

GEOGRAPHY

Paper 9696/11
Core Physical Geography

Key messages

Section A questions incorporated elements of both ‘explanation’ and ‘description’. Most candidates were aware of these command words and what they required. Many answers were detailed and comprehensive. In all three **Section A** questions, descriptions involved comparisons or contrasts. The data provided enabled candidates to achieve detailed descriptions and comparisons, but some answers were rather generic and not sufficiently specific.

The quality of answers was often impressive, and many candidates displayed a clear understanding of relevant geographical concepts. Much of the work presented was logically structured. Clarity of expression is increasingly evident but could be further enhanced through the appropriate use of diagrams. There were opportunities for such diagrams in each of the three **Section B** questions.

The use of relevant examples is important. In many examination papers, case studies are required. In this instance examples were specified, but detail is needed if the examples are to be effective in supporting the written text.

General comments

Planning of answers is generally effective, both in terms of relevance and time allocation. Very few candidates were unable to complete the examination in the allocated time, and rubric errors are becoming increasingly rare. It is now unusual for candidates to attempt more than one question in **Section B**.

The command words and key terms used in the examination were relatively simple. There were no references to ‘trends’ for example, but there continues to be some difficulty distinguishing between ‘description’ and ‘explanation’. Some continue to offer ‘explanation’ when only ‘description’ is required. All questions in **Section B** require some evaluation. Better answers incorporate evaluation into the main text, as the issue of concluding the answer with the evaluation is in having to rush this essential element of the answer in the limited time available. Furthermore, it is difficult to achieve Level 3 and Level 4 without such appropriate evaluation.

All questions in **Section B** were attempted. In recent times there has been an increase in those attempting the Atmosphere and weather option, but fewer candidates chose this option this series. **Question 5(b)** in particular proved a difficult question for candidates.

Most candidates performed effectively in this examination, displaying knowledge, enthusiasm, and determination. For many this was a sound basis for further progress.

Comments on specific questions

Section A

Hydrology and fluvial geomorphology

Question 1

- (a) Most were able to calculate the percentage difference required, although there was no credit for the calculation itself.

- (b) This question specified comparison, but some candidates simply made a series of statements. The comparisons needed to be explicit.
- (c) Many were able to discuss the process of attrition and relate it to velocity. There was limited consideration of local geology.

Atmosphere and weather

Question 2

- (a) Answers were not always very precise, and so some did not give the accurate difference which would have achieved 2 marks.
- (b) Too few gave clear comparisons. It was not always clear that candidates understood the pie charts.
- (c) Global warming is a popular topic and clearly understood. There were many good answers, although the gases themselves were not always identified, nor the distinction between short-wave and longwave radiation.

Rocks and weathering

Question 3

- (a) Not all gave answers in numerical terms, but descriptive answers were also acceptable.
- (b) Most candidates could identify the main points of contrast but did not always support their answers with the data available. Nevertheless, there were some good answers.
- (c) Candidates could clearly identify many of the factors responsible for different rates of movement. However, some of the explanations lacked detail.

Section B

Hydrology and fluvial geomorphology

Question 4

- (a) (i) Answers were not always very precise, and several candidates included percolation in their answers.
 - (ii) There were some valid discussions relating to types of vegetation, but these were not always related clearly to the shape of a storm hydrograph.
- (b) This is a fundamental question about meandering rivers, and one about which candidates are increasingly confident. There were few who did not discuss pools and riffles and helicoidal flow when attempting to explain river cliffs and point bars.
- (c) Answers clearly focused on hard engineering and soft engineering. Examples of methods were given but located examples tended to lack detail. Prediction of imminent flooding was discussed by some, but the constraints of cost were largely ignored.

Atmosphere and weather

Question 5

- (a) (i) Sublimation was understood by some, but answers on radiation cooling were generally weak.
 - (ii) Sensible heat was understood in general terms, but methods of heat transfer were largely ignored. Latent heat answers were unconvincing.
- (b) This question proved too difficult for the majority of candidates. Some contrasted Polar and Equatorial regions but there was little reference to seasonality based on the apparent shift north and south of the overhead sun.

- (c) Candidates found this question easier than **Question 5(b)**. The three basic processes were known, but often not discussed in sufficient detail.

Rocks and weathering

Question 6

- (a) (i) Most candidates had some understanding of both hydrolysis and pressure release, but answers were limited in terms of specific detail.
- (ii) Both expansion/contraction and freeze-thaw were acceptable processes discussed in answer to this question.
- (b) The answer to this question lay in the understanding of convergent and divergent plate boundaries. This was an instance where appropriate diagrams would have enhanced the explanations offered. However, the diagrams themselves were not always of convincing quality.
- (c) There were some good answers to this question. Many candidates discussed both physical and chemical weathering, and offered appropriate examples, often with effective detail. Other relevant factors such as vegetation and human activity were not given the same significance.

GEOGRAPHY

Paper 9696/12
Core Physical Geography

General comments

This examination once again produced a wide range of responses in terms of knowledge and understanding. There were some excellent performances, and many candidates approached their work with thoroughness and enthusiasm.

Observation and description remain essential elements of **Section A**. Candidates are increasingly aware of the need for careful reference to the data provided. It is important to stress that when questions ask for comparison between sets of data or information present on resources, that comparison includes both similarities and differences and therefore both elements are expected in answers. Most candidates appear to be familiar with the relevant geographical concepts, and apply them appropriately, although definitions are sometimes imprecise. In most questions there was an opportunity to produce relevant diagrams that could have been used to enhance the answers, especially **Question 3(b)**, but this was an opportunity that few did effectively.

There were few rubric errors. Very few candidates attempted all three questions in **Section B** and planning generally in terms of time allocation was effective.

As stressed in previous reports, examples and case studies do much to support answers, particularly in **Section B**. A case study was required for **Question 5(c)** and examples were asked for in the other two **Section B part (c)** questions. It is important that sufficient detail is provided and that the examples are appropriate. **Section B part (c)** answers often contained relevant and valid information, but the final evaluation was often limited. **Questions 4(c), 5(c), and 6(c)** all required an evaluation and conclusion based on the evidence discussed. Evaluation does not have to appear just at the end of the answer but, in many cases, continuous evaluation throughout the answers might be more logical, especially if there are many threads to the argument. The final evaluation was too often unconvincing.

All questions in **Section B** were attempted, with answers to Atmosphere and weather being in the minority. The Hydrology and fluvial geomorphology option was by far the most popular.

Comments on specific questions

Section A

Hydrology and fluvial geomorphology

Question 1

- (a) The majority of candidates identified the river channel as a braided channel.
- (b) Most candidates were able to identify some of the features. The identification of feature X caused the most problems with many candidates opting for river bluffs. Most were able to identify feature Y as an island with many using the technical term of eyot or ait. A few candidates identified feature Y as a distributary which is not appropriate for a braided channel. As river/channel/stream was acceptable for feature Y, most candidates were successful in their identification.
- (c) Very few candidates, having identified the channel as a braided channel, realised that they could have answered this part by describing and explaining the characteristics of braided channels. All the features could be explained by fluctuating discharges, high sediment loads, highly erodible channel banks and the relatively steep channel gradients characteristic of braided channels. Most

answers explained each feature separately which led to much repetition and lack of overall detail. A minority of candidates, having identified the channel as braiding, then described and explained the feature as relating to meandering channels.

Atmosphere and weather

Question 2

- (a) Most candidates provided an acceptable answer although there were a few that omitted the percentage symbol.
- (b) Many candidates obtained full marks. Comparisons, both similarities and differences, could have been described with respect to the maximum values of the albedos of the different surfaces or the range of the albedos. There were enough similarities and differences so that the comment made, earlier about comparisons, rarely applied in this question.
- (c) Most candidates understood what albedo measured and realised that they could use information in the resource as part of their answer. Answers were generally sound with respect to albedo but there was sometimes little understanding of the diurnal energy budget and especially that there was a night-time component and that the amount of radiation that is absorbed during the day will determine that which is re-radiated at night. There was also confusion about the nature of reflected radiation with some candidates thinking that it is longwave radiation. A few candidates answered the question with respect to the main components of the diurnal energy budget such as latent heat transfer and sensible heat transfer.

Rocks and weathering

Question 3

- (a) The majority of candidates identified Z as representing subduction.
- (b) There were sufficient similarities and differences between the tectonic processes in the figures to enable most candidates to achieve good marks. There was the occasional suggestion that subduction occurred in both scenarios whereas it only occurred in Fig. 3.1. Some answers described the tectonic processes in both figures separately with no implicit comparison.
- (c) This was a question that really needed an accurately labelled diagram to underpin the answer. Most candidates provided a diagram, but the quality varied enormously. However, the main processes were described and explained quite accurately although there was sometimes confusion with conservative plate boundaries. It was encouraging to note that several answers referred to ridge push as a mechanism for sea floor spreading as well as convection currents, thus reflecting more recent understanding of the processes.

Section B

Hydrology and fluvial geomorphology

Question 4

- (a) (i) The definition of recharge, related to the replenishment of the groundwater store, was often too generalised to fulfil the precise meaning of the hydrological term. Definitions of infiltration were generally sound.
- (ii) Interception was well understood although some answers did not define interception. The process of interception could only be understood in some answers with reference to what was mentioned about the nature and size of leaves rather than with reference to an explicit explanation. Confusion with trunk flow sometimes occurred.
- (b) Understanding of the nature of helicoidal flow is still weak. Answers still portray helicoidal flow as a spiralling (corkscrew) line down the centre of the river channels. Whereas it is a movement from the inner bank across the surface to the outer bank and then a return as a deep flow to the inner bank in a downstream direction. Many candidates realised that it was somehow related to the nature and evolution of pools and riffles but were often unable to provide a convincing explanation.

Knowledge and understanding of turbulent flow were only slightly more accurate. In general, answers to this question were limited in understanding.

