GEOGRAPHY

Paper 9696/11
Core Physical Geography

Key messages

In *Section A*, candidates are expected to know the correct geographical terms for the features identified. Generic descriptions of deposition, for example, are not always sufficient when there are more precise terms available, such as Eyot. Observation is a key element of *Section A*. Each question can be awarded 10 marks, and up to half of those marks are available by identifying aspects of the figures provided. Candidates need to concentrate on the material provided and realise that explanation is usually confined to **part (c)** of **Questions 1**, **2** and **3**. A variety of source material can be used, and it is common for maps, photographs and diagrams to appear in the same examination paper.

In *Section B*, examples or a case study are usually required. In this paper, only examples were demanded, but candidates do need to prepare for a case study where appropriate. Case studies may be used as examples, but examples are insufficiently detailed to form a case study. In *Section B,* **parts (b)** and **(c)** constitute more than one third of all the marks available for the paper. It is essential that sufficient time is made available for the detail and evaluation required. Candidates need to plan their use of time carefully to ensure sufficient emphasis is placed upon the essay question.

General comments

The examination proved accessible to the majority of candidates. Many understood the relevant geographical concepts and were well prepared. The paper proved a fair test of knowledge and understanding across a range of geographical concepts. There were some excellent marks achieved. Very few candidates chose the 'Atmosphere and weather' question in *Section B*. The need to study this topic for the compulsory *Section A* question will hopefully lead to more candidates attempting the 'Atmosphere and weather' questions in *Section B*.

Varied source material was provided in *Section A*, including a photograph, diagram and map. The majority of candidates understood the demands of the questions but needed a clear focus to clarify their answers. In **Question 1**, the features described needed to be clearly related to 'braiding'. Answers to **Question 2** needed to include statistical support, and answers to **Question 3(b)** needed to identify both tectonic plates and movement.

A number of command words appear regularly, such as Describe, Explain and Assess. Some candidates find it difficult to isolate these terms and include explanations where only description is required. In *Section B*, some assessment or evaluation is usually required to reach Level 4.

There were few rubric errors. Clarity of expression continues to improve, and that is commendable. Where appropriate, diagrams can also enhance answers, and **Question 5(b)** is such an example.

Most candidates performed well in the examination, and their enthusiasm and commitment should ensure continued progress in the future.

Comments on specific questions

Section A

Question 1

(a)   Most correctly identified and named the eyot, but some were simply content with a generic description of deposition, which is not a specific feature.

(b)   There were a variety of features available, but some chose to describe generic river features such as floodplain and levée. Furthermore, there was a tendency to simply state what the feature was, without describing it in detail.

(c)   Explanations often did not consider features specific to 'braiding'. It was not uncommon to find attempts at simply explaining meanders.

Question 2

(a)   This was correctly answered by the majority of candidates.

(b)   Most were able to identify how precipitation related to relief and used some of the data on the diagram.

(c)   Some understanding was displayed of the prevailing wind relating to the forced uplift of air. Most extracted some data from the diagram, but not many discussed the rain shadow effect.

Question 3

(a)   The majority of candidates answered this correctly.

(b)   Most candidates were able to identify the three basic plate movements but did not always identify examples of each.

(c)   Most chose volcanoes and fold mountains, although the latter are often discussed in simplistic terms without reference to the volcanic and sedimentary deposits of an accretionary wedge.

Section B

Question 4

(a) (i)   Some confused 'throughflow' with 'throughfall' and did not always associate soil water with the process of infiltration.

(a) (ii)   Answers often lacked clarity. The concept of 'drainage density' is not always understood in terms of the shape of a storm hydrograph.

(b)   Candidates found this difficult. Some interpreted this as a question on land use changes and river flow. This was not irrelevant, but received limited credit.

(c)   The Three Gorges Dam was the most popular example used, and there was some excellent detail. A variety of hard and soft engineering procedures were discussed, but there was limited evaluation in terms of preventing floods.

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Question 5

Answers to parts **(a)** and **(b)** were lacking in clarity and detail. Answers to part **(c)** were more convincing and displayed some understanding of this topic.

Question 6

(a) (i)   Freeze-thaw is understood by most candidates, although the thawing process tends to be neglected. Candidates are less secure in their understanding of hydration.

(a) (ii)   Some described freeze-thaw once again and gained some credit. Better answers described granular disintegration and exfoliation.

(b)   Rock structure and climate were discussed. Rainfall often figured prominently. Many were aware of the significance of human activity, although explanations were sometimes simplistic.

(c)   There were limited rock type details in terms of structure, texture and chemical composition. Candidates were more knowledgeable about alternatives such as climate, vegetation and human activity, but this made the final evaluation difficult.

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General comments

There were some excellent answers, but the responses to some of the questions were poor. As noted in previous reports, it was clear that many candidates did not read the questions carefully enough. A variety of command words may appear in questions, but in this examination the ones that dominated were 'describe' and 'explain'. There is consistency in the demands of individual questions. In *Section A*, **part (b)** questions generally require description, while the **part (c)** questions require explanation. It is still the case that some candidates were not sufficiently clinical in their approach, offering explanations when only descriptions were demanded. This lack of precision was seen in responses to questions requiring definitions (**Questions 4(a)** and **6(a)**). Definitions need to be precise and explanation is not required.

Other command words continue to cause problems. The command word 'compare' includes both similarities and differences. Also, many candidates have trouble in describing trends. Both **Questions 1(b)** and **2(b)** asked for a comparison of trends. As the rainfall and river discharge data in **Question 1(b)** were expressed in monthly values throughout the year, the analysis should have been with reference to consistent patterns or changes throughout the year, not a month by month listing of the various values. Thus, the rainfall and river discharge patterns needed to be compared. Many candidates equated trend with correlation between the sets of data, which was not required. There were somewhat similar problems with **Question 2(b)**, but the changes in radiation levels were more consistent and there were better comparisons. It needs to be stressed that in many of the resource based questions, the use of data extracted from the resource is needed to obtain the full range of marks.

The only other general comment, before a consideration of specific questions, concerns the use of case studies. A case study requires precise locational information and detailed analysis of the topic being covered such as a recent flood event, as in **Question 4(c)**. In many of the answers it was far from clear which river or stretch of river was being discussed. Without specific details it is very difficult to assess the significance of the detail being ascribed to that case study. There is detailed guidance on case studies which can be accessed from the Cambridge International School Support Hub. The issue with **Question 4(c)** will be discussed in more detail later in the report.

The use of maps and diagrams and their accuracy remains variable. This would benefit from further focus and development. This was the case for **Questions 4(b)** and **6(b)**. In *Section B*, evaluation and assessment are dominant features, either explicitly or implicitly. All 'levels' questions lead candidates into some level of evaluation, and this was not always forthcoming. Level 3/4 responses are often differentiated through the detail and sophistication of the assessment.

Comments on specific questions

Section A

Question 1

(a)   Most candidates answered this question correctly, but the units (mms) were often omitted.

(b)   The problem with describing trends has been discussed in some detail earlier. This confusion tended to lower the mark that could be awarded.

(c) There was a good response to this question and full marks were awarded to many candidates. The two main reasons discussed were the influence of vegetation in intercepting the rainfall and reducing the amount and speed with which water reached the river, and hard engineering procedures (dams, artificial levels, dredging, etc.) which had the same effect.

Question 2

(a) Virtually all candidates stated the maximum amount of radiation correctly.

(b) This 'trend' question was answered better than **Question 1(b)**, probably because there was a definite trend in the solar radiation absorbed by the Earth's surface which contrasted clearly with the variation in solar radiation reflected by clouds. A few candidates misread the question and answered it with respect to the solar radiation reflected by the Earth's surface.

(c) Most candidates recognised that an explanation needed to refer to the variable cloud cover at different latitudes but were unable to offer consistent and accurate explanations as to why cloud cover varied. They were unable to place the conditions for cloud formation into a latitudinal context. There were some relevant points about the way amounts of incoming solar radiation vary with latitude, but this was only part of the answer. Far too many candidates still argue that the equator is closer to the sun.

Question 3

There was a much better response to this question and many candidates achieved very good marks.

(a) Many candidates were able to score full marks with a description and the use of data.

(b) Many candidates again achieved full marks.

(c) The main point, as stressed in the Mark Scheme, is that precipitation is essential for deep weathering. Few candidates recognised that it is the penetration of water that is needed for this depth of weathering and therefore that chemical weathering processes are the most significant processes. The majority of the answers described weathering processes in general, often with little detail about the processes themselves. Thus, stating that water is required for hydrolysis without explaining how water is involved in this process was insufficient. Similarly, description of freeze-thaw weathering (not the most appropriate process for deep weathering) without explaining the role of water in detail, gained little credit.

Section B

Question 4

(a) (i) Most candidates understood that the term thalweg referred to the area of maximum velocity in a river, but the definitions often failed to mention that it was the line of maximum velocity, thus reinforcing the previous comments about precision in definitions. Knowledge of the nature of bluffs was poor. Many candidates confused bluff with river cliff.

(ii) This was answered well with most candidates noting at least two of the elements listed in the Mark Scheme. However, there was a tendency to confuse turbulent flow with helicoidal flow.

(b) The problem with answers to this question was that the discussion started with the waterfall already in place. Few answers explained how the waterfall initially was formed by river erosion accentuating differing rock resistances along the bed of the river. This differential erosion would then lead to less resistant rock being eroded to commence the formation of the waterfall. The terms soft and hard rock are still being used when resistant and less resistant rock are more preferable terms. The nature of the rock can then be discussed in terms of the erosion processes that are able to exploit the less resistant elements in the rock. One of the easiest ways to explain waterfalls is by the retreat of a knickpoint after rejuvenation of the river system. Most of the large waterfalls in the world have formed in this way. Once the waterfall had been formed, answers describing the role of hydraulic action, cavitation and abrasion, especially in the plunge pool, were quite thorough.

