9696/11

Paper 1 Core Physical Geography

General comments

This was the first examination based on the revised syllabus and papers, and the results, in general, were most encouraging. Centres have built on the experiences of recent years, and most candidates displayed a clear understanding of the physical concepts involved. There was a full range of quality seen.

Much of the teaching is obviously of high quality, and excellent marks were achieved by a significant number of candidates. The examination proved successful in testing these able candidates, but was also fair to candidates over a range of abilities. Candidates generally coped well with the demands of the new style examination and there were very few rubric errors. Planning, in terms of time allocation, was effective, and only a few candidates were unable to complete the examination in the time allocated.

All questions were answered, but 'Hydrology and fluvial geomorphology' proved the most popular topic in **Section B**. It is clear that 'Atmosphere and weather' continues to be the least popular choice for the majority of candidates, but some of the answers offered were of commendable quality. Now that this topic is a compulsory part of **Section A**, it is to be hoped that, in the future, more candidates will be sufficiently knowledgeable and confident to choose 'Atmosphere and weather' in **Section B**.

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

A variety of command words may appear in questions, but in this examination, the three that dominated were 'describe', 'explain' and 'assess'. There is consistency in the demands of individual questions. In **Section A**, the part (b) questions generally require description, whilst the part (c) questions require explanation. There were many excellent answers, but some candidates offered explanations when only descriptions were demanded. In **Section B**, evaluation and assessment are dominant features, either explicitly or implicitly. All 15-mark questions lead candidates into some level of evaluation, and this was not always forthcoming. Level 3 and 4 responses are often identified through the detail and sophistication of the assessment.

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

The source material provided in **Section A** was, in general, competently used by the majority of candidates although there was a variation between questions.

This was generally a most encouraging examination in terms of the knowledge and understanding of the candidates. The approach was thorough and effective, and this first experience of the new examination will provide a solid foundation for future candidates.

Comments on specific questions

Section A

Hydrology and fluvial geomorphology

Question 1

- (a) Part (a)(i) was answered less well than (ii). A range of values was acceptable in both cases but many answers were well beyond the acceptable range. The units for the respective values were omitted by some.
- (b) The interpretation of Fig.1.1 caused many problems. It was not so much the specific interpretation but the ability to describe the relationship cogently. The anomaly of clay was missed by many. Quite a few candidates misinterpreted the question and answered in terms of erosion.
- (c) Most candidates were able to gain some marks, however the level of detail and coverage of the relationship often precluded high marks. The anomaly of clay and silt was missed by many.

Atmosphere and weather

Question 2

- (a) The vast majority gained full marks for parts (i) and (ii).
- (b) The general pattern of precipitation totals was well described with location A often identified as an anomaly. However, too many candidates simply stated the individual totals without making general statements.
- (c) There were many excellent answers. The orographic process for location B was well described, although the process of air uplift, cooling, condensation and then precipitation was sometimes described in very general terms. Many candidates noted the possibility of a minor orographic uplift at location C. Explanation of the low total at location A was often ignored.

Rocks and weathering

- (a) All candidates were able to score one mark.
- (b) The accuracy and detail of the explanation varied with the cause of instability chosen in part (a). Those who opted for vegetation removal and downslope drainage provided the more convincing explanations. It was encouraging that vegetation removal was seen in terms of both strengthening by root networks and the effect of vegetation on water movement. Explanations for the other causes were less effective. There tended to be a lack of precision in the understanding of the causes of slope instability. Simply stating that slope instability occurs when shear stress overcomes shear strength is not a sufficient answer. There needs to be an explanation as to why shear strength might decrease or shear stress increase. Many candidates also wrote about overland flow, sheet wash and rills which are not really related to slope instability.
- (c) The detail provided in answering this question was often impressive with detailed knowledge of a variety of procedures. Answers, however, did tend to be descriptive rather than explanatory. The accuracy and detail in the diagrams were less impressive and emphasises the comment made earlier about diagrams.

Section B

Hydrology and fluvial geomorphology

Question 4

- (a) (i) Definitions were generally recalled accurately, although a number confused 'stemflow' with the internal movement of water and the role of interception was often ignored. 'Overland flow' was understood by the majority.
 - (ii) There was some confusion over the nature of the water table. Many described it as a store, confusing it with groundwater store. However, most candidates were able to gain some credit.
- (b) There were many excellent answers to this question with a variety of precipitation types (usually rain and snow) described. Occasionally there was a lack of explanation. Thus, statements to the effect that high intensity rainfall leads to overland flow, is a description and required an explanation as to why. The question also asked for the shape of the storm hydrograph; this should include lag time, rising limb, peak discharge and falling limb. Often, the explanation was incomplete.
- (c) There was some confusion as to what constitutes hard engineering but, in general, answers were comprehensive with many good, accurate examples. Different examples were used, many of which were very detailed, but some lacked the correct focus, and concentrated on the causes of flooding and subsequent impacts.

Atmosphere and weather

Question 5

- (a) Many candidates answered 'reflected solar radiation' by using the term reflection. Very few mentioned the lack of absorption. Also, many thought that reflected solar radiation was long wave. 'Sensible heat transfer' was usually described in terms of conduction or convection.
- (b) Answers were generally weak. Most candidates were able to describe incoming solar radiation but were less able to explain the role of adsorbed radiation in the diurnal energy budget apart from the release of radiation at night.
- (c) There were some sophisticated answers, concluding that wind belts were the most important influence on the atmospheric transfer of energy and with a good assessment of other factors such as ocean currents. The combination of knowledge of wind systems with the tri-cellular model was often good. The tri-cellular model was used to emphasis both lateral and vertical transfer of energy. Some candidates argued for the transference of energy, other than heat, such as large energy wind systems. This was perfectly acceptable. Factual knowledge and geographical understanding were often of high quality, and some answers incorporated excellent diagrams, illustrating both ocean currents and the major wind belts.

Rocks and weathering

- (a) Both parts were competently answered. In (a)(i) subduction was generally well understood, although the role of convection currents was often ignored. Answers to (a)(ii) were generally competent, although many did not explain why sea floor spreading does not occur at other tectonic plate boundaries.
- (b) Answers, in general, were weak with only partial understanding of the role of water in weathering processes. Hydrolysis was often confused with other chemical processes and the role of rainfall in physical weathering was often ignored apart from freeze-thaw.
- (c) There were mixed responses to this question. Many candidates did not identify classification as the focus of the question. Thus, they failed to assess other factors, such as type, materials etc. Knowledge of the various types of mass movement was often incomplete. However, there were some very good answers. Over the past few years there have been signs that knowledge and understanding of mass movements are improving.

9696/12 Paper 1 Core Physical Geography

General comments

This was the first examination based on the revised syllabus and papers, and the results, in general, were most encouraging. Centres have built on the experiences of recent years, and most candidates displayed a clear understanding of the physical concepts involved. There was a full range of quality seen.

Much of the teaching is obviously of high quality, and excellent marks were achieved by a significant number of candidates. The examination proved successful in testing these able candidates, but was also fair to candidates over a range of abilities. Candidates generally coped well with the demands of the new style examination. There were few rubric errors, and only a handful of candidates attempted to answer all **Section B** questions. These were almost invariably weaker candidates, lacking the detailed knowledge to enable them to focus on just one of the three questions offered. Planning, in terms of time allocation, was effective, and only a few candidates were unable to complete the examination in the time allocated.

All questions were answered, but 'Hydrology and fluvial geomorphology' proved the most popular topic in **Section B**. It is clear that 'Atmosphere and weather' continues to be the least popular choice for the majority of candidates, but some of the answers offered were of commendable quality. Now that this topic is a compulsory part of **Section A**, it is to be hoped that, in the future, more candidates will be sufficiently knowledgeable and confident to choose 'Atmosphere and weather' in **Section B**.

