GEOGRAPHY

Paper 2217/01

Paper 1

General comments

The paper was regarded as being appropriate for the ability range of candidates and it achieved a high degree of differentiation. **Question 1** was the most popular, most candidates attempted it. **Question 4** was the least popular. Excellent answers were seen to all questions and ,whatever questions candidates chose, there were plenty of questions where for A and A* grade candidates were able to show their abilities. In all questions the less demanding and/or more structured tasks provided all candidates with the opportunity to achieve positively in some areas, particularly those involving the use and interpretation of the source materials. Examiners continue to be impressed with the high quality of geographical learning which is taking place in many Centres throughout the world, and once again commented on significant improvements in the standard of work from many Centres. In general candidates' answers were focused, and written in complete sentences, showing good progression of ideas. Specialist geographical terms were used where appropriate. However many candidates lost marks in case studies, where answers were typically too short (often shorter than other answers within the same question) and lacked the development of ideas or necessary detail required. However candidates did choose a pleasing variety of examples for their case studies, generally using them to answer the questions in a relevant way to score some marks.

There remain many weak candidates who struggle to cope with the demands of the paper, perhaps through lack of effort, ability or linguistic problems which they experience. The detailed comments on questions below highlight the strengths and weaknesses of candidates. Careful consideration of these comments and the advice therein should be invaluable in preparing candidates for future examinations.

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

- 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.
- answer the three chosen questions in order, starting with the one which they are the most confident with, and finishing with the one which they are least confident with (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, 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.

Comments on specific questions

Question 1

(a) (i) Confusion in reading the two different vertical scales made this qui
had the decimal point misplaced by reading the left-hand axis.

(ii) The majority of candidates knew that natural population growth ha
and death rates but large numbers were unsure exactly how to
marks. Some multiplied, others divided or added the numbers.
but forgot to say that the answer was `per 1000` (or calculate it as

(iii) Many candidates gave correct answers in all three sections by referring to the differences in birth and death rates. Other candidates lost these simple marks by referring to increases or decreases in either or both rates or gave irrelevant explanation.

(iv) There were some excellent answers to this perhaps unexpected question, with some good references to HIV/AIDS, drought, war and issues relating to poor diet/obesity/heart problems in MEDCs. In contrast many weaker candidates simply gave reasons why LEDCs have a low life expectancy, rather than focusing on life expectancy declining as the question asked.

(b) (i) This was generally answered well and many candidates gained the full three marks. Some missed out by just repeating the headline or referring to rewards (financial or otherwise) without linking their comments with how the people could obtain them.

(ii) This differentiated well and there were some excellent, detailed answers showing a good understanding of the problems of under-population, especially regarding lack of workforce, slow economic growth and the need for migrants. Many candidates produced a complex web of interlinked ideas here, developing their points well. Many effectively linked the closure of businesses/less industrial output to a small domestic market, or sometimes an insufficient workforce. There was however some confusion of under population with an ageing population and the consequent increase in dependency ratio.

(c) A wide range of interesting case studies was used, some being appropriate choices, however candidates who chose MEDCs which generally do not have a high rate of population growth (eg China, UK, France, Russia, USA and Japan), found it difficult to score maximum marks as all they could refer to was international migration. Some even referred to internal migration, which has little impact on the population growth rate of a country. Those who tended to score higher marks selected an LEDC with a high growth rate and explained why there was a high birth rate and a falling death rate. Place specific details were often missing however, which prevented candidates gaining the full seven marks.

Question 2

(a) (i) Generally well answered but a significant number did not realise that an urban settlement IS a town or city but would describe it as an area in a town or city. Some candidates repeated the word urban.

(ii) A straightforward question yet large numbers of candidates gave vague answers without demonstrating geographical skills, such as distance and direction. There were also too many answers where candidates were satisfied with vague answers using the word `near`.

