

# GEOGRAPHY

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Paper 0460/12  
Paper 1

## Key messages

In order for candidates to perform well on this paper they need to be able to:

- Follow the examination rubric correctly by answering three questions, one from each of the sections.
- Select the three questions carefully. Read them all through and study the resources provided before making a choice.
- Answer all parts of the three questions chosen in the spaces provided.
- Read the questions carefully, taking note of command words and words which indicate the context of the question, e.g. local or global.
- Respond in the correct way to all command words used in the questions.
- Identify and respond to the focus specified in the question stem – e.g. problems or solutions, impacts on people or the natural environment, hazards or how they are being managed, physical factors, farming system.
- Learn the meanings of geographical words and phrases in order to be able to define and accurately use geographical terminology.
- Be able to describe a distribution from a map by referring to general patterns.
- Use the answer space provided in the question and answer booklet and be guided by the mark allocations in order to write answers of the requisite length.
- Write clearly and precisely, avoiding vague, general words or statements which need to be qualified or elaborated, ensuring that, in the final two parts of each question, ideas are developed.
- Use graphs, photographs and maps of various types, avoiding simply lifting material from them, but interpreting them to support relevant general statements.
- Have a wide range of case studies, at different scales, so that appropriate ones can be chosen for the questions selected.
- Avoid writing a long introduction to any question or including surplus background information at the expense of answering it in detail.
- Link ideas and develop points in case studies, including appropriate place specific information.

## General comments

This was the second March examination testing this syllabus. All candidates were able to make an attempt at their chosen questions, the most able and well prepared candidates performing very well across the paper. Weaker responses were characterised some misinterpretation of questions and irrelevant content as the questions differentiated effectively between candidates of all ability levels.

Most candidates followed the rubric correctly by selecting a question from each section as required, however a few chose two questions from within one section. Very few candidates answered all the questions, indeed those who did so tended to just answer a few parts of each of the six questions, generally the parts requiring shorter answers.

**Questions 1 and 4** were the most popular questions, with **Questions 5 and 6** being of roughly equal popularity. There were good answers seen to all questions, including those requiring extended writing, particularly the case studies on overpopulation, the management of coastal hazards, methods of water supply and the impacts of deforestation. High quality responses in these case studies were well focused and included developed ideas and place detail. Weaker responses tended to be poorly focused or generic with lists of brief, simple statements. In some cases details included by candidates were not relevant, this included long and unnecessary introductions, which in some cases occupied more space than the actual main response to the question set. Many good quality answers included the place specific information required to access the highest level. This requirement can vary between questions – a settlement (**Question 2**) or a country (**Questions 1 and 6**) or an area (**Questions 3 and 4**). Some candidates do not carefully

consider their choice, limiting their mark by inappropriate choices, for example choosing a country rather than a settlement or vice versa. Where an 'area' is required, choosing a country (unless it is extremely small) is not acceptable.

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

### **Comments on specific questions**

#### **Question 1**

- (a) (i) Most answers were correct although a few candidates selected the third option.
- (ii) The main correct reasons suggested were employment and service provision, (e.g. health and education) whilst some candidates referred to accessibility. A significant number of weaker responses ignored the fact that New Zealand is an MEDC, suggesting reasons which would only be appropriate to an LEDC, (e.g. sanitation, clean water, food supply), whilst others made vague statements about the capital being 'more developed' or people living there having a 'better lifestyle'.
- (iii) This was generally well answered and many candidates made reference to more people living on North Island than on South Island, along with reference to specific clusters and/or concentration on the coast. Whilst most candidates were able to 'describe the main features of the distribution' others attempted an explanation.
- (iv) Some candidates wrote about non-physical factors such as employment. The better answers linked the selected physical factors with a clear explanation, usually linked to the ideas of relief and an aspect of climate such as cold temperatures or aridity.
- (b) (i) Most candidates identified three valid changes, although some referred to population numbers rather than population distribution. Some candidates ignored the question instruction and noted that Australasia was unchanged.
- (ii) Candidates who correctly understood the focus of the question scored well with ideas about high birth rates and decreasing death rates, many developing them effectively. However, others misunderstood the question and wrote about the perceived attractions of LEDCs for migrants.
- (c) There was a variety of countries named, Bangladesh, India, China and Nigeria being popular choices of case study. China was accepted as being overpopulated, however some responses focused on the one child policy as a solution rather than describing the problems. Most candidates however did describe problems faced by people living in an overpopulated country, some in simple or general terms at level 1. Such candidates described problems which simply occur in areas of dense population rather than resulting from overpopulation as such, however more perceptive candidates linked ideas which allowed them to show their understanding that overpopulation relates to there being an excess of people for the available resources. Whilst there were considerable numbers of candidates who developed their ideas (Level 2) only a minority also made specific references to the named country to gain full marks.