(c) The response to this question was extremely variable. There were many excellent accounts of a recent flood event. However, in many instances the detail expected from a case study was lacking. There were some accounts in which there was no mention of a specific river. Accounts of Bangladesh typified this. Thus, it was not clear whether a river flood was being discussed or a storm surge from a tropical cyclone. Simply mentioning a river with no indication as to where the flood occurred is not a case study. Many accounts of flooding of the River Chang Jiang (Yangtze) were of this nature. The river is one of the longest in the world and one would expect an answer on its flooding would be able to note where on the river the flooding occurred, such as which provinces and which cities were affected. There are many very detailed accounts of the 1998 flooding on many websites. Without detailed reference to the location of the flooding, it was very difficult to assess the accuracy of the descriptive detail. Thus answers tended to be very generic and could have applied to flooding anywhere.

Question 5

This was a more popular question than in previous years and there were some excellent answers.

(a) In **part (i)** most candidates were able to describe, in general terms, how atmospheric pressure affects the direction and strength of winds. **Part (ii)** elicited a good response. The only element missing was how precipitation was caused after condensation of water droplets.

(b) There were many excellent answers. There was perhaps a little too much concentration on the role of greenhouse gases, but the discussion of pollution domes was relevant.

(c) There was a dichotomy of answers to this question with some very good answers and some which struggled to explain the roles of ocean currents and winds in transferring global heat energy. The better answers pointed out that ocean currents also influence wind systems and vice versa. Also, the fact that ocean currents have very little influence in transferring heat energy across large land masses and continents was mentioned by only a few candidates.

Question 6

(a) In **part (i)**, definitions of the terms heave and slide were often lacking in precision. Many candidates explained the processes leading to heave but failed to state what it was. The same issue was prevalent in definitions of slide. Explanations were offered but it was not clear exactly what a slide was. The discussion could have been applicable to many types of mass movement. In **part (ii)** many candidates did not know what rills were or, if they did know, they could not explain their formation. A large number of candidates thought that rills were terracettes.

(b) It is important to stress the information in the Mark Scheme, as ideas about the formation of fold mountains are still unclear. Convergent plate boundaries include destructive and collision margins. The mechanism of mountain formation is different at each. At destructive margins, as the oceanic plate is subducted, marine sediments are scraped off (accretionary wedge) onto the continental plate and uplifted to form the fold mountains. At collision margins, there is no subduction but one continental plate is thrust under the other, causing uplift and the creation of mountains. The two plates do not collide 'head on' and buckle. The Himalayas are often used as an example, but it needs stressing that the Himalayas were mostly formed when the plates were separated by the Tethys Sea and subduction did occur. This created the folding now seen in the uplifted Himalayan Mountains.

(c) There was, in general, a good response to this question, with accounts discussing how human activity both decreases slope stability and increases it. The discussion was often backed up with good, detailed specific examples. As it was an evaluative question, discussion of other factors affecting slope stability were needed for marks in Level 3, and this was often forthcoming. However, there is still uncertainty as to how the factors discussed lead to instability. Simply stating that shear strength is decreased or shear stress increased without explaining how, is not a complete explanation.

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Paper 9696/13
Core Physical Geography

Key messages

In *Section A*, candidates are expected to know the correct geographical terms for the features identified. Generic descriptions of deposition, for example, are not always sufficient when there are more precise terms available such as Point Bar and Slip-off Slope. Observation is a key element of *Section A*. Each question can be awarded 10 marks, and up to half of those marks are available by identifying aspects of the figures provided. Candidates need to concentrate on the material provided, and to realise that explanation is rarely required initially.

In *Section B*, examples or case studies are frequently demanded. Reference to a case study implies a detailed account or analysis of one appropriate example. Other examples may strengthen an answer, but in themselves do not offer sufficient detail to be acceptable as a case study. Candidates need to be aware of the mark allocations, and in particular that **part (b)** and **(c)** questions in *Section B* constitute more than one third of all the marks for the paper. It is essential that sufficient time is made available for the detail and for the analysis or evaluation required. Candidates need to plan their use of time carefully.

General comments

The examination proved accessible to the majority of candidates. The standard of work presented varied in terms of quality, but most understood the relevant geographical concepts. Indeed, many answers were thoughtful and logically structured. Once again, candidates seem to have been well prepared for the examination. The paper proved a fair test of knowledge and understanding across the range of geographical concepts. Excellent marks were achieved by a significant number of candidates from a wide range of centres, and it was encouraging to note how many now choose to answer the 'Atmosphere and weather' question in *Section B*.

Many candidates would enhance their answers by providing greater detail. This applies to both 'description' and 'explanation'. For example, a reference to freeze-thaw needs to describe the process in more detail, and an explanation would involve further development. Candidates need to develop their ideas.

Varied source material was provided in *Section A*, including a diagram, a graph and a photograph. It was clear that the majority of candidates understood the demands of the questions, but needed a clear focus to clarify their answers. In **Question 1**, few candidates seemed aware that 'comparison' could include similarities as well as differences. In **Question 2**, candidates sometimes offered changes over short periods of time, but neglected to identify more general 'trends'. In **Question 3**, description of the mass movement feature sometimes lacked sufficient detail.

A number of command words appear regularly, such as Describe, Explain and Assess. Some candidates still find it difficult to isolate these terms, and include explanations where only description is required. Assess or evaluate are frequently required to reach a high standard on essay questions in *Section B*, and candidates need to include this essential concluding summary.

There were few rubric errors. The use of English and clarity of expression continue to improve, and that is commendable. Diagrams can considerably enhance answers, and reflect clear and accurate understanding of geographical concepts. **Question 6(c)** is an example of where illustrations of specific plate boundaries would be beneficial.

Most candidates performed effectively in the examination. Their enthusiasm and determination are impressive and should ensure continued progress in the future.

Comments on specific questions

Section A

Question 1

(a)   Most candidates could identify the specific feature, but some simply identified areas of deposition from the key of the diagram – not what was intended, but acceptable, and did reflect careful consideration of the information provided.

(b)   There were few problems with this question. A variety of valid comparisons were available, with both similarities and differences being relevant.

(c)   Many candidates were able to explain general reasons for erosion at the outer bends and deposition at the inner bends, but were less confident when trying to incorporate helicoidal flow and the development of pools and riffles.

Question 2

(a)   Most candidates answered well, but a few were confused by having to work to two decimal places, and some based their answers on 1900–2010, and not on 1910–1980, as specified in the question.

(b)   Weaker responses concentrated on changes from year to year, but stronger responses on general trends. Most identified the fluctuations within the general trends.

(c)   The enhanced greenhouse effect is a topic many candidates are interested in. Knowledge and understanding are clearly developing, although there is a tendency to be unspecific about the nature and origin of greenhouse gases, and unfortunately, holes in the ozone layer continue to be included.

Question 3

(a)   Most candidates were able to identify rockfall as the mass movement, but some do not, or cannot, clearly differentiate between falls and slides.

(b)   Of the three descriptive questions in *Section A*, this had the weakest response. Candidates are not always confident with a photographic source, and drift too quickly into theoretical discussions which are not always appropriate.

(c)   Once again, there was a tendency to drift into mass movement theory, often with considerable detail on weathering processes. The photograph itself suggests evidence that might be useful in terms of explanation, such as the proximity to the road and river. Candidates needed to use the resource more effectively.

Section B

Question 4

(a) (i)   Antecedent moisture was clearly understood by most candidates, but stemflow caused some confusion, especially in differentiating from throughfall.

(ii)   Few candidates were able to provide convincing explanations for the formation of springs, but there was some awareness of the existence of geothermal hot springs, and this was able to gain credit.

(b)   Many candidates do not understand the difference between an annual river hydrograph and a flood hydrograph. Although some factors, such as seasonal variations of precipitation, temperature and land use, can be valid in both instances, many responses were confused.

(c)   Most were able to differentiate clearly between hard and soft engineering, and many concluded that working with nature was the appropriate approach. The advantages and disadvantages of the different methods were discussed, but often superficially. Examples were used, but not integrated into the text. The Three Gorges Dam is known by many, but not always used in evaluation.

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Question 5

(a)(i)   The definitions were generally convincing, but condensation was not always associated with a fall in temperature. Nevertheless, the responses were generally sound.

(ii)   Once again, there were many good answers. Candidates understood the nature of long wave radiation and the conditions under which cooling occurs.

(b)   The intermediate processes of rising air leading to precipitation were understood by most. The basics are simple, and generally candidates coped well.

(c)   Although various examples can add support to an answer, the demand for a case study implies the need for extended detail on one particular example. Both Auckland and Vancouver were used very effectively by a number of candidates. Answers tended to concentrate on temperature changes, with some reference to precipitation and wind. There was limited final assessment in terms of other relevant factors, such as global seasonal changes, but overall many answers were impressive.

Question 6

(a) (i)   Conservative plate boundaries were clearly understood by most candidates. There were many accurate and good quality responses.

(ii)   Once again, most candidates displayed a clear understanding of this topic, although some neglected the role of convection currents. A clearly labelled diagram alone would be capable of achieving full marks.

(b)   Candidates clearly understood biological weathering in terms of pressure caused by root growth, but were less confident of the various types of chemical weathering.

(c)   A variety of landforms are associated with the various types of tectonic plate boundaries. Candidates displayed a convincing understanding of this topic, but in some instances had obviously not allowed sufficient time to incorporate all that was needed in terms of evaluation. Most were aware of the lack of distinctive landforms at conservative boundaries, but the significance of other factors, such as geology, was not usually considered. Time constraints meant that diagrams were not as clear and detailed as they might have been.

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General comments

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 5-mark question.

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 is worth 25 per cent of the total mark and is often the key discriminator, being an evaluation, so they should leave sufficient time to do themselves justice.

Candidates should appreciate that where a question asks for two or three aspects (**Questions 2(b)**, **3(c)**, **6(a)**) and they give more than the required number, the best two or three will be credited. It is not good practice to do more than the number asked for and should not be encouraged as it wastes time.