(iii) This proved to be quite problematic for many candidates. They commonly quoted land uses rather than functions. Tourism and fishing were the most popular correct answers, however there were many guesses, for example a nuclear power station, or agriculture. `Residential` was not an acceptable function as a settlement, by definition, is residential.

(iv) Whilst there were some noteworthy exceptions most candidates did not answer this well. The best answers tended to be from those candidates who chose to explain the tourist function, though few got beyond the location being adjacent to the sea and a beach. Many candidates discussed activities that could be done in Nice (i.e. what the functions consisted of), or how they would be carried out, which was irrelevant.

(b) (i) Generally correct, most candidates knew the terms used and r
patterns, though some wrongly used the word *clustered* for X and s

(ii) This was also well answered. Many candidates were able to de
weaker ones were able to make relevant lists using the details fr
identify issues relating to fertile soils, avoiding floods and the road j

(c) Few candidates actually named rural areas in LEDCs but most cou
urban migration in named countries. Where candidates had clearly
area, the answers were of a higher quality with many relevant d
were place specific to gain full marks. A few candidates mistakenly
city (e.g. from shanty towns in Nairobi or about migration from
country. Candidates need to be aware that in this type of question higher marks will always be obtained by developing the ideas rather than producing lists of basic points (e.g. to obtain better health care, better jobs, better education, better housing etc.).

Question 3

(a) (i) Generally correct.

(ii) Most candidates recognised the significance of Sri Lanka's location closer to the earthquake`s epicentre than India, along with the `shelter/protection afforded to Malaysia by Indonesia, though `B` proved a little bit more challenging than `A`. Some candidates ignored map evidence and referred to ideas such as population density.

(iii) Whilst there were some full and accurate responses, this was generally poorly answered by many candidates who only scored one mark for the idea of movement. Some candidates were confused and referred to volcanic eruptions.

(b) (i) The uncertain nature of the relationship shown by the graph led to several different answers which could all be acceptable. By far the most candidates identified a positive relationship and referred to a pair of data to justify it. This approach could only score a maximum of two marks. Relatively few candidates ventured `no relationship`, or a `positive relationship with exceptions`, giving access to the full three marks, however very few used the data fully and accurately enough for full credit to be awarded.

(ii) Many different valid ideas were suggested, although some candidates were distracted by concepts of distance from epicentre and the scale of earthquake. The most common correct suggestions were quality of buildings, level of preparation and population density. A common misconception was that warning could be given of an impending earthquake to allow evacuation of an area.

(iii) Many candidates gained high marks by listing the damage done by earthquakes, although some did not realise that the word "other" meant `do not write about deaths`. Many referred to effects related to damage to buildings, utilities and infrastructure. Better answers also included the effects of disease, costs to rebuild and food shortages.

(c) Many candidates made generic statements, divorced from a real example, though examples such as Kobe, Indonesia or San Francisco were used, and most could provide basic reasons at least for why people stayed there. Whilst some candidates were able to develop their ideas there was hardly any place specific information provided. A few candidates wrote extensively about the attractions of areas with volcanoes, which is not what this questions asked. The most frequently offered response was indeed because of fertile soil for farmland, where the candidates were obviously thinking of mineral rich soils which occur in an area which has experienced a volcanic eruption. Once again there were many invalid references to prediction and evacuation.

Question 4

(a) (i) Only a minority of candidates gave good definitions of the term `ecosystem`, many simply referring to plants and/or animals. An ecosystem is defined as the biotic (living) and abiotic (non-living) things in an area, interacting with each other.

(ii) Most candidates located the tropical rainforest on or near the Equator but surprisingly few used degrees of latitude or referred to one or more continents for a second mark.

(iii) This was answered successfully by candidates who ignored the answer about the ecosystem. Simple ideas relating to high condensation were sufficient to score maximum marks. However, ideas to temperatures and evaporation/transpiration though so reference to condensation and/or high humidity.

