CONTENTS

FOREWORD

This booklet contains reports written by Examiners on the work of candidates in certain papers. **Its contents are primarily for the information of the subject teachers concerned**.

GEOGRAPHY

GCE Ordinary Level

Paper 2217/01
Paper 1

General comments

There was considerable variation between Centres and within Centres in response to this examination. When considering the full cohort of candidates the examination discriminated very well, with almost the entire mark range being achieved by candidates. The most able and well prepared candidates tackled all their chosen questions with confidence, producing high quality responses to all sections. Centres seem to have adapted well in preparing their candidates for the change to a common paper which replaced the tiered structure, and most candidates provided clear and concise answers to the questions. On the whole Examiners were impressed by the knowledge and understanding shown by candidates from many Centres, also by their level of written communication, particularly the use of geographical terminology. In contrast a minority either produced irrelevant answers to questions, as a result of misunderstanding the command words and requirements, or failed to meet the requirements of all but the most simple questions.

The following general points should be noted:

- Some candidates fail to pay attention to the number of marks available for each part of a question. Consequently they may spend too much time on one part, or alternatively write only a short answer when much more detail is required. Timing is crucial; there were a significant number of candidates who devoted too much time to their first chosen question, including too much detail in sections which were only worth a small number of marks, in consequence having to rush their final question.

- Some candidates do not read the information given in the stem of the question and therefore make inaccurate assumptions when answering it.

- Whilst candidates from some Centres had obviously completed, and could recall, relevant case studies (including well chosen local examples), this had been sadly neglected in others. Many marks were lost by those candidates who either made inappropriate choices or could not recall appropriate specific details, relying instead on a series of basic generic points.

- There are concerns over the presentation of scripts from candidates in some Centres. The following advice should be followed by Centres:

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

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

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

   - At least one line should be left between each part of a question, and preferably three lines between each question.

   - All sheets should be attached loosely, including any insert sheet, at the top left hand corner only.

   - All sheets should be numbered by the candidate and placed in the correct order.

   - Where an instruction is given to complete an answer by labelling or drawing on a resource on the insert sheet, a written answer is not an appropriate alternative.

General comments on specific questions

Question 1 was the most popular question and was answered by most candidates. It often gained the highest marks, but this was sometimes at the expense of either failing to complete the paper or needing to rush the last question.

Other popular questions were **Questions 2** and **5**, whilst there were relatively few answers to **Questions 3** and **4**, the physical geography questions. However it is worthy of note that some excellent responses were seen to these questions, even though they were generally unpopular.

There were few rubric errors, although a small number of candidates did attempt all questions, usually superficially.

Comments on specific questions

Question 1

Although a few candidates gained maximum credit, most had difficulty with certain parts, particularly in **(b)**. Fig. 1 was generally well understood and utilised, thus in **(a)(i)** and **(ii)** they usually gained full marks, although some candidates thought that the people, rather than the economy, were 'healthy'. In **(a)(iii)**, candidates usually gained two of the three marks available, often commenting on the further decrease in oil revenues, which resulted in the building of less schools and clinics, but not then developing their answers to indicate the significance of this. There were few problems with **(a)(iv)** except for overlong answers and those which focused on how education would help people in Nigeria in general terms, rather than in terms of reducing population growth. Many responses to **(a)(v)** were good, with a range of ideas commonly developed by candidates, except for those who confined their answers to the information about Nigeria in Fig. 1, instead of writing about developing countries in general.

It was part **(b)** which created most problems with this question. The nature and amount of information on Fig. 2 proved to be too much for some candidates. Some did not look at the stem and title with care and failed to realise that positive and negative changes in fertility rates were being shown rather than actual rates, hence answers to **(b)(i)**, **(ii)** and **(iii)** were often poorly expressed, although most could read off the correct answer to **(b)(ii)**. Weaker candidates were uncertain as to how to express the changes in part **(iii)** and spent much time quoting specific figures (though not always accurately) but not describing the general picture, a general increase in Sweden in most age groups in contrast to a general decrease in the Irish Republic. Part **(iv)** however was generally well answered, with many perceptive and well thought out answers being written. The emancipation of women was well known, as was the importance of career and familiarity with contraceptive methods. Later marriage, the desire for material possessions and the high costs of child rearing were also well expressed by some candidates, though some were under the misapprehension that child numbers in developed countries are strictly limited by government policy.