#### **Question 2**

Very few candidates answered this question and high marks were not common.

- (a) (i) Most candidates recognised the linear shape.
- (ii) Answers which gained full credit were not common, however those candidates who gained credit here tended to do so for identifying the similarity of shape or the location along the road or the reference to the different services shown on the map in the two settlements.
- (iii) Some candidates recognised the nucleated and linear shape of the two settlements and a few candidates correctly attributed this to the difference in road layout, however few other valid reasons were seen.

- (iv) Many responses showed some confusion was to what 'services' were, or did not refer to their 'characteristics' as required. Generally therefore this question was poorly answered. The settlements are clearly small settlements, as can be seen by using the scale of the map, therefore services will be of a low order, with small spheres of influence and threshold populations, using by people for their daily needs.
- (b) (i) Most candidates recognised that the settlement was on a hill but many explained why it was built there rather than adding further detail to their description of the site.
- (ii) The question discriminated well, with many candidates recognising the influences shown in Fig.2.2, particularly the road, river and flat or low land. More perceptive candidates then developed these ideas through accessibility, water supply and food production.
- (c) Responses to this question were generally weak with few examples achieving more than Level 1 for examples of services or simple description of some of them. A good understanding of the geography of service provision and settlement hierarchies should have led candidates to explain service provision in their chosen settlement by reference to ideas such as population size, access, competing settlements, however such ideas were rarely seen.

### Question 3

- (a) (i) Most candidates correctly selected 'wave cut platform'.
- (ii) Good candidates understood the difference between the types of rock and their effect on the rate of erosion though many others simply guessed or referred to coastal deposition.
- (iii) Many candidates could also explain how the three processes may have eroded the coastline. Whilst most candidates were successful there was some confusion between the processes and some inexplicably wrote about river processes despite being provided with a photograph of a coastline.
- (iv) Many candidates usually recognised problems such as loss of farmland, damage to building and destruction of roads or paths. Weaker responses focussed on flooding rather than coastal erosion.
- (b) (i) Most candidates gained credit for recognising that coral is all around the island, but mangrove is only in certain parts. Some simply named areas where there are coral and mangrove swamps whilst others did not compare as required.
- (ii) This question differentiated well. It is a familiar topic and many responses scored well, making several relevant points and developing some, for example by the use of statistics. Weaker responses sometimes referred to 'temperatures' rather than 'water/sea temperatures' whilst others explained at the expense of fully describing the conditions required for the development of coral reefs.
- (c) A variety of coastal areas were chosen as the case study. Many of the responses were focussed on the UK with Holderness being a particularly common example. Candidates who focussed on erosion usually scored more highly than those who focussed on flooding, tsunami protection or tropical storms. Some candidates wrote at length about the causes and impacts of the hazard at the expense of developing explanations about what has been done to reduce the risk. Candidates who chose erosion described a variety of measures in variable amounts of detail, and many of those who gave a comprehensive account included place detail to earn full credit.