- (c) The response to this question was good. Examples used were varied, accurate and extensive. Occasionally there was more emphasis on factors other than rainfall intensity which made some answers slightly unbalanced. There is still a tendency to assume that the flooding, in the examples noted, was caused by factors immediately adjacent to where the main flooding occurred rather than further upstream. Thus, with reference to the often-quoted flooding at Tewkesbury, the impermeable urban surfaces of the town were noted as the main contributor to the flooding. However, the main increase in the discharge of the river was caused by events further upstream. Better answers contrasted the effect of high intensity precipitation with lower intensity but prolonged precipitation.

Atmosphere and weather

Question 5

- (a) (i) The response to this question was generally sound with most candidates being able to name two greenhouse gases. The ability of the gases to trap outgoing radiation was noted by most candidates, although there was often the same confusion, noted with respect to answers to **Question 2(c)**, about the type of radiation that was trapped.
- (ii) This question was answered well with many candidates being able to explain all the factors leading to precipitation.
- (b) Many candidates did not answer the question with respect to seasonal variations, which was a major component of the question. Also, answers were often unbalanced with more emphasis on temperature variations than pressure variations. The contrast between summer and winter in high latitudes was often explained as well as the lack of seasonal variations at the tropics.
- (c) There was a large contrast in answers to this question. There were many excellent answers with detailed case studies. Vancouver was a particularly popular urban area with its urban climate described and explained in great detail. However, many answers were purely generic with little reference to a specific case study. If an urban area was mentioned, there was often little detail pertaining to that urban area. The points mentioned could relate to any urban area. The best answers covered all the main climatic effects, temperature, precipitation, winds and humidity, whereas many answers simply referred to temperature effects.

Rocks and weathering

Question 6

- (a) (i) The most frequently mentioned effects of a rotational slide were the steep back scar, the deposition of material at the toe and the destruction of vegetation. Most candidates knew enough about the nature of rotational slides to make some relevant points.
- (ii) Most candidates showed some understanding of the nature of sheetwash but were often unable to define it precisely. The degree of understanding of rills was higher and some precise definitions were provided.
- (b) There were many excellent answers to this question with both chemical composition and physical structure of rock being assessed in a balanced way for their effects on weathering. There was sometimes confusion between carbonation and hydrolysis with respect to the rock types and minerals affected but, in general, answers were accurate. The role of joints and bedding planes in influencing the rate and nature of physical weathering processes were also accurately described.
- (c) Many excellent examples were used in answers to this question with Hong Kong being one of the examples most frequently discussed. This meant that high marks were often awarded. Most answers were balanced in their evaluation of the relative roles of human activity and other factors. Occasionally there was confusion between mass movement and soil erosion and over the effects of deforestation. This was counterbalanced by very perceptive comments contrasting the role of trees in preventing shallow mass movement failures but their failure to stop deep-seated movements.

GEOGRAPHY

Paper 9696/13
Core Physical Geography

Key messages

Section A questions incorporated elements of both ‘explanation’ and ‘description’. Most candidates were aware of these command words and what they required. Many answers were detailed and comprehensive. In both **Question 1** and **Question 2** descriptions involved comparisons. The data provided enabled candidates to achieve detailed descriptions and comparisons, but some answers were rather generic and not sufficiently specific.

The quality of answers was often impressive, and many candidates displayed a clear understanding of relevant geographical concepts. Much of the work presented was logically structured. Clarity of expression is increasingly evident but could be further enhanced through the appropriate use of diagrams. Answers to **Question 1(c)** could be clearly illustrated through comparative flood hydrographs, and the main features of mass movements in **Question 3(b)** could also be effectively displayed. All answers in **Section B** could have been enhanced by appropriate illustrations, **4(b)**, **5(b)**, and **6(c)** in particular.

The use of relevant examples is important. In many examination papers, case studies are required. In this instance examples were specified, but detail is needed if the examples are to be effective in supporting the written text.

General comments

Planning of answers is generally effective, both in terms of relevance and time allocation. Very few candidates were unable to complete the examination in the allocated time, and rubric errors are becoming increasingly rare. It is now unusual for candidates to attempt more than one question in **Section B**.

The command words and key terms used in the examination were relatively simple. There were no references to ‘trends’ for example, but there continues to be some difficulty distinguishing between ‘description’ and ‘explanation’. Some continue to offer ‘explanation’ when only ‘description’ is required. All questions in **Section B** require some evaluation. Better answers incorporate evaluation into the main text, as the issue of concluding the answer with the evaluation is in having to rush this essential element of the answer in the limited time available. Furthermore, it is difficult to achieve Level 3 and Level 4 without such appropriate evaluation.

All questions in **Section B** were attempted. In recent times there has been an increase in those attempting the Atmosphere and weather option, but fewer candidates chose this option this series. Candidates found **Question 5(c)** difficult, with the emphasis on land and sea distribution rather than seasonal variations based on the tricellular model.

Most candidates performed effectively in this examination, displaying knowledge, enthusiasm, and determination. For many this was a sound basis for further progress.

Comments on specific questions

Section A

Hydrology and fluvial geomorphology

Question 1

- (a) Most candidates appreciated that 'infiltration' and 'percolation' needed to be combined to arrive at the correct answer. Some gave evidence on how they arrived at their answer, but that was not required in this instance.
- (b) The comparison required could be effectively approached by focusing on land use or precipitation routes. Whichever route was chosen, there needed to be some explicit comparison, and not simply isolated statements. Some comparisons were too superficial and simplistic.
- (c) Some answers were weak. The question specifically referred to the differences between the storm hydrographs of forested and urban areas, and the differences needed to be identified but not explained. Discussions should have focused on 'how' rather than 'why', and ideally incorporated appropriate diagrams.

Atmosphere and weather

Question 2

- (a) Most answers were correct.
- (b) This question was answered quite well. There were a wide variety of comparisons available to candidates. No explanations were required, but the similarities or differences needed to be clearly identified.
- (c) There were good attempts to explain the pattern of daytime and night-time surface temperatures, largely based on the heat island effect. However, some did not differentiate between urban pollution and global warming.

Rocks and weathering

Question 3

- (a) Correctly answered by most candidates.
- (b) Very few chose to illustrate their answers with an appropriate diagram. There was a poor focus generally on description.
- (c) Many could identify the relevant conditions, such as steep slopes, but did not explain how these conditions might lead to mass movement.

Section B

Hydrology and fluvial geomorphology

Question 4

- (a) (i) Solution was clearly defined by most, and many were aware that solution was both a process of chemical erosion and transportation. Knowledge of cavitation, however, was less secure.
- (ii) Most were aware that saltation was the movement of unconsolidated material in a series of leaps or bouncing motion but were unable to explain why.
- (b) Candidates generally understood the difference between braiding and meandering but details in terms of both description and explanation were often unconvincing.
- (c) This question was popular with many candidates, although the located examples tended to lack detail. Also, there was a tendency to include forecasting, monitoring, prediction etc. as part of soft engineering, and to drift into considerable detail about the consequences of flooding. However, many were able to discuss methods of hard engineering and soft engineering, and did so very effectively.

Atmosphere and weather

Question 5

- (a) (i) Sensible heat transfer was understood by many, in general terms. However, there was little reference to convection, conduction or advection. Snow was not defined correctly by the majority of candidates.
- (ii) Most were able to identify gases responsible for the greenhouse effect but did not always consider the enhancement aspect in terms of cause and effect.
- (b) Most understood the context of the diurnal energy budget, but answers were not always very detailed, and few took the opportunity to illustrate with effective diagrams.
- (c) As referred to earlier, few did well on this question. Seasonality was not sufficiently considered, and neither was the tricellular model relating to global pressure systems.

Rocks and weathering

Question 6

- (a) (i) Many answered this question correctly, although there was some confusion between weight and density.
- (ii) Many candidates were able to describe the process of heave, but the question specified explanation, and this aspect tended to lack clarity.
- (b) Some very good answers were seen in terms of the various human activities that can create slope instability. More detailed exemplar material would have been beneficial.
- (c) Many candidates displayed a clear understanding of subduction, and also the type of boundaries where it was significant. Details of landforms were limited, as was the final assessment as to whether subduction was the most significant process.

GEOGRAPHY

Paper 9696/21
Core Human Geography

Key messages

Before answering a question, candidates should read it thoroughly and appreciate that every word must be considered. Too many candidates missed command words or key terms. For example, in **Question 5(c)**, some candidates discussed international migration, not internal migration as required by the question. Others referred to LIC/MIC countries, when the question asked about HICs. Where the question asks for examples and candidates do not include any relevant or appropriate examples, they cannot access the higher levels.

Africa is not a country; too many candidates consider it an LIC. Examples should be more detailed than simply the name of a country, and case studies should be accurate and relatively recent. The syllabus requires that where possible *'case studies should be dated no earlier than 1980'*.

The mark allocation not only indicates the range of points expected, but also the time that should be spent on that section. So the 15-mark **part (c)** questions in **Section B** are worth 25 per cent of the total for the paper, whereas the **part (c)** questions in **Section A** are usually worth 10 per cent or less. The time spent on these two parts should reflect their relative share of the marks.

Good case study knowledge is needed, especially in **Section B**, but it must be appropriately applied to the question. Some candidates simply repeated everything they had memorised about an example they had studied without applying it to the question properly, which made their answers lack focus. Also, examples must be used to support a point being made. Too many candidates give an example in name only, for example 'e.g. India', which does not add a great deal to an answer.

Part (c) in questions in **Section B** always require candidates to discuss different aspects of an issue and come to a conclusion. These questions use wording such as *'how far do you agree with this statement?'* or *'to what extent do you agree with this view?'* This means that the candidate should evaluate a variety of arguments and then come to a conclusion. Too often candidates either give no evaluative remarks or conclude with a simple statement such as *'In conclusion, I agree with this statement'*. Without a reasonable attempt at evaluation candidates are unlikely to achieve more than half marks in these questions.