(iv) Candidates often failed to explain the effects of climate and n without any reasoning, though the well prepared candidates describing characteristics and linking them explicitly to climatic fea average marks were low on this section. The most common corr sunlight and broad leaves or drip tips, however there were many m

(b) (i) Candidates scored well on this section, despite the tendency of many of them to begin with the death of the higher level consumers and then work back to the effect of deforestation on producers. Some weaker candidates, however, missed the basic point that the food chain will be broken, in contrast others showed an excellent understanding and used terms like herbivores or carnivores and/or producers and consumers with confidence.

(ii) Answers to this section were varied and sometimes quite vague. Whilst there were candidates who showed an excellent understanding of the impacts of deforestation, others were confused as to its effects on rivers, and some did not refer to rivers at all. Candidates scored most commonly through ideas such as soil erosion, siltation and flooding, or conversely, less transpiration, lower rainfall and rivers drying up.

(c) **Tropical deserts –** despite being made **bold** was often ignored, and the candidates carried on writing about rainforests! Many who wrote about “desserts” frequently got no further than `hot and dry`, then they turned their attention to cactus plants! Few candidates had a problem with naming a valid example, however the mechanics of desert climates were not well understood by many candidates, so there were few comprehensive answers. Whilst there were notable exceptions most candidates only described the climate of a desert (often with a description of its fauna and flora which was not relevant) and few offered valid explanations of the climatic characteristics (high pressure, descending air, distance from the ocean etc.).

Question 5

(a) (i) Most candidates knew what renewable energy meant although some tried to define by simple giving examples.

(ii) This was generally well answered and many candidates were able to score full marks by referring to advantages such as the fact that renewable energy will not run out and that it is `environmentally friendly`. The idea of cost is not simple here - the running costs and maintenance costs are low while the initial set up costs tend to be high, therefore `it is cheap` was not a valid response.

(iii) It was very unusual for candidates not to score the full marks as most identified the types of renewable energy being generated in the photographs correctly.

(iv) This differentiated well. Whilst some candidates struggled to articulate appropriate ideas, others wrote effectively about limiting site (or weather related), and/or difficulties in relation to the expense of development. Some candidates rightly referred to the fact that newer energy supplies cannot yet meet demand but many only rephrased the question `only provides a small proportion of the world’s energy` thus did not gain credit. There were many misconceptions from weak candidates, typically that renewable were not `powerful` or efficient` enough.

(b) (i) Generally well answered, many candidates coring the full three marks by referring to the lack of availability of electricity, the abundance of dung, wood and charcoal along with cost issues, although it was not always clear by “free” whether candidates meant the fuels were freely available or free of cost.

(ii) There were many very good answers here. The problems were v and the environment, especially those associated with deforesta from weaker candidates was that charcoal was mined, another wa obtain their dung, and once obtained this dung was an `unhygienic candidates felt the need to refer to global environmental problem warming, despite the reference to `local` effects in the questions. V may well be local effects of global problems, candidates would be to issues such as this if the focus of the question is local.

(c) A wide range of examples and types of power station was used, wide ranging. HEP was most commonly used but all many candid `be near water`. Some muddled HEP with tidal power statio reference to water was so simplistic that it was difficult to tell. Thermal or nuclear power stations offered better opportunities to explain locational factors, and some excellent answers were seen, however only from a small minority of candidates. Unfortunately a high proportion of answers gave no example and read as location theory, which only gained limited credit. Sometimes candidates who did name an example gave a detailed description about the station – often with dimensions/costs and its impacts on local people and environment - without explaining the factors which influenced its location as required.

Question 6

(a) (i) Generally correct though some candidates clearly had not even referred to Fig. 10, giving answers such as `breathing` or `burning fossil fuels`.

(ii) Generally well answered although too many "lost" the second mark by listing a whole range of road vehicles rather than giving examples of different types of transport such as road vehicles, trains and aircraft.