For many candidates, English is not their first language, but there is an increasing clarity in both handwriting and expression, which is very encouraging. However, the illustration of answers with maps and diagrams remains variable, and such skills would benefit from further focus and development. At times, such as **Question 3(b)**, using a diagram is a requirement of the question, and failure to comply is costly in terms of marks. At other times, using an illustrative diagram would greatly enhance an answer. All answers to questions in **Section B** could have been improved by the appropriate use of diagrams. For example, many candidates in answers to **Question 4(b)** relied on text only to discuss the 'shape' of a storm hydrograph, and this was not always very effective.

A variety of command words may appear in questions, but in this examination, the three that dominated were 'describe', 'explain' and 'assess'. There is consistency in the demands of individual questions. In *Section A*, the part (b) questions generally require description, whilst the part (c) questions require explanation. There were many excellent answers, but some candidates offered explanations when only descriptions were demanded. In *Section B*, evaluation and assessment are the dominant features, either explicitly or implicitly. All 15-mark questions lead candidates into some level of evaluation, and this was not always forthcoming. Level 3 and 4 responses are often identified through the detail and sophistication of the assessment.

The use of examples can do much to enhance an answer, even if not specifically required. Case studies can offer greater depth and detail than simple examples, but may, in themselves, not cover the range of ideas that a question demands. In **Question 6**, for example, some candidates used Hong Kong as a case study, and it was effectively integrated into the response. However, the best answers need to achieve breadth as well as depth, which a case study alone cannot always provide.

The source material provided in **Section A** was competently used by the majority of candidates. The data was understood and manipulated effectively, but some candidates did not clearly identify two distinct differences in **Question 1(b)**, and the minimum temperature implications of the shape of the isotherms in **Question 2(b)**, were not always clearly described.

This was generally a most encouraging examination in terms of the knowledge and understanding of the candidates. The approach was thorough and effective, and this first experience of the new examination will provide a solid foundation for future candidates.

Comments on specific questions

Section A

Hydrology and fluvial geomorphology

Question 1

- (a) The majority of candidates answered well, particularly in part (a)(i). Showing 'working' in part (a)(ii) sometimes lacked clarity.
- (b) Explanations were often given, rather than a description of two simple points. Furthermore, the two points identified were not always sufficiently distinct from each other.
- (c) This question produced some weak answers. Many candidates drifted into erosion and transportation. Stronger candidates often answered by reference to the Hjulstrom Curve, but failed to discuss specific relevant locations. Many candidates were unclear about general changes in velocity from source to mouth.

Atmosphere and weather

Question 2

- (a) Candidates generally answered well. Most were clearly familiar with isotherms, but not all were confident in suggesting values for a location between isotherms.
- (b) The general pattern of temperature change was clearly identified by most candidates, but the temperature implications of the anomalies near Dagenham and Epping were neglected, or simply not understood.
- (c) Comparisons with rural areas beyond the urban boundary were accepted as relevant. Decreased ventilation, albedo effect, and absorption of heat by darker materials, figured prominently in many answers. However, some explanations were incomplete. For example, pollution raising urban temperatures is only the beginning of the explanation.

Rocks and weathering

- (a) Candidates answered well in both parts. They displayed accurate knowledge of the distribution of different plate boundaries.
- (b) There were some impressive answers from candidates who clearly understood the processes associated with constructive margins. Candidates are increasingly knowledgeable about convection currents and sea floor spreading. Unfortunately, these processes were not always accompanied by suitable diagrams, limiting answers to two marks.
- (c) Once again, many answers were detailed and effective, but candidates did not always confine themselves to the 'one landform' as specified, and island arcs appeared too often. Nevertheless, the understanding of convection currents driving the convergence of plates, and subsequent crustal melting and expulsion through fractures, was excellent.

Section B

Hydrology and fluvial geomorphology

Question 4

- (a) Definitions were generally recalled accurately, although a number confused 'stemflow' with the internal movement of water. The calculation of discharge in part (a)(ii) was known by very few candidates, and simply omitted by many.
- (b) Many chose to discuss 'size' and 'shape' of the drainage basin, and answers were often detailed and effective. Accurate diagrams were produced by many, but sometimes the accompanying text only made reference to peak discharge and lag time, neglecting the 'shape' of the storm hydrograph as specified in the question.
- (c) There was much confusion as to what constitutes soft engineering. Most correctly discussed afforestation, but many also discussed methods of hard engineering as though they were soft engineering. This was confusing, and detrimental to any evaluation that finally took place. Examples were used, many of which were detailed, but some lacked the correct focus, and concentrated on the causes of flooding and subsequent impacts.

Atmosphere and weather

Question 5

- (a) Most clearly understood 'albedo' in part (a)(i), although accompanying data was not always accurate. In part (a)(ii), frontal rainfall was also clearly understood, and the most effective answers incorporated relevant diagrams.
- (b) There were some very strong answers. Most concentrated on local diurnal energy budgets, and displayed clear knowledge and understanding. Some candidates effectively extended the discussion into the global energy budget.
- (c) There were some sophisticated answers, concluding that wind systems were the most important influence in the atmospheric transfer of energy. Factual knowledge and geographical understanding were often of high quality, and some answers incorporated excellent diagrams, illustrating both ocean currents, and the role of wind systems in the vertical and horizontal transfer of energy.

Rocks and weathering

- (a) Both parts were competently answered. In part (a)(i) the weathering terms were clearly understood. Answers to part (a)(ii) were generally competent, and although the question demanded a 'brief' description, it is important that there is sufficient detail to reflect understanding of the role of temperature.
- (b) Knowledge of a case study of Hong Kong was competently used by a number of candidates, and both the positive and negative effects of human activity could be covered effectively through this study. Some candidates produced substantial relevant detail.
- (c) There were mixed responses to this question. Some candidates did not discuss factors, other than water, in sufficient detail. Some relied again on the case study used in **Question 6(b)**, but it was difficult, through this approach, to cover the range of mass movements needed. Nevertheless, there were many effective answers.

9696/13 Paper 1 Core Physical Geography

General comments

This was the first examination based on the revised syllabus and papers, and the results, in general, were most encouraging. Centres have built on the experiences of recent years, and most candidates displayed a clear understanding of the physical concepts involved. There was a full range of quality seen.

Much of the teaching is obviously of high quality, and excellent marks were achieved by a significant number of candidates. The examination proved successful in testing these able candidates, but was also fair to candidates over a range of abilities. Candidates generally coped well with the demands of the new style examination. There were few rubric errors, and only a handful of candidates attempted to answer all **Section B** questions. These were almost invariably weaker candidates, lacking the detailed knowledge to enable them to focus on just one of the three questions offered. Planning, in terms of time allocation, was effective, and only a few candidates were unable to complete the examination in the time allocated.

All questions were answered, but 'Hydrology and fluvial geomorphology' proved the most popular topic in **Section B**. It is clear that 'Atmosphere and weather' continues to be the least popular choice for the majority of candidates, but some of the answers offered were of commendable quality. Now that this topic is a compulsory part of **Section A**, it is to be hoped that, in the future, more candidates will be sufficiently knowledgeable and confident to choose 'Atmosphere and weather' in **Section B**.

For many candidates, English is not their first language, but there is an increasing clarity in both handwriting and expression, which is very encouraging. However, the illustration of answers with maps and diagrams remains variable, and such skills would benefit from further focus and development. At times, such as **Question 3(b)**, using a diagram is a requirement of the question, and failure to comply is costly in terms of marks. At other times, using an illustrative diagram would greatly enhance an answer. All answers to questions in **Section B** could have been improved by the appropriate use of diagrams. For example, many candidates in answers to **Question 4(b)** relied on text only to discuss the 'shape' of a storm hydrograph, and this was not always very effective.

A variety of command words may appear in questions, but in this examination, the three that dominated were 'describe', 'explain' and 'assess'. There is consistency in the demands of individual questions. In *Section A*, the part (b) questions generally require description, whilst the part (c) questions require explanation. There were many excellent answers, but some candidates offered explanations when only descriptions were demanded. In *Section B*, evaluation and assessment are the dominant features, either explicitly or implicitly. All 15-mark questions lead candidates into some level of evaluation, and this was not always forthcoming. Level 3 and 4 responses are often identified through the detail and sophistication of the assessment.