Comments on specific questions

Section A

Population

Question 1

- (a) (i) Nearly all candidates answered correctly.
- (ii) Most candidates showed the correct calculation, but some did not give 'million' in their answer and so did not gain both marks.
- (b) Most candidates gave increased food prices as one consequence, but many candidates were not able to give a second valid answer, with many citing purely social consequences such as malnutrition without qualifying this to comment on the impact on the workforce and economic output.
- (c) Most candidates gave only a brief description using vague and general terms such as 'mechanisation' or 'by using chemicals'. The question asked for an explanation which required

some development as to how technology can increase food production. A few good responses were seen, for example:

'The use of drip irrigation increases crop growth by efficiently getting water to the plants' and 'Research into selective breeding and genetic modification can produce plants that are resistant to disease and give higher yields.'

Migration

Question 2

- (a) (i) Most candidates gave the correct answer.
- (ii) Most candidates gave the correct answer.
- (b) Most candidates were able to give some valid comparisons, but few achieved full marks because they did not make use of the data, or they simply listed the differences without comparison.
- (c) Most candidates gave very generic answers such as 'for employment' without development or exemplification. Some candidates gave a valid reason, such as for greater freedom or to escape persecution, but then gave an example that was within a continent such as from Poland to the UK, which did not gain credit. There were some good answers, for example:

'People migrate from all over the world to Australia because of their points-based system that encourages skilled workers to move there.'

Settlement dynamics

Question 3

- (a) Most candidates gave valid descriptions.
- (b) Most candidates were able to give valid reasons such as employment opportunities and a market for selling farm produce.
- (c) This question was not well answered by many candidates as they only gave a brief comment such as 'more pollution' or 'house prices go up'.

Some better responses were seen, for example:

'An influx of people from cities into villages may change their character and increase house prices because of greater demand.'

Section B

Question 4 was the most popular but a significant number of candidates answered **Question 5**. Few candidates attempted **Question 6**.

Part (b) answers require examples. Weaker responses tended to ignore this instruction or gave thin examples such as 'e.g. London', whilst more effective responses gave more detailed located examples often with relevant data.

The key to these questions is in **part (c)** which demands detailed answers, with clear exemplification and thoughtful evaluation. Weaker responses lacked one or more of these aspects.

Population

Question 4

- (a) Most candidates were able to describe issues such as changes in the dependency ratio, greater pressure on medical and care services and the cost of providing pensions. However, few candidates developed any of the points they made and so not many achieved more than half marks.

- (b) There were some good responses in which candidates related the changes in birth and death rates to the balance between working and non-working age groups, but most candidates gave very general answers, and few supported their answers with valid examples.
- (c) This question required candidates to show an understanding of the reasons for youthful populations in LICs/MICs and discuss whether these were predominantly economic or are the result of other factors. The best answers used case study examples (most commonly from African countries) and gave reasons such as children being seen as economic assets or the lack of effective family planning. Many candidates gave a few very general comments without valid exemplification – it was common to see ‘countries such as Uganda’ given as an example, with no detail that showed knowledge of the country’s population issues, which gained little credit.

Migration

Question 5

- (a) Most candidates were able to say that if a lot of people moved from urban areas to retire this would leave a younger population structure in cities, but few went beyond this and considered other age groups.
- (b) This question required candidates to give reasons, with exemplification, for urban–rural migration, but many simply repeated what they had said in **Question 5(a)** and had no valid exemplification. Some candidates ignored the HIC context and gave a generic response. Better answers had specific knowledge of examples from HICs, such as retirees moving from London to Cotswolds villages for a different quality of life in a smaller quieter environment.
- (c) Many answers gave vague and general accounts with little focus on the question, and some answered in terms of international migration and gained no marks. There were some good answers that linked migration within a country to different stages of the family and employment life cycle, and some chose to focus on rural–urban migration in MICs/LICs, both of which were valid approaches as long as there was some discussion of distance being a factor (and whether or not it was the most important one).

Settlement dynamics

There were too few responses to this question to make meaningful comment.

GEOGRAPHY

Paper 9696/22
Core Human Geography

Key messages

Before answering a question, candidates should read it thoroughly and appreciate that every word must be considered. Too many candidates missed command words or key terms such as 'environmental', so gave irrelevant or poorly focused responses. Where the question asks for examples and candidates do not include any relevant or appropriate examples, they cannot access the higher levels.

Africa is not a country; too many candidates consider it an LIC. Examples should be more detailed than simply the name of a country, and case studies should be accurate and relatively recent. The syllabus requires that where possible *'case studies should be dated no earlier than 1980'*.

The mark allocation not only indicates the range of points expected, but also the time that should be spent on that section. So the 15-mark **part (c)** questions in **Section B** are worth 25 per cent of the total for the paper, whereas the **part (c)** questions in **Section A** are usually worth 10 per cent or less. The time spent on these two parts should reflect their relative share of the marks.

General comments

Section A answers tended to be stronger than **Section B** answers, possibly due to timing issues. **Section A** and **Section B** are worth equal marks, so candidates should spend equal amounts of time on them.

In **Section A** many missed out on marks by not giving information from the resources given e.g. quoting data or doing simple calculations to support their answers. In 4-mark and 5-mark questions, many did not develop a basic point to get a further mark for development.

Even where no specific reference is made to the use of examples, they are often helpful in developing detail or clarifying a point.

Candidates must recognise the significance of key terms in questions such as 'environmental' in **Question 1(b)**, **3(b)** and **4(a)(ii)**, 'social' in **Question 1(b)** and 'economic' in **Question 2(c)**.

Candidates should avoid using blanket terms such as: infrastructure, technology, resources, and facilities, without any clarification of what they mean e.g. transport infrastructure.

Comments on specific questions

Section A

Population

Question 1

- (a) Candidates struggled with this comparison. Essentially there were three levels of food security to compare between three locations. Too many candidates only compared two of the areas or two of the levels. In such questions the quoting of data is an expectation when the question starts with the instruction 'Using Fig. 1.1'.

In weaker responses candidates were too vague such as:

'Africa has more low food security to the rest of the world whereas Asia has roughly the same amount of low food security.'

Such a response needed some supporting data to demonstrate the meaning of terms such as 'roughly the same amount'. Candidates tended to include basic statistics interpreted from the pie chart but relatively few used manipulation of the data.

- (b) The wording of the question is very important. When the command word is 'outline' a single word answer, such as drought, is inappropriate. For example:

'Drought and Flood'

compared with:

'Droughts reduce the water in the soil so plants die or have insufficient water for a high and nutritious yield.'

Candidates tended to state the environmental factor causing food shortages rather than outlining the environmental factor. The most common factors discussed included flooding and drought. Several candidates moved away from the question and did not focus on the environmental aspect. This included a large number of candidates making reference to overpopulation and war.

- (c) Several candidates ignored the focus on social consequences and offered consequences that were clearly not social such as:

'A food shortage will lead to a rise in the price of food and so farmers' income could rise.'

Or considered causes of food shortages such as that resulting from the civil war in the Yemen.

More relevant responses tended to discuss social consequences in terms of health. This was often based around aspects of malnutrition. Candidates tended to discuss how the malnutrition ended up in various illnesses and diseases. It was good to see candidates being aware of some of the specific diseases such as rickets and beriberi. A significant number of candidates discussed the impact of crime in generic terms without a discussion about how crime is caused by a food shortage. It was not always clear what the specific crime was that is caused by a food shortage. Civil unrest/conflict was mentioned by a large number of candidates without an explanation as to how this is a social consequence for people.

Migration

Question 2

- (a) Most candidates correctly stated it was the Gihembe refugee camp. The candidates who made an error on this question tended to look at the highest number on the table and provide the answer Nyabiheke.

- (b) Candidates approached this question in two different and contrasting ways. Some chose to compare the effectiveness of cash aid with that of food aid, for example:

'The problem with food aid is that it can only be used as food. It needs to be used quickly, cooked or it is easily stolen as it is not as easy to hide as cash is.'

Such an answer did not use Table 2.1 or compare the impact but clearly there is some attempt at a comparison of the type of aid.

Most candidates instead compared the three refugee camps quoting the relative impacts on the local economy and national economy, for example:

'In the case of Nyabiheke camp the initial \$127 had a large multiplier effect on the local economy generating an impact of \$253 (virtually doubling the initial aid) but it had a limited impact on the national economy of \$49.'

Such answers tended to ignore the cash aid versus food aid comparison.

- (c) There were many strong responses to this question with a wide range of economic impacts such as:

'The source area might suffer from a brain drain as the more educated and skilled workers flee first so the source area loses its most productive workers so leading to a fall in production and GDP.'

Weaker responses either ignored the economic focus or confused source area with destination area. Few candidates really considered the context of refugees, although some saw this as justification to change the focus of the question, for example:

'As it is refugees that are leaving then clearly there is a war or natural disaster in the area which then has the economic impact of widespread destruction of buildings and infrastructure.'

Settlement dynamics

Question 3

- (a) Candidates struggled over the meaning of 'pattern'. Stronger responses made good reference to both directions of growth and distances, for example:

'In 1990 the city extended 1 km to the north, 3 km to the NE and 3.5 km to the south.'

Weaker responses were often too general, for example:

'It expanded around the CBD and spread mostly north and south.'

Or offered explanations such as:

'Not much of Palmas is right on the coast as they may not want to risk the natural hazard of possible flood damage.'

- (b) This was well understood by most candidates but some gave single word answers, such as 'deforestation', whilst others produced detailed answers, for example:

'As the city expands the network of roads will extend out further and further. This in turn produces more traffic as the population spreads which leads to more traffic congestion. This leads to more air pollution, even smog, and water pollution as fuel spill is washed into the rivers when it rains.'

- (c) Candidates frequently struggled with the wording of this question. Whilst the concept of 'counterurbanisation' was mainly understood, candidates gave accounts of its impacts on rural (and often urban) areas rather than focus on the resulting competition for space in rural settlements. A typical response was:

'The rural area will become more developed and more accessible due to counterurbanisation.'

Most candidates did identify that counterurbanisation would increase competition for the limited housing stock and so force up prices, but few went any further such as the competition between different activities or stakeholders.

Section B

Question 4 was by far the most popular but the relatively few candidates that attempted **Question 6** often produced very effective responses.

Part (b) answers require examples. Weaker responses tended to ignore this instruction or gave thin examples such as 'e.g. London', whilst more effective responses gave more detailed located examples often with relevant data.

