

# GEOGRAPHY

Paper 2217/01

Paper 1

## General comments

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

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

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

- (a) Choose the three questions with care, ensuring that for each of the chosen questions you are confident that you have a case study about which you can write in detail. Answer the three chosen questions in order, starting with the one which you are most confident with, and finishing with the one which you are least confident with, rather than automatically answering them in numerical order.
- (b) Read the entire question carefully before beginning an answer. Decide which section requires which information, thereby avoiding repetition of answers and the time that is wasted. You will not gain double credit for saying the same thing twice. Each question has been carefully prepared to test different parts of the syllabus.
- (c) Take careful note of the command words so that answers are always relevant to the question. Highlighting command words on the question paper is a useful strategy; however, candidates must be familiar with their meanings, something which can only be achieved by the use of past questions and mark schemes in preparation for the examination.
- (d) Use the mark allocation as a guide to the amount of detail or number of responses required. Be aware of timing and do not devote too much time to the first chosen question, or include too much detail in sections which are only worth a small number of marks. The inclusion of irrelevant materials is self penalising, in terms of the time which is wasted. The case studies are often used as an opportunity to `write as much as I know about....` and this is not helpful to candidates. At best they waste valuable time, at worst they overlook what the real task is and their marks suffer.
- (e) Aim to develop each idea so that answers do not emerge as a list of simple points, particularly in case studies where place specific information and details should be included wherever possible to give case studies authenticity.

- (f) Use resources such as maps, graphs and photographs carefully in order to make use of the information they include, and do not merely copy out parts of resources. Wherever possible use your own words to back up an answer, but aim to interpret them and add comment rather than simply listing information read from a table or graph.

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

- (a) Invigilators should ask candidates to write the numbers of their chosen three questions on their first answer sheet on the cover of the answer booklet which they use. This is a useful time to remind candidates only to answer three questions, rather than all six. There are too many candidates who do not follow this simple instruction and answer all six questions. They cannot benefit from such an approach as time will not be sufficient to write good quality answers to questions. In November 2008 fewer candidates attempted all questions than before.
- (b) There should be a margin of at least 2 centimetres on the left and the right side of each page. Apart from the numbers of the questions and sub-sections candidates should not write in these margins.
- (c) Every part of every question chosen should be clearly indicated in the left hand margin.
- (d) At least one line should be left between each part of a question, and at least three lines between each question.
- (e) All sheets should be loosely tied together, with the sheets assembled in the correct order. Sheets should not be submitted loose, nor should they be tied or stapled together so tightly that they are impossible to turn over in order to read all parts.
- (f) All sheets should be numbered by the candidate and placed in the correct order.
- (g) Narrow lined paper, or exceptionally thin paper, should not be used.

### Comments on specific questions.

#### **Section A**

#### **Question 1**

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

- (a) (i) The economically active are the working population. Almost everyone got this correct even though answers were many and varied.
- (ii) The greater percentage of elderly as evidenced by the wider top to the pyramid was appreciated by most. However, in B, birth rate was often confused with young dependents. Some failed to give comparative answers in one or both parts. It would be very much appreciated by Examiners if candidates wrote about comparisons, such as “the pyramid had a wider base”, rather than writing two separate sections and then leaving the Examiner to draw out the comparisons.
- (iii) Most candidates could get at least one mark by reference to “more young dependents in Indonesia”, some calculated totals correctly but few scored the third mark. Lots of candidates gave figures for individual age ranges rather than total young dependents.
- (iv) Most answered with reference to the high birth rates in the LEDCs and this was a perfectly appropriate approach. Candidates should remember that extra credit can be awarded for developing ideas, so should be discouraged from simply writing a list.
- (b) (i) Most were able to make some sort of comparison, and the question seemed to differentiate well, with a reasonable number scoring the full three marks. Marks were lost however through inaccurate figures. Many candidates used end figures i.e. 2025, but the question limited the time period to 1970-2005.

- (ii) Here, too many candidates involved themselves with a contrast between Indonesia and China. The question was designed simply to provoke reasons for the over 65s to increase. Many candidates pointed to longer life expectancy, better treatment of disease and improved health facilities. Many were aware of the importance of improved diet, access to a clean water supply and improved sanitation. A significant number did not understand the question.
- (c) Too many candidates decided that this question concerned overpopulation. As a result, there were many answers which covered China's One Child Policy. Few answers were seen which scored full marks, though most candidates could score something provided they understood "concern". There were lots of good developed references to increased dependency and lack of workers.