The use of examples can do much to enhance an answer, even if not specifically required. Case studies can offer greater depth and detail than simple examples, but may, in themselves, not cover the range of ideas that a question demands. In **Question 6**, for example, some candidates used Hong Kong as a case study, and it was effectively integrated into the response. However, the best answers need to achieve breadth as well as depth, which a case study alone cannot always provide.

The source material provided in **Section A** was competently used by the majority of candidates. The data was understood and manipulated effectively, but some candidates did not clearly identify two distinct differences in **Question 1(b)**, and the minimum temperature implications of the shape of the isotherms in **Question 2(b)**, were not always clearly described.

This was generally a most encouraging examination in terms of the knowledge and understanding of the candidates. The approach was thorough and effective, and this first experience of the new examination will provide a solid foundation for future candidates.

Comments on specific questions

Section A

Hydrology and fluvial geomorphology

Question 1

- (a) The majority of candidates answered well, particularly in part (a)(i). Showing 'working' in part (a)(ii) sometimes lacked clarity.
- (b) Explanations were often given, rather than a description of two simple points. Furthermore, the two points identified were not always sufficiently distinct from each other.
- (c) This question produced some weak answers. Many candidates drifted into erosion and transportation. Stronger candidates often answered by reference to the Hjulstrom Curve, but failed to discuss specific relevant locations. Many candidates were unclear about general changes in velocity from source to mouth.

Atmosphere and weather

Question 2

- (a) Candidates generally answered well. Most were clearly familiar with isotherms, but not all were confident in suggesting values for a location between isotherms.
- (b) The general pattern of temperature change was clearly identified by most candidates, but the temperature implications of the anomalies near Dagenham and Epping were neglected, or simply not understood.
- (c) Comparisons with rural areas beyond the urban boundary were accepted as relevant. Decreased ventilation, albedo effect, and absorption of heat by darker materials, figured prominently in many answers. However, some explanations were incomplete. For example, pollution raising urban temperatures is only the beginning of the explanation.

Rocks and weathering

- (a) Candidates answered well in both parts. They displayed accurate knowledge of the distribution of different plate boundaries.
- (b) There were some impressive answers from candidates who clearly understood the processes associated with constructive margins. Candidates are increasingly knowledgeable about convection currents and sea floor spreading. Unfortunately, these processes were not always accompanied by suitable diagrams, limiting answers to two marks.
- (c) Once again, many answers were detailed and effective, but candidates did not always confine themselves to the 'one landform' as specified, and island arcs appeared too often. Nevertheless, the understanding of convection currents driving the convergence of plates, and subsequent crustal melting and expulsion through fractures, was excellent.

Section B

Hydrology and fluvial geomorphology

Question 4

- (a) Definitions were generally recalled accurately, although a number confused 'stemflow' with the internal movement of water. The calculation of discharge in part (a)(ii) was known by very few candidates, and simply omitted by many.
- (b) Many chose to discuss 'size' and 'shape' of the drainage basin, and answers were often detailed and effective. Accurate diagrams were produced by many, but sometimes the accompanying text only made reference to peak discharge and lag time, neglecting the 'shape' of the storm hydrograph as specified in the question.
- (c) There was much confusion as to what constitutes soft engineering. Most correctly discussed afforestation, but many also discussed methods of hard engineering as though they were soft engineering. This was confusing, and detrimental to any evaluation that finally took place. Examples were used, many of which were detailed, but some lacked the correct focus, and concentrated on the causes of flooding and subsequent impacts.

Atmosphere and weather

Question 5

- (a) Most clearly understood 'albedo' in part (a)(i), although accompanying data was not always accurate. In part (a)(ii), frontal rainfall was also clearly understood, and the most effective answers incorporated relevant diagrams.
- (b) There were some very strong answers. Most concentrated on local diurnal energy budgets, and displayed clear knowledge and understanding. Some candidates effectively extended the discussion into the global energy budget.
- (c) There were some sophisticated answers, concluding that wind systems were the most important influence in the atmospheric transfer of energy. Factual knowledge and geographical understanding were often of high quality, and some answers incorporated excellent diagrams, illustrating both ocean currents, and the role of wind systems in the vertical and horizontal transfer of energy.

Rocks and weathering

- (a) Both parts were competently answered. In part (a)(i) the weathering terms were clearly understood. Answers to part (a)(ii) were generally competent, and although the question demanded a 'brief' description, it is important that there is sufficient detail to reflect understanding of the role of temperature.
- (b) Knowledge of a case study of Hong Kong was competently used by a number of candidates, and both the positive and negative effects of human activity could be covered effectively through this study. Some candidates produced substantial relevant detail.
- (c) There were mixed responses to this question. Some candidates did not discuss factors, other than water, in sufficient detail. Some relied again on the case study used in **Question 6(b)**, but it was difficult, through this approach, to cover the range of mass movements needed. Nevertheless, there were many effective answers.

9696/21

Paper 2 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 half the time and lineage than a 6 mark question e.g. answers to **3(b)** should have been about half the length of **3(c)**.

Still too many candidates do not read the exact wording of questions e.g. **1(b)** asked them to use evidence from Fig. 1.1 but many did not link their reasoning to a cause of death stated in the Figure.

Candidates should read the whole question before answering it as often they answered the next part of the question in a previous response e.g. many explained the issues in **6(a)** then repeated the explanation in **6(b)**.

Candidates should appreciate that where a question asks for two aspects (**1b**, **2b**, **4b**, **5(a)(ii)**) and they give more than two the best two will be taken. It is not good practice to do more than the number asked for and should not be encouraged as it wastes time. Candidates should avoid introductions for the 3, 4, 5 and 6 mark questions. They are not needed and also waste time.

Candidates should be familiar with the new development terminology in the syllabus. Many candidates confused MICs with HICs.

In **Section B**, some candidates struggled possibly due to a lack of time. Candidates need to appreciate that the last part of **Section B** questions are worth 25% of the total mark and is often the key discriminator, being an evaluation, so they should leave sufficient time. Many responses in Section B were weaker than those given in Section A, with candidates producing very short poorly focused answers that did not relate to the marks available. Often the balance in length of response was inappropriate especially in part (**b**) questions where candidates often gave brief responses yet there were 8 marks available. The main distinguishing factor for effective answers was the use of evaluation in part (**c**), especially when it was evident throughout the answer rather than left for a concluding paragraph. Question **6** was by far the least popular.

Comments on specific questions

Section A

Population

Question 1

- (a) Most candidates were able to score full marks. Several candidates gave incorrect answers to part (a)(ii) such as 65000.
- (b) Candidates often did not link cause to effect e.g. why does hot moist conditions lead to malaria. Many candidates could not link malaria to mosquitos and rather saw it as the product of poor sanitation. Some candidates ignored the instruction to use evidence from Fig. 1.1, so gave generalised ideas such as frequency of deaths from earthquakes.
- (c) A large number of candidates ignored the idea of decreasing female death rates and focused on why they were lower than male death rates or why they were high. Again, cause and effect was crucial e.g. 'Better education for females increases their employment chances so they have lower death rates' is not as effective as 'Better female education leads to employment and higher incomes so females have better diets and living conditions such as houses with sanitation so reducing their likelihood of early death.'

Population/Migration

Question 2

- (a) A significant number of candidates could not correctly answer these simple calculations. This could be attributed to not reading the question carefully.
- (b) Many candidates did not read Table 2.1 correctly. The table indicates that there are far fewer young international migrants in HICs than in LICs, suggesting that fewer young people migrate to HICs than to LICs. So candidates who spent time explaining why people in LICs moved to HICs were not fully focused on the question. Most candidates recognised that young people in HICs were less likely to move due to being satisfied by their way of life but few could explain the high numbers in LICs. More perceptive candidates looked at push factors such as famines or recognised the comparative age profiles of HICs and LICs. There are far more young people in LICs than in HICs so the percentage of the population migrating would be higher.
- (c) Most candidates looked at the push factor of lack of education or the pull factor of higher education and more effective answers looked at the ways education opens up knowledge for and aspirations of migrants.