Good case study knowledge is needed, 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. Also, examples must be used to support a point being made. Too many candidates give an example in name only, for instance 'e.g. India', which does not add a great deal to an answer. Furthermore, the syllabus states that 'where possible, case studies should be dated no earlier than 1980.' References to the North Atlantic slave trade as an example of forced migration (**Question 5(b)**) fall well outside this recommended time frame.

Comments on specific questions

Section A

Question 1

(a) (i)   Nearly all candidates were able to answer this correctly.

   (ii)   Nearly all candidates were able to answer this correctly.

(b)   Most candidates described the trend as 'decreasing' or 'falling', but few went beyond this to include descriptions of the rate of change or data.

(c)   Most candidates were able to give simple reasons such as 'more schools will be needed' or 'more will need to be spent on health care', whereas better responses provided more explanation such as 'A youthful population will mean more children of school age which means that the government will need to build more schools and employ more teachers, both of which cost a lot and some countries may not be able to afford them'.

Question 2

(a)   Most candidates were able to describe a pattern, but some used terms such as 'left' and 'right' instead of 'east' and 'west'.

(b)   The most common reason given was about people not being willing to give what they considered to be private or confidential information, but few candidates were able to give two different reasons.

(c)   Most candidates commented on the effect of the loss of young working adults, but most did not develop their explanations. Better responses gave more detail, for instance:

'Most of the people who leave will be young men of working age. This means there would not be as many people working on farms which will make it more difficult for villages to produce food.'

Question 3

(a) (i)   Nearly all candidates were able to answer this correctly.

(a) (ii)   Nearly all candidates were able to answer this correctly.

(b)   Most candidates simply compared the number of flow lines. Few commented on patterns such as the density of flows or the extent of connections.

(c)   Few candidates were able to give convincing explanations. Most responses simply stated that world cities attracted migrants, so their population grew. It was also clear from most answers that candidates were describing urban growth in general and did not show an understanding of the term 'world cities', which is clearly stated in the syllabus: 'The concept of a world city; causes of the growth of world cities; the development of a hierarchy of world cities.'

Section B

Question 4

(a)   While most candidates knew the definition and meaning of birth rate, few were able to demonstrate an accurate understanding of fertility rate, which then limited their ability to make valid comparisons.

(b)   Most candidates were able to give reasonable answers, but with the exception of anti-natal policies (in most cases, China's one-child policy) examples were weak.

(c)   Most candidates demonstrated an understanding of the DTM, but few focused on the changes in birth rate as required by the question, and therefore their answers were very general and unable to access higher level marks. Few candidates were able to discuss the applicability and usefulness of the model.

Question 5

(a)   Many candidates described reasons for economic migration instead of patterns (locations, flows, age and gender groups, numbers and processes such as chain- or step-migration). Some candidates described reasons for international migration in general rather than economic migration as required by the question.

(b)   Most candidates were able to give sound explanations, drawing on contemporary or recent examples. Some, however, chose examples outside the recommended time frame given in the syllabus, such as the North Atlantic slave trade as an example of forced migration or the Irish potato famine as an example of food shortages. Both of these fall well outside the recommended time frame. Most examples focused on involuntary migrations resulting from conflict, such as Syria or Myanmar, but few considered other causes such as natural disasters or environmental stresses.

(c)   Most candidates were able to give general ways in which migrants can be helped to settle, but few were able to provide the exemplification required to access higher level marks.

Question 6

There were insufficient responses to enable meaningful feedback to be given.

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Paper 9696/22
Core Human Geography

Key messages

1   Still too many candidates do not read the exact wording of questions, for example, **Question 2(c)** asked candidates to outline how push and pull factors cause rural-urban migration, but most candidates simply listed push and pull factors without linking them to how they caused the migration. There seemed to be significantly more candidates this year who did not directly answer the question set, especially in *Section A* questions.

2   To achieve well in part **(c)** of questions in *Section B* candidates should evaluate and use detailed examples. Detailed but relatively few examples are usually more effective than a large number of 'e.g. London' type examples.

General comments

Candidates generally performed well on this paper, often lifted by effective *Section A* answers, although few performed very well due to poor performance in *Section B* questions. Few attempted **Question 6** in *Section B*.

Candidates should appreciate that the marks indicate the number of points expected, so candidates are unlikely to get 5 marks, for example, when they give a single undeveloped statement. Likewise a 3-mark question should get an answer that takes half the time and lineage than a 6-mark question. For instance, answers to **Question 4(b)** should have been slightly more than half the length of answers to **Question 4(c)**.

Candidates should read the whole question before answering it, as often they answered the next part of the question in a previous response. For example, many explained the relative success of the population policy in **Question 4(b)** and then repeated this in **Question 4(c)**.

Many candidates struggled with *Section B* questions with often careless or inexact reading of the demands of the question. Candidates still need to appreciate that the last part of *Section B* answers are worth 25% of the total mark and is often the key discriminator, being an evaluation, so they should leave sufficient time to do themselves justice.

Candidates should appreciate that where a question asks for two aspects (**Question 1(c)**) and they give more than two, the best two will be credited. It is not good practice to do more than the number asked for and should not be encouraged as it wastes time.

Clearly some candidates did not fully appreciate the meaning of some of the technical terms used in the questions. Some candidates did not understand the meaning of world city in **Question 3(c)**, did not focus on natural increase in **Question 4(a)**, and in **Question 5(a)** interpreted 'intra-urban' to mean between urban centres.

Comments on specific questions

Section A

Question 1

(a) (i)   Correctly answered by the vast majority of candidates.

(a) (ii)   Correctly answered by the vast majority of candidates.

(b)   Most candidates correctly identified the three elements of the trend, but weaker answers did not support these observations with data from the figure. For example, compare:

'It fell from 1970 to 1990 then levelled out to 2020 but is predicted to rise from 2020 onwards.'

with the more effective:

'It was at 120 in 1970 but fell steeply to 54 in 1990. It then kept steady at around 54 to 52 between 1990 and 2020. It is then predicted to rise sharply from 52 in 2020 to 72 in 2030.'

(c)   The focus of this question is on explanation, but many candidates described two appropriate issues without really explaining why they were issues or how they linked to an ageing population. For example, compare:

'One issue is the lack of labour so industry declines. Also the government needs to spend more on providing extra health care facilities for the elderly.'

with:

'With an ageing population there are fewer young people to work in industries that need strength or innovative ideas so the elderly have to work for longer or migrants have to be attracted to fill these jobs, e.g. as in Japan. As more elderly tend to have poorer health the government will need to spend more of its income on providing more health and care facilities or increase taxation, e.g. UK.'

Question 2

(a)   Correctly answered by the vast majority of candidates.

(b)   The element of comparison was key. Many candidates simply listed the level of remittances in the various districts rather than comparing overall impact. More effective answers pointed out there was insufficient evidence to judge the level of impact:

'As we are not told the nature of the districts nor the number of people living there it is difficult to compare the level of impact, e.g. Imo East might have few people living there so contributing little to the remittances going into Imo state overall.'

(c)   The focus here was on the role of push and pull factors. Few candidates explained the basics: that push factors were repelling people from rural areas and pull factors were attracting them to urban areas. It is the combination of the push and pull that explains such a directional migration. Most candidates gave exhaustive lists of push and pull factors, sometimes repeating them as opposites without specifically linking them to how they cause rural-urban migration. Candidates should be encouraged to be more specific about push/pull factors. This could include being specific about what part of the standard of living/quality of life or infrastructure was a push or pull factor.

Question 3

(a)   Correctly answered by the vast majority of candidates.

(b)   This was a two-aspect question but few candidates appreciated the necessity to cover both aspects. Most candidates either described the direction and width of the flows or outlined the resulting hierarchy. The latter term seemed to confuse many candidates, although some candidates did recognise the caption at the bottom of **Fig. 3.1** as helpful:

'Clearly New York is the top of the hierarchy with links to all 11 cities. Then comes Los Angeles with links to 5 cities. At the bottom of the hierarchy are Atlanta and Minneapolis with only one link each – to New York.'

(c)   Candidates seemed to struggle with this question. The notion of what a world city is was not understood by many candidates and they resorted to describing the economic pulls of large urban areas or failed to consider the 'economic factors' by considering the key political and cultural factors that determine a world city.

Section B

Candidates often seemed to choose their question based on the nature of part **(a)** rather than reading all parts of the question. Too frequently effective parts **(a)** and **(b)** were let down by a weak part **(c)** where the candidate did not fully appreciate the wording of the question. Very few candidates attempted **Question 6**.

Question 4

(a) (i)   Too many candidates failed to consider the need to describe the variation in natural increase and focused instead on the relative rates of births and deaths. Others described population increase which is not the same as natural increase. Many included supportive diagrams but then did not annotate them effectively or were confused by the two extremes, seeing both Stage 1 and Stage 5 as periods of high growth in natural increase. Some gave diagrams of the model but then gave answers such as:

'Stage 1 – fluctuating
Stage 2 – positive
etc.'

Far more was needed on the variation than just positive (and negative for Stage 5 if included).

(ii)   Clearly one approach would be to explain why it is difficult to control birth rates and why it is difficult to control death rates so impacting on the ability to change natural increase rates. Most candidates focused on reasons why birth rates are difficult to reduce, offering comment on tradition, the expense of contraceptives or the need for a high birth rate to offset high infant mortality. Others were more practical:

'Part of the difficulty stems from the lack of information on the existing situation. It is very difficult to collect accurate data from rural areas where often the population is semi-nomadic or distrust government officials.'

(b)   This question had two elements. Most candidates successfully suggested why the policy was needed – usually based on China (or ageing populations in Japan or Singapore) and reflecting either a need to avoid overpopulation or to increase labour supply, but then offered little detail of the main elements of the policy. More effective answers considered both the incentives and disincentives used:

'China combined the carrot and stick approach. The single child received the carrot of free education and medical treatment but should the family have a second child they would have to pay a child raising fee which could be 2 or 3 times their annual income – the stick.'