Question 2

This proved to be a challenging question overall, though it differentiated well. Few candidates struggled with **(a)(i)**, but the gymnasium and post office were often incorrectly located on Fig. 3, often located correctly in terms of distance, but not in the correct quadrant which classified the type of service. Part **(a)(iii)** was sometimes omitted, with many candidates answering in fairly general terms with 'better services' and 'more important services' rather than showing an in depth understanding of service orders and hierarchies. However, there were a few excellent answers which referred to convenience and comparison goods, contrasting orders of services, frequency of use and spheres of influence.

In general the responses to parts **(b)(i)** and **(ii)** were poor. Some candidates drew the theoretical line graph (or a bar graph) which appears in text books and many failed to note that they were dealing with residential population or to look at the key on Fig. 4A, assuming the tall buildings equalled high density. A CBD, crowded with commuters, was equated by many to a high residential population density. Notes were too often given in the text rather than on Fig. 4B, and many simply copied what was on the diagram above. There were some well thought out responses to **(b)(iii)** from candidates who had studied this topic, but many gave vague or inaccurate reasons. In 'A' the provision of housing with better amenities or new apartments was not well known, nor was the need for road improvements. The old housing is commonly in disrepair but few commented on this. The spread of the CBD was much better known, but even here too many laid emphasis on industrial as opposed to service expansion. In 'B' the convenience of a location close to the CBD was well understood, but 'cheap housing' and 'historic buildings' were often simply briefly mentioned with no real understanding being shown. The 'doughnut effect', and the need to avoid it, was not well known generally, though a few candidates wrote authoritatively on it.

Although there were a few superb answers to **(c)**, which frequently were derived from local examples, answers were generally weak. There was often no named example and even where there was an example it was not prominent. It was sometimes not explicitly stated whether the population movement was inward or outward and many candidates included little specific detail, many wrongly writing about the causes of changes rather than their impacts. Generally inward migration tended to produce better answers than outward migration, though even here there were some extremely weak attempts. The influx of migrants into an area was usually handled dispassionately, but it was sad to occasionally read about 'foreigners who are criminals who take our jobs and contaminate our racial purity', perhaps to be expected from the tabloid press but those studying geography ought to know better.

Question 3

In part **(a)(i)** the name of the Stevenson screen was generally known and candidates were usually able to describe some aspects of it, though rarely sufficient to gain full marks. Irrelevant references to siting factors were included by some candidates. Reasoning was often weak and restricted to vague comments such as 'to get accurate readings' though well prepared candidates recognised the importance of true/shade temperatures being taken and the need to house instruments such as the thermometers and hygrometer.

In **(a)(ii)** labels were not always written on the insert and sometimes the insert was not submitted. There was a lack of familiarity with the maximum and minimum thermometer. Some confused it with the hygrometer, others confused alcohol and mercury, and maximum and minimum were often on the wrong side. Explanations about taking accurate readings were often very brief, e.g. 'take the temperature on both sides' or 'look at the indexes'. Nevertheless some good marks were obtained for this part.

Predictably confusion between erosion and weathering was a feature of part **(b)**. Almost all candidates gained both marks for **(b)(i)**, but a few did not refer to both temperature and precipitation. In **(b)(ii)** most chose freeze-thaw for the weathering process and many were able to gain high marks for an accurate and full description of the process. A minority of candidates chose to write about exfoliation which was inappropriate under the circumstances outlined in the question and some described glacial erosion. Chemical weathering proved much more difficult in **(b)(iii)**. The most popular choice was carbonation, followed by hydration but few candidates scored full marks here and there were many references to acid rain.

In part **(c)** hardness, permeability and jointing were the most common responses, but many candidates did not attempt a response or gave one based on little more than guesswork.

Question 4

This question was the least popular, though it did differentiate well, those attempting it either showing reasonable knowledge and understanding of the topic or relying largely on guesswork and vague, general statements.