Population/Migration/Settlement dynamics

- (a) Nearly all candidates correctly read the graph.
- (b) The instruction to use data from Fig. 3.1 meant candidates were expected to quote some dates and population figures. Many candidates provided only dates or only figures, so limiting their answers. Most candidates made more than the required three points for maximum marks.
- (c) Marks could be achieved with six valid observations or fewer supported with development such as examples. Some candidates offered a few undeveloped points such as 'Land and house prices are cheaper than those in inner areas.' This should be explained and linked to the movement out from inner areas. Some candidates got side tracked onto lengthy discussions of the rent/bid model.

Section B

Population

Question 4

- (a) This was another question that could be answered with many valid causes (physical, economic, political, demographic and technical) or with a few detailed and exemplified causes. Few candidates chose or succeeded at the latter approach. Some candidates offered only two causes and few actually described how they occurred.
- (b) Some candidates went for a narrow approach, such as using GM crops, whilst others went for a broader approach that gave them more scope, such as introducing technology. The most successful were those candidates that looked at increasing food production and reducing population numbers. Often there was an imbalance in the detail between the two ways or there was insufficient explanation of how they reduced food shortages.
- (c) Candidates offered some perceptive evaluations of this topic often supported by reference to the models of Malthus and Boserup. Some went beyond food to examine other resources such as energy and water. The most effective answers supported their evaluations with detailed examples drawn from both sides of the argument. The case study of Swaziland from some centres was especially effective. Some candidates offered a pre-learned Malthus versus Boserup discussion which lacked exemplification or link to the question. Many candidates did not commit themselves in their evaluations or pointed out that it differed between HICs and LICs or over time (short term versus long term). Candidates should remember that a concluding evaluation should sum up their arguments and there is no right or wrong final evaluation it depends on their evidence and opinion.

Migration

Question 5

- (a) (i) A large number of candidates confused this with step migration so gave an incorrect answer.
 - (ii) Allowance was made for those candidates who described step migration in part (i) but they found it difficult to suggest two consequences of this type of migration. The most effective answers looked at the impacts on either end of the process at origin and destination.
- (b) Candidates who broke this question down into types of cost that constrain or limit migrants had a sound structure to their answers. These included closing down costs, travelling costs and opening up costs. Others went for broader economic factors such as transport availability, job availability, currency exchanges etc.
- (c) Where candidates adopted a structured approach, such as forced migration versus voluntary migration or push factors versus pull factors with examples, effective answers were produced. Where candidates looked at push factors and pull factors for each aspect, such as employment, in turn answers were not as convincing. Again, it was the level of evaluative comment that differentiated candidates.

Settlement dynamics

Question 6

(a) Some candidates offered purely theoretical answers or used favelas in Brazil as examples of rural settlement. Neither of these approaches were appropriate. This was the case study question and candidates should have recognised that and answered accordingly. Those that did often produced outstanding and detailed answers full of illuminating examples and statistical details. Candidates found it difficult to separate issues from their causes such as 'Influx of second home owners have forced up local house prices.' So the issue was the high house prices and the cause – second home buyers – should have been discussed in part (b).

- (b) Where cause and effect were clear and well linked to the issues described in part (a) candidates achieved at a very high level. Where that link was thin or not effectively explained answers remained limited.
- (c) To some extent this was limited by the chosen case study. Some areas had clearly had a lot of responses from various groups at differing scales and durations with a variety of success over time, with location and for different groups in the local community but some had few such interventions. Those candidates who took a broad overview of the issues and the resulting responses tended to produce more effective answers than those that went through the response to each issue in turn.

Paper 9696/22

Core Human Geography

Key messages

- 1 Candidates should be aware 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.
- 2 Candidates should read the whole question before answering it as often they answered the next part of the question in a previous response e.g. Many explained the causes of the migration stream in Question 5(a) (when only a description of the characteristics was asked for) and then repeated the explanation in Question 5(b).
- 3 Some candidates struggled with *Section B* questions possibly due to a lack of time. Candidates need to appreciate that the last part of *Section B* answers are worth 25% of the total mark and is often the key discriminator, being an evaluation, so they should leave sufficient time to do themselves justice.
- 4 Candidates should appreciate that where a question asks for two aspects (2(b), 4(a)(ii)) and they give more than two the best two will be taken. It is not good practice to do more than the number asked for and should not be encouraged as it wastes time.
- **5** Candidates should avoid introductions for the 3, 4, 5 and 6 mark questions. They are not needed and waste time.
- **6** 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.

Comments on Specific Questions

Section A

Question 1

- (a) Many candidates simply copied data from the table instead of making comparisons e.g. more of the causes of death in Mali affect children than in the USA.
- (b) Many candidates ignored the words population structure and instead suggested impacts on death rates, birth rates etc. without saying how the population structure (proportion of young and old, male and female) would be affected.
- (c) Most candidates were able to explain factors, most of which are related to the phenomenon of ageing populations in many HICs, and aspects of unhealthy lifestyles. Some included crime and terrorism, and while these are often in the news, they don't have significant impacts on overall death rates.

In responses there should be an element of explanation, not just listing (in other words, cause and effect is crucial).

Question 2

2(a)(i) and 2(a)(ii) were straightforward for most candidates.

- (b) Most candidates were able to give good answers to this question and gain credit.
- (c) Most candidates gave simple explanations about migrating to access higher education. Better answers explained how people with higher levels of education are more able to migrate to access employment opportunities. The most effective answers looked at the ways education opens up knowledge for and aspirations of migrants.

Question 3

3(a) and 3(b) were again found to straightforward by most candidates.

(c) Many candidates did not read the question and attempted to answer about both power <u>and</u> transport infrastructures instead of just one. This inevitably led to confused and general answers. Many candidates thought the question was about Singapore (perhaps because it was the resource used in 3(a) and 3(b)) and this usually limited their responses.

Section B

These responses were weaker than those for Section A in general. Candidates often produced very short responses which lacked a relevant focus and often bore little relationship to the marks on offer. **Question 6** was by far the least popular. **Q4** was slightly more popular than **Q5**.

Often the balance in length of response was inappropriate especially in part (b) where candidates often gave brief responses where 8 marks were available. The chief distinguishing factors for effective answers was the use of well-focused examples (case studies) and evaluation in section (c) especially when it was evident throughout the answer rather than left for a concluding paragraph. Many ran out of time to produce anything other than a superficial response to these end sections.

Question 4

(a) (i) Many candidates were not able to give a succinct response covering the key elements of sufficient, safe, nutritious food linked to a healthy life.

A significant number of candidates thought that it was about keeping stockpiles of food locked in warehouses for times of emergency.

- (ii) Most candidates were able to tackle this question effectively.
- (b) Many answers gave simple descriptions of generic approaches such as irrigation, use of machinery, the use of pesticides etc. The Green Revolution was often given as an example, but frequently as a broad generalisation and lacking in specific knowledge. The strongest responses gave clear and accurate examples to support their answer.

(c) A significant number of candidates struggled with this question, although it is explicit in the syllabus. Many answers referred to some natural hazards such as earthquakes and volcanoes, floods, disease and fires, and discussed the impact of other factors such as war and conflict (good examples included Sudan and Syria).

Few were able to go beyond this by bringing in other factors such as natural resources, capital, wealth and the nature of the environment and farming systems used.

Although elements of population policies are relevant, many candidates simply wrote all they knew about China's One Child policy.

Question 5

The most common examples used in answers were either Mexico to the USA or Poland to the UK, but there were also other relevant examples from other parts of the world.

