

# GEOGRAPHY

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Paper 9696/11  
Core Physical Geography

## General comments

This was the first examination based on the revised syllabus and papers for many of the centres. As on the previous version of the syllabus, candidates seem to have been well prepared for the examination. Effective teaching ensured that the quality of many responses was commendable. Many geographical concepts were clearly understood, and answers were often thoughtful and detailed. There was a logical structure to much of the work presented, and it was clear that the examination was accessible to the majority of candidates.

The use of English continues to improve. For those whose first language is not English, there has been considerable progress over recent years, and clarity of expression is increasingly evident.

However, diagrammatic illustration remains variable in terms of both quality and usefulness. For example, very few candidates made effective use of diagrams to explain the intensity of solar radiation in tropical areas in **Question 2(c)**, and plate tectonics diagrams in **Question 6(b)** did not always enhance or clarify the text.

Planning of answers continues to be effective, both in terms of content and time allocation. Very few candidates were unable to complete the examination paper in the allocated time. Now that choice is not an element of **Section A**, fewer candidates committed rubric errors. It was unusual for any candidate to attempt more than one question in **Section B**.

However, there are indications that insufficient emphasis is given to the chosen question in **Section B**. Both sections on the question paper command equal marks, but the need to answer three questions in **Section A** can lead candidates towards a distorted time allocation. Some candidates choose to answer the **Section B** question first, and of course, that is acceptable.

All questions in **Section B** proved accessible to candidates. In the past, Atmosphere and weather was unpopular as a topic, and this was reflected in the limited number of candidates who chose to answer the relevant question. However, it was good to note that there is now an increasing willingness to attempt this **Section B** question, and that reflects positively on the teaching of this topic.

Case Study material is an important element of all three physical topics. Some answers display excellent detailed knowledge, but some are too generic in their approach, and do not focus sufficiently on a chosen specific study. Examples generally can lack sufficient detail.

Although there are a number of command words with which candidates need to be familiar, 'describe', 'explain' and 'assess/evaluate' were the three that were the most significant in this paper. Candidates are now much more aware of evaluation, and the stronger responses integrate relevant comments within the text, and not just as a final conclusion. Description is understood, but the general patterns identified can be fragmented and therefore difficult to identify. However, many provide a good level of detail, although some candidates continue to identify patterns where explanation is required. For example, responses to **Question 2(c)** too often simply provided additional descriptive detail instead of explanation. Candidates need to analyse the demands of each question, and to be aware of the explanatory emphasis of most part (c) questions in **Section A**.

In many respects the resource material provided for **Section A** was relatively easy to use. There were no complex figures that required manipulation, although the pattern of solar radiation in Fig. 2.1 was not always identified very clearly.

Most candidates performed effectively in the examination, and for many there was continued encouraging progress. It is not difficult to identify areas where further progress could be made, but in general there was much to celebrate, and a sound basis for future development.

## **Comments on specific questions**

### **Section A**

#### **Hydrology and fluvial geomorphology**

##### **Question 1**

- (a) Most responses were good, but carelessness cost marks in some. References to 'output' and 'store' in the question were ignored by some, and 'evapotranspiration' was identified instead of 'evaporation' in (a)(i).
- (b) There is a range of effects available, but simply stating an effect is not in itself a valid description. Indeed, this was a question where the development of a single effect could be awarded with 2 marks. However, most candidates scored effectively, but through variety rather than detail.
- (c) It was reassuring to note the number of candidates who could clearly distinguish between 'Hortonian' and 'saturated' overland flow, and this was one instance where developed explanations were successfully used by a number of candidates to enhance their marks.

##### **Question 2**

- (a) Most candidates understood the data presented by Fig. 2.1, but must always clearly identify the units that the figures refer to if they are not given in the question.
- (b) The transition to low values of solar radiation north of the Tropic of Cancer was clearly identified, but the contrast between tropical and equatorial regions caused some confusion.
- (c) Responses were often weak, identifying further pattern details, but not offering any valid explanations. There was a clear opportunity here for a diagram to explain how north and south of the tropics the sun's rays strike the earth at increasingly lower angles, reducing the intensity of the insolation. Simply discussing distance from the sun is not valid.

##### **Question 3**

- (a) Answers were not precise enough. Mud was often identified, but candidates were sometimes too casual in their use of the terms 'flow' and 'slide'.
- (b) Most candidates did attempt to draw a realistic sketch, and not resort to a theoretical diagram. Nevertheless, the quality achieved was variable. The labelling did not always clearly refer to the mass movement, but the toe/deltaic lobe was one feature identified by many.
- (c) Responses were often convincing and of good quality. The significance of water, both in terms of fluidity and weight, was recognised by many, and effectively discussed in terms of shear stress and shear strength. Here again was an example of one theme (high rainfall), being developed to achieve two thirds of the marks available. Human impacts, involving deforestation and road construction, were also clearly identified.

### **Section B**

#### **Hydrology and fluvial geomorphology**

##### **Question 4**

- (a) In part (i) most candidates understood the shape of helicoidal flow, but did not relate it clearly enough to the width and depth of a river, and to the development of meanders.

In part (ii), there were many competent responses, and candidates generally scored well. However, simply naming a transport method is not in itself an explanation.

- (b) Many used an annotated diagram as an aid to 'description', and that was effective. However, explanations were less convincing. Some dealt generally with deposition, but drifted into deltaic deposits. Deposition was often related to reduced energy, but the nature and causes of seasonal discharge variations, such as glacial meltwater, were not widely discussed.
- (c) The syllabus specifies that candidates should have studied a recent river flood event, but answers were often too generic, and not closely related to a specific example. However, causes of flooding were discussed in considerable detail, but reducing the impacts of the flood was sometimes confined to hard and soft engineering.

#### Question 5

- (a) Both parts were answered convincingly. Definitions were clear and accurate in part (i) and the processes of cloud formation in part (ii) were outlined effectively.
- (b) Candidates struggled with this question. The intention was for a discussion of the specific heat capacities of land and water, and consequently atmospheric pressure, both discussed within a framework of seasonal variations. Many responses discussed wind systems, but there was little to gain from this.
- (c) There were some excellent responses to the 'causes' of the enhanced greenhouse effect, but without the examples and evaluation specified in the question. Some candidates drifted into discussions of the ozone layer and pollution.

The 'impacts' were discussed, but not always 'atmospheric' impacts. Polar bears, melting ice and rising sea levels were discussed with great detail, but with only a tenuous link to the 'atmosphere' specified. However, this is a topic that many candidates are comfortable with, and the high standard of many responses reflected this.

#### Question 6

- (a) In part (i) most candidates understood hydrolysis to be a chemical weathering process, but many responses did not offer sufficient detail or understanding beyond that. Vegetation root action, on the other hand, was well understood by the majority of candidates. The process of salt crystal growth in part (ii) was clearly and logically explained through the various stages.
- (b) Not all candidates understood that volcanic island arcs only occur where two ocean plates meet, but that ocean trenches might also occur where an ocean plate is subducted below a continental plate. Diagrams were often used to enhance the text, but their quality was variable in terms of both detail and accuracy. When integrated into the text, accurate diagrams were of considerable value in displaying understanding of this topic.
- (c) This was a difficult question for many, incorporating different rock types, the type and rate of weathering, and other factors such as climate. There were some good attempts to cope with these various elements. A number of responses provided an analysis of limestone and granite in different climatic environments, and this proved an effective approach. Many responses provided a reflection of the good progress that many candidates have made over the duration of their studies.

# GEOGRAPHY

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Paper 9696/12  
Core Physical Geography

## General comments

This was the first examination based on the revised syllabus and papers for most of the centres. There were some excellent responses but many of the responses were weak. The compulsory Atmosphere and weather question caused many candidates problems. Part of the problem was that many candidates did not read the questions carefully enough. This was especially true of **Question 2 (c)** where it was clearly stated that the resource related to July but many of the responses developed an argument on the basis of the ITCZ being over the equator. Many of the responses were highly generic and not related to the resource. **Question 3 (c)** caused problems because of an inadequate understanding of the formation of volcanic island arcs. Also, **Question 4 (c)** asked for the effect of vegetation type on the incidence of flooding. Few candidates examined the type of vegetation, preferring to examine vegetation or no vegetation without specifying any type. **Questions 5 (c)** and **6 (c)** asked for the answers to be based on a specific example. Many answers referred to a specific location but then the answer that followed was purely generic and could have referred to any location. There was no evidence of knowledge and understanding of the example chosen. These points will be examined in greater detail when considering the individual questions.

The use and accuracy of maps and diagrams remains variable, and such skills would benefit from further focus and development. Using an illustrative diagram would greatly enhance a response. All responses to questions in **Section B** could have been improved by the appropriate use of diagrams.

A variety of command words may appear in questions, but in this examination, the ones that dominated were 'describe', 'explain', 'assess' and 'evaluate'. There is consistency in the demands of individual questions. In **Section A**, the part **(b)** questions generally required description, whilst the part **(c)** questions required explanation. Some candidates offered explanations when only descriptions were demanded.

In **Section B**, evaluation and assessment are dominant features, either explicitly or implicitly. All 15-mark questions lead candidates into some level of evaluation, and this was not always forthcoming. Level 3 and 4 responses are often identified through the detail and sophistication of the assessment.

The use of examples can do much to enhance an answer, even if not specifically required. Case studies can offer greater depth and detail than simple examples, but may, in themselves, not cover the range of ideas that a question demands.

This first experience of the new examination for many centres will provide a solid foundation for future candidates.

## Comments on specific questions

### **Section A**

#### **Hydrology and fluvial geomorphology**

##### **Question 1**

- (a) There was more confusion over part **(i)** which was often answered incorrectly. Part **(ii)** was generally answered correctly.
- (b) Most candidates were able to score maximum marks but the terminology used was often vague. It is important that the correct terminology for the shape of hydrographs is used, such as lag time, peak discharge and rising and falling limbs.