The key to these questions is in **part (c)** which demands detailed answers, with clear exemplification and thoughtful evaluation. Weaker responses lacked one or more of these aspects.

Population

Question 4

(a) (i) This should be a well known term but candidates all too often missed one or more of the crucial aspects of the definition or got the age element, under one year, incorrect. Many candidates did not understand that it is a rate, which had implications for their answers in the next two question parts.

(ii) Weaker responses either missed the focus on 'environmental factors' or gave vague answers with little detail, for example:

'Natural disasters can cause a high IMR as they may lead to food shortages meaning children would not receive the nutrients they need so die.'

What were the natural disasters and why did they lead to food shortages?

The explanation was generally based around death rates rather than the death of children under the age of 1.

(b) Most candidates gave a range of factors that explained why IMRs are lower in HICs, usually supported with examples from the UK. Other candidates gave detailed examples of reasons for high IMR in LICs/MICs despite the question clearly referring to HICs. Exemplification was generally weak with typical responses resembling:

'In the UK there are good hospitals which have medicines to cure infant illnesses that would otherwise kill.'

Candidates tended to use generic phrases such as 'improved healthcare', 'better education' and 'cleaner water'. It would be better if candidates exemplified the issues by being specific about what is better about the healthcare in a particular country. Vaccinations were discussed but the discussion tended to be generalised around death and diseases rather than focusing on the under 1 year old infants.

(c) China's one child policy was the almost universal response but all too often candidates focused on the details of the policy and the resulting problems.

Few candidates really answered the question as to why it is so difficult to manage the results of population change. Stronger responses did have this focus on the difficulties, for example:

'Managing population in China was difficult as many of the results of the policy would only be seen in full effect years after the start of the policy.'

'China is a vast country and it was difficult to know what was going on in remote rural areas let alone manage it or manage the results.'

Very few candidates looked at how, and with what success, was the government of China in managing the results of the one child policy, such as the resulting ageing population and unbalanced sex ratio.

Population/Migration

Question 5

(a) Candidates responded strongly to this question offering a wide range of characteristics such as age, gender and income and relating these effectively to the impact on the source area. Stronger responses focused on the resulting impact on the population structure often supporting this with age/sex structure diagrams (population pyramids) and examples:

'Those leaving the source area are usually young working age males, 82 per cent of those leaving Albania, so that section of the population structure is reduced. This in turn can lead to an aging population structure as birth rates fall as the sex ratio is altered in the reproductive age range.'

Weaker responses offered a limited range of characteristics and often confused source area with destination area, for example:

'The influx of young male Mexicans into the southern areas of the US has injected new cultural elements such as the increased use of Spanish.'

- (b) This was a well known topic with most candidates offering a good range of factors – environmental, social, economic and political – causing such migration. Candidates tended to provide generic answers with pull factors being points such as better education or healthcare. Weaker responses typically did not exemplify or gave accounts of the impacts of rural to urban migration.

Many candidates produced vague answers, for example:

'People migrate from rural areas to urban areas as they believe they will have a higher quality of life as they believe urban centres are better.'

The candidates did tend to lose depth of discussion as they tended to provide a range of reasons with little depth and discussion of the explanation. Candidates should avoid general terms such as 'higher quality of life' and try to explain the elements that constitute 'quality of life'. Candidates would benefit from being specific about what the better healthcare or education is. The same can be said about jobs. Candidates commented on basic points such as there are better jobs without a discussion about what made these jobs better etc. Many candidates did not appreciate the locational context so gave examples from the UK.

- (c) Candidates tended to contrast the role of obstacles faced by international economic migrants with those faced by forced international migrants, for example:

'Obstacles have a less important role in international economic migration as economic migrants normally have the money to overcome obstacles such as distance and the cost of visa unlike forced migrants who often leave with nothing so face little chance of overcoming any obstacles.'

Some went further and recognised that economic migrants may vary such that some face few obstacles, for example:

'Some economic migrants are moved by their employer, typically a TNC, from one country to another. As such their costs are born by the company and any obstacles are overcome to ensure the employee can easily migrate.'

Some candidates did not keep tightly to other types of international migration but nevertheless made valid points, for example:

'Obstacles have a less importance in chain migration as people get help and advice from the people who have already come over before them.'

Settlement dynamics

Question 6

Few candidates attempted this question but those that did often produced very effective answers especially for **parts (a) and (b)**, demonstrating good knowledge and application of their case study.

- (a) This was a well answered question. Strong responses described a range of environmental, social, economic and political challenges usually supported by examples, often with data.
- (b) Weaker responses tended to repeat much of the same points as in **part (a)** rather than focus on the management challenges. Stronger responses offered a range of practical issues that made management difficult, for example:

'Much of the population in the shanty town do not want to be managed. They try to avoid officialdom and do not wish to be noticed in case they then have to pay taxes etc. Many of the shanty towns have their own management systems (sometimes gang related) so do not want or need 'outside' management.'

- (c) 'Urban renewal' was often not well understood so many candidates confused it with urban redevelopment and gave lengthy accounts of the London Docklands redevelopment. Weaker responses often did not link the urban renewal to an issue that it was supposedly solving, for example:

'The renewal of inner Birmingham brought lots of young people into Birmingham to the new night clubs and I agree mostly that urban renewal helped here.'

Clearly this response needed more detail and how and what did it help?

Stronger responses recognised that not all issues of urbanisation can be solved by urban renewal, or that urban renewal could make things worse by opening up new issues, for example:

'The London's Dockland renewal replaced a lot of working-class family homes with apartments more suited to the wealthy middle class. What was once a socially integrated community was now divided between the poor and the rich creating new social tensions and issues.'

GEOGRAPHY

Paper 9696/23
Core Human Geography

Key messages

Before answering a question, candidates should read it thoroughly and appreciate that every word must be considered. Too many candidates missed command words or key terms. For example, in **Question 5(c)**, some candidates discussed international migration, not internal migration as required by the question. Others referred to LIC/MIC countries, when the question asked about HICs. Where the question asks for examples and candidates do not include any relevant or appropriate examples, they cannot access the higher levels.

Africa is not a country; too many candidates consider it an LIC. Examples should be more detailed than simply the name of a country, and case studies should be accurate and relatively recent. The syllabus requires that where possible *'case studies should be dated no earlier than 1980'*.

The mark allocation not only indicates the range of points expected, but also the time that should be spent on that section. So the 15-mark **part (c)** questions in **Section B** are worth 25 per cent of the total for the paper, whereas the **part (c)** questions in **Section A** are usually worth 10 per cent or less. The time spent on these two parts should reflect their relative share of the marks.

Good case study knowledge is needed, especially in **Section B**, but it must be appropriately applied to the question. Some candidates simply repeated everything they had memorised about an example they had studied without applying it to the question properly, which made their answers lack focus. Also, examples must be used to support a point being made. Too many candidates give an example in name only, for instance 'e.g. India', which does not add a great deal to an answer.

Part (c) in questions in **Section B** always require candidates to discuss different aspects of an issue and come to a conclusion. These questions use wording such as *'how far do you agree with this statement?'* or *'to what extent do you agree with this view?'* This means that the candidate should evaluate a variety of arguments and then come to a conclusion. Too often candidates either give no evaluative remarks or conclude with a simple statement such as *'In conclusion, I agree with this statement'*. Without a reasonable attempt at evaluation candidates are unlikely to achieve more than half marks in these questions.

Comments on specific questions

Section A

Population

Question 1

- (a) (i) Nearly all candidates gave the correct answer.
- (ii) Most candidates found this straightforward and gave good answers. Those that did not achieve full marks did not support their answer with information from the map, such as names of countries.
- (b) Few candidates gave two valid points. The most common acceptable answers were the use of pesticides, arranging for food storage or planning to obtain food from outside the affected areas. Many candidates gave vague and general answers, for example:

'It can be helpful in determining which countries are at risk from locust swarms' or *'It helps a country know where to grow'*.

- (c) Most candidates could give two causes, but few gained full marks because their responses were too generic, not developed or lacking in examples.

Migration

Question 2

- (a) (i) Nearly all candidates correctly identified Polynesia.
- (ii) Many candidates incorrectly gave Micronesia as the answer because they did not read the question properly and looked at the percentages instead of the actual numbers.
- (b) Candidates who understood the term 'constraint' were able to give two examples, although few added any development such as referring to places and distances on the map. A significant number of candidates misunderstood constraints and gave reasons for, or disadvantages of, migration instead and these responses gained no marks.
- (c) Candidates who understood the term 'chain migration' were able to give good answers, although many spent time explaining what chain migration is rather than discussing its advantages. However, many candidates did not understand the term, and either wrote about migration in general or gave explanations of step migration, and in both cases gained no marks.

Settlement dynamics

Question 3

- (a) (i) Nearly all candidates answered this correctly.
- (ii) Most candidates found this straightforward, but some did not refer to the data for example dates or rates of change. Some candidates simply described the graph without making an explicit comparison between rural population and urban population, and these responses gained little credit.
- (b) Most candidates gave rural–urban migration as a reason, but few were able to give a second valid reason. Stronger responses had a second reason based on differences in age structure or birth and death rates in rural and urban areas, for example:
- 'Many young working-aged people moved from rural to urban which brought increasing birth rate for urban and decreasing birth rate for rural areas.'*
- (c) This question was not well answered by most candidates, with many vague and generic comments, and most did not relate their answers to LICs/MICs as the question required.

Section B

Question 4 was by far the most popular and very few candidates attempted **Question 6**.

Part (b) answers require examples. Weaker responses tended to ignore this instruction or gave thin examples such as 'e.g. London', whilst more effective responses gave more detailed located examples often with relevant data.

The key to these questions is in **part (c)** which demands detailed answers, with clear exemplification and thoughtful evaluation. Weaker responses lacked one or more of these aspects.