(c)   Most candidates seemed to read this question as demanding a critique of the policy, so gave lots of irrelevant material such as the resulting unequal sex balance in China. The expectation was that candidates would be able to quote some data on the changes in natural increase and recognise that these might differ between groups, locations or over time.

An effective answer made the point that:

'There is evidence that natural increase in China would have slowed anyway as the birth rate was falling before the one-child policy was introduced (possibly due to decreasing child mortality rates) and since it has been relaxed there has been little increase in the birth rate so natural increase has remained low.'

Question 5

(a)   Unfortunately, a number of candidates saw this question as relating to inter-urban migration (despite the wording in brackets) so produced irrelevant answers. Others included commuting and tourism which, whilst being valid intra-urban movements, are not migrations. Simply stating where people moved from and moved to is very basic description. More details such as the nature of the migrants and the scale and timing of the migration would have added more detail to the descriptions. Temporal issues were very rarely discussed within the description of intra-urban migration. No explanation was expected and often this was included but gained no credit.

(b)   Generally this was well answered with a range of appropriate factors considered usually including comparative wealth, ethnicity, culture, age and political forces, especially land use zoning/planning. There were some interesting historical answers showing the way colonialism and then post-colonial forces created or re-enforced segregation. The key to a successful answer was the need to support these points with detailed exemplification.

(c)   Generally this was well answered, although many candidates seemed to repeat material from **Question 2(c)**, i.e. urban pushes and rural pulls. A good range of economic, social, environmental and political factors were considered with some attempt at supportive exemplification and evaluation. More effective answers went beyond the relative disadvantages of urban living and the perceived advantages of the rural idyll to consider enabling factors such as the rise of the internet, improved transport and rising incomes:

'In HICs especially, the increased car ownership and fast road links such as the radial motorways into London mean that workers do not need to live near to their work but can commute so they can afford to move out from the urban area.'

Many answers tended to be a list of factors causing counter-urbanisation without the use of evaluative comments. Greater use of examples that are fully integrated across the answer would help candidates increase their performance on this question.

Question 6

(a)   The term 'type' was open to a number of interpretations. Three different types of location for manufacturing were expected. Some candidates seemed confused over the nature of manufacturing and focused on retailing and farming. The command word 'describe' suggests more than just a statement of a location is required. For example, compare:

'Manufacturing can be located at a transport point such as a port.'

with:

'Manufacturing needs good transport location for raw materials to be accessed and finished products to be distributed so is often located near a motorway such as along the M4 corridor in the UK or in or near a port such as manufacturing of soap at Port Sunlight on Merseyside.'

No explanation is expected but exemplification is key.

(b)   Most candidates recognised a movement outwards, from urban centres, in terms of the location of manufacturing with explanation linked to costs and availability of large amounts of space. Some candidates considered the changing nature of manufacturing which resulted in changes in location:

'In many HICs manufacturing changed from heavy industry based on local raw materials to more footloose light assembly industries which necessitated a move to sites where communications were ideal for bringing in components from a variety of sources.'

Others considered changes in the number and type of workers, changes in demand and political factors. Again, the depth and detail of the exemplification was very variable.

(c)   The question referred to one shanty town, but many candidates were unclear on specific locations. Many simply offered 'Sao Paulo' or 'Mumbai' which is too vague as both cities have a number of shanty towns, often with different challenges.

The majority of candidates who attempted this question offered a good range of challenges, nearly all of which were problems typical of shanty towns, but rarely evaluated their relative importance or suggested this might vary depending on who was making the judgement:

'Age would alter the relative importance of the challenges. The young males may see lack of employment as most important whilst the old, who have grown up in the shanty, may put safety and security as their most important challenge.'

GEOGRAPHY

Paper 9696/23
Core Human Geography

General comments

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 5-mark question.

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 is worth 25 per cent of the total mark and is often the key discriminator, being an evaluation, so they should leave sufficient time to do themselves justice.

Candidates should appreciate that where a question asks for two aspects (**Questions 1(c)**, **4(a)(ii)**) and they give more than two, the best two will be credited. It is not good practice to do more than the number asked for and should not be encouraged as it wastes time.

Good case study knowledge is needed, 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. Also, examples must be used to support a point being made. Too many candidates give an example in name only, for instance 'e.g. India', which does not add a great deal to an answer. Furthermore, the syllabus states that 'where possible, case studies should be dated no earlier than 1980.' References to the North Atlantic slave trade as an example of forced migration or the Irish potato famine as an example of food shortages fall well outside this recommended time frame.

Comments on specific questions

Section A

Question 1

(a)   Many candidates gave wrong answers. The range is the difference between the largest and smallest values. Instead of calculating the difference between the years with the highest and lowest values (1980 and 2015), many candidates gave the difference between 1980 and 2030.

(b)   Most candidates were able to say that the youth dependency ratio was decreasing while the aged dependency ratio was increasing. However, more detail is needed for 4 marks, and better answers compared the two in terms of rates of increase/decrease and used data to support the comparisons.

(c)   Most candidates were able to give reasons such as the increased cost of children or the increased availability of contraception. In order to gain 2 marks for each reason, there needed to be some development explaining why the reason stated leads to a decrease in the youthful population. For example:

'In many MICs, women are increasingly focussing on their careers and choosing to start a family later in life, which reduces the number of children in families.'

The question asked for socio-economic reasons, so anti-natal polices were not credited as this is a political reason.

Question 2

(a) (i)   Nearly all candidates were able to answer this correctly.

(ii)   Nearly all candidates were able to answer this correctly.

(b)   Most candidates were able to use the data to give comparisons. However, some candidates simply listed the data for each state without making any comments about similarities or differences. Some candidates made comparisons about the frequency of sending remittances, which were not credited as the question only asked for comparisons about the type of remittance.

(c)   Explanation was required here for 5 marks, and many candidates did not achieve full marks because they only gave general comments such as 'it will enable them to have a better standard of living', without explaining how. Good responses included further detail, for example:

'Money sent back to rural areas will enable families to pay for educational resources and for health care, both of which will improve the quality of life and future prospects of the people, especially children. Money could also be used to repair or improve their houses and to buy seeds or animal feed for smallholdings.'

Some responses described money being used for government expenditure on capital infrastructure development such as new roads and hospitals, which could not gain much credit as remittances are sent directly to families for their personal use.

Question 3

(a)   Los Angeles was correctly identified by a large majority of candidates.

(b)   Many candidates struggled to describe the pattern of connections, and instead described the locations of the cities themselves. Good answers made simple statements using information from the map, for example:

'There are many connections between the east and west coast, particularly New York, Los Angeles and San Francisco, as shown by the thickness of the lines,' and described patterns such as 'There is a triangular pattern of connections between New York, Chicago and Atlanta.'

Weaker responses made comments such as 'Most of the cities are on the coast' or simply counted the number of lines coming from individual cities.

(c)   This question was answered poorly by many candidates, with only the strongest achieving good marks. Some tried to answer using the map (Fig. 3.1) while others described services moving between cities or from cities to rural areas, and they struggled to achieve any marks. Others described the changing location of manufacturing when the question was about services. Better answers included ideas about rents being lower in suburban areas than in CBDs, and the advantages of moving to quieter 'greener' locations with less congestion and access to the suburban workforce.

Section B

Question 4

(a)(i)   Many candidates simply gave a list of three causes, often stated in one word, rather than showing how they affected infant mortality. For example:

'Poverty. Lack of food. Disease.'

In these cases, it was clear that candidates had the right ideas, but they were not clear about the link with infant deaths and could not achieve full marks.

A simple statement for each reason was sufficient to achieve maximum marks, for example:
'1 Poverty means families cannot afford medicines for their children.
2 Lack of clean water means that babies are likely to catch diseases such as cholera.
3 When there are food shortages, infants may be affected by malnutrition and even starvation.'

(ii) Few candidates managed to give a reasonable second reason here. Higher birth rates (to replace losses through infant deaths) was given by many candidates as the first reason, and they then went on to write about future demographic issues that were incorrect, for instance, an ageing population.

(b) This was best answered by those who explained a number of possible reasons related to all the changes taking place in a Stage 2 country, and the best answers gave examples of countries where this has happened. Some candidates drew a diagram of the DTM as a whole, which did not really support their answer as the question was specifically about falling death rates in Stage 2.

Weaker responses discussed the changes in the death rate throughout the DTM, while others also included reasons for changes in the birth rate and total population.

(c) Strong responses gave a balanced view, using relevant examples such as drought and conflict in South Sudan or the development of innovations such as vertical farming. Many good answers also used the ideas of Malthus and Boserup to underpin opposing views of the ability to overcome food shortages.

Some candidates gave the example of China's one-child policy to explain how food shortages could be overcome in the long term by reducing population growth. This was valid, but many then went on to describe the policy and its impacts in great detail, deviating into an answer about population policies rather than food shortages.

Weaker responses were far too general, for example, 'Even in this day and age food shortages are often occurring in parts of Africa. This is because the population is growing too fast and there are droughts and wars.'

Other weaker responses cited very old examples such as 'An example of a food shortage that has occurred in the past is the potato famine in Ireland back in the 1800s when most of the crop was diseased and inconsumable.'

Question 5

(a)(i) Most candidates were able to explain the idea of forced migration involving little or no choice, and many included the aspect of moving between countries/across borders, but very few included the point that migration refers to a change in location/residence for a year or more – hence were limited to a maximum of 2 marks.

(ii) This was generally well done, and many candidates achieved 3 or 4 marks. The key to a good answer was to describe an impact in the context of a relevant example, for instance:

'One positive impact for the migrant when they are forced to migrate is that they are able to escape the conflict in their home country, for example, Syrian refugees who have escaped to European countries. A negative impact is that these migrants are forced to leave behind their careers, homes and often their families. For example, many Syrian doctors have ended up in low-skilled jobs in Germany.'

Some answers cited the Atlantic slave trade of the 1700s and 1800s, which falls well outside the advice in the syllabus that 'where possible, case studies should be dated no earlier than 1980'.

(b) Most candidates had a reasonable example to write about, the most common being Mexico to the USA, Poland to the UK, Philippines to Malaysia and from Pacific islands to New Zealand.