- (c) Most candidates were able to gain some marks, however the level of detail and coverage of the question was sometimes limited. There was often confusion between porosity and permeability. Also, it was not sufficient to simply write about permeability without explaining why certain soils were permeable. The explanation needs to be in terms of pore size and frequency. In a similar manner writing that granite is impermeable is not an explanation. Some candidates did make the distinction between primary and secondary permeability for rocks. Secondary permeability is related to joints, fissures and bedding planes. Unfortunately there is still reference to hard and soft rocks which is inappropriate. Also, limestone is not usually a soft rock as mentioned by many candidates.

## Atmosphere and weather

### Question 2

- (a) There was a mixed response to this question. Some candidates recognised it as the ITCZ but many did not. It is worth stressing that ‘thermal equator’ was also accepted.
- (b) The general pattern of surface winds was described reasonably well and most candidates managed to score at least two marks. However, a minority of candidates wrote about winds moving left or right rather than west or east. Winds blowing from west to east were often called easterlies.
- (c) This question caused many problems. As noted earlier, many candidates ignored the figure entirely and wrote a generic answer about pressure systems, assuming that the sun was overhead at the equator. Thus many described low pressure over the equator that was not shown on the map. The tri-cellular model was described which had very little relevance to the distribution of pressure systems in the figure. It could be relevant but it needed to be related to the position of the ITCZ as shown in the figure. Many candidates noted the difference in pressure between land and sea but did not explain the difference in terms of differential heating of land and sea. Many candidates described the distribution of the pressure systems and not an explanation.

## Rocks and weathering

### Question 3

- (a) Many candidates were able to score both marks for parts (i) and (ii).
- (b) Many candidates achieved full marks and most candidates were able to obtain some marks. However, there was a tendency to provide an explanation rather than simply describing what was in the figure.
- (c) Many candidates confused volcanic island arcs with hot spots, using Hawaii as an example. Also, many explained island arcs with respect to the subduction of an oceanic plate below a continental plate when it should have been the subduction of one oceanic plate under another oceanic plate.

## Section B

### Hydrology and fluvial geomorphology

#### Question 4

- (a) (i) Good marks were achieved by most candidates. However, there was some confusion between abrasion and attrition.
- (ii) This part was also answered quite well but some answers lacked the detail to achieve full marks. The number of marks indicates the amount of detail required. Many candidates provided enough detail for 2 marks but not enough for higher marks.
- (b) There were many excellent responses to this question with a variety of fluvial depositional landforms examined. However, many candidates chose oxbow lakes as one of the landforms. The role of deposition is relatively insignificant in the formation of oxbow lakes and therefore oxbow lakes were not good examples. There were some excellent accounts of deltas with bottomset,

foreset and topset beds being accurately described and explained. Some landforms, such as waterfalls, were completely irrelevant.

- (c) Referring back to the earlier comment, the response to this question was generally weak. Few candidates examined the role of vegetation type, such as deciduous versus coniferous trees, shrubs versus grassland. Land use was usually restricted to urban land use with impermeable surfaces. However, most candidates realised that it was an assessment question and did provide a variety of other factors that could affect the likelihood of flooding.

## Atmosphere and weather

### Question 5

- (a) In part (i) most candidates were able to define sublimation. Definitions of latent heat transfer were more variable but there were a significant number of correct answers. Answers to part (ii) were generally accurate.
- (b) Responses varied considerably. There were many excellent responses but there was a significant minority of candidates that were confused about the difference between convection and frontal uplift.
- (c) There were some sophisticated answers, with accurate and relevant detail about the chosen urban area and the effect of the urban characteristics on its climate. Vancouver and London provided the detail for the best answers. However, for many candidates, responses were entirely generic and unrelated to any characteristics of the chosen urban area. Also, the question referred to climate and many simply explained the heat island effect with little analysis of other climatic characteristics. Too many discussed greenhouse gases and global warming, even bringing the hole in the ozone layer into the response. It is worth stressing that the syllabus requires the study of one urban area in detail.

## Rocks and weathering

### Question 6

- (a) Both parts were incompletely answered. In part (i) the role of water in flows was recognised but the nature of the movement and material were ignored. Falls were rarely related to the free movement form of a very steep slope or cliff. Answers to part (ii) ranged from excellent to weak. Many candidates answered with respect to the effect of water on materials, such as increasing weight, rather than on the physical impact of the rain.
- (b) Many answers attained a Level 2 mark, but there were very few that provided the detail and accuracy to raise the mark into Level 3. Many answers were unbalanced either with respect to the range of weathering processes or the detail provided on rock type and structure. This was not an assessment question and therefore a discussion of other factors, unrelated to weathering, was not needed.
- (c) There were mixed responses to this question. The quality of the responses depended on the chosen example and the detail provided. However, there were some excellent responses. The coast at Lyme Regis and Hong Kong were the best specific examples. It was important to set the general scene and therefore reasons for the problems of mass movement needed to be explained. In the case of Hong Kong it would be the steep slopes in weathered rock, high building density and rainfall amounts and intensity. For Lyme Regis it would be the nature of the rock, especially clay, and the action of the sea at the base of the cliffs. The variety of mass movements also needed describing for high marks. The quality was in the level of detail provided.

# GEOGRAPHY

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Paper 9696/13  
Core Physical Geography

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However, there are indications that insufficient emphasis is given to the chosen question in **Section B**. Both sections on the question paper command equal marks, but the need to answer three questions in **Section A** can lead candidates towards a distorted time allocation. Some candidates choose to answer the **Section B** question first, and of course, that is acceptable.

All questions in **Section B** proved accessible to candidates. In the past, Atmosphere and weather was unpopular as a topic, and this was reflected in the limited number of candidates who chose to answer the relevant question. However, it was good to note that there is now an increasing willingness to attempt this **Section B** question, and that reflects positively on the teaching of this topic.

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## **Comments on specific questions**

### **Section A**

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##### **Question 1**

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##### **Question 2**

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- (b) Most candidates did attempt to draw a realistic sketch, and not resort to a theoretical diagram. Nevertheless, the quality achieved was variable. The labelling did not always clearly refer to the mass movement, but the toe/deltaic lobe was one feature identified by many.
- (c) Responses were often convincing and of good quality. The significance of water, both in terms of fluidity and weight, was recognised by many, and effectively discussed in terms of shear stress and shear strength. Here again was an example of one theme (high rainfall), being developed to achieve two thirds of the marks available. Human impacts, involving deforestation and road construction, were also clearly identified.

### **Section B**

#### **Hydrology and fluvial geomorphology**

##### **Question 4**

- (a) In part (i) most candidates understood the shape of helicoidal flow, but did not relate it clearly enough to the width and depth of a river, and to the development of meanders.

In part (ii), there were many competent responses, and candidates generally scored well. However, simply naming a transport method is not in itself an explanation.

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#### Question 5

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- (b) Candidates struggled with this question. The intention was for a discussion of the specific heat capacities of land and water, and consequently atmospheric pressure, both discussed within a framework of seasonal variations. Many responses discussed wind systems, but there was little to gain from this.
- (c) There were some excellent responses to the 'causes' of the enhanced greenhouse effect, but without the examples and evaluation specified in the question. Some candidates drifted into discussions of the ozone layer and pollution.

The 'impacts' were discussed, but not always 'atmospheric' impacts. Polar bears, melting ice and rising sea levels were discussed with great detail, but with only a tenuous link to the 'atmosphere' specified. However, this is a topic that many candidates are comfortable with, and the high standard of many responses reflected this.

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- (b) Not all candidates understood that volcanic island arcs only occur where two ocean plates meet, but that ocean trenches might also occur where an ocean plate is subducted below a continental plate. Diagrams were often used to enhance the text, but their quality was variable in terms of both detail and accuracy. When integrated into the text, accurate diagrams were of considerable value in displaying understanding of this topic.
- (c) This was a difficult question for many, incorporating different rock types, the type and rate of weathering, and other factors such as climate. There were some good attempts to cope with these various elements. A number of responses provided an analysis of limestone and granite in different climatic environments, and this proved an effective approach. Many responses provided a reflection of the good progress that many candidates have made over the duration of their studies.

# GEOGRAPHY

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<p>Paper 9696/21 Core Human Geography</p>
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## Key messages

- 1 Candidates should appreciate that the marks indicate the number of points expected so candidates are unlikely to get say 5 marks when they give a single undeveloped statement. Likewise, a 3 mark question should get an answer that takes a little over half the lineage of a five mark question.
- 2 Some candidates struggled with **Section B** questions possibly due to a lack of time. Candidates need to appreciate that the last part of **Section B** answers are worth 25% of the total mark for the paper and is often the key discriminator, being an evaluation, so they should leave sufficient time to do themselves justice.
- 3 Candidates should appreciate that where a question asks for two aspects e.g. **1(c)** and **3(b)** and they give more than two the best two will be taken. It is not good practice to do more than the number asked for and should not be encouraged as it wastes time.
- 4 Good case study knowledge is vital, especially in **Section B**, but it must be appropriately applied to the question. Too many 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. The syllabus states that 'where possible, case studies should be dated no earlier than 1980. Case studies from within the lifetime of the student are likely to be the most relevant and engaging.' There were too many examples of inappropriate and out-of-date case studies such as the Irish potato famine in the ninth century and food shortages in the Second World War.

## Comments on specific questions

### **Section A**

#### **Population**

##### **Question 1**

- (a) Few candidates had any difficulty with this part.
- (b) The best responses described the differences between the two groups and used data to support their answers. Good responses also commented on the relationship between levels of development and actual and predicted TFR. However, few candidates were able to answer well enough to achieve full marks.
- (c) This question was answered well by most candidates. Nearly all candidates managed two correct answers, but some did not develop their answers to explain how they led to reduced fertility rate. For example, candidates identified increasing levels of female education and literacy, but did not go on to explain that this could lead to more women having careers and delaying having children which leads to reduced fertility rates.

#### **Migration**

##### **Question 2**

- (a) The majority of candidates incorrectly answered 'Albania', indicating that the term 'net migration' was misunderstood.

- (b) This question was not well answered by many candidates because they hadn't properly understood the term 'net change'. Very few candidates gained four marks and many resorted to listing numbers from the table unable to discern any pattern. The candidates who did understand 'net change' were, however, able to give good answers using data from the table.
- (c) Most candidates were able to give simple explanations, but lack of development and exemplification limited responses.