This was an opportunity for a well-learned case study to be applied to the question.

Part (a) was an example of where a significant number of candidates did not read all parts of the question before they began, and as a result gave explanations of the causes of migration, instead of describing characteristics such as age groups, gender, modes of transport, levels of skills, places of origin and destination, numbers involved. Many candidates did not give a named case study and simply described migration in general terms.

Again, in part **(b)** many candidates gave general explanations of pushes (e.g. high unemployment, 'poor conditions') and pulls (e.g. better job opportunities, education) without relating them specifically to a case study. A significant number of candidates who did refer to named source and destination countries lacked sufficiently detailed knowledge to access higher levels (for example a surprising number of answers stated that all Polish migrants to the UK went to Peterborough).

Stronger answers in part (c) assessed the balance of positive and negative impacts within and between the two ends of the migration stream. Impacts could be economic, social, cultural and political and it was the level of evaluative comment that differentiated candidates. Again, weaker answers were generalised with impacts that could have applied to any location.

- (a) Many candidates were able to give explanations based on counter-urbanisation (which is a clear requirement in the syllabus) and explained how environmental, economic and social conditions deteriorating in the city led to 'pushes' whilst rural areas seem more attractive with cheaper housing and better environments. Other factors explained were improved transport links and the development of technologies that enable more 'home working'. Some answers explained moves within urban areas (e.g. from the inner cities to the suburbs) and confused population movements out to beyond the city's boundary with the growth of the cities themselves (urban expansion) and so were not able to address the question effectively.
- (b) This was the part of the question with weakest answers, with many candidates giving vague and general answers, often describing very small-scale changes (e.g. a former bank being turned into a restaurant). Good responses were able to give answers based on case studies, but even here some answers were very general descriptions of changes such as London Docklands.
- (c) Good knowledge of examples was crucial here. Stronger answers went beyond income differences to discuss other causes such as differences in ethnicity, religion, culture and age, backed up by good exemplification. Weaker answers simply focussed on income differences, many simply writing a descriptive account of favelas in Brazil.

Paper 9696/23

Core Human Geography

Key messages

- 1 Candidates should be aware 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.
- 2 Candidates should read the whole question before answering it as often they answered the next part of the question in a previous response e.g. Many explained the causes of the migration stream in Question 5(a) (when only a description of the characteristics was asked for) and then repeated the explanation in Question 5(b).
- 3 Some candidates struggled with *Section B* questions possibly due to a lack of time. Candidates need to appreciate that the last part of *Section B* answers are worth 25% of the total mark and is often the key discriminator, being an evaluation, so they should leave sufficient time to do themselves justice.
- 4 Candidates should appreciate that where a question asks for two aspects (2(b), 4(a)(ii)) and they give more than two the best two will be taken. It is not good practice to do more than the number asked for and should not be encouraged as it wastes time.
- **5** Candidates should avoid introductions for the 3, 4, 5 and 6 mark questions. They are not needed and waste time.
- **6** 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.

Comments on Specific Questions

Section A

Question 1

- (a) Many candidates simply copied data from the table instead of making comparisons e.g. more of the causes of death in Mali affect children than in the USA.
- (b) Many candidates ignored the words population structure and instead suggested impacts on death rates, birth rates etc. without saying how the population structure (proportion of young and old, male and female) would be affected.
- (c) Most candidates were able to explain factors, most of which are related to the phenomenon of ageing populations in many HICs, and aspects of unhealthy lifestyles. Some included crime and terrorism, and while these are often in the news, they don't have significant impacts on overall death rates.

In responses there should be an element of explanation, not just listing (in other words, cause and effect is crucial).

Question 2

2(a)(i) and 2(a)(ii) were straightforward for most candidates.

- (b) Most candidates were able to give good answers to this question and gain credit.
- (c) Most candidates gave simple explanations about migrating to access higher education. Better answers explained how people with higher levels of education are more able to migrate to access employment opportunities. The most effective answers looked at the ways education opens up knowledge for and aspirations of migrants.

Question 3

3(a) and 3(b) were again found to straightforward by most candidates.

(c) Many candidates did not read the question and attempted to answer about both power <u>and</u> transport infrastructures instead of just one. This inevitably led to confused and general answers. Many candidates thought the question was about Singapore (perhaps because it was the resource used in 3(a) and 3(b)) and this usually limited their responses.

Section B

These responses were weaker than those for Section A in general. Candidates often produced very short responses which lacked a relevant focus and often bore little relationship to the marks on offer. **Question 6** was by far the least popular. **Question 4** was slightly more popular than **Question 5**.

Often the balance in length of response was inappropriate especially in part (b) where candidates often gave brief responses where 8 marks were available. The chief distinguishing factors for effective answers was the use of well-focused examples (case studies) and evaluation in section (c) especially when it was evident throughout the answer rather than left for a concluding paragraph. Many ran out of time to produce anything other than a superficial response to these end sections.

Question 4

(a) (i) Many candidates were not able to give a succinct response covering the key elements of sufficient, safe, nutritious food linked to a healthy life.

A significant number of candidates thought that it was about keeping stockpiles of food locked in warehouses for times of emergency.

- (ii) Most candidates were able to tackle this question effectively.
- (b) Many answers gave simple descriptions of generic approaches such as irrigation, use of machinery, the use of pesticides etc. The Green Revolution was often given as an example, but frequently as a broad generalisation and lacking in specific knowledge. The strongest responses gave clear and accurate examples to support their answer.

(c) A significant number of candidates struggled with this question, although it is explicit in the syllabus. Many answers referred to some natural hazards such as earthquakes and volcanoes, floods, disease and fires, and discussed the impact of other factors such as war and conflict (good examples included Sudan and Syria).

Few were able to go beyond this by bringing in other factors such as natural resources, capital, wealth and the nature of the environment and farming systems used.

Although elements of population policies are relevant, many candidates simply wrote all they knew about China's One Child policy.

Question 5

The most common examples used in answers were either Mexico to the USA or Poland to the UK, but there were also other relevant examples from other parts of the world.

This was an opportunity for a well-learned case study to be applied to the question.

Part (a) was an example of where a significant number of candidates did not read all parts of the question before they began, and as a result gave explanations of the causes of migration, instead of describing characteristics such as age groups, gender, modes of transport, levels of skills, places of origin and destination, numbers involved. Many candidates did not give a named case study and simply described migration in general terms.

Again, in part **(b)** many candidates gave general explanations of pushes (e.g. high unemployment, 'poor conditions') and pulls (e.g. better job opportunities, education) without relating them specifically to a case study. A significant number of candidates who did refer to named source and destination countries lacked sufficiently detailed knowledge to access higher levels (for example a surprising number of answers stated that all Polish migrants to the UK went to Peterborough).

Stronger answers in part (c) assessed the balance of positive and negative impacts within and between the two ends of the migration stream. Impacts could be economic, social, cultural and political and it was the level of evaluative comment that differentiated candidates. Again, weaker answers were generalised with impacts that could have applied to any location.

- (a) Many candidates were able to give explanations based on counter-urbanisation (which is a clear requirement in the syllabus) and explained how environmental, economic and social conditions deteriorating in the city led to 'pushes' whilst rural areas seem more attractive with cheaper housing and better environments. Other factors explained were improved transport links and the development of technologies that enable more 'home working'. Some answers explained moves within urban areas (e.g. from the inner cities to the suburbs) and confused population movements out to beyond the city's boundary with the growth of the cities themselves (urban expansion) and so were not able to address the question effectively.
- (b) This was the part of the question with weakest answers, with many candidates giving vague and general answers, often describing very small-scale changes (e.g. a former bank being turned into a restaurant). Good responses were able to give answers based on case studies, but even here some answers were very general descriptions of changes such as London Docklands.
- (c) Good knowledge of examples was crucial here. Stronger answers went beyond income differences to discuss other causes such as differences in ethnicity, religion, culture and age, backed up by good exemplification. Weaker answers simply focussed on income differences, many simply writing a descriptive account of favelas in Brazil.