In part **(a)** most candidates scored some marks, though few gained full marks, many hedging their bets with a consideration of both destructive and constructive plate margins. In **(b)** there was considerable variation in quality of answers, for many diagrams were either weak or non existent, but from others there were some good sketches with the alternate layers of lava and ash, a clear crater and magma chamber. The vent and dykes were also labelled on some diagrams. Some submitted text only and, given the clear question instructions, this was not acceptable.

In **(b)** a few candidates were familiar with mudflows, but others seemed to be guessing and only a few realised that there would be a mix of ash with heavy rain or snow melt. Most had lava in their mix. However in **(ii)** the potential damage wreaked by mudflows was well appreciated.

Part **(c)** differentiated well, with most candidates able to give several ideas, some drawing and elaborating on an effective diagram of a constructive margin. Weaker candidates again struggled to distinguish between the processes occurring at constructive and destructive margins.

In part **(d)(i)** there were many excellent answers describing the specifics of 'earthquake proof' buildings which could score full marks. Other credit worthy points included drills, monitoring and the preparedness of emergency services. In **(ii)** some candidates had problems differentiating between the short and long term effects, but many were able to gain some marks and a few drew on case studies. Many appreciated the financial problems of countries with a low GDP, damage to infrastructure and the economy were often considered and human problems such as homelessness were sensitively expressed.

Question 5

Whilst this question was a very popular one, performance varied widely, perhaps as a result of some candidates being under time pressure, as it was often the last question they attempted, but also many vague and poorly thought out answers were evident, to all parts of the question.

Some candidates did not realise that the pie charts shown in Fig. 9 represented four developed countries. However, explanations of the low percentages in primary occupations were usually accurate, with much successful reference to the mechanisation of primary activities and the exhaustion of raw materials. Good candidates often showed awareness of developed countries relying on the import of raw materials. In **(a)(ii)** there were many irrelevant comments about changes when the question was about all of the pie charts, not just those for 2000. In contrast **(a)(iii)** was well answered with a high proportion gaining full marks for identifying the changes which had taken place in each sector. The reasoning for the changes in **(iv)** was often vague with many undeveloped or unlinked references to 'better technology' or similar phrases. There was a lot of variety in the answers to **(a)(v)** and **(a)(vi)** which reflected the fact that there are differences between developing countries. The dependence of developing countries on the primary sector was often correctly pointed out, with valid reasoning such as the importance of (subsistence) agriculture, along with the lack of development of the tertiary and/or secondary sectors. Some candidates were able to justify differences in all sectors.

Responses to part **(b)** were very disappointing, the main reasons being the lack of suitable, detailed case studies. A few candidates gave good detailed answers which related to textbook examples such as the M4 Corridor, Cambridge Science Park and Silicon Glen. Also there were a few more local examples from continental Europe and South East Asia such as Kobe and Osaka. Many wrongly chose car assembly, some chose iron and steel and a sizeable minority chose nothing at all or just named a large country rather than an area. Very few chose farming, indeed amongst those who did some of the choices of small-scale cultivation of cash crops were neither small-scale nor examples of cash crop farming. Some of the best farming answers were about market gardening in the Dutch polders.

Those with well revised case studies did well, however many gave vague, general responses, which showed little real understanding, about the ideal location of their chosen economic activity, without giving details which were specific to their chosen location. As previously stated the use of case studies by candidates is an aspect in which there is room for considerable improvement.

Question 6

This question differentiated well. Clearly environmental geography is very popular with candidates. However questions on it tend to produce many vague answers, frequently based on misconceptions and unsubstantiated value judgements and this one was no exception.

Part **(a)** produced some very good definitions and also some which were vague and/or inaccurate. The weakest were usually for 'urban sprawl' which sometimes lacked clarity, the spread of the built up area into the surrounding countryside being the key point. Candidates coped well with **(a)(ii)** and **(a)(iii)**. The resource was well interpreted, although some candidates failed to take note of the marks available, with responses often too lengthy. Candidates should be advised that, whilst the resource is there as a stimulus, they should avoid direct copying of it.