### Settlement dynamics

#### Question 3

- (a) Most candidates correctly answered this part, but considerable numbers did not use a compass point in their answer using directions such as 'left' or 'right', which is not geographically correct.
- (b) Most candidates easily achieved two marks with one answer but were not able to find a second difference that was not a mirror image of the first.
- (c) This question was not, in general, answered well. The best responses were able to use good examples to show why urban renewal occurs in HICs. However, many candidates were unable to support their explanations with relevant examples and produced vague and general responses. Others appeared to ignore the context of 'HICs' and instead gave descriptions of issues in cities in LICs.

### Section B

#### Population/Migration

#### Question 4

- (a) (i) Most candidates were able to answer this part, but many did not achieve full marks, the most common reason being that they did not refer to quality of life or standard of living.
  - (ii) This was generally answered well, with the best responses citing both changes on population and changes in availability of resources.
- (b) A good understanding of the causes of food shortages was shown in many responses, covering causes such as population increase, natural disasters, conflict, distribution problems, pests and crop diseases, but few answers were well exemplified. Weaker responses mentioned one or two causes and exemplification simply stated 'e.g. Africa' rather than described individual countries or regions.
- (c) Where candidates used examples and gave both negative and positive consequences, there were some good responses. Weaker responses focussed only on the negative aspects whereas the strongest responses described how adversity can lead to innovation in farming and improvements in distribution systems. Strong responses used good exemplification to support the response whereas weaker ones gave general descriptions of hunger in unnamed LICs.

#### Migration

#### Question 5

- (a) Where candidates had read the question carefully and had good case study knowledge there were good responses. The best responses were very specific naming places within the countries chosen for the example and quoting numbers of migrants and dates. However, too many achieved few or no marks because they simply gave reasons for migration rather than focusing upon the key words of scale and pattern with detail on numbers, timescales, and specific origins and destinations (rather than simply, for example, 'Mexico to the USA').
- (b) Generally, this was answered well. The key differentiator was whether candidates discussed the case study they had used in (a) generically or with good place detail.

- (c) Where candidates had understood the importance of writing about change and focussed appropriately upon the word 'increasing', they scored well and gave clearly exemplified answers about transport, technology, globalisation, etc. Weaker responses did not do this and simply described generic push and pull factors with little exemplification.

### Settlement dynamics

#### Question 6

- (a) Most candidates gave a few appropriate explanations, but they were often very generic and tended to be linked to urbanisation in LICs whereas examples from cities in HICs were equally appropriate. The syllabus refers to either power or transport, but examiners accepted responses that covered examples beyond these.
- (b) This was often not well answered due to the lack of an appropriate case study with responses limited to some simple descriptions of attempts at improvements, some of which were not to do with infrastructure (such as increasing taxes on fuel, or subsidising fares). The best responses described attempts to improve transport and where an appropriate case study was used, candidates did well, giving specifics about location, costs, timescales and other detail which strengthened the response.
- (c) Many answers were limited by a weak response to part (b), and few candidates directly addressed the 'caused as many problems as they solved' part. There were some good responses that considered the relative balance of problems caused and problems solved by the attempt(s) to provide infrastructure described in (b) in a clear and well-developed assessment. The best responses considered the outcomes in terms of specific success criteria, meeting aims, budget, timescale, unforeseen difficulties and disruption during construction, breakdowns, and also discussed the impact on different groups of people within the chosen city.

# GEOGRAPHY

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Paper 9696/22  
Core Human Geography

## Key messages

- 1 **Section A** answers tended to be stronger than **Section B** answers possibly due to timing issues. **Section A** and **Section B** carry equal marks so candidates should spend equal amounts of time on them.
- 2 Candidates should appreciate that the marks indicate the number of points expected so candidates are unlikely to get say 5 marks when they give a single undeveloped statement. Likewise, a 2 mark question needs two appropriate points rather than a long list.
- 3 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) in **Section B** is worth 25% of the total mark for the paper whereas the part (c) in **Section A** is usually worth 10%. The time spent on these two parts should reflect their share of the marks.
- 4 Candidates clearly knew some detailed geography as demonstrated by effective part (c) answers to **Section A** questions but often struggled in the more applied questions, typically part (b), in **Section A** questions.
- 5 Even where no specific reference is made to the use of examples they are often helpful in developing detail or clarifying a point.
- 6 Candidates should read the whole question before answering it as often they answered the next part of the question in a previous response e.g. many explained the challenges in **Question 6(a)** then repeated them in **Question 6(b)**.
- 7 Candidates should avoid introductions for the 3, 4, 5 and 6 mark questions. They are not needed and waste time.
- 8 Responses in **Section B** were generally sound unless the candidate had left insufficient time to give it their full attention. Often the balance in length of response was inappropriate especially in part (b) responses where candidates often gave brief responses yet there were 8 marks available.
- 9 The chief distinguishing factor for effective answers in **Section B** is the use of effective exemplification and thoughtful evaluation in part (c), especially when they are evident throughout the answer rather than left for a concluding paragraph. A detailed example is usually more effective than a large variety of examples of the 'e.g. Rio' type.

## Comments on specific questions

### **Section A**

#### **Population**

##### **Question 1**

- (a) Most candidates had no problems with this starter question.
- (b) Some candidates found this scatter graph confusing and gave descriptions that were not accurate or ignored the 'more' versus 'less developed' LICs. Actual TFRs were similar but the predicted was uniformly lower for the more developed LICs. Such questions do require use of data rather than vague descriptions e.g. 'more developed LICs range between 4 and 5 for predicted TRF whilst less developed range from 6 to 7.5' is more effective than a simple 'less developed LICs have higher predicted TFR'.
- (c) This was well answered by most candidates who either gave a lengthy list of factors influencing high fertility rates or gave fewer factors but with effective and detailed explanation or exemplification.

## Migration

### Question 2

- (a) Most candidates used the data effectively to show Montenegro gaining migrants and FYR Macedonia losing migrants. Some did not include any data despite the wording of the question.
- (b) Nearly all candidates offered 'illegal migration' as the reason for inaccurate data but then rarely went beyond this statement to explain why or how this made the migration data inaccurate.
- (c) This was clearly a well understood topic with most candidates referring to examples drawn from areas of political instability and conflict such as Syria or Myanmar. Ethnic cleansing was often covered as well as laws that discriminated against cultures or beliefs. Some candidates went onto economic or social factors rather than tie these into political factors. Government policy can cause unemployment, a common cause of emigration, but this needed explaining in a political context.

## Settlement dynamics

### Question 3

- (a) Most candidates correctly identified Lambeth but a significant number saw it as Haringey and most districts were quoted by candidates suggesting a lack of appreciation of the meaning of 'one third'.
- (b) Variation was usually seen as the range between the highest and lowest supported with the relevant data. The most effective answers went on to point out that Tower Hamlets was disproportionately high or that the bottom four or five were closer in proportion than the top four. There was no expectation to refer to the geographical pattern as no map was given so candidates could not know where these districts were. Those that chose this locational approach were often incorrect in their location of districts.
- (c) This proved a challenging question as few could go beyond the rather basic notion of the people with higher incomes buying larger houses either on the urban outskirts or in gentrified inner areas whilst the poor could only afford cheaper houses in less advantaged locations. Many saw low income earners being 'forced' to live in run down areas. Few really developed why segregation happened and persisted. A greater use of examples might have developed answers more effectively.

## Population/Migration

### Question 4

- (a) (i) This was well known although the actually age ranges quoted did vary. Candidates were allowed some degree of variation as retirement age changes. Most candidates offered an equation, with the young and old dependent groups divided by the working group, which was probably the most effective way of demonstrating how it could be calculated. It is usual for the equation to be multiplied by 100 which some candidates forgot.
- (ii) Simply answering that it is a population dominated by the young was a limited, but common, response. It is the relative number of young people compared to the other age groups in society – usually the working age group and the elderly. Some candidates offered illustrative examples such as The Gambia. Some candidates suggested this referred to the working age group, 15 to 65.
- (b) Most candidates gave an effective range of social, economic and demographic issues often with detailed exemplification including data. Weaker responses offered little in the way of exemplification apart from single terms such as 'e.g. Gambia'. Issues included social, economic, environmental and demographic.
- (c) This question allowed candidates to evaluate either by showing how age encouraged or discouraged migration or by considering the role of age compared with other factors that influenced migration rates such as gender, income, and employment opportunities. Some of the most effective answers considered a range of push and pull factors that influence migration, relating them to

different age groups or stages in the life cycle. Detailed exemplification was rare but was key to effective answers.

## Migration/Settlement dynamics

### Question 5

- (a) Most candidates clearly understood the basics of chain migration but few went beyond the simple description of a pioneer migrant attracting family or other contacts to a destination. More needed to be described on how they did this e.g. information flows. The chief weakness was the thinness of exemplification. Many candidates ignored this or offered simplistic examples such as 'Mexicans to the USA' without really linking it into the chain migration process as such. Many candidates still confuse chain and step migration.
- (b) This was clearly a well-known and understood topic with long lists, often a little superficial, of rural push and urban pull factors. Exemplification was not demanded but often it helped to provide detail and depth to answers.
- (c) Where questions ask for one or more examples often it is the answer that sticks to one detailed example that is more effective than the answer that offers a host of superficial examples such as 'e.g. Sao Paulo'. This topic is well understood with a range of environmental, social, economic and political impacts but weaker answers offered a limited range, typically over-focusing on sanitary issues or offered little evaluation. The most effective evaluation weighed up the positive versus negative impacts although some looked at how the impacts varied between groups or over time, or between areas within their chosen area such as the contrast in impacts between central wealthy areas and fringe shanty towns.