### Question 2

- (a) (i) The vast majority correctly identified model A.
- (ii) Most associated X with the CBD but fewer identified Y as the industrial zone.
- (iii) Few failed to gain credit; most achieved 1 or 2 out of the 4 marks which were available. Good answers concentrated on the land use models themselves. For example, they both had a CBD in the middle; both had an industrial belt flanking a main road. Squatter settlements were present in A but not in B and so on. There were lots of references to the quantity of specific land uses rather than the pattern / distribution within the model.
- (b) (i) This was done well with many gaining full credit. Connection with the main roads such as the Pan-American Highway, the rivers and the highland margins were the main components of a good answer. Fewer commented on the clustering in the north and in Cono Sur to the south. There were some inaccuracies – "outside the CBD" instead of "the outer edge of the built up area", but, on the whole, a good attempt.
- (ii) Far too many candidates here referring to positives (e.g. near river for water supply) rather than showing understanding that squatter settlements occupy land which is not required for other uses or of poor quality. Lots of references also to agriculture and 'hiding from the authorities in the hills'. Others tried to account for the existence of squatter settlements rather than answering the question which had been set.
- (iii) Better responses generally than (ii). Some good details of rural-urban migration, and pull factors, such as jobs, along with references to being unable to afford alternative housing. Also some good references to lack of investment in housing by the authorities.
- (c) Most candidates could score at least at Level 1, though many progressed into Level 2 with some simple development of their responses. There were some Level 3 answers gaining full marks which were impressive, especially if local examples were used. There were some superb answers relating to Rio de Janeiro and the favelas found there. The self help schemes were carefully detailed and there was considerable knowledge, not only of simple electricity and water provision, but also the ambitious Rocinha development.

### Section B

#### Question 3

- (a) (i) The vast majority correctly named the Stevenson Screen.
- (ii) Most identified the thermometer and the barometer.
- (iii) Many candidates knew the reasoning behind A, B and C. It was clear that candidates had been well taught and had done their revision carefully.
- (iv) This question differentiated well, with full marks being scored by a fair number, though 1 or 2 was the norm. Most scored a mark for referring to 'open space', often repeating it in a different way such as 'away from trees'. Some gave good reason for this. Fewer references were made to 'on grass' or 'fenced compound' although some candidates gave the reasoning 'to keep animals out'.

- (b)(i)** Generally well answered, either by reference to trends or by use of figures.
- (ii)** As **(i)**, most answers scored well. However, some candidates ignored the two times generally described trends over the whole time period shown. Many accurate figures were given to support answers. Only wind direction was troublesome. Most could not interpret degrees in terms of direction.
- (c)** Most candidates understood what they had to do and wrote something about effects of drought. A number however read drought as 'flood', and a few tried to write about causes, usually referring to global warming. Some wrote at length about impacts of high temperatures, rather than lack of water. Well prepared candidates realised the importance of developing their answers, but from other Centres points made were brief and simple. There were good answers on the Sahel, where many examined the link between lower than average rainfall and resulting low crop yields which would cause malnutrition or starvation. Other good answers made reference to MEDCs. Candidates stressed problems such as shortages of irrigation water, increased costs of winter feed, water rationing and so on. Parts of Australia and New Zealand were quoted as relevant case studies.

#### Question 4

- (a)(i)** The river with the largest volume was 7C, and whilst this was the most common answer given, a significant number of candidates got it wrong.
- (ii)** Many candidates did not make a comparison and some failed to confine the differences to valley shape and referred to other features such as alluvium. Good candidates noted the steeper valley sides in A and As V shaped cross section, compared with the more open or "U" shape of B.
- (iii)** Well prepared candidates gained three easy marks here.
- (iv)** This question differentiated the candidates well. Some excellent descriptions were given, often accompanied by simple diagrams. Unfortunately, other candidates mixed up erosion and transportation and / or just listed the names of the processes.
- (b)(i)** Largely disappointing responses were given, with few full mark answers seen. Many candidates simply wrote what they knew about waterfalls and their formation rather than what they could see in the photograph.
- (ii)** Benefits were generally well done but not problems. It was rare for any candidate to score a mark on problems, with all sorts of erroneous answers about flooding, erosion, dying and disadvantages of tourism!
- (c)** The responses given to this question were generally weak, with poor case studies chosen. Some made basic reference to "heavy rainfall" but very few candidates developed themes connected with process. Specific examples were rare. There was often a tendency to be sidetracked on to the effects of the flood rather than the causes.