Population

Question 4

- (a) (i) Most candidates were not able to give a sufficiently precise definition to gain full marks. A significant number of candidates confused fertility rates with birth rates.
- (ii) There were few good answers in which candidates went beyond a simple comparison such as *'Fertility rates in HICs are lower than fertility rates in LICs/MICs.'* Examples of stronger responses

were those that gave examples of fertility rates in different categories of countries or distinguished between rates of change in MICs and LICs in comparison with HICs. Far too many candidates gave lengthy explanations for differences, but this was not what the question asked for and gained no credit.

- (b) Most candidates were able to give valid explanations involving female empowerment, the availability of birth control and the economic costs of child-raising. However, too few provided convincing examples to help them move beyond the middle of Level 2. Candidates who had confused fertility rates and birth rates in **Question 4(a)(i)** continued to in this question, and these answers lacked focus.
- (c) The vast majority of candidates used China as their case study, but most of these answers were weak because they did not address the question. Instead, there were lengthy accounts of China's population history since the 1940s and descriptions of the One Child Policy. Few seemed to realise that the question required a discussion of how the difficulties in managing natural increase were overcome, not a discussion of the reasons for the policy or a description of its implementation. Another issue with these case studies was that statistics quoted were often completely inaccurate regarding dates and population numbers – many saying that a consequence of the policy was a reduction in the population. Candidates who used a case study other than China generally did better on this question. Those that used Singapore's population policies often gave the best responses.

Migration

Question 5

- (a) Most candidates gave very general descriptions of refugee flows without referring to their characteristics such as their age/sex mix or their ethnic or religious groups. Examiners accepted quite a wide interpretation of 'characteristics' to include source regions, numbers involved, and causes of forced migration. However, most candidates gave simple descriptions and fewer accessed higher marks. Some candidates answered in terms of voluntary economic migration rather than refugee flows, and these responses gained little credit.
- (b) Many candidates gave very generic migration answers without a focus on refugees, and answers were poorly exemplified. The best answers were those that focused the response on specific examples to explain positive impacts such as engagement in the economy, bringing skills and cultural diversity.
- (c) There were some strong responses to this question in which candidates discussed the age factor (often focussing on the family life cycle) alongside other factors such as moving for economic or social reasons. Some candidates included a discussion on rural–urban migration in MICs/LICs or counterurbanisation in HICs to good effect. Exemplification was important, with some of the best answers giving examples from their own area or country, and in some cases their own personal experiences within their families. Weaker responses made a few comments about how age influences internal migration without considering other factors. A small number of responses did not read the question properly and instead wrote about international migration.

Settlement dynamics

Question 6

- (a) The best responses considered social impacts such as the migration of younger people away from rural areas, or changes to traditional characteristics of villages. There were also valid responses that described economic impacts (such as house prices) and environmental impacts.
- (b) Candidates who had a good understanding of the reasons behind the location of urban functions were able to give good answers, especially if they were able to describe an urban area familiar to them. However, there were few of these and most candidates gave generic answers about CBDs, housing and industry with little focus on the question, with few using examples to good effect.
- (c) There were some good answers to this question in which candidates discussed economic factors (usually house prices) and other factors that lead to segregation, including ethnicity and age, and

were able to relate these to their case studies. Weaker responses were very generic and lacked examples.

GEOGRAPHY

Paper 9696/31
Advanced Physical Geography Options

There were too few candidates for a meaningful report to be produced.

GEOGRAPHY

<p>Paper 9696/32 Advanced Physical Geography Options</p>
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General comments

The response of many candidates was creditable but there were some incidences where questions were misinterpreted. It is important to stress that questions need to be analysed in full rather than concentrating on a few terms as this can lead to responses not answering the question. General performance was variable and there were many excellent responses. All options received attention with Hazardous environments being the most popular and Coastal environments being the least popular. There was the occasional rubric error but no more than in previous examinations.

It is worth making a few general comments, some of which will be explored in greater detail later. Some candidates use concepts and processes in the wrong context, therefore demonstrating incomplete understanding. Flocculation and especially liquefaction were often applied incorrectly. To offer specific examples is useful, but simply stating a general location where some issues might occur, such as an entire country, is often not. This was especially true of answers to **Question 9**. **Question 9** asked for a detailed case study. Very often examples were not detailed enough to be a case study, or they were at an inappropriate scale, and many candidates used a variety of examples which were not case studies. It is important that, if specific events are discussed, such as earthquakes or volcanic eruptions, the specific details are reasonably accurate.

Responses to the resource-based questions were generally excellent and many candidates presented much good physical geography.

Comments on specific questions

Tropical environments

Question 1

- (a) Candidates had to describe the pattern of deforestation in the Brazilian Amazon tropical rainforest that was portrayed in the resource. There was the usual problem as to how to interpret the word pattern. Pattern implies a general synthesis of deforestation rates over the years. The main points that could have been mentioned were an overall decrease, with a series of peaks and troughs or fluctuations, the year of greatest increase or decrease, dates of major peaks and many others. However, many candidates simply described the graph year by year rather than examples of the overall pattern. Such a response gained few marks.
- (b) This question provided an opportunity to explain the effects of deforestation on the nutrient cycle in tropical rainforest ecosystems. Many candidates used diagrams and the quality of the information portrayed was variable. There were some excellent diagrams with detailed annotation but often detail was limited and inaccurate. The question asked for an explanation of the effects of deforestation, but many answers were too descriptive with little explanation. Also, some candidates concentrated more on the effect of deforestation on animals and organisms rather than on nutrient cycling. However, most candidates were able to achieve some marks when answering this question.

Question 2

Responses to this question needed to be based on a detailed description of the climatic characteristics of both the humid and seasonally humid tropics. Assessment required some consideration of other factors that influence the climatic characteristics. Most candidates were able to describe the nature of the ITCZ and

make a few descriptive points about climatic characteristics. Explanations of the atmospheric processes involved were less detailed and other important factors sometimes ignored. However, in contrast there were answers with a detailed understanding of the role of the ITCZ as well as other influencing factors such as monsoons, topography, air masses and latitude.

Question 3

There were more responses with reference to rainforest ecosystems than to savanna ecosystems. The key words in this question were sustainable and management. Sustainability is a difficult concept but management as a term should be more understandable. Sustainability was often mentioned in answers but with little evidence of understanding. Many responses concentrated on factors other than climate such as other physical factors, population and political pressures, conflicts/wars, economic activity, exploitation and economic development but with little reference to climate issues. Therefore, answers were generally unbalanced which made evaluation difficult. Problems of management tended to be discussed in implicit terms rather than explicitly. However, there were several useful and relevant specific examples.

Coastal environments

Question 4

- (a) Responses to this question reflected the same issue with respect to the interpretation of pattern as for **Question 1(a)**. In this question it was a comparison of the global pattern of coastal dunes and coastal saltmarshes that was required. Many responses described the distribution, continent by continent, of the features rather than the global pattern. However, most candidates were able to describe some elements of the global pattern.
- (b) This question was not well answered. Few responses were able to describe and explain the formation of saltmarshes. Coastal saltmarshes require certain conditions for their development and then there is the eventual development of a sward zone where inundation would only occur at very high tides. Most candidates noted that the sheltered area behind spits was a good location for saltmarshes to develop but wrote most of the answer outlining how spits develop as a result of the action of longshore drift.

Question 5

This was by far the most popular question in this option and there were many excellent answers. The range of threats to coral reefs discussed was often extensive and detailed. Occasionally the conditions necessary for efficient coral reef development were lacking which made evaluation of the threats difficult. Evaluation of the significance of the threats was also sometimes minimal. However, the general response was good, and some high marks were awarded.

Question 6

There were few responses to this question. Few responses demonstrated an understanding of wave refraction and those responses that did explain wave refraction were unable to relate its action to the formation of coastal landforms. Most responses ignored wave refraction and concentrated on other factors such as rock type and geology, wave energy and sub-aerial processes. This made evaluation of the question very difficult.

Hazardous environments

Question 7

- (a) Most candidates managed to identify many of the points noted in the mark scheme with some achieving maximum marks. There were many points that could have been noted. Some responses referred to likelihood in general rather than using the specific categories identified in the resource.
- (b) The most frequently explained causes of landslides, other than earthquakes, were precipitation (water), human activity and volcanic activity. Whichever cause was discussed, the reduction in shear strength and the increase in shear stress were noted but without an adequate explanation as to how and why these changes were produced. Therefore, answers tended to be descriptive rather than explanatory. As an example, many responses mentioned the increased weight on slopes from construction but with little detail as to why this might lead to landslides.

Question 8

Candidates were asked to assess the extent to which hazards from volcanic eruptions can be predicted. Many candidates, however, interpreted the question as simply referring to the extent to which volcanic eruptions, in general, could be predicted without reference to individual hazards. Such an approach gained some credit but discussion of the ability to predict specific volcanic hazards was required for higher level answers. Some candidates did manage to do this and gained credit for doing so.

Question 9

The question asked for a case study of a hazardous environment to be used to assess the view that some of the problems of that environment were more difficult to manage than others. The case study needed to be at an appropriate scale so that the various hazards are closely related spatially. However, many of the examples discussed as case studies were not sufficiently detailed to meet the requirements listed in the mark scheme. Also, several examples were often discussed in disparate parts of the world rather than a single comprehensive case study. Examples were often on too broad a scale, such as North America or China, to allow meaningful evaluation of management issues. There were also several responses that were essentially generic, such as volcanoes in general, which were inappropriate. This meant that the overall response to this question was weak.

Hot arid and semi-arid environments

Question 10

- (a) The photograph showed a series of yardangs in the Kaluts Desert, Iran. The question asked for a description of the physical landscape shown. There were many features that could have been described and most candidates were able to describe many of them and therefore achieve good marks. A few responses described other features of deserts which were not shown in the photograph.
- (b) The question asked for an explanation of the formation of the feature labelled A in the photograph. The feature was a wind eroded yardang where wind abrasion had etched out parallel lines of weakness in the rock. Many candidates did interpret the feature as a yardang. However, there was some ambiguity in the interpretation of the feature with many candidates suggesting that it was a dune, especially a barchan. For this reason, credit was given to good explanations of barchan dunes.