9696/31 Paper 3 Advanced Physical Geography Options

General comments

This was the first examination of the revised syllabus and papers. The response of candidates was generally encouraging with some very good answers to some questions. All candidates now need to do a resourcebased question followed by the option of two essay questions. The resource-based questions caused few problems. The essay 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. Conclusions should come at the end of answers rather than being anticipated at the beginning. Coastal environments and Hazardous environments were, as usual, the most popular options. The Tropical environments option was the least popular and caused some problems for candidates. The responses to these questions are examined in greater detail later. There were few rubric infringements and only an occasional candidate answered from more than two options.

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

Comments on specific questions

Tropical environments

Question 1

- (a) Diagrams were generally poor with the labelling being minimal. Some candidates identified features that were not present in the photograph. There was a very poor response to this part.
- (b) Understanding of the role of deep weathering in the formation of the landforms was limited. Some answers tried to explain the features by surface physical processes. Although hydrolysis was understood to be a significant weathering process in granite, the role of joints and joint spacing in influencing the formation of the features was poor. Most candidates realised that erosion was involved in revealing the surface features but the level of detail was minimal.

Question 2

This was the best answered question in this option. Those candidates that attempted it were aware of the importance of the ITCZ and were able to argue convincingly for its influence on tropical climates. Some answers even discussed the nature and formation of monsoon climates. The question asked for an assessment thus discussion of factors other than the ITCZ was required. Ocean currents and latitude were the most frequent other factors that were discussed.

Question 3

Although there were a few good answers, many answers showed little understanding of the nutrient cycles in either of the ecosystems. Responses mostly considered the tropical rainforest ecosystem with very few answers based on the savanna ecosystem. There were occasional good Gersmehl diagrams but the cycles were often described in very simple terms. Human influence was usually restricted to deforestation and mining with only a partial understanding of the effects on the nutrient cycles.

Coastal Environments

Question 4

- (a) Most candidates were able to identify at least two main changes. However, much time was wasted in explanation, only to be repeated in part (b).
- (b) Many candidates misinterpreted the term sub-aerial processes and explained the features in terms of marine processes. Explanation of sub-aerial processes concentrated on weathering especially freeze-thaw and salt weathering. However, the detail was often lacking and there was little indication as to how these processes lead to the formation of the features.

Question 5

This was the least popular question in this section with a generally weak response. The range of depositional landforms covered was often limited to spits with a few throw away lines with respect to bars and barrier beaches. Transport processes were described well, but the explanation for longshore drift was often limited. There were some good accounts of the difference between swash aligned and drift aligned beaches and the different beach forms created by constructive and destructive waves.

Question 6

This was the most popular question in this section. The detail in many answers was impressive and many excellent marks were attained. However, a few introductory statements outlining why climate change and global warming are happening were often missing. It was good to see that many candidates were questioning the influence of sea level rise on corals. It is generally agreed that the current rate of sea level rise is probably insufficient to affect coral growth. The effect of sea water temperature rise was considered by most. The increase in acidity of the sea water was considered by some as well as the potential increase in storm activity. Factors other than climate change that were discussed were many and varied and it is apparent that the increase in Crown-of-Thorns Starfish had captured the attention of most. However, there was a minority of responses that failed to consider any factors other than climate change. Overall, the quality of response was good.

Hazardous environments

- (a) Few candidates were able to describe the nature of a lahar. Most understood that it is fast and many used the figure to describe some characteristics. The same was true of rockfalls. There was generally a weak response to this part.
- (b) To reiterate the above statement, lahars were often confused with pyroclastic flows and sometimes even with lava flows. Those that did have some understanding of lahars and their movement were unable to explain the precise mechanisms involved. Melting of snow and ice was often considered but the manner in which the water becomes incorporated with volcanic debris, especially ash, was often very vague. Some described water flow moving down the mountain picking up debris rather than being incorporated in the material, increasing pore water pressure and reducing cohesion. Many described the movement as a slide.

Question 8

This was by far the most popular question in this option and received a good response from candidates. The detail in many answers was impressive with accurate reference to specific earthquakes, dates and number of casualties. Most candidates were aware that factors other than preparedness and monitoring needed discussion. The most significant other factors discussed were magnitude of the earthquake, location of focus and epicentre, and secondary hazards such as landslides.

Question 9

This was not a popular question but there were some very good responses. The question asked for primary and secondary impacts rather than primary and secondary hazards, so there was no requirement to make the difficult decision as to which hazards were primary or secondary. This made the question somewhat more straightforward. As with **Question 8**, the level of detail was often good. Some candidates ignored or misinterpreted the large scale aspect and described the effects of tornadoes.

Hot arid and semi-arid environments

Question 10

- (a) Most candidates were able to obtain good marks covering the variety of fluvial processes that have created the landforms shown in the figure. However, evaporation was sometimes missed in the formation of the playa.
- (b) Although there was sometimes uncertainty concerning the nature of Pleistocene pluvials, most answers covered the main processes that occurred during the pluvials and were able to relate them to the landforms shown in the figure. There was some confusion over the piedmont with some candidates confusing it with pediment. However, pediment was credited if it was stated that a pediment was part of the piedmont.

Question 11

There were very few answers to this question. The quality of the answers was very variable ranging from very simple statements about the climatic features to very detailed accounts of temperature values and variations, humidity, winds and the great spatial variability of these factors.

Question 12

In many cases, it was unclear whether hot arid or semi-arid environments were being assessed. This significantly weakened some of the answers. There was also some confusion as to which areas were hot arid or semi-arid. Although many commenced with a brief discussion of the problems faced by management, many answers discussed strategies without an introduction. However there were some excellent answers with detailed accounts of a variety of management strategies. This variety of case studies was much greater than in previous answers to similar questions. It was good to note that in the discussion of the Great Green Wall there was much argument as to its sustainability. Discussion of sustainability was also more prominent that it had been in previous years. However, in some of the answers the discussion was very generalised with little specific detail and were mainly generic and unrelated to any specific area or location.

9696/32 Paper 3 Advanced Physical Geography Options

General comments

This was the first examination of the revised syllabus and papers. The response of candidates was generally encouraging with some very good answers to most questions. All candidates now need to do a resourcebased question followed by the option of two essay questions. The resource-based questions caused few problems, with parts (a) proving an accessible introduction, although parts (b) proved much more demanding to a sizeable proportion of candidates. The essay questions all demanded an evaluation or a reasoned argument based on an assessment. Many of the responses would have benefited from a short introduction outlining the issues that were to be discussed. Conclusions often brought the arguments and discussion to a satisfactory end, although some responses simply agreed with the wording of the question.

Coastal environments and hazardous environments were, as usual, the most popular options. There was a small increase in the number of candidates choosing the least popular hot arid and semi-arid environments option.

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

Comments on specific questions

Tropical environments

Question 1

- (a) Most candidates interpreted Fig. 1.1 accurately and many used specific values to illustrate the contrasting precipitation and temperatures. The focus of the question was a contrast, however some candidates simply described the characteristics of tropical rainforest and savanna ecosystems without focusing on specific differences.
- (b) This question focused particularly on the movement of the ITCZ. The better responses explained this movement with reference to specific geographical areas within the tropics. It was important to relate the movement of the ITCZ to the precipitation and temperature variations within the savanna ecosystem. Only a minority of candidates managed to do this convincingly.

Question 2

This was the least popular question in this section. Although there were a few good answers, many showed only superficial understanding of the effects of vegetation upon soil fertility. The better responses discussed and assessed other major influences upon soil fertility in a tropical ecosystem, particularly human activities.

Question 3

This was the best answered question in this section. Many candidates had a clear understanding of the threats to sustainable management in a tropical ecosystem and used specific case studies to illustrate their ideas. Some of the weaker responses simply highlighted general threats and problems without any clear understanding of the major issues involved in sustainable management.