## Settlement dynamics

### Question 6

- (a) Some candidates seemed confused by the term 'management' and focused on planning issues or simply urban problems. Weaker responses tended to blur the three parts to the question or repeat much the same material in all three parts. The most effective answers considered issues of size, dynamism as well as environmental, social, economic and political aspects that make management on a holistic scale difficult.
- (b) This and the linked part (c) all related to the case study candidates were required to have studied. Weaker responses offered a limited range of challenges and/or little detail from their shanty town. Simply naming a shanty town and then offering a generic list of problems was unlikely to achieve at a high level and often duplicated much of the material offered in part (a). It was the depth and variety of detail from a real place that produced the most effective responses.
- (c) Some leeway was given to the exact coverage of all the challenges described in part (b). Some candidates ignored the linkage of parts (b) and (c) suggesting they did not fully read all parts of the question before answering it. Some candidates did go through all of the challenges mentioned in part (b) showing examples of responses to them, whilst other candidates focused on a number of schemes designed to overcome a number of related challenges such as Assisted Self Help schemes. Again evaluation of their relative success was the key to the higher levels. Sometimes candidates were over optimistic or simply incorrect in their assessment. The more effective answers showed some appreciation of their partial success either in terms of groups helped, areas helped or over time.

# GEOGRAPHY

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Paper 9696/23  
Core Human Geography

## Key messages

- 1 Candidates should appreciate that the marks indicate the number of points expected so candidates are unlikely to get say 5 marks when they give a single undeveloped statement. Likewise, a 3 mark question should get an answer that takes a little over half the lineage of a five mark question.
- 2 Some candidates struggled with **Section B** questions possibly due to a lack of time. Candidates need to appreciate that the last part of **Section B** answers are worth 25% of the total mark for the paper and is often the key discriminator, being an evaluation, so they should leave sufficient time to do themselves justice.
- 3 Candidates should appreciate that where a question asks for two aspects e.g. **1(c)** and **3(b)** and they give more than two the best two will be taken. It is not good practice to do more than the number asked for and should not be encouraged as it wastes time.
- 4 Good case study knowledge is vital, especially in **Section B**, but it must be appropriately applied to the question. Too many 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. The syllabus states that 'where possible, case studies should be dated no earlier than 1980. Case studies from within the lifetime of the student are likely to be the most relevant and engaging.' There were too many examples of inappropriate and out-of-date case studies such as the Irish potato famine in the ninth century and food shortages in the Second World War.

## Comments on specific questions

### **Section A**

#### **Population**

##### **Question 1**

- (a) Few candidates had any difficulty with this part.
- (b) The best responses described the differences between the two groups and used data to support their answers. Good responses also commented on the relationship between levels of development and actual and predicted TFR. However, few candidates were able to answer well enough to achieve full marks.
- (c) This question was answered well by most candidates. Nearly all candidates managed two correct answers, but some did not develop their answers to explain how they led to reduced fertility rate. For example, candidates identified increasing levels of female education and literacy, but did not go on to explain that this could lead to more women having careers and delaying having children which leads to reduced fertility rates.

#### **Migration**

##### **Question 2**

- (a) The majority of candidates incorrectly answered 'Albania', indicating that the term 'net migration' was misunderstood.

- (b) This question was not well answered by many candidates because they hadn't properly understood the term 'net change'. Very few candidates gained four marks and many resorted to listing numbers from the table unable to discern any pattern. The candidates who did understand 'net change' were, however, able to give good answers using data from the table.
- (c) Most candidates were able to give simple explanations, but lack of development and exemplification limited responses.

### Settlement dynamics

#### Question 3

- (a) Most candidates correctly answered this part, but considerable numbers did not use a compass point in their answer using directions such as 'left' or 'right', which is not geographically correct.
- (b) Most candidates easily achieved two marks with one answer but were not able to find a second difference that was not a mirror image of the first.
- (c) This question was not, in general, answered well. The best responses were able to use good examples to show why urban renewal occurs in HICs. However, many candidates were unable to support their explanations with relevant examples and produced vague and general responses. Others appeared to ignore the context of 'HICs' and instead gave descriptions of issues in cities in LICs.

### Section B

#### Population/Migration

#### Question 4

- (a) (i) Most candidates were able to answer this part, but many did not achieve full marks, the most common reason being that they did not refer to quality of life or standard of living.
  - (ii) This was generally answered well, with the best responses citing both changes on population and changes in availability of resources.
- (b) A good understanding of the causes of food shortages was shown in many responses, covering causes such as population increase, natural disasters, conflict, distribution problems, pests and crop diseases, but few answers were well exemplified. Weaker responses mentioned one or two causes and exemplification simply stated 'e.g. Africa' rather than described individual countries or regions.
- (c) Where candidates used examples and gave both negative and positive consequences, there were some good responses. Weaker responses focussed only on the negative aspects whereas the strongest responses described how adversity can lead to innovation in farming and improvements in distribution systems. Strong responses used good exemplification to support the response whereas weaker ones gave general descriptions of hunger in unnamed LICs.

#### Migration

#### Question 5

- (a) Where candidates had read the question carefully and had good case study knowledge there were good responses. The best responses were very specific naming places within the countries chosen for the example and quoting numbers of migrants and dates. However, too many achieved few or no marks because they simply gave reasons for migration rather than focusing upon the key words of scale and pattern with detail on numbers, timescales, and specific origins and destinations (rather than simply, for example, 'Mexico to the USA').
- (b) Generally, this was answered well. The key differentiator was whether candidates discussed the case study they had used in (a) generically or with good place detail.

- (c) Where candidates had understood the importance of writing about change and focussed appropriately upon the word 'increasing', they scored well and gave clearly exemplified answers about transport, technology, globalisation, etc. Weaker responses did not do this and simply described generic push and pull factors with little exemplification.

### Settlement dynamics

#### Question 6

- (a) Most candidates gave a few appropriate explanations, but they were often very generic and tended to be linked to urbanisation in LICs whereas examples from cities in HICs were equally appropriate. The syllabus refers to either power or transport, but examiners accepted responses that covered examples beyond these.
- (b) This was often not well answered due to the lack of an appropriate case study with responses limited to some simple descriptions of attempts at improvements, some of which were not to do with infrastructure (such as increasing taxes on fuel, or subsidising fares). The best responses described attempts to improve transport and where an appropriate case study was used, candidates did well, giving specifics about location, costs, timescales and other detail which strengthened the response.
- (c) Many answers were limited by a weak response to part (b), and few candidates directly addressed the 'caused as many problems as they solved' part. There were some good responses that considered the relative balance of problems caused and problems solved by the attempt(s) to provide infrastructure described in (b) in a clear and well-developed assessment. The best responses considered the outcomes in terms of specific success criteria, meeting aims, budget, timescale, unforeseen difficulties and disruption during construction, breakdowns, and also discussed the impact on different groups of people within the chosen city.

# GEOGRAPHY

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Paper 9696/31  
Advanced Physical Geography Options

## General comments

This was the first examination for this cohort of the revised structure to the paper. The response of candidates was generally encouraging with some good responses to most questions. All candidates now need to do a resource-based question followed by the option of two essay type questions. The resource-based questions should have caused few problems. However, many candidates did not use enough precision when interpreting the resources. This was especially true of **Question 1(a)**. All resource-based questions ask for a description or identification based on the detail in the resource. No explanation is required. That is the demand usually in parts **(b)** of the resource-based question. However, many candidates provided an explanation when none was required. The essay type questions all demanded an evaluation or a reasoned argument based on an assessment. Many of the responses would have benefited from a short introduction outlining the issues that were to be discussed. Conclusions often brought the arguments and discussion to a satisfactory end, although some responses simply agreed with the wording of the question.

Coastal environments and Hazardous environments were, as usual, the most popular options. Tropical environments questions were the least popular but there was an increase in candidates choosing the Hot arid and semi-arid environments option.

The concept of sustainability is covered in many of the questions and most candidates are aware that it includes environmental, economic and social strands. However, environmental sustainability is often downplayed and it needs to be remembered that environmental issues cannot be addressed fully if the physical geography involved is not completely understood.

## Comments on specific questions

### *Tropical environments*

#### **Question 1**

- (a) Most candidates interpreted Fig. 1.1 reasonably well and there was plenty of scope to comment on the surface, jointing, corestones and the weathered rock. The focus of the question was a description of the granite landforms, however some candidates instead explained how the various characteristics had evolved but this was the focus for part **(b)**.
- (b) This question focused particularly on the nature of granite and the operation of weathering processes in tropical environments. Candidates were able to offer some relevant characteristics and processes but few managed a detailed explanation of deep chemical weathering (mostly hydrolysis of the feldspar minerals) influenced by the joint spacing. Too many responses overstated the significance of freeze-thaw action in these environments.

#### **Question 2**

This was the least popular question in this option. Although there were a few good responses, many showed only a superficial understanding of the relative importance of soils, geology, climate and relief in the development of climax vegetation. The better responses evaluated and assessed many major influences upon climax vegetation in a tropical ecosystem including human activity and fire.

### Question 3

This was the best answered question in this option. Many candidates had a clear understanding of several sustainability problems which relate to the nature of the climate, vegetation and soils in tropical environments. The better responses used detailed knowledge of case studies to illustrate their ideas including an evaluation of the significance of human activity.

#### *Coastal environments*

### Question 4

- (a) Most candidates were able to identify some of the patterns and trends shown in Fig. 4.1. It was the detail and range that accounted for different marks. There was some difficulty in communicating the location of the various areas of erosion and deposition.
- (b) Many candidates were able to identify two factors which could account for the rates of coastline change. However, there was a range of detailed understanding. Any two factors could be chosen and many considered possible wave type and coastal management. Some of the better responses explained the significance of sediment supply, refraction or offshore gradient.

### Question 5

Responses to this question were generally weak. Most candidates simply agreed that the formation of cliffs were the result of the various processes of marine erosion. The focus of the question was cliff profiles and other relevant factors in their formation include geology, weathering, mass movement, changes in sea level and coastal management. A considerable amount of time and effort was wasted in the detailed description of headland evolution and the formation of caves, natural arches, stacks and stumps.

### Question 6

This was the most popular question in this section. There were some excellent responses which used well-chosen examples to illustrate a range of ideas. Both physical and human management problems were identified and described which allowed a sustained evaluation throughout the answer. The very best responses assessed the various strands of sustainability in the context of specific geographical locations.

#### *Hazardous environments*

### Question 7

- (a) This part was reasonably well done by most candidates. Many commented on the generally curved tracks and used an exemplar to illustrate their observation. Also, a fair proportion identified Hurricane Dolly and Hurricane Hanna as anomalies. However, there were difficulties expressing clearly enough how they did not match the general pattern.
- (b) This part was answered effectively with many candidates accessing at least Level 2. Most responses showed a clear understanding of how and where tropical storms developed and the best answers used a detailed knowledge and appropriate examples integrated effectively into their response.