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

#### Section 3

#### Question 5

- (a)(i)** This question was usually answered correctly, although a significant minority failed to include "millions" with the 680.
- (ii)** Europe and Asia-Pacific were commonly identified correctly.
- (iii)** A range of sound answers were evident, with many candidates scoring 2 or 3 marks, typically by reference to increased affluence, increased leisure time and the development of specified tourist facilities. A few candidates confined their response to the advantages of tourism to an area, which did not answer the question so failed to earn marks.

- (b)(i)** Virtually all of the candidates who chose to answer this question scored well in this part. The advantages of tourism were clearly understood.
- (ii)** The problems which international tourism cause for people who live on Mahé were less well understood. Pollution came to the fore here, especially littering and also noise. An adverse cultural impact and crime were also mentioned. However, the seasonal nature of tourist based employment with its low pay and negligible career prospects were rarely mentioned. Even the best candidates rarely gained the fourth mark available, as no reference was made to the information sources given.
- (iii)** In this question the candidates were specifically asked to refer to Fig. 9 and photographs B, C and D, which they did with skill. There was a wide range of acceptable answers which allowed many candidates to achieve maximum marks. With the wealth of visual resources given, vague answers were not seen as creditworthy. Candidates needed to be specific, for example “sandy beaches” and “clear sea” rather than just “beach and sea”.
- (c)** Unfortunately, candidates who had scored well throughout the rest of the question failed to score as well in this part, largely because they did not answer the question posed. The crucial thing was to understand that the question referred to “...maintain, improve and conserve the quality of the environment”. Too many candidates did not move beyond the idea of “putting in more litter bins” or “cleaning the beach”. A few candidates, who live in tourist areas, produced some amazing answers, with a huge amount of local detail. Writing from personal knowledge always provides an advantage and usually a better response.

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

#### Question 6

- (a)(i)** There were a few good definitions given by those candidates who recognised that fossil fuels are derived from plants / animals. However, too many candidates failed to score in this question because they either gave examples of fossil fuels or they said that they were non renewable energy sources from underground.
- (ii)** Most correctly identified Asia/Pacific and Africa although the other continents were also widely quoted by candidates who did not understand how divided bar graphs work.
- (iii)** This question was universally done very well, with the vast majority of candidates scoring maximum marks.
- (iv)** Generally disappointing answers were given to this question, especially in contrast to the previous part. Good candidates recognised the availability of resources, like oil in the Middle East. The level of development was an important factor explaining why fuelwood is so important in many LEDCs. Others made reference to Government policies e.g. Nuclear power being banned in New Zealand. Weaker candidates gave vague answers which largely failed to earn credit, and some did not understand the question and either wrote about the importance of finding other sources of energy when fossil fuels run out, or what should be done to combat the impacts of global warming.
- (b)(i)** Few candidates simply copied straight from the source without showing signs of understanding. There were some excellent references to ideas such as increased production / transport costs and the fact that the increased cost of imports will be likely to have significant negative impacts on economic growth.
- (ii)** For good candidates this was a straightforward question. Oil spillages and oil combustion producing air pollution, lead to a whole host of environmental problems, which were well understood by many. Alaska was used very well as a case study. There was some evidence of some candidates beginning to run short of time by this point. Some candidates who had been developing their answers well ceased doing so here.

(c)

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

# GEOGRAPHY

Paper 2217/02

Investigation and Skills

## General comments

Candidates for this examination were entered from 42 Centres across 16 countries.

In **Section A**, **Question 1** proved to be the hardest, largely due to difficulties with the descriptions in **parts (b)(iv), (c) and (e)**. Candidates tend to simply use names that they see printed on the map, rather than using the map to interpret the landscape. The subsequent questions were generally well answered, though **Question 3(b)(ii), Question 4(c)** and **Question 5(f)** were more difficult.

In **Section B** approximately two-thirds of the candidates chose to attempt **Question 6** with the remaining one-third choosing **Question 7**. A small minority of candidates attempted parts of both questions, though this invariably resulted in a low overall mark, since they did not have sufficient time to do either of them well.

Ten percent of candidates did not attempt the last section of their chosen question in **Section B**. This may have been due to running short of time, in which case candidates need to be encouraged not to spend a disproportionately large amount of time on **Section A**.