#### Question 4

- (a) (i) Most answers to this question identified the correct definition of weather.
- (ii) Most, but not all, candidates correctly identified both instruments.
- (iii) Most candidates made good use of the photograph and either referred to trees and buildings as being obstructions, or wrote about the unsuitable ground surface. The best answers linked the ideas about trees to shade or shelter.
- (iv) This question was a good discriminator. There were many good answers which included details of the design Stevenson screen and how it influences the accuracy of measurements. Weaker responses simply linked the answer to protection from rainfall and/or people.
- (b) (i) Answers varied in quality and accuracy. The best answers scored three marks by referring to the Equator, central Africa the western side and the island of Madagascar. There was a general lack of accuracy in descriptions of the north and south extent of the rainforest, especially in the use of latitude, and relatively few candidates made the obvious point that it extends further to the south than to the north.
- (ii) This differentiated well and perceptive candidates showed accurate and detailed knowledge of the processes occurring in Equatorial regions which result in hot and wet climates. Better responses included details of overhead or direct sunlight, and high amounts of evaporation and transpiration. Other candidates realised the significance of the location close to the Equator but did not show a clear understanding of why it is hot and wet there. Some answers were vague, with references to sunshine and/or humidity, however they did not show any understanding of why these factors results in a hot and wet climate.
- (c) A few excellent responses were seen with the Amazon rainforest being the most popular choice. Despite the fact that many candidates included information on global impacts, most did refer to local impacts as the question required. Better answers linked ideas about habitat loss to the death or migration of animals and the impacts on food chains. They also included details of migration of local tribes or loss of local cultures. For many candidates however, these were less detailed than the irrelevant information which they included about the impacts of global warming and climate change.

#### Question 5

- (a) (i) Many candidates plotted the land use percentages correctly.
- (ii) Most candidates gained full credit and showed good understanding of the two terms, although a significant number confused arable with monoculture.
- (iii) Candidates are now familiar with using triangular graphs and many identified three differences correctly, usually through comparative statements, but also by using statistics. Whilst statistics were accepted, they needed to be accurate and some candidates lost marks by using statistics which were not within the required tolerance.
- (iv) Many candidates suggested valid reasons, usually linked to earning money, producing high yields and using different inputs and machinery.
- (b) (i) Generally the images were used well by candidates, most of whom gained credit for the similarities of arable land and pastoral being present on both farms. Common mistakes were references to extensive and intensive farming, neither of which can be determined from the photographs, along with irrelevant or incorrect references to flat land, electricity and trees.
- (ii) This question differentiated well with most, but not all, candidates making reference to appropriate physical factors. The best answers linked physical factors, usually flat land or fertile soil, to specific land uses, particularly the growth of crops such as rice and tea. Weaker responses simply stated that aspects of climate, relief and soil determined land use on a farm, or enabled agriculture to take place, but did not elaborate in any way. Some candidates wrote about climatic hazards, such as drought, referring to impacts on yields but not explaining how they were likely to affect land use.

- (c) Answers varied with examples from locations within India, the UK and Canada being most common. Whilst most candidates gave a more precise location some just named a country which was not acceptable and restricted their marks. The best answers followed the instruction to 'describe the farming system' and described inputs, processes and outputs in some detail, whereas weaker candidates merely listed some of them. Another common error was to explain why the land was used for that purpose rather than describing the farming system.

### Question 6

- (a) (i) Almost all answers correctly identified the correct year from the graph.
- (ii) Candidates who recognised that the predicted increases for China are greater than those for the USA, backing this up with accurate statistics, scored full credit. Many candidates, however, stated the USA 'was the same' despite being told to 'compare the increases in the use of energy' in the question.
- (iii) Good quality responses referred to industrialisation, technological development and increasing numbers of vehicles. Many candidates referred to 'using more electricity' or 'increasing population' but did not say what more electricity was used for or why increasing population may result in more energy being used. Few candidates made reference to the increasing amount of international travel or the use of more electrical appliances in the home.
- (iv) This was a good discriminator. Many candidates recognised the significance of the burning fossil fuels, explaining in detail how emissions resulted in temperature increase, melting ice caps and increasing sea levels to flood coastal areas. Whilst perceptive candidates referred to enhanced global warming as required, weaker candidates wildly guessed, suggesting that flooding was due to varied possibilities such as mining subsidence, disposal of waste and nuclear testing.
- (b) (i) Most candidates correctly identified three countries from the relevant resource.
- (ii) This achieved good differentiation. Many candidates referred to specific impacts on natural vegetation, habitats and wildlife, the differentiation being achieved largely by how well the candidates developed these ideas. Significant numbers of weaker responses made vague statements (e.g. 'it causes acid rain' and 'it affects wildlife') which were not worthy of credit or referred to the impacts on people rather than the natural environment.
- (c) Many different countries were named. Whilst there were some excellent answers, including developed descriptions and place detail, many lacked detail, simply listing a variety of methods of water supply. The best answers focused on individual schemes in USA (California), Lesotho and India.