### Question 8

This was the most popular question in this option and received a good response from most candidates. The detail in many answers was impressive with accurate reference to specific volcanic eruptions. Some candidates were aware that a range of measures can reduce the impact of eruptions, although volcanic prediction techniques were not always fully understood.

### Question 9

This question allowed the candidate to develop their own approach and responses varied widely depending on the hazardous environment chosen and the full understanding of sustainability. A successful approach was one which showed a detailed knowledge of a case study alongside a secure understanding of specific management strategies that had been used in a specific geographical location. The weaker responses consisted of very generalised and vague observations regarding a hazardous environment and sustainability.

***Hot arid and semi-arid environments***

**Question 10**

- (a) Most candidates were able to identify at least one type of sand dune shown in the photograph; however some failed to include a labelled diagram. Some of the best responses included a detailed annotation to the diagram, which was then elaborated on in the text.
- (b) Most candidates had a general understanding of the development of the crescentic dunes, although there was a wide range of detail included. The better responses focused on the role of aeolian transport and deposition whilst suggesting that sand availability, wind consistency and initial obstructions could also have significance.

**Question 11**

This was not a popular question and candidates may have not appreciated that there was an opportunity to discuss all the main causes of aridity and need not have over-concentrated on ocean currents. The best responses used examples such as the Atacama in order to illustrate and elaborate on the relative importance of factors governing aridity.

**Question 12**

A precise definition of desertification was a good starting point for many responses. The best responses contained a balanced account which considered natural processes and human activity. Once again the consideration of a specific area, such as the Sahel, added quality to the response.

# GEOGRAPHY

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

This was the first examination for this cohort of the revised structure to the paper. The response of candidates was mixed. There were some very good responses to some questions but there were some very weak responses as well. All candidates now need to do a resource-based question followed by the option of two essay type questions. The resource-based questions should have caused few problems. However, many candidates did not use enough precision when interpreting the resources. This was especially true of **Questions 1(a)** and **7(a)**. All resource-based questions ask for a description or identification based on the detail in the resource. No explanation is required. That is the demand usually in parts **(b)** of the resource-based question. However, many candidates provided an explanation when none was required. This was especially true of **Question 7(a)**. The essay type questions all demanded an evaluation or a reasoned argument based on an assessment. Most of these answers would have benefited from a few brief sentences outlining the issues that were being discussed. This was especially true of **Question 6** where a few words would have been useful outlining how pollution was to be interpreted.

Hazardous environments questions were, as usual, the most popular option but there were a considerable number of answers to the Hot arid and semi-arid environments option. Tropical environments questions were the least popular and caused some problems for those candidates. The responses to these questions are examined in greater detail later. There were few rubric infringements and only an occasional candidate answered from more than two options.

The concept of sustainability is still not fully understood but there were encouraging signs in **Question 12** that it is receiving more attention. Most candidates are aware that sustainability has environmental, economic and social strands. However, environmental sustainability is often downplayed. It needs to be remembered that environmental issues cannot be addressed satisfactorily if the physical geography involved is not completely understood.

## Comments on specific questions

### *Tropical environments*

#### **Question 1**

- (a) There were a few excellent responses which covered the majority of the points noted in the mark scheme. However, many responses were vague and provided little locational detail. Precision was lacking, such as above and below the equator as a description instead of north and south.
- (b) The emphasis was on an explanation of the changes to the nutrient cycle. This was where responses were more descriptive than explanatory. Many simply described the changes without an explanation. It was clear that few candidates understood the cycle in any detail, especially leaching.

#### **Question 2**

This was the most popular question in this section and tended to be the best answered question in this section. Some candidates were aware of the importance of the ITCZ and were able to argue convincingly for its influence on the climate of seasonally humid tropical environments. However, many responses were too vague and the variability of climate within the seasonally humid tropics was ignored. The question asked for an assessment and therefore discussion of factors other than the ITCZ was required. Ocean currents, latitude and altitude were the most frequent 'other' factors that were discussed.

### Question 3

This was the least popular question in the option. It was clear that many candidates would have preferred to answer a question on granite landforms but the emphasis was clearly on the deep weathering profiles in granite. Many candidates wrote about physical weathering such as insolation weathering that could only occur at the surface. Also, there were accounts of freeze-thaw weathering which were inappropriate. Some candidates argued convincingly that factors such as climate (temperature and precipitation) were important, as well as vegetation and a stable land surface. Characteristics of granite, such as mineralogy and especially jointing were often ignored. The general response to this question was weak.

### *Coastal environments*

#### Question 4

- (a) Most candidates were able to identify several physical features in Fig. 4.1. However, the features needed describing and not merely identified. Also, time was wasted in explanation, only to be repeated in part (b).
- (b) Explanation varied depending on the features identified in part (a) but usually required a discussion of a combination of marine and sub-aerial processes. Headlands and bays were frequently explained as well as rock falls and the formation of the wave cut platform. The detail in the description of marine processes was often very basic, such as referring to hydraulic action without specifying how it operates. Some candidates explained features that were not present in Fig. 4.1 or had not been described in part (a).

#### Question 5

There were too few answers to make comment appropriate.

#### Question 6

Candidates had to decide how to interpret pollution. There were two acceptable ways of answering this question depending on whether greenhouse gases were considered as pollution. The detail in many responses was impressive and many excellent marks were attained. However, a few introductory statements outlining the interpretation of pollution were often missing. Although many still think that sea level rise is a major threat it was good to see that many candidates were questioning the influence of sea level rise on corals. It is generally agreed that the current rate of sea level rise is probably insufficient to affect coral growth. The effect of sea water temperature rise was considered by most although some completely ignored global warming. The increase in acidity of the sea water was considered by some as well as the potential increase in storm activity. Factors other than pollution, such as tourism (although this often had a pollution connection), overfishing and increased storm activity, needed examining. However, storm activity was often related to global warming and thus pollution. It is apparent that the increase in Crown of Thorns Starfish had captured the attention of many candidates. But even the spread of the Crown of Thorns Starfish can be related to fertiliser input into coastal waters and thus pollution. These complex interrelationships meant that the assessment had to be skilfully examined. A minority of candidates only examined pollution and did not assess other factors.

### *Hazardous environments*

#### Question 7

- (a) Diagrams, as noted in previous reports, were generally poor quality. Many candidates still produce theoretical diagrams rather than try to represent what is shown in the photograph. To emphasise the point mentioned earlier in the general comments, description was required and not explanation.
- (b) The question clearly stated that impacts on lives and property of the mass movement shown in Fig. 7.1 were to be examined. Too many candidates wrote about examples of mass movements all over the world. Many of the mass movements described were inappropriate such as the lahar at Nevado del Ruiz and the mudflow at Aberfan. If this approach was taken, some generic marks were available, depending on the appropriateness of the mass movements used as examples, but not the full range of marks.

### Question 8

This was the least popular question in this option but generally received a good response from candidates. The detail in many answers was impressive with accurate reference to specific large scale tropical disturbances, dates and number of casualties. Most candidates were aware of some of the factors that needed discussion but prediction and monitoring were often ignored. The evaluation of the effectiveness of the procedures was the main discriminator.

### Question 9

This was the most popular question in this option and there were some very good responses with detailed specific examples. Comparison of earthquakes in countries at different levels of economic development featured strongly. Many candidates took the difficulty of predicting earthquakes at face value and did not try to assess whether this was so. Such answers were unbalanced and did not provide a convincing assessment of the question.

### *Hot arid and semi-arid environments*

### Question 10

- (a) Most candidates were able to obtain good marks covering the distribution of hot arid areas.
- (b) Answers were split between those candidates that understood well the causes of aridity at the two locations. These candidates scored highly. There were candidates that had a generic understanding of the causes of aridity but were uncertain which cause related to which location. Also, there was a minority of candidates who did not separate discussion into the separate locations and hoped that some correct explanation filtered down to the specific location.

### Question 11

This was the least popular question in this option. The quality of the responses was very variable. The better responses described and explained a wide range of landforms that might be related to past climates and contrasted these with landforms currently forming. However, many responses were unbalanced in the range of landforms examined and some candidates clearly possessed little understanding of the relationships between processes and landforms. Inselbergs, mesas and buttes were sometime explained by wind action and zeugens to water action. Some candidates digressed into features other than landforms such as cave paintings or fossils of humid climate animals.

### Question 12

In many cases, it was unclear whether a hot arid or a semi-arid environment was being assessed. This significantly weakened some of the responses. There was also some confusion as to which areas were hot arid or semi-arid. Although many commenced with a brief discussion of the problems faced by management, many responses discussed solutions without identifying the problems. Many responses were purely generic and unrelated to a specific environment or location. However, there were some excellent responses with detailed accounts of a variety of issues and solutions. It was good to note that in the discussion of the Great Green Wall in Africa there was some argument as to whether it is sustainable. However, discussion of sustainability was usually limited especially with respect to the issues raised in a discussion of Dubai. This emphasises the comment made earlier about varying types of sustainability, Dubai may be sustainable in economic terms as long as oil is available but the issue of environmental sustainability is rarely tackled.

# GEOGRAPHY

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<p><b>Paper 9696/33</b> <b>Advanced Physical Geography Options</b></p>
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## General comments

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The concept of sustainability is covered in many of the questions and most candidates are aware that it includes environmental, economic and social strands. However, environmental sustainability is often downplayed and it needs to be remembered that environmental issues cannot be addressed fully if the physical geography involved is not completely understood.

## Comments on specific questions

### *Tropical environments*

#### **Question 1**

- (a) Most candidates interpreted Fig. 1.1 reasonably well and there was plenty of scope to comment on the surface, jointing, corestones and the weathered rock. The focus of the question was a description of the granite landforms, however some candidates instead explained how the various characteristics had evolved but this was the focus for part **(b)**.
- (b) This question focused particularly on the nature of granite and the operation of weathering processes in tropical environments. Candidates were able to offer some relevant characteristics and processes but few managed a detailed explanation of deep chemical weathering (mostly hydrolysis of the feldspar minerals) influenced by the joint spacing. Too many responses overstated the significance of freeze-thaw action in these environments.