Coastal environments

Question 4

- (a) Despite the instruction, a large number of candidates did not include a labelled diagram with their response. Most candidates were able to identify the characteristics of one coastal depositional land form, however, much time was wasted in explanation which was then repeated in part (b).
- (b) Many candidates understood the processes of marine transportation and deposition. However it was important to relate this to the coastal depositional landform chosen. Some of the better responses included annotated diagrams to clarify the formation of the chosen land form. Occasionally precise detail and understanding of longshore drift was lacking, although mid-Level 2 marks were mostly attained.

Question 5

This was the least popular question in this section with a generally weak response. Understanding of isostatic and eustatic sea level change was often insecure and resulted in very vague and imprecise answers. However, the question gave considerable scope for candidates to evaluate sea level change and other significant factors in the formation of coastal landforms. A small minority managed to capitalise on this and produced a clear evaluation of various factors in the formation of a range of coastal landforms.

Question 6

This was the most popular question in this section. However, it was hard engineering techniques that were at the centre of this discussion and too many candidates wasted time on analysing soft engineering techniques. It was good to note that many responses incorporated a detailed analysis of specific coastlines, especially the Holderness coast. The best responses focused clearly on the levels of technology, cost and sustainability throughout their discussion.

Hazardous environments

Question 7

- (a) This question was particularly well done by most of the candidates. Global patterns and trends were readily recognised and data was used effectively to illustrate the points made. A small minority simply described the various locations and the number of storms found in each of the oceans on the map.
- (b) Once again this question was answered effectively with most candidates accessing at least Level 2. Most responses showed a clear understanding of how and where tropical storms developed and the best answers used detailed knowledge and integrated appropriate examples effectively into their response.

Question 8

This was by far the most popular question in this option and received a good response from most candidates. The detail in many answers was impressive with accurate reference to specific volcanic eruptions and earthquake events. Some candidates were aware that volcanoes can have a positive effect on lives whilst remaining a threat to property. The better responses indicated the greater scale and threat of earthquakes and offered a more balanced view.

Question 9

This was not a popular question and there was a wide range in the quality of responses. The better answers maintained a focus on tornadoes and highlighted the great impacts on lives and property. At the same time the difficulties involved in prediction, preparation and monitoring of tornadoes was acknowledged, with some discussion of the methods used by NOAA and USGS to measure the areas at risk. Most answers included examples of the location of tornadoes, especially tornado alley in the USA.

Hot arid and semi-arid environments

Question 10

- (a) Most candidates were able to identify at least one erosional landform shown in the photograph, however some did not include a labelled diagram. Some of the best responses included a detailed annotation to the diagram, which was then elaborated on in the text.
- (b) Most candidates had a general understanding of the development of the landform chosen, although there was a wide range of detail included. The better responses focused on the role of wind erosion and the varying resistance of different rocks.

Question 11

Most responses contained a balanced argument when accessing the extent to which the degradation of soils and vegetation is caused by human factors. There was a good range of case studies and examples used to illustrate the damage done by various types of human activity. However, only the better answers then discussed several physical factors, which increased the rate and level of degradation in semi-arid environments.

Question 12

There were very few answers to this question. The quality of the responses was very variable, ranging from simple descriptions of weathering processes, to very detailed accounts of both physical and chemical weathering processes in both hot arid and semi-arid environments. The better answers also included a range of landforms to illustrate their evaluation.

9696/32

Advanced Physical Geography Options

General comments

This was the first examination of the revised syllabus and papers. The response of candidates was generally encouraging with some very good answers to most questions. All candidates now need to do a resourcebased question followed by the option of two essay questions. The resource-based questions caused few problems, with parts (a) proving an accessible introduction, although parts (b) proved much more demanding to a sizeable proportion of candidates. The essay questions all demanded an evaluation or a reasoned argument based on an assessment. Many of the responses would have benefited from a short introduction outlining the issues that were to be discussed. Conclusions often brought the arguments and discussion to a satisfactory end, although some responses simply agreed with the wording of the question.

Coastal environments and hazardous environments were, as usual, the most popular options. There was a small increase in the number of candidates choosing the least popular hot arid and semi-arid environments option.

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

Comments on specific questions

Tropical environments

Question 1

- (a) Most candidates interpreted Fig. 1.1 accurately and many used specific values to illustrate the contrasting precipitation and temperatures. The focus of the question was a contrast, however some candidates simply described the characteristics of tropical rainforest and savanna ecosystems without focusing on specific differences.
- (b) This question focused particularly on the movement of the ITCZ. The better responses explained this movement with reference to specific geographical areas within the tropics. It was important to relate the movement of the ITCZ to the precipitation and temperature variations within the savanna ecosystem. Only a minority of candidates managed to do this convincingly.

Question 2

This was the least popular question in this section. Although there were a few good answers, many showed only superficial understanding of the effects of vegetation upon soil fertility. The better responses discussed and assessed other major influences upon soil fertility in a tropical ecosystem, particularly human activities.

Question 3

This was the best answered question in this section. Many candidates had a clear understanding of the threats to sustainable management in a tropical ecosystem and used specific case studies to illustrate their ideas. Some of the weaker responses simply highlighted general threats and problems without any clear understanding of the major issues involved in sustainable management.

Coastal environments

Question 4

- (a) Despite the instruction, a large number of candidates did not include a labelled diagram with their response. Most candidates were able to identify the characteristics of one coastal depositional land form, however, much time was wasted in explanation which was then repeated in part (b).
- (b) Many candidates understood the processes of marine transportation and deposition. However it was important to relate this to the coastal depositional landform chosen. Some of the better responses included annotated diagrams to clarify the formation of the chosen land form. Occasionally precise detail and understanding of longshore drift was lacking, although mid-Level 2 marks were mostly attained.

Question 5

This was the least popular question in this section with a generally weak response. Understanding of isostatic and eustatic sea level change was often insecure and resulted in very vague and imprecise answers. However, the question gave considerable scope for candidates to evaluate sea level change and other significant factors in the formation of coastal landforms. A small minority managed to capitalise on this and produced a clear evaluation of various factors in the formation of a range of coastal landforms.

Question 6

This was the most popular question in this section. However, it was hard engineering techniques that were at the centre of this discussion and too many candidates wasted time on analysing soft engineering techniques. It was good to note that many responses incorporated a detailed analysis of specific coastlines, especially the Holderness coast. The best responses focused clearly on the levels of technology, cost and sustainability throughout their discussion.

Hazardous environments

Question 7

- (a) This question was particularly well done by most of the candidates. Global patterns and trends were readily recognised and data was used effectively to illustrate the points made. A small minority simply described the various locations and the number of storms found in each of the oceans on the map.
- (b) Once again this question was answered effectively with most candidates accessing at least Level 2. Most responses showed a clear understanding of how and where tropical storms developed and the best answers used detailed knowledge and integrated appropriate examples effectively into their response.

Question 8

This was by far the most popular question in this option and received a good response from most candidates. The detail in many answers was impressive with accurate reference to specific volcanic eruptions and earthquake events. Some candidates were aware that volcanoes can have a positive effect on lives whilst remaining a threat to property. The better responses indicated the greater scale and threat of earthquakes and offered a more balanced view.

Question 9

This was not a popular question and there was a wide range in the quality of responses. The better answers maintained a focus on tornadoes and highlighted the great impacts on lives and property. At the same time the difficulties involved in prediction, preparation and monitoring of tornadoes was acknowledged, with some discussion of the methods used by NOAA and USGS to measure the areas at risk. Most answers included examples of the location of tornadoes, especially tornado alley in the USA.

Hot arid and semi-arid environments

Question 10

- (a) Most candidates were able to identify at least one erosional landform shown in the photograph, however some did not include a labelled diagram. Some of the best responses included a detailed annotation to the diagram, which was then elaborated on in the text.
- (b) Most candidates had a general understanding of the development of the landform chosen, although there was a wide range of detail included. The better responses focused on the role of wind erosion and the varying resistance of different rocks.