(iii) Whilst some candidates did not use the terms `more` or `increase in` when referring to vehicles, industries and electricity consumption (to explain *increases* in carbon dioxide levels) most did realise that this was required and scored well on this question.

(iv) There were some excellent responses here, also quite a lot of confusion. As many wrote about the ozone layer and how we are making holes in it as those who wrote about global warming. Some superb answers were seen, with the process correctly explained and correct terms used (short wave/long wave radiation, etc.). Often a useful diagram was incorporated, fully labelled to enhance the written answer. The one problem was the frequent confusion with ozone layer depletion, a completely separate issue with different causes and mechanics. A very prevalent source of confusion.

(b) (i) Almost all candidates agreed that MEDCs are more responsible for global warming than LEDCs but, despite the fact that they had been asked to study Fig. 11, few used data from the map to support this assertion. Perhaps many candidates had not seen maps of the style of Fig. 11 before, nevertheless the use of the percentage figures on the map did make the resource easy to interpret for those candidates who attempted to use it as instructed. Many wrote at length about why MEDCs were responsible, offering nothing more than a repetition of the ideas expressed in (a) (iii).

(ii) Many candidates found this question difficult and there were very few outstanding answers. Most candidates were able to score one or two marks by reference ideas such as to our dependence on fossil fuels, the fact that we could not give up our cars and electrical devices and/or the lack of awareness of the problems being caused by their use. A small number of well prepared candidates explained why global agreements to reduce emissions of carbon dioxide are hard to establish and difficult to police, and indeed politically and economically unlikely, but mature answers such as this were not common. Many simply explained why we are emitting so much carbon dioxide, once again repeating answers to (a) (iii) or wrote about the shortcomings of renewable energy.

(c) This differentiated well, and answers ranged from the excellent to the dramatic with absolutely no substance. Most candidates scored some marks and there were some comprehensive, place specific answers scoring full marks. Quite a few examples were provided such as Antarctica, the Maldives and the Himalayas. Whilst there were still candidates who included irrelevant material such as the impacts of ozone depletion, there were many who developed and exemplified relevant

impacts such as ice melting, sea level rising, low coastal areas flo
to people and the natural environment. Some Centres concer
drought which are faced, for example in sub-Saharan Africa, alth
well developed. Many candidates described types of climatic
increased number and strength of tropical storms, etc.) without li
change in distribution of wind belts, ocean currents etc.). Commor
bears `live in Antarctica` and that the `poles` were melting, rather th

GEOGRAPHY

Paper 2217/02
Investigation and Skills

General comments

Entries were received from 53 Centres spread across 21 countries.

In ***Section A***, **Question 1(c)** and **Question 4** proved to be more difficult, while **Question 3** was easier with around 10% of candidates gaining all of the available marks for this question.

In ***Section B***, **Question 8** was more popular than **Question 7** by more than 2:1. However, **Question 7** produced the greater range of marks including the highest scores for ***Section B***.

Comments on specific questions

Section A

Question 1

(a) (i) Most candidates correctly identified the wide tarred road, with all three words being required for a correct answer. Incorrect answers that were seen included the river and the railway itself, illustrating the need for care when reading the question.

(ii) This question required candidates to look right to the edge of the map, where Concession is indicated to be off the map on the western side. An answer of either west or south-west was acceptable, though it was pleasing to see many candidates correctly using the 16-point compass to give a WSW direction.

(b) Many correctly identified the compass directions required here, but a sizeable proportion had the drainage in the opposite direction. The correct response was from south-east to north-west, though south to north was also accepted. A few tried to express the answer in terms of the place names on the map.

(c) (i) It was disappointing to see so few correct answers in this section. Subtraction of one spot height from the other gave a height difference of 38 m. An acceptable road distance was within the range 6800-7000 m. These figures led to a gradient of between 1 in 179 and 1 in 184.2, though few candidates got to this final answer. Common errors included the reciprocal for the gradient and incorrect application of the scale to the road distance. Some had quoted 0081, the grid reference of the second spot height, in place of the height difference.