#### **Question 2**

This was the least popular question in this option. Although there were a few good responses, many showed only a superficial understanding of the relative importance of soils, geology, climate and relief in the development of climax vegetation. The better responses evaluated and assessed many major influences upon climax vegetation in a tropical ecosystem including human activity and fire.

### Question 3

This was the best answered question in this option. Many candidates had a clear understanding of several sustainability problems which relate to the nature of the climate, vegetation and soils in tropical environments. The better responses used detailed knowledge of case studies to illustrate their ideas including an evaluation of the significance of human activity.

#### *Coastal environments*

### Question 4

- (a) Most candidates were able to identify some of the patterns and trends shown in Fig. 4.1. It was the detail and range that accounted for different marks. There was some difficulty in communicating the location of the various areas of erosion and deposition.
- (b) Many candidates were able to identify two factors which could account for the rates of coastline change. However, there was a range of detailed understanding. Any two factors could be chosen and many considered possible wave type and coastal management. Some of the better responses explained the significance of sediment supply, refraction or offshore gradient.

### Question 5

Responses to this question were generally weak. Most candidates simply agreed that the formation of cliffs were the result of the various processes of marine erosion. The focus of the question was cliff profiles and other relevant factors in their formation include geology, weathering, mass movement, changes in sea level and coastal management. A considerable amount of time and effort was wasted in the detailed description of headland evolution and the formation of caves, natural arches, stacks and stumps.

### Question 6

This was the most popular question in this section. There were some excellent responses which used well-chosen examples to illustrate a range of ideas. Both physical and human management problems were identified and described which allowed a sustained evaluation throughout the answer. The very best responses assessed the various strands of sustainability in the context of specific geographical locations.

#### *Hazardous environments*

### Question 7

- (a) This part was reasonably well done by most candidates. Many commented on the generally curved tracks and used an exemplar to illustrate their observation. Also, a fair proportion identified Hurricane Dolly and Hurricane Hanna as anomalies. However, there were difficulties expressing clearly enough how they did not match the general pattern.
- (b) This part was answered effectively with many candidates accessing at least Level 2. Most responses showed a clear understanding of how and where tropical storms developed and the best answers used a detailed knowledge and appropriate examples integrated effectively into their response.

### Question 8

This was the most popular question in this option and received a good response from most candidates. The detail in many answers was impressive with accurate reference to specific volcanic eruptions. Some candidates were aware that a range of measures can reduce the impact of eruptions, although volcanic prediction techniques were not always fully understood.

### Question 9

This question allowed the candidate to develop their own approach and responses varied widely depending on the hazardous environment chosen and the full understanding of sustainability. A successful approach was one which showed a detailed knowledge of a case study alongside a secure understanding of specific management strategies that had been used in a specific geographical location. The weaker responses consisted of very generalised and vague observations regarding a hazardous environment and sustainability.

***Hot arid and semi-arid environments***

**Question 10**

- (a) Most candidates were able to identify at least one type of sand dune shown in the photograph; however some failed to include a labelled diagram. Some of the best responses included a detailed annotation to the diagram, which was then elaborated on in the text.
- (b) Most candidates had a general understanding of the development of the crescentic dunes, although there was a wide range of detail included. The better responses focused on the role of aeolian transport and deposition whilst suggesting that sand availability, wind consistency and initial obstructions could also have significance.

**Question 11**

This was not a popular question and candidates may have not appreciated that there was an opportunity to discuss all the main causes of aridity and need not have over-concentrated on ocean currents. The best responses used examples such as the Atacama in order to illustrate and elaborate on the relative importance of factors governing aridity.

**Question 12**

A precise definition of desertification was a good starting point for many responses. The best responses contained a balanced account which considered natural processes and human activity. Once again the consideration of a specific area, such as the Sahel, added quality to the response.

# GEOGRAPHY

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**Paper 9696/41**  
**Advanced Human Geography Options**

## General comments

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Comment about the overall pattern/trend/impression is useful, with data (or location in the case of a photo) to back this up, and anomalies, if present. Where data is presented in a graph, a month by month description can gain maximum 1 mark (e.g. **Question 7**).

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## Comments on specific questions

### *Production, location and change*

#### **Question 1**

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## Question 3

There were too few answers to make comment appropriate.

## *Environmental Management*

### Question 4

- (a) This part was well answered. Many candidates identified one or two indications of pollution and there was a good understanding of eutrophication. As there were 3 marks available for this question, it would be advisable for candidates to look for at least 3 pieces of evidence or develop 2 pieces fully. Some candidates made guesses that there was an industry, farm or house nearby, which is conjecture not evidence from the photograph. Some described plastic waste or oil spills, which is also not clear in the photograph, therefore candidates are reminded to only use the evidence provided. Comment on the extent of the algal bloom, its structure floating on the water, that there was more along the banks and less in the centre, shows that the candidate is identifying patterns, therefore using the resource and not just stating facts. No credit was given for stating that the water was 'not clear' as this could have been caused by disturbed sedimentation or other reasons, and therefore, the description needed to suggest pollution.
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### Question 5

This was a popular question with many responses reaching Level 2. The majority of candidates knew the positives of using renewables and gave balance by showing the negatives of a range of examples. However, for some this approach ended there and proved too simplistic for the demand of the question. Candidates struggled to relate renewable energy use to meeting energy demand and tended towards description of the renewable resources and their limitations. Answers lacked the balance needed that the question required if not linked to energy demand.

Many candidates used the Three Gorges Dam as an example of HEP with limitations, which was a good example to choose. There were a range of questionable statistics about its success, so centres should take advice to make sure their candidates know the difference between projected and actual output from the dam (which is far less than hoped/planned for). Also, candidates who only developed their response on the basis of this one scheme limited themselves as the question required much broader knowledge of a range of renewable resources. A full assessment of the statement requires more than one example of renewable energy.

A good answer might have considered the imperative in many LICs to use cheap fossil fuels to enable development while HICs are now in the position to reduce dependency. This would then allow a consideration of how lifestyles could be adapted to reduce energy demand and encourage the use of renewable resources. Others included the idea of resource endowment playing a major role in whether the use of renewables was indeed viable for a country. Candidates who displayed an understanding of trends in HIC, MIC and LIC contexts and international political pressure to use renewables showed a conceptual understanding that enhanced their answers. Those candidates who made a clear assessment of the amount of energy produced by renewables, its reliability to meet demand, compared to non-renewable were able to reach Level 4.

### Question 6

This was another popular question but did prove difficult for some candidates who misunderstood the meaning of constraints.

Some candidates described a case study or two of causes of environmental degradation without full consideration of why many, for example, LICs find it difficult to establish good environmental standards. These candidates would then go on to describe how the environmental degradation was being managed, and assess the extent of success, but the focus was not on the extent that constraints had been overcome. However, in an assessment of success of strategies, often the constraints are implicit and some examiners were able to award credit if the assessment considered this. However, it is worth centres noting that the syllabus states 'Constraints on improving the quality of degraded environments' therefore candidates should be familiar with constraints in the context of different places, giving them the option of choosing an LIC, MIC or HIC, or urban or rural environment.

Most candidates had some very good knowledge on environmental degradation and showed a real concern for the issue but did not make the most of their knowledge by simple adaptations to the demands of the question. Good planning of both elements of this question could have avoided this for many. An approach might have been to consider degradation in terms of the level of development and show how increasing wealth leads to more public concern about the state of the environment. This would then allow for a consideration of how HICs have tackled the problems apparent in countries such as China and India that featured often in answers.

### *Global interdependence*

#### Question 7

- (a) This question was a classic example of where many candidates took the simple approach of describing month by month what happened to the trend. Centres should note that this is a far too simplistic description. The expectation is that candidates will pick out differences in the trend, the highest month(s), when the opposite is true, any changes in rate of increase or decrease and any anomalies. The mark scheme is clear that a month by month description will only gain 1 mark.
- (b) Many candidates remained in Level 1 because they did not fully read all that the question was asking of them and made no reference to months of low demand. There were descriptions of a range of ways that destinations can increase tourist arrivals, but these could have been applied all year round. However, there were some candidates who did answer this question very well, using named examples or destinations that are known to suffer from months of low demand, and developed descriptions of the strategies the destinations or countries have used to increase tourist numbers, even in these low months. To get into Level 3, there needed to be a range of attempts, therefore when a candidate gave more than two attempts which all related to one overall concept (often price) the answer could not get into Level 3.

#### Question 8

This was not a very popular question within the option. However, those candidates who did answer tended to do well showing good knowledge of trade and the full range of factors. Some answers did not relate other factors such as trade blocks back to resource endowment to allow for an assessment of the importance overall. A good approach to this question would have been to establish the role of resource endowment in world trade with examples such as the Gulf States and oil, Australia and minerals, to show that resource endowment is crucial and still relevant today for many countries. Then a good approach might have been to

take an historic route to show how trade has developed to focus less and less on obtaining raw materials and food to manufactured goods and invisible trade. A good case could have been made for the global tourism industry being a new interpretation of resource endowment as natural features such as climate and beaches are part of a new type of world trade flows.

### Question 9

This was by far the most popular question on the paper and answered with wide degrees of success. There was usually quite good understanding of the question but often the focus of the response was on how successful ecotourism was in this or that destination. Some compared mass tourism with ecotourism to allow for a contrast. Some adopted a Butler Model approach that often led candidates in the wrong direction.

Responses sometimes lacked a focus on environmental sustainability, and instead took a broader view, focussing on social and economic sustainability. This was valid as a contrasting type of sustainable tourism, only if there was sufficient development of environmental sustainability as the focus of the response. There was some very good knowledge apparent in answers and many were able to structure their answers carefully. However, if only one destination was chosen, it was difficult for candidates to fully assess the view. It could be possible that one destination has achieved a degree of environmental sustainability, but a full assessment requires balance.

