition given earlier in the question.

> **Paper 0460/03**
>
> **Paper 3**

General comments

The response of candidates to the May/June 2003 examination varied greatly within and between Centres. Many candidates were able to score marks over 50 out of 60, whilst there was still a significant number who attained marks of less than 25 out of 60. Overall marks were higher than in previous examinations and there was, generally, a good understanding of the issues and skills required to answer the questions set. Candidates dealt with the mapwork question well and they also coped well with **Questions 5** and **6**. Many found **Question 2** difficult, possibly because of a lack of familiarity with meteorological instruments, and **Question 7** often produced weak answers because candidates failed to concentrate on the information provided in Fig. 7.

English expression was, generally, good and there was little irrelevance in candidates' answers, although reasons were sometimes included in **Question 3 (a)** and **7 (c)** which led to theoretical solutions rather than answers based on the resources presented in the Question Paper.

Presentation showed an improvement in this examination, generally, but there were still too many scripts which had answers cramped together and writing which was almost illegible.

Comments on specific questions

Question 1

There was a pleasing improvement in map reading performance and marks, consequently, were higher than usual. Almost all candidates identified the estate office correctly in **(a)(i)**, and there appeared to be a progressive improvement in candidates' ability to give accurate third and sixth figures in the map reference. Indeed, errors in the map reference were rare. The compass direction was stated correctly in **(b)(i)**, apart from a few weaker candidates who either gave the reverse direction or stated the answer as a bearing. Measurement of the horizontal distance was good and answers were, usually, within the permitted range. Weaker candidates sometimes answered in kilometres rather than metres. The response to part **(c)** was excellent as most candidates named four types of natural vegetation. There were occasional irrelevant answers about rivers and crops. Coconuts were easily identified in part **(d)** but bananas proved to be more difficult. In part **(e)** many candidates were able to describe the high altitude, steep slopes, lack of roads and forest as reasons for the lack of settlement. However, time was sometimes wasted by speculation about agricultural productivity of the area and the use of negative terms such as no rivers, no industry. Weaker candidates digressed irrelevantly about the damage to the environment which could result from settlement. In part **(f)** candidates named five correct services: hospital, school, church, post office and police station. The cemetery, public works department and water were less frequently identified. Many candidates scored full marks in part **(g)** as they noted features such as bays, headlands, beaches, cliffs, islands and river mouths.

Question 2

Many candidates gained their only mark for this question by identifying P (mercury/alcohol) and S. The muslin was described simply as either cotton or cloth and the term 'wick' was not generally k. There were some good answers to part **(b)** where candidates knew to subtract the wet bulb reading from dry bulb reading. Weaker candidates lost the second mark in this section by failing to give the units as degrees centigrade. The response to part **(c)** was good as many candidates gave the correct answer 70%. In part **(d)** few candidates gained credit for their answers. Few were aware that relative humidity concerns the water vapour in the air and even fewer that it is a percentage of what the air could hold if it was saturated. The quality of the response to this question depended on the candidates' familiarity with the instrument drawn in Fig. 1. It was evident that some candidates had not seen this type of instrument before.

Question 3

Surprisingly, this question was not well answered. In part **(a)** stage 3 was given rather than 4 and, for B, stage 2 was given rather than 1. Indeed, sometimes the answers were reversed and in other responses answers were spoilt by offering more than one stage of development for each letter. In part **(b)** the response was often good. In **(b)(i)** reference was made to low birth and death rates, high life expectancy and, less frequently, the even shaped pyramid. The high birth and death rates were given by most candidates in response to part **(b)(ii)**. In **(c)** candidates found this part of the question quite difficult. This may have been due to the wording of the question. A significant number of candidates, however, were able to identify that deaths exceeded births in stages 1 and 4. In part **(d)** stage 2 was identified correctly but it was rarely noted that this stage had the biggest difference between birth rate and death rate. In both parts **(c)** and **(d)** there was a frequent failure to consider the balances between birth and death rates. Another common problem was the inclusion of irrelevant reasoning for the changes.