# GEOGRAPHY

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Paper 0460/22  
Paper 2

## Key messages

- When giving six-figure grid references for points on survey maps, greater accuracy would be achieved by using the methods described on page 21 of the syllabus. Errors were common both in giving the correct square and in measuring the tenths.
- When answering photograph questions, candidates should concentrate on what can be seen in the photograph and avoid speculation for which there is little or no evidence. This was evident in **Questions 3 and 5**.

## General comments

The response to the paper was variable. **Question 2** on development was very well answered. There were good answers to all the other questions, but candidates found some aspects of each question more difficult.

## Comments on specific questions

### Question 1

- (a) Candidates showed good skills of locating the features shown on Fig. 1.1 then identifying them using the key. Full marks were common. In part (vii) where the correct answer was *built-up area*, because of the similarity of the colours in the key, examiners also allowed *city*.
- (b) Most candidates were able to identify the lake at **Y** and the marsh at **V**. Identifying the relief features from the contour patterns proved more difficult, with the valley at **W** and the ridge at **Z**.
- (c) Only a minority were able to give the six-figure grid reference of the feature at **T**. Many answers were not in the correct square and those which were often gave incorrect third and sixth figures. As noted above, the correct method for giving grid references is described on page 21 of the current syllabus.
- (d) Most candidates gave the correct distance along the railway of 3200 metres. Describing the route of the railway proved to be more difficult. Few identified the overall direction as south west to north east. Few related the route to relief by noting the gentle slopes, avoiding high ground. Very few noted the tunnels through hills. Rather more candidates noted the winding route through forest and cultivation which linked settlements.
- (e) The answers to the questions on the cross section were variable. Many candidates were able to identify the footpath at **R** and the forest at **P**. The river flowing north at **Q** and the river flowing south at **S** proved more difficult.

### Question 2

- (a) Almost all candidates noted that India's HDI was *medium*.
- (b) Full credit were also the norm in this part of the question, with *mostly high* HDIs in Asia, *mostly low* HDIs in Africa and *mostly low and medium* HDIs in the tropics.
- (c) Candidates showed good graph plotting skills, showing the GNI per capita of US\$ 2100 between two of the horizontal lines. Almost all candidates noted that India's GNI increased the most



between 2000 and 2010. Calculating the increase in India's GNI per capita between 1980 and 2012 proved straightforward with most candidates giving the correct answer of US\$ 3732.

- (d) This part of the question tested understanding of a composite index of development. A variety of different responses were given credit. Most commonly, candidates noted that developments in education or life expectancy had not been as quick as increased incomes.

### Question 3

When describing the two housing areas in the photograph, those candidates who confined themselves to describing what they could see in the photograph scored well. Speculation about the social status, incomes or employment of the people or how many people lived in each house were not given credit.

For Area X, credit was given to statements describing the houses as small, single storey, high density (but not nucleated), with few windows, flat or gentle roofs, disorganised and in a variety of styles. Reference to slums or shanties was also credited.

For Area Y, credit was given to statements describing the houses as large, two storey, low density, red, sloping roofs, with a uniform design in an organised pattern.

### Question 4

- (a) Candidates had varying success in identifying types of plate tectonic setting. They were generally successful in identifying part (ii) sea floor spreading at location 4, part (iii) no major earthquakes at locations 1, 5 or 6 and part (v) a chain of fold mountains at location 2. They were less successful in identifying part (i) a place where plate is being destroyed at 3 and part (iv) a place where there are volcanoes at 3 or 4.
- (b) Here candidates had to match the given definitions with terms listed in the syllabus. Many were able to do this well. The reservoir of molten rock beneath an active volcano was the *magma chamber*, a type of volcano formed from layers of lava and ash was a *strato-volcano* or *composite cone* and a type of wide, gently sloping volcano formed mainly from basalt lava was a *shield volcano*. Simply describing volcanoes as *cones* was not sufficient to gain credit.

### Question 5

- (a) As in the earlier photograph question, candidates who concentrated on what could be seen in the photograph scored well. When describing the features of the vegetation, marks could be gained by referring to the scrub or bushes or small trees, the scattered or sparse vegetation, few leaves, green vegetation, some plants with no leaves, and grass. When describing the distribution of the vegetation, marks could be gained by referring to more on the low ground at the bottom of the hill, sparser on the steep slope, and the vegetation in a line. No marks were given for features not seen in the photograph such as deep roots, cacti, sunken stomata, thorns, or for features of the relief and climate.
- (b) Most candidates knew that plants reached water deep underground by long or tap roots and reduced water loss through transpiration by a variety of specific leaf features. Fewer were aware that plants caught rain before it evaporates through shallow, widely spreading roots.