Some candidates chose all five options in part **(b)** and made shallow attempts rather than giving an in depth answer on two of them. The most popular choices were deforestation, the high concentration of carbon dioxide and soil erosion. Whilst too many answers were about the consequences rather than the causes there were a number of excellent answers, where reasoning displayed a high level of understanding.

In **(c)(i)** although some candidates were familiar with the problems and causes of the depletion of the ozone layer, many confused this global problem with global warming or occasionally acid rain. **(c)(ii)** produced some excellent responses, with some well thought out and balanced answers which showed an excellent environmental awareness and empathy with the natural world. The need to maintain biodiversity was well understood, as was the need to consider future generations, and many candidates were able to explain the difficulties of so doing, largely as a result of economic pressures. Unfortunately in contrast many wrote in vague terms, suggested totally implausible solutions, or had simply run out of time or inclination to write in the detail which was required.

<table>
<tr><td>Paper 2217/02
Paper 2</td></tr>
</table>

General comments

The June 2004 paper discriminated well between candidates of different abilities. The most able candidates demonstrated good mapwork and analytical skills, however, the final question, based on fieldwork investigation, was a problem for many candidates. Generally the standard of written English was good, although illegible handwriting was a problem for a small minority of candidates. The vast majority of candidates completed the paper, although some candidates appeared to have not planned their time well, leaving insufficient time to complete the last question.

Comments on specific questions

Section A

Question 1

Part **(a)(i)** was answered well. Most candidates identified the mosque. In **(a)(ii)** many candidates demonstrated their understanding of six figure grid references, and were able to correctly identify the grid reference of the confluence as 985658. Some candidates appeared to not understand the term confluence, and so incorrectly gave grid references appropriate to points on each river, rather than where the two meet.

In **(b)(i)** fewer candidates were able to correctly give the distance traveled within the allowed range of 2600-2800 metres. In **(b)(ii)** the direction traveled was usually correctly stated as south.

In **(c)** a few candidates correctly identified the sugar plantations. However many incorrectly stated tea, or used the term arable, which is too generalised. In part **(d)** the narrow floor, meanders, waterfalls and rapids were often correctly identified.

In part **(e)(i)** good answers referred to the dam, reservoir or power station, or what the water might be used for, such as water supply for farms/settlements or power for industry/towns. In **(e)(ii)** many candidates correctly identified the settlement pattern as linear, but very few were then able to explain the reason for this pattern, which was the easy access to Surinam, rather than generalised comments, such as accessibility.

In **(f)** some candidates correctly identified limiting factors such as high and, steep slopes, forested areas, and few roads. However, many candidates failed to give map evidence, but instead gave explanations, which were often very generalised.

Question 2

In part **(a)(i)** most candidates correctly identified Burkina Faso, and in **(a)(ii)** usually read the graph well, giving a fertility rate of 3 for Sudan.

In **(b)(i)** many candidates only gained one mark from a simple statement such as 'the female literacy rate increases as the fertility rate decreases'. For the second mark, candidates needed to develop that basic statement. In **(b)(ii)** many reasons were often suggested to explain the relationship, such as education leads to a knowledge of family planning, or that women who were more educated had careers, and so would be less likely to choose to have so many children.

Question 3

Part **(a)** was not well answered by many candidates, many not using the photographic evidence well. Many candidates noted that the hilly area is terraced, but failed to further extend their answer by stating that most of the cultivation is located on the flat valley floor, and that the nature of the cultivation is fields of crops.

Parts **(b)(i)** and **(b)(ii)** were well answered, with candidates identifying that the hill areas had been deforested and terraced to allow for further cultivation. Good understanding was shown of the consequences of this clearance, such as soil erosion, due to the lack of cover and interception.