Question 4

Plotting of information on pie charts has been done very well in previous examinations. However, this time, in general, candidates' work was not as accurate as in the past, despite the figures involved being relatively straightforward. The majority of candidates were precise plotting the primary sector but few were sufficiently careful with the measurement of the tertiary segment on the pie graph. The response to **(b)** was given correctly as 70% and, in **(c)**, most candidates correctly identified country B as the developing country, but they found it difficult to express clearly why they had made this choice, either by describing the structure of B (high primary, low secondary, low tertiary) or how B differs from C (higher primary, less secondary, less tertiary). Weak candidates identified C and even A.

Question 5

In part **(a)** most candidates noted that the farm buildings had been enlarged but the term 'commuter' was only known by more able candidates. Nomads, migrants and newcomers were frequently suggested. In part **(c)** candidates identified the school and the post office and, less frequently, the bus stop and the shop. The response to **(d)** was excellent as most candidates identified the riding stables, the restaurant and the car park.

Question 6

The definitions, given in response to part **(a)(i)**, were often a little vague and there were some misconceptions. Some thought a plate was a dividing line whilst others suggested that it was a segment under the crust. Good candidates suggested that plates were sections of the earth's crust floating on the mantle. In part **(a)(ii)** most candidates gave two from Nasca, South American and Antarctic plates. The Pacific plate was incorrectly quoted. The response to part **(a)(iii)** was, usually, correct. In part **(b)(i)** the term 'epicentre' was known by a large number of candidates and, in part **(b)(ii)**, they were able to identify the city as being nearest to the epicentre or in the area with the greatest intensity. There was a variety of responses to **(b)(iii)** based on Fig. 6. These included the dam bursting, flooding, tsunami, landslides and damage to the motorway. Some candidates failed to use Fig. 6 and only included general points about earthquake effects such as damage to buildings and fire.

Question 7

It would seem that some candidates had difficulty with the wording of some parts of this question
they did not understand terms such as 'through traffic'. They also tended to answer the question w
reference to the resource provided. In part **(a)** either the motorway or the outer ring road was commen
upon but rarely both. Many candidates ignored the 'through traffic' aspect of the question and irrelevantly
wrote about general traffic planning in the area. The response to part **(b)** was better but 'bus roads' rather
than 'bus lanes were described. In part **(c)** full marks were common for references to the railway, park and
ride, car parking, pedestrianisation and restricted access to private cars. Weak candidates ignored the
instruction to discuss methods shown on Fig. 7 and wrote about traffic measures they had been taught in
general such as traffic lights, car sharing and wider roads. The facts relevant to **Question 7** were known but
candidates had difficulty in allocating the facts to the parts of the question **(a)**, **(b)** and **(c)**.

Paper 0460/05

Alternative to Coursework

General comments

The majority of candidates completed the examination within the allocated time and many Examiners
commented on an overall improved performance. This especially applied to the heeding of command words
and the general use of the provided data although candidates still attempt to explain and give reasons for a
pattern in the data when just description is required. The listing of results from the provided tables caused
loss of marks on some questions and candidates would do better if specific comments were always written
rather than vague suggestions.

Comments on specific questions

Question 1

This was based upon an impact of tourism situation and tested the candidates' understanding of soil erosion
using provided data and data collection methods for counting tourists.

The first part of the question **(a)** required the candidate to recognise the need to state any three pieces of
information on a recording sheet. The name of the recorder, the time or date or the location of the
investigation which makes a recoding sheet unique and easy to identify after the data collection were the sort
of responses required. Often complete Centres gained the available marks here but, disappointingly, a
number of candidates simply copied the information from above part **(a)**.

Part **(b)** tested the ability of the candidate to look at the provided data in the Table (Fig. 1) and identify the
overall pattern of the narrowing footpaths away from the Information Centre. The better candidates scored
full marks if this was supported by using the figures to show that the North East path changed from 1.9 to
0.2m and the South West path from 1.9 to 0.3m. No comparison or further comments was required for the
two marks. Many candidates wrote far more detail than was needed wasting time and effort. Some wrote
about the percentage of bare ground which they then repeated for part **(c)**.