(ii) Answers here usually involved general comments such as "gradient is not the same everywhere" or "slope is not uniform", whereas study of the map would, in this particular case, show that the road crosses a valley. The most common response was the ambiguous comment that "the road is not straight".

(d) (i) A fairly generous tolerance was allowed on this question. Measuring from A, R was between 3 mm and 7 mm, I was between 41 mm and 46 mm and M was between 97 mm and 103 mm. Many candidates were within these tolerances, and there were far fewer instances of candidates being unsure of exactly how to show the positions on the cross-section profile.

(ii) The same A-B line was used for the investigation of land use in (d)(ii). The most common correct answers were cultivation, road, huts and orchard / plantation. Medium bush, track / cut line / game trail and buildings were also acceptable, though the latter was rarely spotted. Some candidates

overgeneralised; for example, putting residential instead of huts. cultivation as either aerodrome landing area or the boundary of rur

(e) (i) This was a relatively straightforward question with many candida variety of examples were possible for each service. Railway a choices for transport but tracks and aerodrome were also possibi sports field, club or golf course. For health most cited the clinic, t would also have been accepted. A few made the mistake of pu sports, rather than a health service.

(ii) Many had the Mazowe River located on the right hand side of t taken the trouble to draw the route to a high degree of accuracy ga was for correctly indicating the direction of flow. This was to the north, but quite a number of candidates had the river flowing in the wrong direction.

Question 2

(a) (i) Many candidates successfully completed the graphs of rainfall and temperature in Fig. 3. The most common mistake was to draw bars for the temperature plots and to join the January to April rainfall data into the line. It was surprising the number of candidates that did this considering the clumsy cross-over that it created on the graph.

(ii) In (a)(ii) it was necessary to subtract the lowest temperature from the highest, to give an answer of 1°C. Some candidates did this, but others simply wrote down the two extremes without performing the subtraction. Others seemed to be confused with average temperature, having summed the twelve figures, with or without dividing by twelve.

(iii) Part **(iii)** was a simple reading from the graph and most candidates correctly stated 27°C and 70 mm. A few made the error of reading from the wrong scale.

(b) It was pleasing to find that many candidates had deduced that atmospheric dust would block solar radiation or simply increase cloud cover. However, quite a few had clearly not read the question carefully, since they were talking about eruptions causing increases in temperature.

(c) To answer this question it was necessary to appreciate the magnitude of the data on Fig. 3. Most realised that rainfall levels were high, but went on to suggest flooding, which was rather too general, particularly in the aftermath of a tsunami, and given that Fig. 3 shows climate data, with rainfall for each month rather than an individual weather event. However some commented on waterborne diseases and others suggested muddy conditions. Some hinted at the possibility of inadequate shelter, though this was not well expressed.

Interpretation of the temperature data was rather more varied, with almost as many suggesting that the temperature was low as said it was high. This is where an appreciation of magnitude was important since, although the temperatures may indeed be lower than is in the experience of many candidates, that does not make them cold in an absolute sense. Those who commented on high temperatures talked about ideas such as food spoiling more quickly, dehydration and promotion of disease.

Some candidates were talking about how climate would affect crop growth but this was not relevant to conditions in temporary aid camps.

Question 3

(a) Most candidates correctly completed Fig. 4, with crossed lines for Algeria and parallel lines for Democratic Republic of Congo. An occasional error was when the latter was shaded as for the 1 - 9.99 category.

(b) Most candidates correctly indicated "intensive" and "north-east" to complete the sentences in this section. Those who had achieved one mark, usually had the direction correct with an incorrect farming system.

(c) In this section it was possible to score two marks for advantages
have a 3+1 or 1+3 arrangement. The majority of candidates corre
higher yields and some scored a second mark by expanding this id
for farmers or decreased food prices. Another commonly cited
controlling pests and diseases.