Question 11

This was a very unpopular question and most of the answers were incomplete and demonstrated little understanding of piedmont zone landforms. The formation of the landforms needed to be explained with an assessment of the role of water as opposed to other processes such as weathering and wind action. Few of the landforms detailed in the mark scheme were described and explained accurately. Some landforms were described and explained which had no relationship to piedmont areas.

Question 12

This was a very popular question and there were some good responses underpinned with excellent locational detail. Candidates needed to explain the nature of desertification with an assessment of the factors causing it. Many of the issues detailed in the mark scheme were discussed, but often in a very generalised way, with little reference as to how they caused desertification and how they were related to population pressure. The processes involved in desertification sometimes received little attention. Many responses were overly generic, with little reference to hot arid and semi-arid environments, and could have applied to any environment. Deforestation in the Amazon rainforest was sometimes mentioned. In contrast to these points, some responses based the discussion on specific Sahelian countries with exemplary detail.

GEOGRAPHY

Paper 9696/33
Advanced Physical Geography Options

General comments

The response of many candidates was creditable but there were some incidences where questions were misinterpreted. It is important to stress that questions need to be analysed in full rather than concentrating on a few terms as this can lead to responses not answering the question. General performance was variable and there were many excellent responses. All options received attention with Coastal environments and Hazardous environments being by far the most popular. There was the occasional rubric error but no more than in previous examinations.

It is worth making a few general comments, some of which will be explored in greater detail later. Some candidates use concepts and processes in the wrong context, therefore demonstrating incomplete understanding. Sub-aerial and especially hazard mapping were often applied incorrectly. To offer specific examples is useful, but simply stating a general location where some issues might occur, such as an entire country, is often not. It is important that, if specific events are discussed, such as earthquakes or volcanic eruptions, the specific details are reasonably accurate.

Responses to the resource-based questions were generally excellent and many candidates presented much good physical geography.

Comments on specific questions

Tropical environments

Question 1

- (a) Candidates had to describe the distribution of oxisols/latosols shown in Fig. 1.1. Most responses included references to the lines of latitude and specific parts of major continents. More detailed answers commented on the discontinuous nature of the distribution and the areas where little or no development was found.
- (b) This question provided an opportunity to explain the formation of oxisols/latosols. Most candidates were able to describe the main characteristics of these soils, but many missed the chance to use a diagram of the soil profile to illustrate their ideas. The better responses explained both how and why these characteristics developed over time through a secure understanding of leaching in a tropical environment.

Question 2

This was the more popular essay in this option. The granite landforms used by the candidates could have included bornhardts, castle koppies, tors and possibly, inselbergs. Solid responses described how deep seated chemical weathering along joints, followed by stripping of the weathered material, eventually reveals the landforms. The best answers then explained how the exposed features were attacked by a variety of physical and chemical weathering processes and surface erosion. Consequently, climate is obviously important, and most candidates pointed this out. The strongest responses considered geological characteristics and relief along with soil and vegetation cover.

Question 3

This question gave candidates an opportunity to demonstrate their knowledge and understanding of savanna ecosystems. As an area between the rainforest fringe and the semi-arid border, it can be viewed as a

transitional zone with clearly different elements. These include wooded, park, shrub and thorn savanna. Some responses highlighted that the vegetation might be altered by human activities and that variations could be related to topography, soils and the availability of water.

Coastal environments

Question 4

- (a) Responses to this question reflected an issue with respect to the interpretation of pattern. In this instance it was a description of the loss of coral cover along the Great Barrier Reef that was required. Most candidates used coastal settlements and/or points of the compass as reference points. This allowed a general recognition of the overall change along the coast, with certain anomalies. However, a few candidates simply described the map along a transect from north to south without picking out the patterns.
- (b) Responses to this question were largely well answered. Most candidates could describe two threats to coral cover on reefs. However, there was a wide variation in the quality of the explanation. The better responses considered the ideal conditions required for healthy coral growth and explained how their chosen factors interrupted or halted coral development.

Question 5

The best responses used a case study to illustrate their ideas regarding a closed system within which sediment is moved from one location to another. As a consequence, processes in specific coastal locations do not act independently and affect other areas within the cell. Therefore, coastal management at one location can have serious consequences at other areas within the sediment cell. Some answers had only a very basic understanding of sustainability although a large number referred to the environmental, economic and social aspects of the concept.

Question 6

This was a very popular question with a wide range of marks achieved. This centred on the level of understanding of sub-aerial processes and the discussion of other relevant processes involved in the development of coastal cliffs and wave-cut platforms. The more detailed responses considered the importance of rock type and structure and a variety of marine processes along with possible human activity. It was good to note that an increasing number of candidates used diagrams in their answers, with several adding effective labels and annotations.

Hazardous environments

Question 7

- (a) Many candidates found some difficulty in articulating their ideas regarding the distribution of landslide potential shown in Fig. 7.1. The map was reasonably complex, but the most effective approach began by identifying general points regarding patchiness and linear patterns in various parts of mainland USA. The better responses used points of the compass to identify distinct clusters of each category of landslide potential.
- (b) Most responses commented on the factors that can lead to landslides. These included a combination of external processes and the characteristics of the slope material and topography. Whichever cause was discussed, the reduction in shear strength and increase in shear stress needed to be noted, along with an adequate explanation as to how and why this led to landslides.

Question 8

Candidates were asked to assess the extent to which high rainfall is the most significant hazard resulting from atmospheric disturbances. Although a small number of responses only considered high rainfall in general, most candidates covered large-scale atmospheric disturbances, but some did not consider tornadoes. The key to the higher levels was through a detailed consideration of other primary and secondary hazards related to atmospheric disturbances on different scales. Consequently, an assessment of flooding, storm surges and high winds were considered in relation to hurricanes, cyclones and typhoons, whilst very high winds, hail and pressure differences were assessed in relation to tornadoes. Although this was not the

most popular question in this option, the general quality of the answers was very good, especially where direct reference was made to specific events and examples.

Question 9

This was the most popular essay question on the paper and produced a wide range of marks which was often related to the understanding of what hazard maps show. Most candidates linked prediction of earthquakes and volcanic eruptions to the production of hazard maps. However, many simply concentrated on prediction techniques rather than focusing on where the hazards were most likely to be experienced. Earthquake hazard maps are mainly produced on past events, major fault lines and the nature of the geology, and are very difficult to predict in regard to location, timing and intensity. However, some of the better responses argued that volcanic eruptions are also difficult to predict due to the range of hazards and the areas likely to be affected. Overall, candidates found this question gave them the opportunity to demonstrate their full range of knowledge and understanding and there were some excellent responses, especially those which used specific events and maps to illustrate their ideas.

Hot arid and semi-arid environments

Question 10

- (a) The photograph depicted a parabolic (barchan) dune in Erg Chigaga, Morocco. The question asked for a description of the features of the landscape shown. There were many features that could have been described and most candidates that chose this option were able to describe many of them and achieve good marks.
- (b) The question asked for an explanation of the formation of the feature labelled A in the photograph. As noted above, the feature was a barchan dune and so candidates needed to refer to a reliable source of sand, some obstacle to lead to the initial growth of the dune, a steady wind in a constant direction and turbulence over the crest of the dune. The more complete responses considered wind shear at the sides to produce the horns.

Question 11

This was the least popular essay question on the paper despite giving candidates the opportunity to demonstrate their knowledge and understanding of all landforms and processes found in hot arid and semi-arid environments. Water processes were the main focus of the question, and some responses considered an historic approach suggesting that water action was more significant in the past. The better responses considered landforms that were the result of weathering and wind processes and so allowed an evaluation of the relative importance of all the processes operating in these environments.

Question 12

Most candidates demonstrated a reasonably secure knowledge of the adaptations of plants in hot arid and semi-arid environments. The better responses were able to link the adaptation to either extreme temperatures or drought. The best responses acknowledged that certain adaptations are related to both of these climatic characteristics and were able to distinguish between physical and physiological drought.

GEOGRAPHY

Paper 9696/41
Advanced Human Geography Options

There were too few candidates for a meaningful report to be produced.

GEOGRAPHY

Paper 9696/42
Advanced Human Geography Options

Key messages

- Skills-based **Questions 1(a), 4(a), 7(a) and 10(a)** require more practice. At this level, basic data description needs to be developed to show an understanding of what is shown in the resource.
- Description of data presented in tables and identification of relationships within data needs to be developed.
- Case studies from published sources should be checked for appropriate coverage of the syllabus requirements and extra details researched either by teachers and/or in collaboration with candidates.
- Case studies and examples are more likely to have accurate place support when the location(s) are familiar or have some meaning to the candidate.

General comments

Candidates have sound knowledge of factors relevant to each question and there is some evidence of planning of essay responses. This aspect could be enhanced by consideration of the evaluative part of the question and structuring the response. Some candidates present a confused mixture of in favour/against arguments, which makes it difficult for the evaluation to be effective. Reflections from two of the experienced Examiners might assist:

Firstly, evaluations seem to fall into one of three groups. At the simplest level the candidate just writes a paragraph at the end which repeats the main points they have made in the essay. The next level up follows a rather formulaic approach of making a point in a paragraph, then adding a sentence at the end of every paragraph which refers to the essay title and stating whether their point agrees or disagrees with it. Then the best evaluations are those that clearly understand where they are going with the essay based on a plan and at various points along the essay pause to summarise the points they have been making which either support or disagree with the question. It does not necessarily have to be at the end of every point made, but rather a reflection as they go along, using their own words, rather than just repeating the question.

Secondly, the importance of using evaluative language (e.g. more/less important than, significant impact, the most, the least, in spite of, despite, although, etc.) but also making clear statements and not leave it up to the Examiners to draw the conclusion for them (e.g. this suggests that, highlights that). Also in concluding, candidates could use the opportunity to highlight their view and evaluate by going back to the question asked rather than repeating in the conclusion what has already been said. One other thing could be to consider key concepts of the syllabus: the scale, place, change in time, diversity, and interdependence between elements, hence they are more likely to be able to introduce those evaluative angles. Of course, all applied to the specific question asked.

Most candidates who took this paper answered questions from the Environmental management option. The second most popular option was Production, location and change with Global interdependence being a close third.