## Comments on specific questions

### **Section A**

#### **Question 1**

- (a) The majority of candidates correctly identified the grid square as 1356, to locate the settlement of Gros Islet. It was pleasing that very few opted for the adjacent square containing the place name label. Some candidates chose other settlement areas on the map. This may have been because they noticed that the overall map name was Gros Islet, and the same thinking could have influenced those who gave 1050 as their answer, i.e. the SW corner of the extract.
- (b)(i) This section required accurate use of 6-figure grid references. A was the fish ponds, while B was the bridge where the highway crosses the Choc River. Many candidates appeared to have located the correct square, but not all were sufficiently accurate to arrive at the correct feature. To compensate for this some candidates listed a number of features, within the general area, for both A and B.
- (ii) Here an answer in kilometres was required, with answers in the range 1.6 km – 1.8 km being accepted. Many candidates did give answers within this range, though a few seemed unsure as to how to apply the scale and some gave answers in metres.
- (iii) Many candidates correctly stated the direction as NW but a sizeable proportion gave the direction of A from B (SE) instead.
- (iv) Most candidates commented on the cultivation/plantation in the area. Some also went on to mention the river and then commented on the natural vegetation which gave them three points. However, many ignored the phrase “physical landscape” and just listed anything that they could identify on the map, more often than not just by taking words straight off the map, such as “power station”, “brick factory” etc. Very few attempted to comment on the relief of the area, but descriptions of the valley, with its steep side slopes and changing width, would have been valid.

- (c) This was generally done better than **(b)(iv)**. Most candidates mentioned the headlands along with the sand/mud found at the beaches. Further comment on the vegetation and one of the human features was the most likely combination of points leading to five marks. Most candidates made the bays and headlands points but then filled the available space with repetition of this, describing the sequence along the coastline, padded out with the names of bays and headlands where given. Occasionally candidates just used the place names which failed to score any marks.
- (d) Most candidates selected the Hotel and the Yacht Club for their evidence of tourism. However, it was also necessary for a grid reference to complete the answer, and these were not always correct and were sometimes omitted. Some candidates cited the beach, which was equally valid, and a grid reference at any single point along the beach was accepted.
- (e) In this section candidates found it difficult to make general comments. Those who scored the maximum of three marks had usually noticed the proximity of a river, the flat land or gentle slope and the presence of the largest area in the SW. However, some candidates simply listed the locations, either with compass directions, by name or by grid references.
- (f) The most popular choice of grid square for this answer was 1151. Many mentioned the water supply from the nearby river and some talked about settlements providing labour or the ease of cultivating flat land, but few made two clear points. Some mentioned soil fertility but this could not be deduced from the map evidence.

### Question 2

- (a) There were a number of ways of scoring four marks here, though it was hoped that candidates would go beyond simply listing the number of cities in each continent, and thus scoring marks in this way was limited to a maximum of two. Many of the candidates noted that most of the cities were in Asia and most in LEDC's. Many used the given lines of latitude as a basis for their description of distribution and comments such as "8 in the tropics" or "mostly in the northern hemisphere" were acceptable.
- (b) There was good understanding of this question. Mexico City, New York, Sao Paulo, Mumbai and Tokyo all needed to be named for two marks and many candidates did do this. Some candidates only listed four cities, in which case it was invariably Tokyo that had been omitted.
- (c) In this section candidates had to identify three cities expected to grow by more than five million between 2000 and 2015. There were five possible answers: Lagos, Karachi, Delhi, Dhaka and Jakarta. Most candidates selected Lagos, Karachi and Dhaka since these were the three with the greatest growth. (A few candidates had selected Tokyo which suggests that they had simply selected the largest cities in 2015 rather than those with the most growth.) The candidates were required to identify the cities by circling the location on Fig. 2. as shown in the example. However, some candidates had not used the map and instead had tried to show their answer by circling parts of the graph on Fig. 3 – either the names or the bars themselves.

### Question 3

- (a) (i) Almost all of the candidates were able to correctly plot India on the graph. A few, however, had life satisfaction on the line for 5.8 due to counting the scale incorrectly.
- (ii) Similarly here, almost all candidates had interpreted the graph correctly and listed Japan as having the highest life expectancy and Costa Rica as having the highest life satisfaction. A few candidates had stated the figures for these countries rather than naming the countries.
- (iii) Most candidates correctly inserted the word "higher" into the first sentence. In the second sentence India, Cote d'Ivoire or Congo were all acceptable answers. Congo was the most popular choice being furthest removed from Vietnam on the graph. In the third sentence the correct response was Egypt, though some candidates had looked for the similarity on the life expectancy axis and had thus concluded Congo. In the final sentence the correct answer was 4 years lower. However many candidates had not noticed the word "lower" on the final line and thus stated the actual life expectancy of Costa Rica rather than the difference.