### Question 6

- (a) Candidates showed excellent pie chart plotting skills.
- (b) In this part of the question candidates had to use the information provided in Fig. 6.2 to explain advantages and disadvantages of the tourist industry to the tropical island. Examiners accepted a wide variety of answers. Those candidates who linked their answers to Fig. 6.2 generally scored well and full marks were common.

Economic advantages given credit included investment by transnational corporations giving greater government income from taxes and less need for government investment, cruise ships providing trade for local businesses, hotels providing jobs and tours of the coast giving jobs as guides.

Economic disadvantages given credit included investment by transnational corporations leading to the profits going abroad or that business can move elsewhere, seasonal hotel work, foreign workers sending remittances abroad and taking jobs from locals.

Environmental benefits given credit were often about education or greater awareness of conservation, or about the importance of a clean environment for tourists.

Environmental problems given credit were often about damage to reefs or loss of environments by building hotels. Where there were references to pollution, examiners insisted on these being more specific than simply the word *pollution*.



# GEOGRAPHY

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Paper 0460/42  
Alternative to Coursework

## Key messages

Here are a few messages to pass on to candidates and to consider in their preparation. These have been suggested by examiners based on scripts they have marked:

- When answering Hypotheses questions that ask whether you agree or not, always give your opinion at the start of your answer before any supporting evidence. This will usually be *Yes*, *No* or *Partially/To some extent*. Do not just copy out the Hypothesis if you agree with it. It is important to make a decision and state it as well as provide the evidence for your choice. Be clear in your decision – expressions such as *'might be true'*, *'could be false'* are too vague.
- If you are provided with a decision about a Hypothesis, e.g. *'...results did support Hypothesis 1...'* in **Question 2(c)(ii)** – do not then disagree with it and try to justify your view. You need to support the decision made with evidence.
- When giving figures in an **(a)** answer, always give the units if they are not stated for you, e.g. data evidence in **Question 1(d)(iv)**. It is also important that your numbers are clear, e.g. a 4 can look like a 9; a 7 can look like a 1; sometimes a 2 looks like a 5.
- When shading graphs, use the same style as that provided in the question and make sure your pencil gives a good dark image. Check you understand the scales used and the importance and style of any plots already provided, e.g. on **Question 1(d)(ii)** and **(iii)**.
- When completing pie charts or divided bar graphs, complete these in the order of the data given and in the order of the key, e.g. **Question 2(c)(i)**. Make sure your shading matches the key, e.g. if diagonal shading slopes to the right, do not draw yours sloping to the left.
- When you have finished the examination, go back and check that all graphs have been completed.
- Read questions carefully and identify the command words, e.g. *Describe...*, *Explain...* A question that asks *'Why?'* requires a reason to be given, not a description. If a question asks for data, e.g. **Question 2(c)(ii)** then you must use statistics from resources whereas evidence could be a qualitative answer.
- Check you are using the resources that a question refers you to, e.g. **Question 2(d)(ii)** Fig.2.3 and Table 2.2. If exact figures are given in a Table, these should be the ones referred to in evidence rather than estimating from a graph, e.g. **Question 1(d)(iv)**.
- Take into account the marks awarded. Examiners do not expect you to be writing outside the lines provided so do not write a paragraph when only two lines are given – this wastes time.
- Make sure you understand how the fieldwork is being carried out, e.g. in **Question 1(f)** many candidates did not gain marks because they did not suggest how data collection methods could have been better; instead they suggested ideas that had already been used.
- It is important that, when candidates write the remainder of their answer elsewhere, that they signal it by writing something like – *'continued on page 14'* to ensure it is seen. It needs also to be noted that some candidates gave the wrong sub-section number by their extra work, which made it more difficult to match to their earlier answer and credit correctly.

## General comments

The vast majority of candidates found this examination enabled them to demonstrate what they knew, understood and could do. Weaker responses – though there were not many this session – scoring on the practical questions such as drawing graphs or diagrams, making calculations and making choices from tables. Stronger responses scored well on the more challenging sections requiring judgement and decision-making on Hypothesis choices with evidence and other written answers. Both questions proved equally accessible.