Question 4

In part **(a)** most candidates identified that November 1974 had the highest recorded discharge. However fewer were able to use the graph in **(b)(ii)** to identify that there were 5 months with a discharge of below 3 cumecs. Parts **(b)(i)** and **(b)(ii)** were poorly answered, as candidates were unable to describe the overall pattern of discharge, but instead gave the figures for each month rather than describing the overall pattern. Candidates needed to identify that there is an irregular pattern, with long periods of low flow, and sudden peaks and troughs, even when the discharge is high. Reference to months and figures was only credited where these figures were used to support a valid point describing the overall pattern. In **(b)(ii)** the more able candidates were able to comment that the pattern suggested evidence of seasonal change such as dry seasons with sudden storms.

Question 5

In part **(a)** the majority of candidates gained a mark for identifying that Auna is to the east of the river. In **(b)(ii)** many recognised that the settlement pattern is linear, but needed to show better reasoning for this, such as access to irrigation, fishing, and the potential use of the river for transport. In **(c)** most candidates used the map to identify that the town of Bussa had been drowned by the new lake. However, fewer then noted that the town of New Bussa has been built further south. Few candidates in **(d)** were able to identify that the river is flowing to the South.

Question 6

In part **(a)(i)** the Katse dam was correctly named and in **(a)(ii)** the provision of water for South African cities and industries was usually correctly identified as the purpose of the scheme. Candidates usually correctly identified the advantages of the dam for the local people, such as new access roads and bridges. However, in **(b)(ii)** many failed to give possible disadvantages for the environment, such as deforestation, visual pollution, or noise during construction, although many noted the problems for local people, such as shortage of water, and cultural impacts of the arrival of foreign workers, including drunkenness and crime.

Question 7

This question was less well answered by many candidates. In part **(a)(i)** many candidates used the graph to identify that services were the largest sector of the economy in 1952. However, in **(a)(ii)** many were unable to correctly complete the divided bar graph or to label or shade the sectors. In part **(b)**, as in **Question 4 (b)(i)**, many candidates were unable to describe the pattern of changes, instead simply giving dates and figures. Candidates needed to correctly identify that agriculture decreased, that services decreased then increased, and that industry increased and then decreased.

Section B

Question 8

The theoretical investigation concerned the collection and interpretation of rainfall and wind direction data. The candidates were asked to describe, compare and analyse data from two different locations over a period of fourteen days to prove or disprove a specific hypothesis.

(a)(i)   The majority of candidates showed an understanding of both the need for a waterproof pen to preserve the measurement markings and the straight sided bottle to ensure that the volume of rain water collected remained constant.

   (ii)   The candidates showed an excellent understanding of location factors for the rain gauge with the most common factor being 'an open area'.

(b)(i)   Although the dispersion graph may be unfamiliar to many candidates, the majority completed the graph accurately at 9 and 12 for day 8.

   (ii)   The distribution of rainfall at the school was generally poorly completed. The mark scheme gave credit for recognising the broad patterns in the distribution of the rainfall. Only two marks were available and candidates need to reflect this in the amount of time and effort spent on the question. The best answers identified the fairly dry period of the first six days and the two following days when the maximum amount of rainfall fell. Although there was no requirement to refer to wind direction a significant proportion did so and others listed data from the table which also gained no credit.

(iii) The average daily rainfall was calculated accurately by the majority of candidates.

(iv) The comparison of the data at the two locations was completed well with the recognition that the airport received a greater amount of rain generally but also had a higher number of days with rain and also a higher maximum rainfall amount. The skill of comparing data is always required for this paper and candidates need to be trained to recognise differences and similarities to be confident to score in this type of question. Examiners reported that far too many candidates listed the data without making comparative comment thus gaining no marks.

(v) This question required the candidate to demonstrate a clear geographical understanding of relief rainfall, continentality or the concept of the rain shadow. Overall the standard of knowledge with understanding demonstrated here was disappointing. The marks were awarded firstly for recognising the overall pattern that higher ground receives higher rainfall and the rainfall is greater closer to the sea (for example at the airport). The other marks were gained by a specific explanation of uplift, cooling and condensation with altitude and the moist winds bring rain close to the coast but inland the air is drier. It was evident that some Centres had taught this topic well and that the candidates were able to apply their understanding to this question. However the Examiners generally felt that candidates were very vague in their answers with too many broad or confused ideas.