Good answers took each of the elements in the question in turn, (such as age groups, gender and skills for 'character') and applied it to an example they had studied.

However, too few candidates related it specifically to the question and instead gave a general description of the migration stream, its causes and impacts, much of which was irrelevant to the question and gained few marks.

(c) This was often answered well as long as the candidate had read the question and related their response to <u>economic</u> migration, with the best being rooted in well learned case studies (often those used in **Question 5(b)**). Weaker responses brought in many non-economic push and pull factors such as discrimination, political upheaval and conflict, which could not be credited. A number of candidates chose to write about rural-urban migration, which could not be credited as the question asked about international migration.

Question 6

(a)(i) Most candidates were able to answer this in simple terms of people moving back into cities. Better answers included the growth of new 'urban living' residential developments in and around the CBD.

(ii) Many of the responses were unable to give reasons and resorted to explanations of the growth of cities and urbanisation in general.

(b) There were some good responses that explained the development of functional zones in terms of competition for locations and the bid-rent theory. Most explanations were explained in terms of retail services rather than other land uses, which meant they did not achieve the highest marks.

(c) This was a question about urban management, and most candidates were able to discuss issues such as housing, transport and the environment. However, most responses were couched in terms of general urban problems without discussing how the size of cities affected their management, for example, the complexities of building efficient transport systems or providing water, electricity and sewage systems as a city grows.

GEOGRAPHY

Paper 9696/32
Advanced Physical Geography Options

General comments

The response of candidates was generally encouraging with some very good answers to some questions. All candidates now have to do a resource based question followed by the option of two essay type questions. The resource based questions caused few problems. The only issue with the response to **Question 4(a)** was the interpretation of 'distribution'. Some candidates still see this as describing the wave energy, coast by coast, without offering a general synthesis. 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.

Many candidates misinterpreted **Question 5**, answering with respect to differences between high and low tides rather than the substantial effects of sea level changes in the past. Answers to **Question 9** were also problematic. Many answers wrote about a single hazard event rather than a hazardous environment. This offered little scope for a detailed assessment of the question. Hazardous environments and Hot arid and semi-arid environments questions were the most popular. The Tropical environments questions were the least popular and caused some problems for many candidates, especially **Question 2**. 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 sections.

The concept of sustainability is still not fully understood, but there were encouraging signs in **Question 12** that the concept 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 imperfectly understood.

Comments on specific questions

Tropical environments

Question 1

(a) This was answered well by most candidates but with the occasional answer simply describing the characteristics rather than comparing them.

(b) Few candidates were able to offer a detailed explanation of the climatic characteristics listed in the table. Many answers concentrated on explaining the temperature differences with reference to the apparent movement of the overhead sun. Explanation of the rainfall characteristics was often very basic with little reference to the seasonality and the influence of the intertropical convergence zone.

Question 2

There were very few answers to this question and they tended to be deficient in several respects. However, some answers were able to differentiate the types of tropical karst and use these differences to explain the role of weathering. It was clear that many candidates would have preferred a question on granite landscapes and there were some answers that tried to explain tropical karst landforms in terms of deep weathering and exhumation. The emphasis in the question was on the role of weathering and other factors in the formation of tropical karst landforms. Although knowledge of the various types of tropical karst was desirable, the emphasis should have been on weathering, especially carbonation. Differences between the types of tropical karst could then be explained with reference to other factors such as limestone rock structure (joints and bedding planes), climate, vegetation and base level changes, especially with respect to tower karst.

Question 3

This was the most popular question in the section. Although there were a few good answers, many answers were very generalised and concentrated on the vegetation adaptations (xerophytic) to the periodic dry season and to pyrophytic adaptations. There was limited reference to actual species or type of vegetation, and few answers recognised that there is a large variation in vegetation in the savanna ecosystem with a transition from humid tropical rainforest to semi-arid ecosystems. This is a transition from wooded savanna to park savanna, shrub savanna and thorn savanna with their associated vegetation characteristics.

Coastal environments

Question 4

(a) Most candidates were able to gain reasonable marks. The most frequently noted distribution pattern was generally low wave energy on coasts near the equator and higher wave energy towards the higher latitudes. The contrast between east and west coasts was, quite frequently, noted.

(b) Most candidates were able to describe the differing characteristics of high and low energy waves, with the contrast between swash and wash efficiency. However, there is still confusion about the effect of these different processes on the cross section (profile) of beaches. High energy (destructive) waves, where backwash is the more effective process, decrease the slope of beaches. Low energy (constructive) waves, where swash is a more effective process, build up beaches into a steeper profile.

Question 5

This was the least popular question in this section with a generally weak response. As noted in the general comments, few candidates interpreted sea level changes correctly. The role of sea level change in the formation of coastal landforms was one of the few additions to the syllabus for 2018–2020.

Question 6

This was the most popular question in this section. There were two parts to the question: a description of the characteristics of coastal dunes followed by an assessment of the factors involved in their formation. A sketch cross section of the dunes would have been an excellent means of underpinning the description. Unfortunately, few candidates produced a sketch diagram. The diagrams that were produced were often inaccurate and lacking in detail. Descriptions were often better than the attempt to assess the factors in the formation of the dunes. The colour change from yellow to grey dunes was often noted but with little explanation of the fact that the change in colour was the result of increasing organic content as the dunes developed. The change in pH from highly alkaline to more acid conditions as the dunes and vegetation developed was also omitted.

Hazardous environments

Question 7

(a) There was a mixed reception to this question. The description of the characteristics of the debris flows and mudflow needed to be based on the features identifiable from the figure. However, whilst the majority of candidates attempted this, many candidates embarked on an explanation, which was not required. This meant that there were, in general, two markedly contrasting answers – those which concentrated on the description of features shown in the figure and those which did not answer the question.

(b) Although there were elements in the figure that might have helped in answering this question, the question was essentially generic. The reference to the figure was only necessary to identify debris flows, landslides and mudflows which needed assessment in terms of their potential hazardous nature. Thus, their hazardous nature should be assessed in terms of their respective characteristics, such as nature of the materials involved, size, speed of movement, slope angle and possibly frequency. Although some candidates did recognise this need, many did not differentiate between the various types of mass movements and therefore were not able to assess how the hazardous nature varied between them.

Question 8

Most candidates understood what tsunami are, but few were able to explain their formation in other than very basic terms. Earthquake activity under the sea was mentioned, but the mechanisms by which the tectonic activity produced the initial displacement of the water were not described in any detail. The second part of the question, the extent to which the hazardous impacts of tsunami may be reduced, was answered more satisfactorily. The tsunami following the 2011 earthquake off the coast of Japan was often used as an example to address this issue, with prediction and preparedness being well discussed.

Question 9

The interpretation of this question was problematic. The syllabus states that candidates must study some of the problems of sustainable management of a hazardous environment based on a case study. There are two elements in this statement: it must be a case study and it must be related to a hazardous environment. Discussion of a single event, such as the eruption of Mount St. Helens, does not constitute a study of a hazardous environment unless there is a more general discussion of the environment. The hazardous environment, in this case, could be the Cascade Range of western North America of which Mount St. Helens is a part. Hurricane Katrina is an indication of the hazardous environment of Gulf Coast North America and is just one example. This means that the discussion of a single event was unlikely to fulfil the requirements of the question.

There needs to be a general discussion of the environment within which specific hazardous events had occurred. The best example of a hazardous environment discussed was the Philippines, which have mass movement, volcanic and tropical cyclone hazards. The question also asked for a single hazardous environment. Many answers discussed several hazardous events across the world. Such answers were relevant if used to assess contrasting levels of prediction and preparedness, but were just separate descriptions with no synthesis. There is detailed guidance on case studies which can be accessed from the Cambridge International School Support Hub.

Hot arid and semi-arid environments

Question 10

(a) Most candidates were able to obtain good marks on this question, although some candidates were confused by the different total size of the respective areas, rather than concentrating on the respective levels of soil degradation.

(b) Most candidates were able to offer some explanation to explain the greater level of soil degradation in semi-arid areas. Most answers concentrated on the greater population densities and greater possibilities for overcultivation and therefore soil degradation in semi-arid areas.

Question 11

Most candidates who answered this question were able to explain a variety of landforms in hot arid and semi-arid areas and relate them to the processes involved. There was a greater understanding of landforms created by wind processes than those produced by either water or weathering. However, far too often, answers were basically two separate discussions with little evaluation of the question. In contrast to this, some candidates did suggest that wind was more important in shaping landforms in hot arid areas rather than in semi-arid areas where the role of water could, potentially, be greater.

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 answers. There was also some confusion as to which areas were hot arid or semi-arid. The comments made earlier about case studies apply equally to this question. Answers often mentioned a semi-arid area, such as the Sahel, but then the discussion was very generic and could have related to any semi-arid area and not specifically to the Sahel. The Sahel is an extremely variable area and answers need to be based on more site specific case studies so that the discussion could be evaluated. The question was also about the problems that make sustainable management difficult rather than a detailed account of the solutions to these problems. However, there was usually some implicit understanding of the problems within these answers.

GEOGRAPHY

Paper 9696/33
Advanced Physical Geography Options

General comments

The overall response of candidates was encouraging with some very good answers to certain questions. All candidates had to do two resource based questions and the vast majority found these highly accessible. Responses in **part (a)** are improving with a better interpretation of command words evident. However, **part (b)** proved more demanding and generally requires greater accuracy and detail. As in previous examinations, the essay type questions were the main discriminator, with an encouraging proportion of candidates using specific examples to illustrate their ideas.

In the first part of the resource based questions, candidates were asked to describe either a photograph of geographical features, a model or a geographical distribution. This was often done accurately and effectively. The best answers focused on the significant patterns and trends. **Part (b)** of the resource based questions required explanation. There was a wide range of quality in the responses with the better answers explaining the processes responsible for the development of landforms or distributions. The essay type questions all demanded an evaluation or a reasoned argument based on an assessment. Many responses would have benefited from a brief introduction outlining the issues being discussed and then sustaining their assessment throughout the answer in order to reach a clear conclusion.