There is less general advice to be given for areas for improvement in this paper. As there are no question choices to make, it is difficult to miss sections out – though candidates do (especially completion of graphs) – and there were no reports of time issues as the booklet format does not allow or encourage over-writing of sub-sections.

Most points for teachers to consider, when preparing candidates for future Paper 42 questions, relate to misunderstanding or ignoring command words, the use of equipment in fieldwork and the importance of experiencing fieldwork – even if it is only in the school grounds or simulated in the classroom. Particular questions where candidates did not score well often relate to them not fully reading the question or just completely missing out straightforward graph completions. Such failings mean that some candidates do not obtain a mark in line with their geographical ability and is an area that centres should work on.

Centres should be aware that, although this is an *Alternative to Coursework* examination, candidates will still be expected to show that they know about fieldwork equipment, how it is used and fieldwork techniques. Some fieldwork experience is vital even if there is only limited opportunity within the centre. Familiarity with maps, tables and the various graphs listed in the syllabus is also important for this examination.

### **Comments on specific questions**

#### **Question 1**

- (a) The majority of candidates chose the correct factors which were listed in rows 3, 4 and 5. A number, however, chose rows 2 or 6 which were incorrect. Many only chose one or two rows despite being asked for three choices.
- (b) This was attempted quite well by most. As no equipment was suggested in the question, a wide range of answers was possible. For width, quite a few candidates correctly suggested using poles on each side of the river and measuring the width using a measuring tape or rope. A number referred to the 'ends of the river' instead of sides; this was not credited. It was expected that for depth, candidates would refer to using a rod or stick held vertically until it touched the river bed and then measured up to where the rod was wet. Most did this but a few threw in a rock on a string; others suggested using sonar and some suggested rowing out in boats to measure depth across the river.
- (c) Almost all candidates plotted both points accurately and joined them up; a few plotted the first point well but then plotted the second point in some odd locations; they did not spot that the vertical scale decreased, not increased, with height.
- (d) (i) Almost all candidates identified the third statement as correct.
- (ii) and (iii) Most candidates plotted the two points correctly on the two graphs.
- (iv) This was well done although candidates needed to recognise that they had already been told that the Hypothesis decision was 'partly true'; quite a number gave their own decision which was not required. Candidates recognised the increase from sites 1–4 and the decrease to site 5 and gave accurate paired data from the table in both cases thereby proving that the 'partly correct' decision. A number gave estimates of data from the graph; it was important that they used the accurate data from the table as evidence if they are referred to a table of data. A few candidates just listed data from all the sites which cannot be accepted as supporting evidence.
- (v) This proved to be a challenging question. There were some references to erosion with no specific ideas relating to how erosion of the bed and banks caused depth and width to increase. Candidates confused velocity changes with discharge changes and there were references to the changes being caused by deposition. A focus on the basic causes of changes in river characteristics from the upper to lower course would benefit responses to such questions.

- (e) (i) This question discriminated well with better candidates interpreting the photograph even if unfamiliar with the technique and describing how the pebble should be placed between the jaws of the callipers and the length measured using the scale. Weaker responses showed little understanding of how the callipers worked giving vague answers such as 'put the pebble in the callipers and measure the length'.
- (ii) Most candidates identified the pebbles as 2 and 15; some misunderstood the classification giving incorrect answers such as 4 and 6.
- (iii) The majority of candidates plotted the mean length more accurately within tolerance than the roundness score which was often drawn exactly on the 3.6 line instead of just below it at 3.58.
- (iv) Most candidates identified the correct conclusion stated in the second row; those that chose incorrectly usually picked the 'no relationship' option.
- (v) An incorrect choice in (iv) meant that it could not be supported by data here, however the majority of candidates that made the correct choice in (iv) did choose data to support this mostly from sites 1 and 6. A few that had made the correct choice gave a qualitative answer even though the question asked for data. This is a requirement candidates should be aware of.
- (f) This question discriminated well. The better candidates made sensible suggestions such as sampling more pebbles, using systematic sampling, using more sites, measuring at equal intervals along the river or smaller intervals across it or using other equipment such as a pebbleometer. Weaker responses included taking more measurements, repeating measurements, using more students and doing the task at different times.