(c)(i) Many candidates clearly identified that the arrow of the wind vane pointed to the direction that the wind was blowing from. This was a critical understanding to the wind direction data. The second mark was less easily obtained by identifying the 'tail' or 'blade' of the wind vane as having a larger surface area thus catching the wind causing the vane to rotate.

(ii) The candidates generally completed the wind rose graphs to a high standard to gain full marks.

(d) The question required the candidates to suggest a direction from the airport and school to the sea. The more able candidates confidently recognised that the winds bringing rain would come from the direction of the sea and therefore identified a south/southwest direction. The written reasoning for this decision was also clear, but far more use should be made of data evidence to support the comments. However other candidates struggled especially if their understanding of wind directions was less secure.

(e) The conclusions were generally well written with an acceptance that the airport, being closer to the sea, received more rainfall. This was supported in the better responses by either quoting the total or the average daily figures for each location. The subtlety of the incorrect second part of the statement that winds from the south bringing most rain was only identified by a few of the most able candidates who recognised that south westerly winds also contributed significantly to the highest rainfall. Most candidates recognised that it was statistically unreliable to compare the data from two different rain gauges and also identified a range of possible student errors which may limit the collected data and the findings of the entire investigation.

Question 9

This theoretical investigation was set up to find out about visitors at a leisure park and the impact they may have on the environment of the park. The candidate's understanding of sphere of influence as a geographical concept was important to success on this question although the question contained many of the analytical and presentation skills required in all coursework.

(a)(i) The key to a successful answer to this question was to focus on the advantages of 'systematic' sampling rather than sampling itself. Therefore, comments about the lack of bias and obtaining a wider range of answers gained the marks.

(ii) Most candidates recognised the importance and relevance of time and weather to this particular study and many candidates suggested examples to illustrate their point.

(b)(i) Examiners commented that they were disappointed at the overall level of understanding shown about the sphere of influence as the area around a service/settlement where the people live who uses that service/settlement. Concise and relevant definitions were rare. A common misconception was the idea of furthest distance (i.e. range) or more generally how far people came.

(ii) Candidates readily provided a list of valid reasons to explain why Q1 of the questionnaire fails to indicate the sphere of influence. Traffic congestion was a familiar answer and different methods of travel also gained credit.

(iii) The success of this question did depend on the level of understanding shown in **(i)** and **(ii)**. 'Where do you live?' was the acceptable response but Examiners reported finding this answer was rare.

(c)(i) The majority of candidates coped well with providing the wording and layout for a new question on the questionnaire, hence gaining full marks.

(ii) Many candidates managed to link together the ideas of distance and travel methods to score here. The most common response was that visitors coming by car would come from further away showing a greater sphere of influence in comparison to someone who walked from a local area.

(d)(i) There were six marks available for the correct and presentable pie chart to show the duration of stay. The majority produced neat and accurate graphs using an appropriate key and including a title. Too many candidates were insufficiently careful with the angles drawn or omitted a title. Candidates should be encouraged throughout the two years of the course to display data using a variety of different techniques specifically in preparation for this paper.

(ii) The candidates generally described the duration time of visitors well and hence identified the main trend to stay 3 – 6 hours whereas beyond 6 hours was only selected by a minority of visitors.

(iii) The impact of the visitors on the environment of the park was universally answered well. Usually the candidates started with an overall general statement that the impact of visitors would be greater as time of stay increased. However the candidates then offered very valid expansion of this idea to include litter, footpath erosion, vegetation damage and wildlife disturbances. It was pleasing to note that many candidates gained full marks for this part.

(e)(i) The final question used different data collected to show the opinions of the visitors. Again the success of this question depended upon the candidates' ability to identify general patterns in the data. The best responses recognised that overall the visitors were satisfied with the facilities but that the toilets scored well, the information about the area scored poorly and many other facilities were mainly satisfactory. The candidates should be encouraged never to list the information but to try and comment on overall trends in the data.

(ii) The candidates who gained full marks in **(i)**, generally were able to apply this understanding to suggest two practical ways in which the park should improve the facilities. Popular valid suggestions were to provide information leaflets and clearer signposts and these gained the two available marks.