Comments on specific questions

Production, location and change

Question 1

- (a) Candidates were expected to compare the distribution of palm oil production for two years. Two elements were expected – the location of producing areas and changes in amounts of production.

In most cases an overall increase of production, with little change in the distribution was identified. Some candidates noted that there were new producers but were not expected to know the names of these. A few candidates noted that in Africa there was one country less. Candidates struggled to develop the regional aspect of the changes. At this level it is expected that they know names of continents and be able to use compass points to break this down further e.g. West (Africa), Southeast (Asia). Few candidates realised that the proportional circles were centrally located within each country, so it is not true to state that production increased into Australia.

- (b) Many candidates were able to identify potential issues arising from the extension of cultivation. In most cases points about deforestation, soil erosion and habitat loss were commonly used, often to good effect. The main factor limiting the quality of responses was the level of explanation, as requested by the question command word. While the majority of candidates identified and generally described issues, relatively few actually explained one of either cause of the issue i.e. its link to extension of cultivation or the impacts which make it an issue.

Question 2

Candidates demonstrated knowledge of factors influencing agriculture including physical factors such as: rainfall, temperature, water supply, climate change, climatic hazards, relief, rock and soil type. Few were able to note that the former 'climatic' factors are more likely to be a cause of the need for change than the other more static factors. Overall, the quality of a response was influenced by the details about agriculture in one country. Better responses were seen where case studies had relevance to the candidates, those focused on their own country, region or even a named located farm or producer. In these cases, candidates are more likely to know about specific aspects of agriculture such as agriculture in area 'X' is changing because of factor 'Y', so there is a need to change in the following way(s), with management by the farmer/holder, government and they will also be able to discuss the factors influencing the causes, changes and management and how far physical factors are the overarching cause.

Question 3

Most candidates knew what is meant by industrial agglomeration: the clustering of firms in a related area. They were also able to consider the role of industrial agglomeration through the advantages of agglomeration such as reduction of costs related to setup e.g. infrastructure, production costs (more frequently mentioning transport and labour), industrial linkages and benefits from cooperation and knowledge sharing. Some candidates commented on how the role may change and how disadvantages might accrue in time, so the role may diminish because of factors such as overcrowding, pollution, high cost of land and traffic congestion. Better responses were well founded on named located areas of industrial agglomeration and knowledge of specific factors which cause industries to locate in the area. Factors commonly seen included government, resources/materials and power. As candidates expanded their response to consider other factors, many lost links to specific locations and became more descriptive in style.

Environmental management

Question 4

- (a) Candidates could describe the greenhouse gas emission impacts of the food products shown in Fig. 4.1 through comment on the amount and range of impact. Many candidates identified the products with the largest and smallest impact: beef and beans but struggled to make further valid comment. The range from low to high impact was not always noted.
- (b) Many candidates showed a good understanding of the question and were able to identify two factors that influence the source of energy used to generate electricity. The most used examples were resource endowment, environmental pressures and government policy, physical conditions in relation to renewables and the relative cost of different energy sources. Most responses were largely generic and did not always directly focus on HICs even if HIC examples were named. Comment on the HIC context could have referred to factors such as financial capability, ability to make a choice based on environmental impacts despite (arguable) cost increase, public opinion/choice of consumers.

Question 5

A significant number of candidates did not fully understand the idea of ‘overall electrical energy strategy’ (OEES) and consequently simply discussed examples of individual energy schemes such as Kariba, Ulla-Førre, Three Gorges, without reference to the relationship of the scheme to the OEES or focused on the electrical energy supply mix or parts of it. For this question candidates needed to know specific details beyond simple ideas that the main energy source is for instance HEP/coal and then to effectively present a generic response. Again, candidates do better when they use specific knowledge of a country which is familiar to them. In this case they are more likely to have knowledge of details (often quite localised but still valid) about aspects of the OEES and electrical energy issues in the chosen country. There is also evidence that candidates confuse natural gas and oil as sources of electrical energy generation. Better responses outlined an overall energy strategy for a country and then described how far different elements of the strategy reduce environmental impacts. These responses were often thoughtful and well documented providing the opportunity for a clearly analytical and evaluative discussion.

Question 6

Many candidates showed a good understanding of the question and used appropriate examples to develop their ideas. Better responses considered both the causes and impacts, so what leads to the issue and who/what is impacted by the issue. The direction of a response in terms of balance between comment on water quality and water supply depended on the viewpoint taken but sound responses had a clear statement of their viewpoint at the beginning, were able to illustrate this view and to conclude in an evaluative fashion. Candidates who noted that the statement included reference to ‘many countries’ were able to develop their evaluation by considering different circumstances where either quality or supply was/is the major issue. There were some very reflective responses considering countries that have good water supply, but poor water quality and vice versa, but also considered the ability of a country to pay for what it needed e.g. desalination plants and water purification plants. In contrast it was possible to develop a sound response based on the situation within one country and, again, such responses were well founded on detailed knowledge and possibly experience of their own country.

Global interdependence

Question 7

- (a) A reasonable starting point for candidates was recognition of the fact that the column ‘total net ODA’ was in rank order from highest to lowest, but the column ‘% share of ODA contracts awarded to firms in the donor country’ was not in rank order, so they could assign ranks to the countries in this column to make a comparison with the former column. They then should have observed that the table does not show any clear relationship. Candidates should have stated either: there is no clear relationship or there is evidence of both a positive and a negative relationship. This should then have been supported by grouping countries together that had similar characteristics such as USA and UK, Luxembourg and Portugal, or displayed contrasting evidence of no relationship such as Canada, Switzerland and Australia all with net ODA of \$3000–\$4000 but varying per cent share of contracts. Some candidates interpreted the command ‘describe the relationship’, as suggesting that there was an obvious relationship and consequently appeared to try and find a clear relationship within the data, at times by only using data from specific countries to justify their narrative of either a positive or negative relationship. A small number of candidates simply repeated the data or identified data from only two or three countries. Some candidates suggested that ‘total net ODA’ was money received rather than donated.
- (b) Many candidates were able to identify advantages of aid to receiving countries rather than factors that might be specifically related to tied aid. The command word ‘explain’ demanded some reasoning why the factors identified might be seen as an advantage to receiving countries and in many cases explanation was limited to simple points which were not fully developed.

Question 8

Reference to clear global patterns of trade was a characteristic of better responses, whilst lower quality responses were largely descriptive of factors influencing the ability to trade. For historical factors colonialism was frequently cited as an example, linked in better responses to the global pattern of trade of primary products/manufactured goods between colonised and colonising countries. Very few candidates were able to discuss how these dated historical linkages may have changed, evolved into neo-colonialism or have been replaced by new power exercising nations or how other factors such as trade agreements may themselves

have an historical dimension. Resource endowment, locational advantage and the concept of comparative advantage were popular alternative factors seen but again candidates needed to link these to the global pattern of trade. For this type of statement led question, candidates might consider the complexity of causal factors and how they are linked together.

Question 9

In most cases candidates demonstrated some understanding of economic sustainability and the general location of the examples selected was appropriate. However, in many cases the specific requirements of the question were not addressed, especially regarding two factors. The first was that a significant number of candidates did not address the instruction to base the answer on 'one tourist area or resort', instead basing their answer on a large area (e.g. southern Spain) or a whole country (e.g. Jamaica was commonly used). In these cases, the case study should have specific details which refine the 'one tourist area or resort' demand of the question. For example, naming one Costa in Spain with some detail of at least one location or in Jamaica, noting that tourism is mainly focused on the north coast, with examples such as Montego Bay, Negril marine park, international airports and the north coast highway giving the starting point for the case study. While this still created the opportunity to express an understanding of economic sustainability it generally did not allow candidates to express the detail required to offer thorough evaluation. In a small number of cases candidates used more than one example, usually resulting in basic responses that lacked the specific detail required to fully address the question. The second factor was that several candidates did not identify the need to focus on economic sustainability and often the bulk of the essay was more focused on ideas about environmental or social sustainability. Where these ideas were clearly linked in a more holistic way to economic considerations this was relevant, but in many cases, they were isolated points and as such added little to the overall discussion.

Economic transition

Question 10

- (a) Candidates were able to identify features shown in the photograph effectively, but the key was to consider how these features might illustrate that Nigeria is an emerging newly industrialised country (NIC). In this context, photographs need to be seen as evidence which can be used to support points related to the question and moves the response away from simply describing what is shown towards using the photograph more analytically.
- (b) In most cases candidates translated the question into direct observations about the impact of new industry setting up in NICs, which was an appropriate way of addressing the question and allowed candidates to demonstrate an understanding of the positive impact of industrial development. A range of observations were seen, including points about employment opportunities, regular income, and training opportunities. Several candidates developed this theme by bringing in observations about the economic multiplier and links to the development of social facilities such as health centres and schools, thus illustrating a broader understanding of economic development.

Question 11

Those candidates who clearly understood and had appropriate knowledge of economic indices (in most cases this was based on income data of some sort, either GDP, GNI or adjusted income data which considered local prices/purchasing power) were generally able to develop a thoughtful discussion which highlighted the advantages and disadvantages of different ways of measuring global inequalities. In some cases, candidates also brought the idea of using multi-use indexes into the answer (usually HDI) and argued that a mix of both economic and social data might give a clearer picture of development or reduce the disadvantage of only using economic or social information. Candidates using this type of approach generally produced thoughtful answers which demonstrated some evidence of evaluation. It was evident that some candidates did not fully understand the concept of global inequality and were not totally clear about what was meant by 'economic indices'. Very few mentioned the ease or otherwise of collecting accurate data, which is key in arguing about the 'best way' to measure. Another missed opportunity was to consider economic measures as a group and make broad comparisons with other groups such as social, environmental, or political. Broad groups such as this might take away the temptation to describe a range of (economic) measures, sometimes inaccurately, but effectively only make the same evaluative comment about each.