- (b)(i) Most candidates successfully ranked the countries as 1 – USA, 3 – Japan and 4 – Costa Rica. Those who had made a mistake usually had Japan ranked at 1 as they were ranking with respect to the life expectancy axis.
- (ii) It was clear that many candidates did not understand the term “environmental footprint”. From the stem of (b) they wrote about land, minerals and water, but often in terms of the amounts available in the two countries rather than the use of these resources. Very few candidates scored three marks but those who did generally pointed out that USA is a MEDC and has more industries and uses more energy than Costa Rica. More specific comments were also acceptable such as “more irrigation” or “more cars per person” in USA. Some candidates assumed that the USA had a bigger environmental footprint due to having a bigger population but this point was not valid as the term was defined as the use of resources per person in the stem of (b). Some candidates assumed that a high environmental footprint was a good thing; others wrote about why the life expectancy was similar.

#### Question 4

- (a) This section was done well since, as the photographs showed little other than physical landscape, candidates were forced to stick to the point, in contrast to **Question 1(b)(iv)**. Most commented on the relief and vegetation cover in A contrasting with the bare rock in B. A number of candidates only focused on the foreground of Photograph B, thus restricting their answer.
- (b) This was a straightforward question as a variety of weathering processes could have been occurring in both places. Chemical or biological weathering were acceptable for either, with physical weathering as another alternative for B. More specific names of processes were also accepted. Many candidates scored two marks. Those that didn't had usually described a process rather than naming it.
- (c) This section was more difficult and many candidates just tried to follow through with the weathering ideas from (b). However, there were some excellent answers based on knowledge of tectonic / volcanic activity and its presence in A and absence in B. Many candidates noted that there would be a difference in climate, particularly rainfall, which would influence the vegetation. Others pointed out the human activity in Photograph B.

#### Question 5

- (a) Most candidates correctly named China as the country producing most electricity.
- (b) In this section it was important to distinguish between the largest proportion of electricity from HEP (Italy) and the largest amount from HEP (China), and a number of candidates had these the wrong way round. A few suggested “no country” for (b)(i) as they were looking for HEP to be the tallest bar.
- (c) This section was very well answered with many candidates covering far more than was necessary for the three marks available. Simple comparison of each power source was sufficient, e.g. “Japan uses a larger percentage of natural gas than China”, but many also noted the dominance of coal in China compared to the more equal percentages of coal, gas and nuclear in Japan.
- (d) Most candidates correctly stated HEP and wind as the renewable sources. It was also possible to utilise the term “other” on Fig. 6, provided an appropriate type was then specified.
- (e) In this section some candidates correctly stated wood or biomass. Many just selected one of the sources shown on Fig. 6.
- (f) Candidates found this section difficult and there were many vague answers such as “cheaper” or “easier”. A few candidates noted that high sunshine levels would be good for solar power. Others pointed out that money would be saved if fuels did not need to be imported.