A good approach to this question might have been to consider various examples of ecotourism or tourism in general and show how close they get to the principles of sustainability. There is also scope for considerations of global impact – air travel usually means using a lot of fossil fuels. Candidates who were critical of ‘greenwashing’ by tour operators tended to score well, as this approach showed a conceptual understanding of current HIC consumer demands, and how business adapts.

### *Economic Transition*

#### Question 10

- (a) There was the expectation that candidates picked out patterns: highest, lowest, least, most, anomalies etc. not just repetition of Fig. 10.1.
- (b) Candidates could make reference back to Fig. 10.1 to show how China and Mexico have different economies dependent on what measurement is being used. Those candidates who answered this question did well when they used examples to make the point they wanted to.

#### Question 11

This question was answered by very few candidates. Of those who did, the majority did very well, including a range of influences and factors that have contributed to the location of economic activity around the world. Examples of TNCs as case studies were helpful, as also is contextual understanding of society, economy and political influences in a variety of locations.

#### Question 12

There were too few answers to make comment appropriate.

# GEOGRAPHY

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**Paper 9696/42**  
**Advanced Human Geography Options**

## General comments

Centres and candidates should be aware that the economic classification of countries now used for the syllabus has changed to: LICs = low income countries; MICS = middle income countries and HICs = high income countries. There is a note to this effect on the cover of the question paper. Candidates may still use classifications such as MEDC/LEDC but need to be sure that MEDC does not equate to MIC.

Some of the questions request candidates to use to one or more examples (**Question 2** and **Question 6**). Candidates should be aware that they can use one only, which might involve the use of ideas from a case study. Where multiple examples are offered, the candidates should ensure that each one is adding something to the assessment aspect of the question. This could be to illustrate a similarity or to emphasise something different.

Examples and case studies should be selected, initially by the teacher, bearing in mind whether the source used offers full coverage of the syllabus. This is particularly seen to be a problem where the source may describe attempts to solve problems in a location but there is a lack of evidence about whether the solution has worked or not. Frequently this applies to attempts which are very recent.

A common characteristic of the entry for this session of the paper in essay questions is to lead with knowledge about the topic and to spend less attention to the assessment element. Frequently essays do not have any conclusion and are based upon an opening viewpoint only. In these essays the majority of the marks are awarded for the evaluation assessment objective. Having a conclusion represents one way to draw a response together with respect to the terms of the question.

## Comments on specific questions

### *Production, location and change*

#### **Question 1**

- (a) Most candidates understood the command word 'compare' and recognised that they were to compare only the 'warm' areas. Some, however, made statements about other categories from the map such as 'wet and warm', which were not creditable. Most candidates made creditable points related to the number of areas in each hemisphere – though very few noted that one area crossed the equator – with other comparative points such as the larger extent in the northern hemisphere or that all areas in both hemispheres are coastal in location.
- (b) Candidates were asked to explain the consequences of warmer drier climates for agricultural production in LICs/MICs. Some used locations from the map to support the response which was creditable. LICs/MICs was taken by some candidates as one grouping of countries, whilst others used it as the basis for a comparison of the consequences for agricultural production between LICs and MICs. Some candidates confused LICs/MICs with the classification used up to 2018 of LEDCS/MEDCs, so comment on MEDCs was not creditworthy. Most noted that the consequence of warmer drier climates would lead to a decrease in productivity through lower yields and/or crop failure which was in some cases developed towards other consequences such as hunger from a food shortage. Another popular choice for a consequence was the need for irrigation to overcome the increased loss of moisture and this was sometimes developed towards increased cost and issues such as affordability and/ or those from excess irrigation. The perceptive also saw that there was a relationship between the climate and soil health, loss of fertility and propensity towards soil erosion. There were other quite commonly seen consequences such as change to drought

resistant crop types, extensification of production and moves from crop farming to livestock. The better responses were supported with examples and, commendably, at times quite detailed based on places or events familiar to them.

## Question 2

This question was generally quite well done and very popular. The best responses had detail about specific attempts to introduce agricultural change in specific locations. Success or not was assessed with reference to specific criteria such as agricultural productivity or output, in relation to meeting aims, responding to challenges facing agriculture, delivering change on time and within budget, helping farmers, feeding the nation, producing export crops or responding to changes in markets, diversification etc. These better responses were also characterised by considering success at different scales such as the individual producer or farm compared to regions or at the national scale and by considering aspects where there was less success, the difficulties encountered, other problems created by the attempt, perhaps unforeseen and the challenges which remain. Weaker responses were characterised by one or more of the following: lack of specific place detail (often the Green Revolution with only a named country), use of more than one country (Jamaica and Zimbabwe or India commonly seen) but without adding anything extra to the quality of the assessment, over-emphasis upon a narrative of the problems facing agriculture (particularly seen with case studies on Jamaican agriculture and rural issues). Selectivity of relevant content from one or more examples/case studies of agricultural change was often a discriminatory factor between the better and weaker responses. Dated content from before 1980 was sometimes seen in the responses. Centres are advised to use examples from 1980 onwards due to their relevance and likely influence upon the engagement of the candidate which leads to details which support a response. Some sound responses were seen with examples of a very localised scale such as farms within regions, where candidates live and have experience of the success or not of specific attempts.

## Question 3

Responses to this question were quite mixed. Better responses were balanced in coverage between government policy and other factors. They had a clear locational element (especially for the government aspect), used examples of specific manufacturing industry in real locations and assessed the extent to which government policy influences the location of manufacturing industry. Content expected on government policy included the role in planning, investment in certain locations, financial incentives, industrial estates and EPZs, or through associated factors such as transport infrastructure or education. Weaker responses lacked detailed knowledge about government policy with reference to the location of manufacturing industry and/or were too imbalanced towards other factors. Too many responses lacked examples.

## *Environmental management*

### Question 4

- (a) Candidates were able to gain the skills marks by giving clear evidence from the photograph and developed this evidence as sources of pollution.
- (b) Most candidates used stimulus information from the photograph such as the activity (washing pots), the stagnant nature of the water or the economic status of the location as an MIC to initiate one or more aspects of their response. Problems associated with improvement were generally well understood with common ideas such as resistance to change, low literacy rates, lack of funding locally or from government, whilst better responses were able to link ideas such as these or others together.

### Question 5

Generally quite well done with good responses assessing not only the problems of fossil fuels (running out, environmental impacts) but also demonstrating an awareness of their current importance and efforts to extend their use through exploring new locations, improving efficiency of use etc. alongside the benefits of renewables. The best responses demonstrated clear links to the role in global energy supply of fossil fuels and renewables and were able to extrapolate from their knowledge of current energy production and consumption trends to some point(s) in the future. Commonly seen approaches were to consider how specific countries have or are dealing with issues created by their high use of fossil fuels and moves towards renewables with China and Norway the most common examples, along with a consideration of the contrasting situation between countries at different levels of development: LICs, MICs and HICs, with some noting the position of NICs.

More moderate responses tended to pay less attention to the future role and to change the direction of the question either to the pros and cons of fossil fuels and renewables or to direct the question to renewables without demonstrating an assessment of the future role of fossil fuels in global energy supply. Some candidates mistakenly included biofuels and/or wood as fossil fuels. Very few candidates fully appreciate where nuclear energy fits into the fossil fuel debate.

Areas which centres might investigate further include the relative cost of producing energy at different scales, for different stakeholders and in different locational contexts, technological development that might extend the life of fossil fuels, such as the exploitation of coal carbonisation, tar sands and fracking or reduce the cost of energy from renewable sources.

### Question 6

This question was generally quite well done. The best responses used examples of specific attempts to protect an environment or an aspect of an environment at risk, with a clear focus upon an aspect of environmental degradation such as pollution of land, air and/or water. There were examples from both rural and urban environments. Some examples do not readily fit this option, with economic decline of London Docklands and Harare street vendors frequently seen. Centres must relate these case studies to aspects of environmental degradation, as above.

It was encouraging to see that there were some very perceptive evaluations using examples from Zimbabwe, where social and political problems hindering attempts were extensively and candidly covered and Namibia's nature conservancies, where success was measured through environmental improvements linked to both social and economic gains. In all cases, attempts need to have a reasonable time period since inception, so that an evaluation of success can take place.

Weaker responses often approached the question with a brief summary of a series of scenarios, outlining a simple risk, a basic description of an attempt to protect and a simply stated assessment of success or not. Each one adding little to any other and without a conclusion drawing the response together as an assessment of similarities or differences which influence the success or not at a broad level. In other cases, there was far more emphasis on the causes and the evidence, rather than on the attempts to protect an environment at risk.

### *Global interdependence*

### Question 7

- (a) Generally, the graphs were interpreted with some credibility, but most candidates failed to realise that in all but one case the changes were actual increases in numbers, even though the second bar for each region was mostly lower than the first. Most focused upon variation with respect to the two dates, 2015 compared to 2014, rather than between world regions for each date. Very few candidates were able to express the change for Africa from 2015 compared to 2014. Africa was the only region to experience a change from positive to negative and represents a decline in numbers.

- (b) There were generally good responses to this part but with many not reaching Level 3. Most provided a wide range of reasons without detail or demonstrating a strong conceptual understanding; fewer points but with some elaboration or discussion would have been more successful. The question is focused on percentage increases in international tourist arrivals for the world, i.e. 4.0 per cent and 4.2 per cent for the two years 2014 and 2015. So overall, these are high rates of growth and are based upon relatively recent data such that factors which are quite clearly historical had little credit.

### Question 8

Candidates mostly had a sound knowledge base to approach the question considering factors such as resource endowment, locational advantage, historical factors, e.g. colonial ties, development, trade agreements, comparative advantage, terms of trade but less considering changes in the global economy. The emphasis of the assessment element of the question was on why global trade is unequal and this provided a clear challenge to many candidates. This may have been approached spatially by considering the fact that the overall pattern of trade – in spite of recent changes – is still dominated by the high income countries/G20 or through a comparison between the position of two continents such as Europe and Africa. This spatial approach was less prevalent than an approach based on the reasons. Reasons for the inequality of global trade commonly seen included: terms of trade for primary producers as opposed to secondary producers, inability of some countries to develop their own resources without ‘assistance’ from outside capital sources, the increase of trade within trade blocs and lack of access for countries outside the blocs. Few noted the changing role and importance of new superpowers in trade such as China or the changing nature of elements of trade for the former ‘developed’ nations, where focus of activity is higher up the supply chain and/or in higher technology products. A characteristic of a higher-level response was the ability to consider the relative importance of the factor/reasons for inequality of global trade. Some candidates mixed up ‘Fair trade’ with ‘free trade’ and/or overemphasised the contribution of Fair trade to global trade inequality.