The concept of sustainability is still not fully understood, but there were encouraging signs in **Question 11** that it is receiving greater attention. There were few rubric infringements and only an occasional candidate answered more than two sections.

Comments on specific questions

Tropical environments

Question 1

(a)   This was answered well by most candidates with many using a clearly labelled diagram. A significant minority failed to recognise the landform and/or did not include any diagram.

(b)   Few candidates were able to offer a detailed explanation of the formation of a bornhardt. Many included comments regarding granite, structure and weathering without integrating the processes into the formation of the landform.

Question 2

There were very few answers to this question and they tended to be deficient in several respects. It was clear that many candidates were unsure as to the meaning of trophic levels and had little knowledge of their application in rainforest and savanna ecosystems. The decrease in energy flows through the trophic levels was often stated but not always applied to the wording of the question.

Question 3

This was the most popular question in this section. Most candidates were able to demonstrate a knowledge of the ITCZ and understood its general movement throughout the year. What was less clear to many was how this affected the characteristics and distribution of seasonally humid tropical climates. The better responses chose specific geographical locations in order to evaluate the influence of the ITCZ while considering other factors.

Coastal environments

Question 4

(a)   Most candidates were able to gain a good mark as long as they focused on the characteristics from location A to location B. This clearly involved a change to the pH, soil colour, and percentages of organic content and calcium carbonate. The best answers used selected data to illustrate the patterns that they had recognised.

(b)   The better responses considered the prerequisites of ample supply of sand and onshore winds before explaining the roles of obstacles to sand movement and stabilisation by vegetation. Subsequent soil development was less clearly explained and consequently few candidates accessed the top level.

Question 5

This question gave candidates considerable scope to demonstrate their knowledge and understanding of the factors influencing coastal erosion. For many, this was lacking in detail and accuracy. There was a tendency to simply compare hard and soft rock with a brief consideration of geological structure. A small number of excellent responses considered specific rock types and structures, offering other physical and human influences on coastal erosion through an examination of specific coastlines.

Question 6

There were two parts to the question: a thorough analysis of the conditions needed for sustained coral growth followed by an assessment of the threats from global warming, pollution, human activity and other sources. The best answers sustained the assessment by considering how a condition was specifically threatened, incorporating accurate detail and geographical examples. However, many responses did not make this link or were unbalanced.

Hazardous environments

Question 7

(a)   A significant proportion of candidates found it difficult to adequately express the geographical distribution shown on the map and often resorted to quoting values for specific states. Concentrations in the central southern belt and the south east of the United States were clearly identified but not referred to accurately in the text. Description of areas where tornadoes were largely absent and the decline to the north and west allowed the better answers to achieve full marks.

(b)   A large proportion of candidates confused small scale tornadoes with much larger scale atmospheric disturbances, namely typhoons, hurricanes and cyclones. This resulted in irrelevant material in many responses. High marks were achieved through a recognition of 'tornado alley' as the location for the interaction of hot, humid air from the Gulf of Mexico and cold air from the north, with the resulting super cell formation.

Question 8

Most candidates knew what mass movements were but had great difficulty in distinguishing different types and causes. Consequently, the impacts were largely generic and limited to the damage to property and loss of life. However, a small number of responses included several examples of different mass movements in a variety of environments. This allowed scope for effective evaluation and access to the higher levels of credit.

Question 9

This proved to be the most popular question in this section. However, a significant proportion of candidates concentrated on types of volcano rather than types of eruption and included generic products. A clear differentiation between types of eruption and a comprehensive range of products allowed the better answers to achieve a high mark. The best answers contained a detailed assessment of the hazardous impacts of several eruptions, often quoting accurate detail from well documented events.

Hot arid and semi-arid environments

Question 10

(a)   Most candidates were able to obtain good marks on this question with some including an accurate, annotated diagram to aid clarity. A small proportion wasted time by describing the vegetation.

(b)   This question seemed more problematic, with many candidates failing to relate specific landforms to the processes being discussed. Consequently, a general narrative emerged concerning conditions found in hot arid environments. The better responses commented on the likely rock type and structure being influenced by specific types of weathering, wind action and sheet wash.

Question 11

In many cases, it was unclear whether hot arid or semi-arid environments were being assessed. This significantly weakened some of the answers. A case study requires specific, accurate detail and this was needed to form the basis of the response. The nature of the climate was adequately handled in most cases, but knowledge and understanding of soils in both environments was generally weak. As discussed earlier, the idea of sustainability is becoming more clearly understood. However, management techniques often lacked detail and accuracy when applied to the specific case study and thus weakened the evaluation of attempted solutions.

Question 12

Although there were some sound responses to this question, many were unbalanced. Human activity resulting in desertification was soundly assessed but natural causes were often merely acknowledged or largely ignored. Unfortunately, many responses contained sections on solutions to desertification and the strategies adopted in certain countries.

GEOGRAPHY

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

Key messages

1 For essay questions, read the question carefully. Deconstruct the question and plan a response based upon the entirety of the question. There is a common theme that candidates seize upon the first part of the question and they miss or underemphasise the key part which may come towards the end.
2 Some candidates express an opening viewpoint about the evaluative element of the question but do not make any concluding remarks.
3 Developing the skill of evaluation: this is linked to the two key points above. **Questions 2**, **6**, **9** and **12** ask candidates to evaluate ways/difficulties/the use of/factors. Evaluation in these questions could include comparing one with another, identifying which has more importance, how the factors influence each other, the complexity of the factors, and so on. This approach was rarely seen and many essays remained at a descriptive level and achieved Level 2.
4 For resource based questions and especially **part (a)**, candidates are displaying confidence with their geographical skills.

General comments

Handwriting is largely exemplary which allows the candidates to clearly communicate their ideas and allows the flow of information and ideas to be read by the Examiner. Responses are generally of a suitable length to enable candidates to maintain a contention and to adequately illustrate it with place support and conceptual ideas. Some candidates display a tendency to write essays which are content based and lack some selectivity with reference to the question. The evaluative elements could be worked upon. Some candidates display a sound and detailed knowledge of the examples and case studies which they include. This is frequently aided by the choice of local, regional or national examples which are familiar to the candidate. This gives an authenticity which conveys a sense of place.

The most popular options were Environmental management and Production, location and change.

Comments on specific questions

Production, location and change

Question 1

(a) This was generally done well with candidates able to make a descriptive point about the distribution of each class, mostly by using compass points as a reference. A small number simply listed each of the states within each category with no reference to location and distribution.

(b) The majority of candidates showed some awareness of the link between heavy and bulky products and transport costs, but missed the point that the products were of low value. The low value means that the profit margins are small and are further reduced by high transport costs such that production has a spread of locations. In missing the point about low value many candidates contradicted themselves saying location was near both market and raw materials. Stronger candidates distinguished between weight gaining and weight losing industries, and some even quoted the Material Index. Some candidates mentioned other factors such as land, labour, energy, water, transport infrastructure or environmental issues.

Question 2

This was a very popular question with some very good responses. The key message for teaching and learning from this question is to plan a response based upon consideration of all aspects of the question and to pay attention to the demand of essay questions for a strong evaluative element (AO4 12 of the 20 marks). This question did not ask candidates to write all they know about multiple ways which bring about change in agriculture. Better responses not only described ways of increasing productivity but made comment on more than the pros and cons of each way, such as the relative importance of each in terms of increasing productivity from the system. It was perfectly acceptable to base a response on a limited number of ways, following a contention set out in the introduction, for instance that the most important factor is X because this leads to Y and Z which are factors of increased productivity, etc.

On occasion, evaluative comment is stated as on-going comment or at the end of a paragraph or as a summary or in the conclusion. Stronger responses were able to focus on the four aspects of the question: a clearly defined agricultural system (supported with specific locational details), different ways, increasing productivity, and taking an evaluative approach. Stronger responses also developed the basic idea of increased production or output through consideration of factors influencing yields, and they developed ideas about increased productivity in terms of production increasing either per unit area or per unit labour.

Weaker responses adopted an approach of describing many different 'ways', with basic comment on the pros and cons of each and some basic links to production (rather than productivity). In this type of response, the specificity was often quite generalised and the evaluative element basic. Two approaches quite commonly seen were the Green Revolution or Land reform programmes. Candidates with these approaches infrequently focused upon the demands of the question.

Question 3

This was not a popular option and most of the candidates who attempted it found it somewhat challenging. The strength of the response was often dictated by the choice of example. Where an appropriate example was chosen, candidates were able to describe the aims with some evaluative comment on the ambition of these aims and offer an assessment of the effectiveness of the industrial policy for manufacturing. However, in a significant proportion of cases, candidates ignored the link to manufacturing and drifted into discussion about general industrial policy (in some cases using agriculture as an example), or they had a broader discussion about trade policy where industrial policy was often quite a marginal part of the essay. These approaches failed to address the question effectively and generally limited the essay to lower level marks.

There were some good responses using India or Taiwan as case studies. Centres and candidates should take note of the difficulties under exam conditions of complex case studies where there is a historical element to a country's industrial policy. Candidates appear to have difficulty in accurately recounting the stages, so centres may wish to consider the general advice given about case studies that post 1980 is a reasonable cut off point. Again, as for **Question 2**, it may be better to thoroughly address the demands of the question through a more limited coverage.

Environmental management

Question 4

(a)   The majority of candidates were able to identify either increases or decreases in relation to each of the four fuel types and the two dates given. Fewer recognised the fact that the main type changed from fossil fuels to renewables (minus hydro-electric power) or indeed that HEP remained the smallest. Most candidates could read data accurately from the compound graph. Centres should note that with clear lines given with the use of graph paper, accurate data reading is expected. Some candidates misinterpreted the scale: not working out that one square here was two percentage points – not a half – or by not realising that the total was out of 100 percent for each year.