Question 12

Most candidates approached this question by using the idea of ‘core–periphery’ and discussing how some areas (south-east Brazil and north-east Brazil/Amazonia were commonly used) have a relative economic advantage and how this is enhanced through the mechanism of cumulative causation. There were essentially two approaches to the question. One approach used examples and considered the relative economic advantages/disadvantages of the chosen areas and how this had created socio-economic regional disparities and subsequent divergence. The second approach took a broader perspective by suggesting that more recently, governmental regional development policy had made this pattern far more complex, with the consequence that the discussion around divergence and convergence was also more complex. This approach provided the opportunity for a more detailed and evaluative discussion in relation to the question in terms of the need to consider ‘to what extent would you agree that its regional development is characterised by convergence’. In both cases reference to theory was seen to enhance a response.

GEOGRAPHY

Paper 9696/43
Advanced Human Geography Options

Key messages

When answering the **part (a)** questions candidates should be encouraged to use the wide range of data available to them. For example, if a map is used candidates should use compass points, the scale or given place names to help them describe the places they are using as evidence. If a graph is used candidates should use the range of data and also look for anomalies and patterns and ways to manipulate or group the data. Some candidates continue to make very simple observations.

For **part (b)** questions there are still many candidates who write simple explanations, often one sentence. They do not take their explanations to the depth needed at this level, which can be done by using linking phrases such as 'therefore', 'furthermore', 'which leads to...' etc. The Level 3 descriptor states 'clearly explains...well founded in detailed knowledge and strong conceptual understanding of the topic.' Few candidates are answering **part (b)** questions in a way that shows their full knowledge and understanding.

Candidates who plan out essays (where a plan can be seen) continue to do better than those who do not. In addition to this, candidates who begin their essay with an evaluative statement often stay on track more than those candidates who do not. Many essays continue to be narratives instead of discussions which address the evaluative element of the question.

General comments

Most candidates who took this paper answered questions from the Environmental management and Global interdependence options. Candidates were able to use place examples in their answers as evidence, however, simply giving the name of a place without any context should be discouraged.

Comments on specific questions

Production, location and change

Question 1

- (a) Most candidates used Fig. 1.1 and Fig. 1.2 effectively to describe the changes in agricultural land. In most cases the reduction in central Europe and Eastern Europe were identified, after which several other minor changes were described. Candidates are not expected to know the names of the countries, but can use details given to describe locations, such as the Seas. Candidates should also be encouraged to use scale and compass directions when the resource is a map, to highlight their competency in using these skills.
- (b) In most cases answers focused on environmental issues, with points about deforestation, soil exhaustion and erosion, and eutrophication commonly used. To a lesser degree, observations about pressures on water sources were also identified. There were very few observations made about socio-economic impacts. The distinction in relation to the mark awarded was generally based on how effectively candidates responded to the command word 'explain'. Very often appropriate ideas were identified but the explanation of the issue was limited. Candidates should be encouraged to give detailed explanation of the causes and effects/issues that arise.

Question 2

Candidates found this question quite challenging and often interpreted it as the economic factors that affect agriculture rather than how the impact of economic factors created the need for agricultural change. Several candidates considered the question in relative terms by considering other factors. When the other factors were considered relative to economic factors the discussion about 'extent' was effective. However, very often the other factors were considered in isolation with virtually no reference to economic factors and answers were consequently self-limiting. Candidates need to be aware that the key phrase within a question must be addressed in order to achieve at the higher levels.

Question 3

Candidates had some understanding of industrial inertia but were not always able to fully develop the idea alongside specific and appropriate examples. One or two candidates implied that the industrial location decision was quite complex and often based on a number of factors, consequently if only some of these factors changed there might be less need to change location. Also, points about how the cost of moving might overshadow any potential locational gains were implied by some candidates. These ideas were not always fully developed, had they been they could have formed the basis for a sophisticated discussion.

Environmental management

Question 4

- (a) The majority of candidates did not address the instruction to describe 'regional variations'. A region is an area of the world, not an individual country. Continents, regions within continents or hemispheres would be acceptable groupings. HIC and MIC are not regional variations, instead being categories of countries, which share similar economic characteristics. Candidates were given the continents/regions in brackets on Fig. 4.1 and need to watch out for when they are asked to manipulate the data. In most cases candidates simply described individual countries, in many cases doing very little more than copying the data from Fig. 4.1.
- (b) The majority of candidates showed a good general understanding of this question and were able to suggest two appropriate reasons for the variations in the level of carbon dioxide emissions. The more commonly used examples included observations about resource endowment, amount of manufacturing industry, diversification of energy sources and environmental legislation/strategy. Several candidates also considered the question in relation to the level of development or the pace of development. At the highest-level candidates developed their answers by offering qualified points and specific examples to support their ideas. A small number of candidates suggested more than the two reasons requested, this generally led to a lack of depth in each of the reasons given.

Question 5

It was evident that a significant number of candidates did not fully understand the idea of 'energy strategy' and consequently simply discussed examples of individual energy generation projects (a common example used was the Three Gorges Dam). While this approach had some merit it usually produced very descriptive responses and did not fully address the question and was consequently self-limiting. Those candidates who outlined the overall energy strategy of a country and then used examples to express what was being done to realise the strategy often produced thoughtful and well documented answers which provided the opportunity for a clearly analytical and evaluative discussion. This question had a clear route; introduce the strategy, outline how it was being carried out and then evaluate its success in terms of 'overcoming issues in power production', as expressed in the question. As such, it provides a useful template for practicing examination technique and appreciating how to respond to the demands of an examination question.

Question 6

A significant number of candidates did not appear to fully understand or respond to the demands of the question. In many cases candidates described the factors that caused environments to be degraded, rather than identifying the constraints on improving degraded environments, as requested by the question. While this approach highlighted issues related to degraded environments it did not give the opportunity to fully address the question. Those candidates that did address the key idea of 'constraint on improving the quality of degraded environments' generally produced thoughtful responses which showed a good level of understanding. As has happened before, some candidates interpret 'physical factors' as human strength or

the built environment, rather than the natural occurring conditions which affect attempts to improve a degraded environment. The evaluative element often dictated the overall quality of responses.

Global interdependence

Question 7

- (a) The majority of candidates were able to identify particular points from the data, often by grouping countries that had similar characteristics. It was evident that some candidates interpreted the command as suggesting that there was an obvious relationship and did not really consider that there might actually be no clear relationship. Several candidates did not fully address the command 'describe the relationship' and simply repeated the data, misinterpreted the data or considered that 'total net ODA' was money received rather than donated.
- (b) The majority of candidates were able to identify disadvantages of aid to receiving countries but in many cases candidates identified generic factors rather than factors that might be specifically related to tied aid, as expressed in the question. The command word 'explain' demanded some reasoning why the factors identified might be a disadvantage to receiving countries and in many cases explanation was limited to simple points which were not fully developed.

Question 8

Candidates generally demonstrated a good understanding of the idea of resource endowment, with many identifying oil and coal as specific examples and using fossil fuel exporting countries as examples of places where resources dominate international trade. A significant number of candidates brought in other factors that influence trade, the more commonly used examples included trade agreements, locational advantage and historical relationships. When these examples were used to make comparative points in relation to the influence of resource endowment candidates often produced thoughtfully considered responses. In some cases, these additional examples dominated the discussion and there was only a limited assessment of the role of resource endowment and consequently the key idea expressed in the question was not fully addressed. The idea of 'patterns of trade' was not generally considered, answers more often focusing on individual countries rather than global patterns.

Question 9

The majority of candidates chose this essay question. In most cases candidates demonstrated some understanding of sustainability and the general location of examples selected was appropriate. However, in many cases the specific requirements of the question were not addressed, especially regarding two factors. The first was that a significant number of candidates did not address the instruction to base the answer on 'one tourist area or resort', instead basing their answer on a large area (e.g. southern Spain) or a whole country (e.g. Jamaica was commonly used). While this still created the opportunity to express an understanding of sustainability it generally did not allow candidates to express the detail required to offer thorough evaluation. In a small number of cases candidates used more than one example, usually resulting in basic responses that lacked the specific detail required to fully address the question. The second factor was that several candidates did not identify the need to focus on environmental sustainability and often the bulk of the essay was more focused on ideas about economic or social sustainability. Where these ideas were clearly linked in a more holistic way to environmental considerations this was relevant, but in many cases, they were isolated points and as such added little to the overall discussion.

Economic transition

Question 10

- (a) Candidates identified the key features shown on the photograph effectively but did not often use this to suggest how it illustrated the impact of globalisation, as expressed in the question. A good example was the disused factory, which was identified and described by most candidates as being a key element of the photograph. However, the possible link to globalisation (closure of industry suggesting deindustrialisation linked to a global shift in manufacturing) was not always made. Simply describing the features shown on the photograph did not achieve marks, the key word expressed in the question was 'evidence', which clearly flags up the need to use the photograph in some way.

- (b) The majority of candidates identified changes to the structure of employment and consequent employment opportunities as an impact of the locational change of economic activity. After that many candidates struggled to identify a second impact. The command word 'explain' demanded some cause-effect reasoning and in many cases explanation was limited to simple points which were not fully developed.

Question 11

Those candidates who clearly understood and had knowledge of both social and economic indices were generally able to develop a thoughtful discussion which highlighted the advantages and disadvantages of different ways of measuring global inequalities. In some cases, candidates also brought the idea of using multi-use indexes into the answer (usually HDI) and argued that a mix of both social and economic information might give a clearer picture of development or reduce the disadvantage of only using social or economic information. It was evident that a number of candidates did not fully understand the concept of inequality and were not totally clear about what was meant by 'social indices'.

Question 12

This question was generally answered effectively, with the example of Brazil commonly used. The concept of 'core-periphery' was understood by most candidates. There were essentially two approaches to the question. One approach used south-east Brazil and one part of northern Brazil (usually either the north-east or part of Amazonia) and considered these areas in relation to the core-periphery model, bringing in points about variations in economic opportunities and how the northern areas have greater environmental challenges and observations about migration towards the south-east. The second approach took this further by suggesting that governmental regional development policy had made the link to the core-periphery model more complex. This approach provided the opportunity for a more detailed and evaluative discussion in relation to the question in terms of the need to 'assess the extent to which the concept of core-periphery explains the pattern of regional development'.