In part **(c)(i)** a detailed response was required using the data to compare changes along the two paths. The
essence of a comparison is the relative comment about two locations. The best answers compared how the
South West path always had more bare ground than the North East path, that the centre always contained
more bare ground than the edges of the paths and that the percentage of bare ground decreased with
distance away from the Information Centre. If each statement was then supported by data the maximum
marks could be awarded. Examiners commented on the generally poor use of data to make comparisons
and the common mistake of merely listing the data from the table without commenting or identifying the
patterns. Other candidates compared each location with another and did not state any changes occurring
either with distance or across the path width thus failing to score the marks. This is a skill which candidates
need practise to be fully prepared for this Paper.

Evaluating the data collection methods is an essential skill in coursework. Part **(c)(ii)** needed candidates to criticise the method used to gain the bare ground data and many candidates recognised the nature of calculating quadrat percentages or that bare ground may be missed between the 200m intervals. However, other candidates misunderstood that the question concentrated on the methods of data collection and not the results recorded. Careful reading of the key words of the question should be stressed to all candidates in preparation for the examination.

The pedestrian counting component of the investigation in part **(d)** appeared to be better understood and most candidates expressed an understanding of how pedestrian numbers may change during the day and hence should be counted more than once and that a 'tally' system is the best method of recording the number of visitors. Also there was a good response in identifying 400m as the most common distance walked with the main reason given as the highest total of pedestrians. The more able also noted the rapid decline in numbers at 600m from the Information Centre.

In part **(e)** the explanation of the link between high visitor numbers and bare ground caused by soil erosion was generally well understood and allowed real differentiation of candidates to take place. The best responses expanded upon the simple trampling and compressing comments to show geographical understanding by discussing the role of roots in holding the soil in place and how destroying the vegetation meant that the area was vulnerable to both wind and water erosion. The suggestions as to where and how this soil erosion should be reduced was well answered with up to 400m on the South West path being the most common response with a range of appropriate management strategies outlined to gain other marks.

The majority of candidates showed initiative in their suggestions for further data collection, part **(f)**, although the best responses were very specific in what data was to be collected and where and how this should take place. Many candidates gained no credit for using vague terms such as 'observe' and 'look and see' rather than 'count' and 'record' the litter at specific locations. Credit was also gained by commenting upon the recording sheet required and either the quadrat method or a scoring system was valid data collection techniques for investigating the litter problem.

Question 2

This question investigated three settlements of different sizes and different functions. The geographical understanding of a settlement hierarchy varied although most candidates were able to make a link between the population of a settlement and the services and traffic experienced within a settlement for part **(a)**. There was some confusion between settlement hierarchy and the changes from the CBD to the outer fringes of a town by some candidates.

In part **(b)** the concept of a secondary source was widely known and many gave appropriate examples with the census and the internet being the most common responses. The comparison of services found in the three settlements gained a very variable response. The best answers recognised the basic types of services offered at the smallest settlement, A, and that both B and C also had these services but in addition had different services. Again there was a tendency to list the service types from the table without comment or to use total numbers of services which did not gain credit.

The plotting and labelling of the scattergraph in part **(c)** was generally accurately completed with a positive correlation best fit line constructed. The most common error was not to label the marks and this simple omission limited the marks awarded.

In part **(d)** the knowledge and understanding of linear and nucleated settlements was usually known, although again this varied between Centres with the diagrams sometimes a little vague as to the shape of the settlement and the road patterns which may determine the settlement shape. This information was not used to explain the central location of the traffic survey but nevertheless appropriate reasoning was offered that the central location would have the highest traffic flow and often linked to the land use found in central areas. Most candidates suggested sensible times to repeat the traffic count and developed their answers to give reasons. The poorer answers only gave vague suggestions and hence lost marks.

In part **(e)** the bar graph was generally constructed accurately with sensible choices of axis scales. The most frequent omission by candidates was a title to their graph and thus they did not gain full marks.

The final section of the question was generally well answered which again was an improvement on similar questions in previous Examination Papers. Most candidates agreed with the hypothesis and commented that C, being the largest settlement, had more traffic and a higher number of services than the smallest settlement A. Additional marks were gained if data was used as evidence to support this response. A few candidates again failed to read the question with sufficient care and did not mention A, B or C so limited the marks available.