(b)   The majority of responses focused on declining emissions from using less fossil fuels and links to less atmospheric pollution, acid rain and climate change. Where these ideas were expressed effectively, candidates had the basis of a sound answer. Responses were developed further with reference to a reduced need to develop coal mines/oil fields and consequent reduction in land and/or water pollution or a reduction in environmental accidents associated with transporting oil. Some candidates made the rather sophisticated point that since the data was only considering Europe, the global impact may be quite marginal or they noted that abandonment of mining areas might be adding to rather than reducing degradation. A few candidates wrote about the detrimental effect of using fossil fuels, not how the environment impacts may change from using less fossil fuels.

Question 5

Better responses needed to demonstrate understanding of the difference (syllabus paragraph 12.2) between 'one named located scheme to produce electricity' and 'one country's overall electrical energy strategy'. There may be confusion over the terms 'scheme' and 'strategy' for some candidates. Teachers and learners might wish to focus on differences in scale between these two case studies (Key concept 2 in the syllabus). Candidates could, however, have used knowledge about the country's overall electrical energy strategy to assess how far people have different views about the success of the named located scheme. Teachers should also select case studies which enable candidates to answer a range of types of question about the case study. Ulla-Førre in Norway was frequently used and the material presented did not appear to enable candidates to consider the statement in the question that 'People have different views about the scheme's success'.

Candidates who did focus on 'one named located scheme' (often Three Gorges or Kariba) often produced thoughtful answers. On the other hand, there was evidence of a strong response based on a geothermal plant in Iceland. Even though the response was relatively brief, a good mark was achieved because there was a focus on the views of success of different stakeholders. Overall, a major discriminating factor in responses was whether or not there was emphasis on the views of different people about the success of the scheme. Teachers should note the syllabus reference in 'Examples and case studies' to: 'case studies should… allow candidates opportunity to examine the conflicts of interest and viewpoints of different groups of people affected by the… initiative (here located scheme) being studied.'

There were some good responses focused on the Kariba scheme. For some candidates, this was based on the selection of a case study from within their own or a neighbouring country. This is a strategy for selecting examples and case studies which is to be recommended. Candidates were able to use contrasting viewpoints about the planning, aims, construction and early stages of the scheme's operation, and they developed the response further through an accurate chronology moving forward to changed opinions of a more contemporary nature.

Weak responses generally did not plan a response based on the whole question: the statement and the command (Key message 1 above). These responses tended to describe advantages and disadvantages of a multi-purpose scheme of the named located scheme with little reference to the production of electricity.

Question 6

Better responses focused on why issues of water quality are difficult to overcome. They broke the question down into: what are the issues of water quality; why these issues are difficult to overcome; and they made some attempt to evaluate which issues and/or difficulties are the most difficult to overcome. The most common issues seen were based on causes of water pollution, though other issues such as the provision of safe drinking water and water purification enabled better responses to display a wider context. Some developed valid contrasts between rural and urban areas, or between drier and wetter places (sometimes within their own country), with a few considering economic development as a factor. Many candidates displayed a sound knowledge of place examples, and gave some detailed examples and knowledge.

Better responses selected examples carefully in order to make specific points. Less successful responses used too many examples, often repeating ideas, and were characterised by being descriptive and having a more limited focus on why water quality was a problem rather than why it is difficult to overcome. In these responses, the evaluative element was weak with basic comments on aspects of lack of finance such as: cost of chemicals; cheaper to dump waste; lack of education/ignorance; corruption. Very few candidates considered key concepts such as scale (Key concept 2 in the syllabus) and change (Key concept 7 in the syllabus) which would be useful in a question like this. Centres should ensure that the key concepts are embedded into the topics, examples and case studies.

Global interdependence

Some candidates may have been taken by surprise that there was no essay question in this option on tourism. Teachers need to ensure that they cover all aspects of the option and that candidates prepare for all aspects. Tourism was, however, the theme for **Question 7**.

Question 7

(a)   The majority of candidates used Fig. 7.1 effectively to identify the impacts on local society of the tourism activity shown. The most common were the children selling jewellery (positive and negative) and exchange of cultures. Some, however, failed to respond to the idea of 'local society' (Key concept 2 in the syllabus) as expressed in the question or drifted into broader discussion about economic factors or the environmental impact.

(b)   This question was generally done well with a wide range of impacts described. A significant number of candidates made carefully considered observations about the effects of mass tourism on the environment. Where these observations were clearly linked to Fig. 7.1, responses were frequently very impressive. Most referred to various aspects of pollution – land, air and water – while some very good answers referred to the potential impact on coastal and marine ecologies. A few noted that the expansion of tourist facilities would impact on the coastline itself. Less successful responses failed to appreciate that the question asked the candidate to refer to the photograph as a stimulus and wrote very generic answers and/or attempted to write about too many 'ways' without developing the idea that the type of tourism is mass tourism or the risk being degradation.

Question 8

This question was not popular and appeared to challenge candidates particularly because the focus of the question was on 'changes in the global market', which appeared to be not well covered in the resources that centres select to support the option. Candidates seemed to think that the question was about the general factors which influence trade and frequently they described each factor affecting global trade: resource endowment, locational advantage, historical factors, etc., as per the syllabus. Better responses understood what is meant by the global market, could describe changes in the global market and link these to the trade of exporting countries (Key message 1 above). Reference to changes in the global market most seen included: growth of NICs/MICs/BRICs, trade blocs and protectionism. Some candidates successfully developed responses around specific countries which had gone through rapid industrial change (China, India and South Korea were the main examples given) and had consequently changed their pattern of exports. There still appears to be confusion between the role of the WTO, free trade and Fair trade. Centres should consider what the difference is between free trade, fair trade and Fair trade – the latter seemed to be confused for some candidates.

Question 9

There were some thoughtful and well supported responses based on a variety of types of aid, with a clear evaluative element linked to economic and/or social development (environmental or political development were less frequently seen). Some candidates successfully broadened the evaluation by briefly considering other ways to achieve development, with trade commonly seen. Centres should note that such an approach should not, however, form the major part of the response, since an assessment of the use of international aid was the theme of the question. Again, scale (Key concept 2 in the syllabus) was less visible as both a differentiating factor on achieving development and in terms of small scale versus large scale projects or in terms of time scale. Weaker responses usually adopted an approach of describing types of aid with little developed support and not linked to whether the aid led to development or not. These responses were often quite unbalanced towards negative issues such as tied aid, corruption and dependency. There were some sound discussions of the growing influence of Chinese aid to Africa.

Economic transition

Question 10

(a)   There was a mixed response to this question. Most were able to compare the general difference between the top three and the bottom three factors as the former being all governance and regulatory while the latter were all market and infrastructure. Further credit could have been gained by adding up the totals for the top three and bottom three factors as: 47% against 14%, and/or by comparing the relative importance of the top three with the bottom three, with the top three between 15 and 17% while the bottom three are much lower, between 4 and 5%. Neither of these approaches was commonly offered.

(b)   Some candidates noticed the definition of 'general security environment' below the graph and used this to outline a response using real examples to support these responses. Better responses demonstrated an understanding of foreign direct investment as an investment of capital requiring a return in the form of profits and/or dividends to shareholders or interest on loans, and linked this to how aspects of the general security environment might affect these monetary returns or influence other factors of production such as infrastructure, labour or markets.

Question 11

The quality of responses depended on how well candidates understood what HDI is and its strengths and weaknesses as the best way of measuring inequality. Better responses displayed understanding of both strengths and weaknesses and were able to compare HDI with other measures of inequality. Few candidates displayed knowledge of positive aspects of the HDI such as: it is calculated on a scale of 0 to 1, combines both social and economic measures (some focus on people), is agreed by the United Nations which publishes a report each year (the Human Development report which includes HDI values globally), and can be tracked and compared easily. Weaker responses were generally quite descriptive and the comparative, evaluative part of the question was somewhat overlooked.

Question 12

Responses based on a case study, often with some detailed knowledge of the regional geography of the chosen country, and displaying a range of factors both physical and human which were clearly linked to limiting development of the periphery were largely successful. References to the conceptual background, the Core-Periphery, were valid but candidates in general know more about the core and less about the periphery and are not aware that processes such as backwash have a limiting effect on the development of the periphery. The quality of a response was largely dictated by the level of detail and the extent to which a range of factors was considered. The idea of considering the relative importance of different factors in order to develop the evaluative element was largely overlooked and was therefore a differentiating factor (Key message 2 above). In some cases, the examples used were very simplistic. This was especially true of responses referring to the periphery of the UK.

GEOGRAPHY

Paper 9696/43
Advanced Human Geography Options

Key messages

Candidates choose two from the four different options. Within these options is a compulsory two-part question, worth a total of 10 marks. **Part (a)** is point marked about a resource (graph, photograph, data set, etc.) with clear allocation of skills marks/guidance in the mark scheme of expectation of these skills. If the resource is a data set, comment on the rates of change or difference between the sets may be relevant. **Part (b)** is assessed by three levels and is along the same theme as the resource, but not necessarily needing to use the resource.

The optional choice of essay is marked with Levels 1–4. Quality planning of a response may take time but enables candidates to focus on the assessment objective of Evaluation (AO4) which has 12 marks out of the 20 allocated. Any essay question which includes a type of factor requires other factors to be included in the response. The style of this question will be unfamiliar to some candidates, so should be practised by centres.

Teachers should continue to teach all content within each option. Regarding dated content the syllabus states '… where possible, case studies should be dated no earlier than 1980…' This date is suggested so that the case studies are relevant and engaging to candidates. Where examples are taken before this date, it is suggested that they are reviewed or summarised along the lines of 'pre-1980 a range of measures were attempted but they were largely successful or not'.

General comments

Candidates responded well to the point marked **part (a)** questions. There are 3 or 4 marks to be awarded, and to gain full marks there need to be either three or four individual observations with resource support or two well developed observations. The latter approach requires some resource/data manipulation. For both **Questions 4(a)** and **10(a)** there was data information provided that was not required by the question, so candidates need to be taught how to select information appropriately from the resource.