## Question 2

- (a) (i) Almost all candidates did this well having learnt standard textbook definitions for both terms.
- (ii) Candidates needed to clearly identify between push and pull factors in this question. Quite a few failed to emphasise the negative aspect of the push factor, e.g. they would state that it was a factor 'causing people to leave' but this can be applied to a pull factor too. Pull factors were described more accurately especially by using the word 'attracts' in the answer. A number repeated the terms 'push' and 'pull' in their answers which was not credited.
- (b) (i) Most candidates correctly chose rows 1 and 4 as reasons for why the teacher suggested the extra question in the questionnaire. The most common incorrect answer chosen was row 2.
- (ii) This question was not answered well. It was important that candidates realised that the questionnaire was complete and this question was about the advice a teacher would give students who were going to use the questionnaire. Many candidates suggested new questions or amendments to existing questions such as adding closed and open questions. These suggestions were irrelevant. Stronger responses focused on its use with ideas such as identifying the purpose of the questionnaire, being polite, working in pairs for safety reasons, going to busy places, having a sampling method and choosing a variety of ages and genders.
- (iii) To ensure the age-groups were mutually exclusive and the same range, the correct answers could only be 31–45 and 46–60, which most candidates suggested for both marks. One mark was awarded if the suggestions were mutually exclusive but of an incorrect range. Weaker responses often started with a number that overlapped, e.g. 30 and also had overlaps in the middle and the end, e.g. 61 or gave age-groups that did not ensure continuity.
- (c) (i) Most candidates plotted the correct dividing line at 59 from the left and shaded the two sections correctly. A few misplaced the line at 60 or too far to the right.

- (ii) This was another question where candidates were told the Hypothesis decision so did not need to give their own decision, which was not always in agreement. This question proved challenging. Some candidates just listed the highest percentage reasons for the migration of males and females but more insight was required. Candidates needed to identify the most important reasons for male migration and identify, using data, that these were different to the most important reasons for female migration. The best candidates did compare the different reasons, e.g. higher wages for men at 36 per cent with accompanying partner at 41 per cent for women for two marks, and also compared another high reason for male and females to be credited with a third mark.
- (d) (i) Although a small number plotted incorrectly from 70 per cent, the large majority of candidates did plot 34 per cent accurately with the correct shading.
- (ii) Most candidates gave the correct conclusion that the Hypothesis was true. Quite a large number also gave percentage figures for male (66 per cent) and female (52 per cent) as data evidence for further credit. Not so many, however, made a clear statement that the Hypothesis applied clearly to both male and female migrants which would have gained the third mark.
- (iii) This question proved to be the most challenging one on the paper. Many answers were limited to suggesting that the students would now know the age-groups that had taken part in the questionnaire or the age-groups of migrants. What was required was how the age-group information could be linked to the reasons for migration and the origin of the migrants. Few made this link.
- (e) (i) Most candidates could describe what was meant by secondary data and gave an example, usually a book, newspapers or the internet.
- (ii) Most candidates drew two flow lines that were within tolerance of the key; most shaded the arrows as shown. A few gave the thicknesses the wrong way round; Libya was drawn more inaccurately than Jordan. A very small number ignored the location of Libya and Jordan and drew arrows to other countries that they named as Libya and Jordan. Almost all correctly started their arrows in Egypt and ended them in the correct two countries.
- (iii) This question proved challenging for many candidates. The pie graph was the most popular choice as the best method to show the results but, instead of focusing on the recognition of percentages and comparing proportions, too many focused on the different colours used or it being easier or quicker to draw. A small number chose the map as the best method because it showed direction and number of migrants which was accepted but the idea that it showed distance travelled was incorrect as some arrows continue beyond the edge of the map with no defined end.
- (iv) Most candidates identified that most migrants move to nearby countries, other Middle East countries, countries to the east or to LEDCs. Candidates who suggested that most go to Saudi Arabia did not gain credit. While the highest number to any one country do go to Saudi Arabia (which would be credited), 34 per cent of all migrants go to Saudi Arabia so 66 per cent, i.e. most, migrate elsewhere. Candidates need to be a little more careful in their use of terms such as most, many, the majority in these type of questions. Negative answers, such as few to Australasia, were not credited as the question wanted two main trends of migration not where people were not migrating to or few were migrating to. Few candidates identified two main trends for both marks.