**Section B****Comments on specific questions****Question 1**

- (a) (i) This was done well by virtually all candidates. Occasionally candidates chose high for the first space. A small number chose their own words but these were extremely rare.
- (b) (i) It was surprising how many variations in layout were provided. The best candidates asked a question about transport used, gave at least three realistic choices and gave boxes for ticks by either the questioner or the questionee or asked them to indicate their choice e.g. underlining. Weaker candidates asked irrelevant questions e.g. where do you live? Some gave unrealistic choices (e.g. boat, train or planes) and others filled in the questionnaire. The biggest shortcoming was not asking a question as stated in the stem.
- (ii) A disappointing response here. The majority of candidates did not clearly indicate what systematic sampling was; reference to a pattern or order needs to be qualified as random sampling could fit these weak definitions too. The best answers referred to such terms as "every 5<sup>th</sup> person" or "every 10<sup>th</sup> house". A few referred to asking questions on a questionnaire in a particular order which was a misreading of what was required.
- (iii) Credit here for advantages depended on understanding what systematic sampling was. Good candidates explained how it avoided bias and why it was easy and quick. Weak candidates just stated it was easier without explaining why. A number pursued the questionnaire slant e.g. it was quick if carried out in the street.
- (c) Apart from a very small number of candidates, the bar graph was completed for full marks by virtually all.
- (d) (i) Candidates who gave between 2-2.5 km as an answer were not providing the precision expected at this level but just stating the distance of the two outer rings. The bottom C on the chart is the maximum range – acceptable distances were 2.2/2.3 km.
- (ii) Candidates scored well here. Most measured distance carefully and referred to patterns e.g. linear for buses, scattered for cars. Those that did not measure gave weak descriptions with no distances e.g. "from everywhere". Again measurements were not always made especially for cars and buses and the nearest ring distances were used with weak answers.
- (iii) Explaining the patterns gave various responses. The best candidates referred to issues of cost, health and avoiding car parking/congestion for walkers or bikers; distance and time were also mentioned for those using cars. The access to bus routes was referred to. Weak candidates just said walking or biking was easier or more convenient or not far to walk, without elaborating on the reasons behind these statements.
- (e) (i) For reasons that still remain a mystery, far too many candidates missed this out completely; maybe its location at the bottom of the paper did not help. Only a small minority outlined a sphere of influence which went around the outside of the C positions and came in substantially on the west to at least the 4 km ring. Some did the latter but left the 10 km ring as the edge of the sphere! Some just drew a complete circle at 9.7 km. This is clearly not well understood and had some impact on following questions.
- (ii) Candidates either gave reasons related to the Sports Hall or other more generic reasons which were acceptable as the question said 'any service'. Most recognised that lack of income or access could be a reason; lack of settlements due to mountains or the sea were possibilities. Another sports centre was a good response. An answer such as "nobody liked sport", given the size of the area, was unlikely!
- (f) This was well done. Candidates needed to read the question carefully. It required a judgement on both hypotheses, a decision as to which service had the greater range or sphere of influence with two reasons supported by data from the resources. Many candidates did all of this. Others only referred to one or no hypotheses. Some gave no data at all. A few thought the market hall had the

biggest range because it had more visitors. The sphere of influence and range teachers to work on in future.

## Question 2

- (a) (i) Most candidates gained a mark here suggesting location in the ground (though not underground) or not on a post or reference to funnels and shape or measurements on the side. Candidates needed to be careful when they refer to "it" to make sure it was clear which instrument they meant.
- (ii) The vast majority did get the order 2,1,4,3, correct though a few were confused.
- (iii) This was not done well. Too many suggested line or scatter graphs and suggested rainfall and wind direction on the axes. Others suggested a three-way graph for rainfall, wind direction and date or month. The best candidates suggested bar chart or histogram with rainfall and time on the axes.
- (b) Answers in general were too vague here. The arrow "shows where the wind is blowing" without adding to or from is unclear; the letters represent the compass directions not "south" because the example is this; the vane is not on the roof "for more or stronger winds" but to avoid obstacles to get maximum exposure to wind; the paddle is not wide to "get an accurate reading" but to maximize surface area as it turns at the slightest wind to show the direction.
- (c) This was disappointing. Almost all candidates could make reference to the presence of the sea and winds picking up moisture via evaporation, but it was only the minority that noted the height of the School at 400 m and linked this to an explanation of relief rainfall. Others referred to ocean currents, frontal rainfall and land cooling the winds, none of which were relevant to this example. Candidates must look carefully at the resource before starting their answers.
- (d) (i) Too many candidates thought that the prevailing wind was the strongest wind or thought that it comes from the sea rather than the wind direction from which most wind comes during the year.
- (ii) Pattern is an area for teachers to work on. The best candidates gave overall views such as "most winds are from the south-west and west; none from north-west or north-east" but too many just listed the number of days for each. Reading off what the graph shows is not describing a pattern. A number also wrote about the wind directions in the reverse e.g. most going to the south-west.
- (e) (i) Most candidates marked in the plots in the correct place and on the SW line. Weak candidates marked two or three plots correctly then another in the 11 or 13 region! A number put all 4 on the 0 line which is inexplicable.
- (ii) As with (d) (ii) the word "pattern" was not well understood. Some just stated the fact e.g. 10 mm from the north. The better candidates recognised there was "only one" reading in the north and it could be an anomaly; also that most rain was from the west and no rain came from the E/SW/S. These overall comparative judgements are part of describing a pattern; not description of individual situations.
- (iii) Most candidates agreed with the hypothesis; it was difficult to see how any candidate could choose the other two options given the data on the graph but a number did.
- (f) In comparison with similar questions in previous years this was well done. This may be because candidates were not asked to explain how their suggestions would improve the experiment. Suggestions that were acceptable included extending the time, covering other seasons, using a traditional rain gauge and using more instruments at more sites. Using different instruments or measuring other parameters needed explanation in the context of the question. Less acceptable answers were unrealistic, such as measuring several times a day for two years