Many mentioned toxins in the disadvantages section, either in rela
application or, more commonly, the potential for residue in food s
about the problem of eutrophication.

Question 4

(a) Despite clear instructions to use labelled arrows to locate the features on Fig. 5, many candidates simply wrote the required letter, which made it quite difficult to interpret their answer. For example, for C the arrow needed to point to one of the three piles of stones on the beach. Those who had only labelled with a letter had often located the label on the cliff face next to the pile of stones, where it was easier to see, but consequently not clear that they were trying to indicate the pile of stones.

The two rock types on Fig. 5 were indicated by the difference in shading and label B could be located anywhere along the horizontal line on either cliff section. Some labelled along the vertical line between the two sections of cliff. Many chose one of the two points where the horizontal rock boundary met the line indicating the change from one cliff section to the other.

Anywhere from the base of the cliff, stretching into the sea, was an acceptable position for wave-cut platform P.

(b) (i) Here it was necessary to observe differences in the two sections of the cliff shown on Fig. 5. The majority of candidates noted the difference in vegetation cover and it was possible to gain two marks from this by referring to both the vegetation / lack on the cliff face and also that at the base of the cliff on the right. Another approach was to consider the steepness of the cliff, which could also be expressed in terms of the shape of the slope towards the top of the cliff. A few candidates just made one point and then went on to explain in this section rather than in (b)(ii). Some also failed to score marks because they had used the terms "left" and "right" incorrectly when locating the differences.

(ii) A good answer in this section needed to refer to wave action and cliff collapse and retreat on the cliff to the left of the sign, in contrast to the cliff to the right being protected, from erosion and salt water, and instead being modified by weathering. Many candidates wrote about the presence or absence of wave action but they did not always successfully relate it to the differences that they had described in (b)(i).

Question 5

(a) Most of the candidates successfully ranked the countries as follows: Norway, Canada, Italy, New Zealand, Indonesia, Honduras, Georgia and Haiti. Occasional error saw the reversing of either Italy and New Zealand, probably due to misreading the thousands digit, or Honduras and Georgia.

(b) (i) A triangular graph is a difficult skill so it was pleasing to find many candidates successfully completing Fig. 6.

(ii) Reading data from the graph proved to be more difficult than plotting. Allowing for plus or minus 1 on all figures, Indonesia had 44% primary and 38% tertiary, while New Zealand had 12% primary and 57% tertiary. Many candidates managed to correctly read the primary industry off the bottom axis but went wrong with the tertiary figures. It was necessary to get all four figures correct for both marks but many candidates managed to score 1, since for this only one correct figure was required.

(c) Without fully understanding how to read Fig. 6, it was still possible to score three marks in this section, since it was only necessary to compare the relative positions of LEDCs and MEDCs. Thus many candidates were able to state that MEDCs have a higher percentage in tertiary and secondary and a lower percentage in primary, or visa versa for LEDCs. The most common error here was for candidates to compare primary, secondary and tertiary with each other, for a

particular country or group of countries, rather than comparing LE also distracted into writing details about types of jobs in each employment structure rather than a simple description.

Question 6

(a) Many candidates had correctly completed Fig. 7, though unfortu labels and indicated the sectors incorrectly.

(b) Most candidates had correctly interpreted Fig. 7 and noted tha highest number of migrants to the USA. Asia was occasionally proximity to the 50% label on Fig. 7. Others had simply looked selected Caribbean.

(c) A process of elimination led to three possible answers for this section: Africa, Oceania or Canada. Again most candidates were successful here.

(d) The most common answer here was to point out the close proximity of Central America to USA, though relatively few made the point of the direct land border between the two areas. Many went on to talk about perceived opportunities such as jobs attracting migrants from LEDCs and some appreciated the relative population size of Asia as a source area. A common error was to write about reasons for migration without reference to pattern.