In answering **part (b)** questions, as stated in the mark scheme, candidates need to develop an explanation of two or more reasons. Many candidates need to spend more time on **part (b)** as answers can be generic. It is possible to achieve full marks with two well developed paragraphs, but many candidates are not including the required level of detail and development. Those candidates who achieved Level 3 included specific examples and details of what was being explained.

The best essays are more than a narrative approach of learnt content. The candidates apply knowledge and understanding to the question being asked. Examples should be used throughout, and these can vary from places to strategies, techniques, methods, policies, etc. In weaker responses, the evaluation was inferred or placed in a simple conclusion. Candidates are encouraged to make a judgement statement throughout their essays after each new idea is introduced. This quickly and simply turns a narrative essay into a broad evaluation (a feature of a Level 3 and Level 4 response).

The most popular options were Environmental management and Global interdependence, and the majority of candidates chose either one or both of these options.

Candidate performance could be enhanced by using time well, such as in choosing carefully which question to answer, by reading both in full and thinking about and planning the responses before starting. As essays carry 20 marks, they should take more time and be longer than the responses to **parts (a)** and **(b)** which carry 10 marks.

Comments on specific questions

Production, location and change

Question 1

(a)   A description of regional variations requires candidates to consider all three variables shown (total demand, market share and production units). Some candidates noticed that market share and total demand were linked together. There are four regions of India shown in **Fig. 1.1**, so candidates should mention all four to show variation. One effective way to approach a question such as this is to look for any overall pattern which showed a clear north and west 'high' to east and south 'low' and to illustrate it with data support. This should then be developed further with data manipulation, such as combining regions to show dominance, etc. Taking a simpler approach of describing the difference between the highest and lowest regions reached a maximum of 2 marks, so candidates should be advised to look for ways to manipulate the data given whenever possible.

(b)   Candidates needed two or more reasons to achieve Level 3, and many focused on the changes in demand as a country such as India becomes more industrialised. It would have been good to see candidates focus more on the different aspects of 'changes over time' such as fluctuation, short and long term, but many approached the question quite simplistically with generic comment on increase or decrease over time. The best responses would be able to make links between reasons and show how one reason might lead on to another, illustrating the dynamic nature of market share.

Question 2

The focus of an answer needs to be on irrigation. There are two parts to the question: the need for and the effects of, which suggested a structure for the essay which some candidates made use of. Candidates explained the need for irrigation, illustrated with a specific located example in an arid region of the world. There also needs to be assessment of the factors affecting the need. The second part of the essay could then be about the effects of introduced irrigation. Place specific examples of success were effectively used, and as this also should be an assessment, candidates should consider limitations of success, resulting issues or ongoing problems that need to be addressed. As there are two parts to this question, candidates should be advised to make a brief plan for their essay to ensure balance between both parts.

Question 3

Very few candidates chose this question, but of the few responses seen, candidates should be advised to ensure they have a clear understanding of these syllabus terms.

Environmental management

Question 4

(a)   All four data sets on the bar chart showed an increase, so it was not enough to simply state 'increase' and expect to gain a mark. The rate of increase should have been described, as shown in the mark scheme. Candidates would do well to quantify the increases they describe, as seen in the mark scheme, using appropriate data support. Candidates generally selected the two appropriate data sets (renewables and hydro-electric power). Please note that comparison between the two gained no marks as the command word here was 'describe'.

(b)   This question was answered well by the majority of candidates, who easily reached Level 2 by giving two or more reasons for reducing fossil fuel use. The focus of answers should have been on reducing fossil fuel use for electricity production, therefore candidates needed to avoid answers which included reducing traffic or health problems from domestic burning of fossil fuels. Many candidates used examples from cities that have high levels of air, water or land pollution, or gave details about increased demand for renewables as a result of increased awareness and international protocols. The best answers were able to make links between these reasons and show how one has led to another with specific examples throughout.

A significant number of candidates wrote comments about global warming and the depletion of the ozone layer together, as if they are the same phenomenon. Carbon dioxide has no direct effect on ozone, unlike CFCs and HFCs. In fact, some studies show that carbon dioxide is increasing the amounts of ozone by preventing nitrogen oxide from breaking it down, therefore increased carbon dioxide increases ozone levels. Teachers should ensure that candidates do not assume all climate issues result from the use of fossil fuels.

Question 5

This was a popular question and some strong answers were given. It should be noted that the essay should have been focused on one country's electrical energy strategy, not on a scheme. It is very unlikely that essays which focus on one scheme can address the demands of this question appropriately. Some candidates chose Norway, others France, and China also featured heavily. Strategy needed to be clearly explained. Many candidates focused their essay on overcoming issues with pollution, not changes in demand and supply. This could gain credit if pollution was clearly framed as a factor in changes in demand (i.e. public opinion and international pressure to change to renewables), but it is clear that some candidates who attempted this question may have been swayed by **Questions 4(a)** and **(b)** in their thinking and believed the question was on the same theme. Teachers should make clear to candidates that the essays are distinct from the compulsory questions in each option. Some candidates did focus on the question well and gave the required balance between issues of changes in demand and supply of electricity. An essay plan would have helped candidates to focus on the demands of the question, and not be distracted by **Questions 4(a)** and **(b)**.

Question 6

Candidates who answered this question used a variety of place specific examples to illustrate where bad management of the degraded environment, or lack of management in the first place, led to a degraded environment. Both approaches were acceptable and led to many fascinating essays about issues faced in a variety of locations. The best essays included an assessment of the extent to which bad management is the main cause, and then assessed other causes such as cultural, physical, economic, etc. This style of question seemed to suit most candidates who answered it and there were only a few essays where bad management was not the focus. Teachers are encouraged to teach candidates to be able to critically evaluate a statement when one is presented to them in an essay such as this. They are not expected to wholeheartedly agree, thereby writing a one-sided unbalanced essay. The use of multiple place examples can be used to give the contrasting argument, i.e. 'in Place A bad management is the main cause, etc. However, in Place B the main cause is something else, etc.'

Global interdependence

Question 7

(a) This question was answered well, and candidates were able to give a range of social impacts of tourists on bicycles. Two or more developed impacts or four separate points is the only way to reach full marks. The mark scheme shows that either positive or negative reasons are acceptable, but they must be evidenced from the photograph. Therefore some candidates who referred to crime rates increasing could only gain credit if there was evidence used from the photograph, such as the camera or expensive watches that these tourists can be seen to have, which could make them a target of theft.

(b) Some credit was given for the reasons leading to the global increase in tourism and therefore more variety on offer. However, many responses did not develop the growth of 'new types' specifically and remained in Level 2. Examples of destinations or types of new tourism are an expectation of a Level 3 response.

Question 8

There was sound knowledge of the work of the WTO and most candidates structured their essay into two parts, one for strengths and one for limitations. Most candidates had an awareness of the aims of the WTO and described these as their strengths, and most candidates knew at least some limitations. The best essays had examples of disputes that had either been successfully dealt with by the WTO or had failed one or both parties. General criticisms often aimed at international organisations, such as corruption and ineffectuality, were included, but better essays were critical of bias rather than corruption, time-scale, environmental issues and level of power in effectuality. Teachers should note that candidates should be prepared to know actual examples of where the WTO has been involved in trade disputes, and that these are necessary to illustrate any essay about the work of the WTO. A small minority of candidates had not been taught this part of the syllabus and answered the question as if it was about Fairtrade. It is important to prepare candidates by ensuring all the syllabus content is covered.

Question 9

This was a very popular question and one which produced some excellent essays. Candidates have been well prepared to be critical of international aid, both in the short and long term, and there were many pleasing responses which were well balanced. Some essays focused on debt and debt relief, which were relevant but limiting if the candidate did not consider other types of aid which do not require repayment yet still constrain development due to dependency, inflation rates, corruption and mismanagement, etc. The best essays contained examples of NGOs and their effective bottom up projects, and a critical evaluation of why this type of aid is often more effective than large scale infrastructure projects. Tied aid was a feature, as is often the case, and it was pleasing to see more up-to-date examples used. Overall, this question was answered well.

Economic transition

Question 10

(a)   There was 1 mark available for the overall trend and then for descriptions of the changes between 2007 and 2016. Candidates should use units of measurement from the graph and make sure that they are focused on the correct data set (developed markets only). There were only 3 marks available here and most candidates achieved these.

(b)   Many candidates approached this question from the point of view of a TNC rather than an investor and many gave examples such as 'cheap labour' and 'relaxed laws' which were not credited. Investors are concerned with maximising profit and so the focus of the question was about the possibility of seeing emerging and frontier markets as potential customers, rather than a way to make cheaper products for HICs. This limited some of the answers given. Investors are not overly concerned with the operational running of factories, but want to see profit, so where these were clearly linked credit was given.

Question 11

This year, the command word 'discuss' was used for **Question 11** which should elicit a range of measures in a detailed discussion, with a level of evaluation of which is best and why. As expected, most candidates approached this question from the point of view that a measure with multiple indicators, such as HDI, is better than a measure with a single indicator, such as infant mortality rate. They then went on to discuss the benefits of using a measure such as HDI to measure social inequality. Some essays were missing the focus on social inequality, finding it too easy to focus on unequal distribution of wealth. Teachers are advised to ensure that social inequality – health, education, wellbeing, gender issues, etc. – is taught as distinct from economic inequality, despite often being linked.

A few candidates misread the intention of the question, and discussed HDI only as 'the best way'. Teachers should ensure that candidates are aware of the demands of such a question, as mentioned above, should a similar one appear in the future. This would be a good example to use as a practice question in teaching.

Question 12

This was not a popular question, and those candidates who chose to answer it produced mixed results. The focus of the question is on initial advantages, and this was often missing. Other factors are relevant if assessed against initial advantages, but many candidates knew about the development of a core region and made this the focus to the detriment of the overall answer. There were some excellent essays using SE Brazil – its terra rossa soils, natural harbours, mild climate, etc. Candidates know the models of core-periphery well and were able to apply this to the question, but they need to ensure that they do not fit their answer around their knowledge rather than answering the question set.