### Question 9

Better responses did assess the model’s usefulness in terms of it being more suited to mass tourism in HICs and being less appropriate for ‘newer’ types of tourism, and well managed ecotourism. Some candidates developed the response with respect to how some areas have moved through the stages more quickly than others, whilst other examples of locations or types of tourism have missed stages out. These better responses attempted to assess the view rather than describing the model and its fit to a located example. Better responses displayed understanding of both axes of the graph/model itself (time against increase in numbers) using these two variables to structure their response. Some points which may have been considered but were not widely seen relate to the rate of growth represented by the shape of the curve. This may vary according to factors such as the rate of development, numbers, accessibility, government policy and number of competing areas. Very few displayed understanding that the origins of the model are set around concepts such as carrying capacity and the use of the model as a planning tool at the later stages or that the model’s application depends upon the length of time that data is available for and its accuracy.

### *Economic transition*

### Question 10

- (a) Most candidates were able to make something of the data which appears quite complex to begin with. Those candidates who understand that trends are changes over more than one year, could simplify the information and to make valid comparisons of similarities and or differences. Similarities included from 2010 to 2012 all three regions fall or from 2017 to the end all three regions demonstrate a flat trend, whilst differences include BRICS excluding China reach their lowest point after the other two regions.
- (b) Two broad areas which contribute to the inaccuracy of predictions could have been offered: changes in the global economy and how these affect national economies and statistical limitations. Most candidates selecting this question did not develop their reasoning. Reasons mostly given related to the uncertainty of the global economy and unexpected events such as war and natural hazards. Very few identified factors influencing the accuracy of data or statistical uncertainties of predictive data like this.

### Question 11

Few candidates displayed knowledge of what foreign direct investment (FDI) is and generally considered factors influencing investment. As a result, the foreign and direct aspects received little attention. One common approach was to consider factors influencing investment by TNCs but at this broad level, without considering the direct aspect of FDI which involves some form of control by the investor. Most candidates were clear about what constitutes an economic factor but few noted in their discussion that there is frequently interplay between factors and that some factors are linked to economic factors. Some candidates used negative examples which discourage investment or FDI such as corruption or a poorly educated workforce. This approach was less effective in terms of the question set.

### Question 12

Candidates generally approached the question by using examples from specific countries, identifying and describing clear core and peripheral regions. Some linked this core-periphery relationship to processes such as cumulative causation, the multiplier effect and processes of spread and backwash. The quality was very much linked to the strength and detail of the examples and the ability to assess whether regional disparities within countries can never be overcome. There were some good responses using examples from countries such as Brazil, Canada, India and Zimbabwe. Assessment of whether the regional disparities can never be overcome or not was centred around two approaches. First, a country where there had been clear attempts to overcome regional disparities through specific regional development policies. Second, as seen in the context of Zimbabwe, where the major disparities are between core city regions and a peripheral area of the rural areas surrounding those core cities. In this case, candidates identified the major focus of government policy as attempts to address issues related to rural-urban migration, which perpetuates the regional disparities. They were able to provide evidence of the success or not of programmes such as the provision of free education, rural electrification and education of farmers.

# GEOGRAPHY

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**Paper 9696/43**  
**Advanced Human Geography Options**

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- (b) The command word 'suggest' requires candidates to describe and develop ideas, not just make basic statements. Each suggestion needs to explain how the river water quality would be improved. Many candidates could give a variety of suggestions but stayed in Level 2 if these suggestions lacked development or examples. It was very hard for candidates to get to Level 3 without an understanding of the causes and solutions to eutrophication, although this was possible if candidates included a range of techniques from finding and legislating against the source of the pollution, to clean up of the existing pollution. Overall, this was a well answered question with the majority of candidates being awarded more than half the marks available. It is worth noting that although eutrophication is not mentioned by name in the syllabus, it is a common result of 'poor agricultural practice' in HICs and MICs, and would be a very useful example of water pollution; 'nature, causes, solutions' for candidates to study. It can be a feature of both rural and urban degradation.

### Question 5

This was a popular question with many responses reaching Level 2. The majority of candidates knew the positives of using renewables and gave balance by showing the negatives of a range of examples. However, for some this approach ended there and proved too simplistic for the demand of the question. Candidates struggled to relate renewable energy use to meeting energy demand and tended towards description of the renewable resources and their limitations. Answers lacked the balance needed that the question required if not linked to energy demand.

Many candidates used the Three Gorges Dam as an example of HEP with limitations, which was a good example to choose. There were a range of questionable statistics about its success, so centres should take advice to make sure their candidates know the difference between projected and actual output from the dam (which is far less than hoped/planned for). Also, candidates who only developed their response on the basis of this one scheme limited themselves as the question required much broader knowledge of a range of renewable resources. A full assessment of the statement requires more than one example of renewable energy.

A good answer might have considered the imperative in many LICs to use cheap fossil fuels to enable development while HICs are now in the position to reduce dependency. This would then allow a consideration of how lifestyles could be adapted to reduce energy demand and encourage the use of renewable resources. Others included the idea of resource endowment playing a major role in whether the use of renewables was indeed viable for a country. Candidates who displayed an understanding of trends in HIC, MIC and LIC contexts and international political pressure to use renewables showed a conceptual understanding that enhanced their answers. Those candidates who made a clear assessment of the amount of energy produced by renewables, its reliability to meet demand, compared to non-renewable were able to reach Level 4.

### Question 6

This was another popular question but did prove difficult for some candidates who misunderstood the meaning of constraints.

Some candidates described a case study or two of causes of environmental degradation without full consideration of why many, for example, LICs find it difficult to establish good environmental standards. These candidates would then go on to describe how the environmental degradation was being managed, and assess the extent of success, but the focus was not on the extent that constraints had been overcome. However, in an assessment of success of strategies, often the constraints are implicit and some examiners were able to award credit if the assessment considered this. However, it is worth centres noting that the syllabus states 'Constraints on improving the quality of degraded environments' therefore candidates should be familiar with constraints in the context of different places, giving them the option of choosing an LIC, MIC or HIC, or urban or rural environment.

Most candidates had some very good knowledge on environmental degradation and showed a real concern for the issue but did not make the most of their knowledge by simple adaptations to the demands of the question. Good planning of both elements of this question could have avoided this for many. An approach might have been to consider degradation in terms of the level of development and show how increasing wealth leads to more public concern about the state of the environment. This would then allow for a consideration of how HICs have tackled the problems apparent in countries such as China and India that featured often in answers.

### *Global interdependence*

#### Question 7

- (a) This question was a classic example of where many candidates took the simple approach of describing month by month what happened to the trend. Centres should note that this is a far too simplistic description. The expectation is that candidates will pick out differences in the trend, the highest month(s), when the opposite is true, any changes in rate of increase or decrease and any anomalies. The mark scheme is clear that a month by month description will only gain 1 mark.
- (b) Many candidates remained in Level 1 because they did not fully read all that the question was asking of them and made no reference to months of low demand. There were descriptions of a range of ways that destinations can increase tourist arrivals, but these could have been applied all year round. However, there were some candidates who did answer this question very well, using named examples or destinations that are known to suffer from months of low demand, and developed descriptions of the strategies the destinations or countries have used to increase tourist numbers, even in these low months. To get into Level 3, there needed to be a range of attempts, therefore when a candidate gave more than two attempts which all related to one overall concept (often price) the answer could not get into Level 3.

#### Question 8

This was not a very popular question within the option. However, those candidates who did answer tended to do well showing good knowledge of trade and the full range of factors. Some answers did not relate other factors such as trade blocks back to resource endowment to allow for an assessment of the importance overall. A good approach to this question would have been to establish the role of resource endowment in world trade with examples such as the Gulf States and oil, Australia and minerals, to show that resource endowment is crucial and still relevant today for many countries. Then a good approach might have been to

take an historic route to show how trade has developed to focus less and less on obtaining raw materials and food to manufactured goods and invisible trade. A good case could have been made for the global tourism industry being a new interpretation of resource endowment as natural features such as climate and beaches are part of a new type of world trade flows.

### Question 9

This was by far the most popular question on the paper and answered with wide degrees of success. There was usually quite good understanding of the question but often the focus of the response was on how successful ecotourism was in this or that destination. Some compared mass tourism with ecotourism to allow for a contrast. Some adopted a Butler Model approach that often led candidates in the wrong direction.

Responses sometimes lacked a focus on environmental sustainability, and instead took a broader view, focussing on social and economic sustainability. This was valid as a contrasting type of sustainable tourism, only if there was sufficient development of environmental sustainability as the focus of the response. There was some very good knowledge apparent in answers and many were able to structure their answers carefully. However, if only one destination was chosen, it was difficult for candidates to fully assess the view. It could be possible that one destination has achieved a degree of environmental sustainability, but a full assessment requires balance.

A good approach to this question might have been to consider various examples of ecotourism or tourism in general and show how close they get to the principles of sustainability. There is also scope for considerations of global impact – air travel usually means using a lot of fossil fuels. Candidates who were critical of ‘greenwashing’ by tour operators tended to score well, as this approach showed a conceptual understanding of current HIC consumer demands, and how business adapts.

### *Economic Transition*

#### Question 10

- (a) There was the expectation that candidates picked out patterns: highest, lowest, least, most, anomalies etc. not just repetition of Fig. 10.1.
- (b) Candidates could make reference back to Fig. 10.1 to show how China and Mexico have different economies dependent on what measurement is being used. Those candidates who answered this question did well when they used examples to make the point they wanted to.

#### Question 11

This question was answered by very few candidates. Of those who did, the majority did very well, including a range of influences and factors that have contributed to the location of economic activity around the world. Examples of TNCs as case studies were helpful, as also is contextual understanding of society, economy and political influences in a variety of locations.

#### Question 12

There were too few answers to make comment appropriate.