Question 11

Most responses contained a balanced argument when accessing the extent to which the degradation of soils and vegetation is caused by human factors. There was a good range of case studies and examples used to illustrate the damage done by various types of human activity. However, only the better answers then discussed several physical factors, which increased the rate and level of degradation in semi-arid environments.

Question 12

There were very few answers to this question. The quality of the responses was very variable, ranging from simple descriptions of weathering processes, to very detailed accounts of both physical and chemical weathering processes in both hot arid and semi-arid environments. The better answers also included a range of landforms to illustrate their evaluation.

Paper 9696/41 Advanced Human Geography Options

Key messages

- 1 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 students. 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'.
- 2 Current information can be very useful since it highlights current thinking and recent changes. However, in some questions, current facts are less useful, especially when in response to data (Questions (a) and (b)) which is not completely up-to-date. This characteristic is also important in questions demanding comments on policies and events as in Question 12, on regional convergence. Current policies have often not had time to be put into action and certainly not to be assessed.
- 3 Teachers are reminded of the necessity to teach all content within each option, since even where candidates have a favoured part(s) to the option, the structured question may have a focus on another part of the option or the essay choice might not match with content selected by the teacher or student.
- 4 The time allocated by a candidate and length of response expected has not changed- it is still possible to achieve a high-level response, for the essay questions, within three sides of normal handwritten text. More is not necessarily better. 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. Some candidates treated the part (b)'s of the compulsory questions 1, 4, 7 and 10 as essays which then led to time management issues in the paper.
- 5 Any question which asks candidates to consider the part played by one factor should also bring other factors into the discussion to develop the assessment element. This style of this question may be unfamiliar to some candidates, so should be practiced by centres.

General comments

For the compulsory question, the first part (a) is now point marked about a resource, with clear allocation of skills marks/guidance in the mark scheme of expectation of these skills. The second part (b) is assessed by three levels/Level marked 1–3 and is along the same theme as the resource, but not necessarily needing the resource as stimulus.

The optional choice of essay is levels marked 1–4, as opposed to 1–3 in previous years. This should allow for greater distinction between very good and excellent answers.

Many candidates scored well on the point marked questions (a), however, it is worth noting that development of one point could only reach maximum 2. Some candidates would benefit from considering the number of marks allocated for the question. Comment about the main feature of the data such as the overall trend/pattern/impression is always useful, with specific data in support before considering other aspects such as anomalies. Where data is presented in tabular form-either numbers or percentages – as in **Question 4(a)** – data manipulation is required, rather than just repeating the information from the resource.

For the essay questions, better responses structured the whole essay as an assessment, whilst a moderate approach was to make assessment comment in the introduction and the conclusion. Some candidates did not make a statement in the introduction about their view regarding the main point of the question with at best only a concluding statement – this approach is least successful.

In general, examples should be used throughout a response, whilst candidates should pay careful attention to examples specified by a question. They should be able to determine if a question is focused upon one example – usually a case study from the syllabus – or if it is possible or even a demand to use more than one example. The command 'using one or more examples' means that a candidate could score full marks by considering one example with specific details – a case study – or by using a variety of examples, which may still include details from a case study.

Scale – comments are often made about countries or continents which are far too sweeping, e.g. many candidates refer to Africa as a country or the scale demanded by a question is misinterpreted.

Comments on specific questions

Production, Location and Change

Question 1

- (a) Most candidates could outline two benefits from using automation in the production process but very few were able give supporting evidence from the photograph.
- (b) Varying quality of responses was seen. Some with no idea about functional linkages, some displaying a general knowledge and the better responses able to link this knowledge of functional linkages to vehicle production as shown in Fig. 1.1 and more generally.

Question 2

Those attempting this question were able to show some understanding of intensification and support ideas with relevant case studies and examples. Most responses focused mainly on the capital-intensive aspect of intensifying agriculture, with examples such as: mechanization, application of chemicals, irrigation. Good responses considered a wide variety of ways that intensification is achieved, explained benefits and problems thoroughly and argued clearly about how far they agreed with the statement. Exemplar support was often based around examples of activities related to intensification such as irrigation, whilst stronger responses had examples from places varying in scale from a named country to that of an individual producer. These stronger responses had clear supporting details, demonstrating a sense of place. Most argued that the benefits are greater and were often stronger on the problems than the benefits. Most commonly the structure for the response was centred around two parts: the benefits then the problems. Few were able to take individual aspects of intensifying agriculture and weigh up the pros and cons of each aspect and assessing how far this goes towards the overall view expressed.

Question 3

Very few candidates attempted this question and those that did mainly focused on discussion of location with only passing reference to character or they tended to ignore the distinction between character and location. Centres should take note of key point 3 above, as some candidates attempted this question and appeared to be insufficiently prepared for it, whilst others started **Question 2**, crossed it out and attempted **Question 3**. Candidates who did well demonstrated clear knowledge of varying roles played by the government in influencing the character and location of manufacturing industry rather than some poorer responses which viewed the role of government more simply as one of telling business (rather than manufacturing industry) what to do. The better responses were also able to widen the evaluation by considering other factors and the relative importance of these and the role of the government.

Environmental Management

Question 4

(a) The key to success here was to focus on the terms of the question and the columns 'without access to electricity' rather than to comment upon those 'with access to electricity'. Part of the skill assessed in this question was the correct identification of the set(s) of data required. Another key skill is the ability to manipulate data rather than to lift it directly. Very few candidates recognised that the total of the regions given is one less than the world total, so a valid point was missed that the rest of the world has only one million without access to electricity or that these regions comprise more than 99 per cent of the total.

(b) Weaker responses did not refer to with the resources and saw this as a general question about why energy is more accessible in some areas than others. Stronger responses developed reasons about demand and supply to the places shown in the table. Many did pick up on the urban-rural distinction which is valid at this point, but a few simply described rather than explained the difference. Most were able to offer reasons such as: level of development, resource endowment, income and technology as per the syllabus, whilst a common approach was to contrast ease of access in urban areas with remoteness in rural areas. A differentiating factor is how far these reasons can be developed. For instance, to state that regions such as Africa and Asia lack technology is quite basic. This idea and others need to be developed in themselves and in relation to the terms of the question.

Question 5

Good responses were characterised by knowledge of specific up-to-date energy mixes used for the generation of electrical energy for at least one country and a thorough evaluation of the extent to which the energy mix is influenced by clearly defined human and or physical factors. The evaluation was sometimes developed by comment on factors for temporal variations in this mix and/or by a clear understanding of factors influencing the balance between different sources of energy and who/what is responsible for this balance. Many argued that decisions about the balance of energy sources were often a combination of both factors and that it is fair to say that it is difficult to sort out the more dominant factor.

Weaker responses often used an approach of comment in two separate sections: physical and human factor, whilst others were not always able to either distinguish between physical and human factors or incorrectly categorised them. The concept of balance was not always clear although some sort of preference may be mentioned. Some drifted off into long discussions of one named located scheme to produce electricity focusing more on impacts and success of the scheme than on the factors behind this scheme and its relevance to the balance of energy sources at the scale of a country.

Exemplification was mostly led by one specific country-which is perfectly valid, however the view of some candidates is very limited at times. This was particularly seen with reference to countries where one power source dominates electrical energy production such as France, Norway or Iceland and/or where candidates have a limited view of other sources and factors behind the balance of sources. It would be reasonable to suggest that centres/candidates should also consider how demand factors fit into this topic.

Question 6

The most important factor behind the success or not of attempts to answer this question is in the choice of the case study of one degraded environment. This was especially true where an urban environment is used. Centres and candidates should make sure that the case study chosen fits this option. The option is titled 'Environmental management' and under paragraph 12.3, 'Environmental degradation', the content is focused on pollution (land, air and water) with further content on water quality, factors in the degradation of rural and urban environments, constraints on improving the quality of degraded environments and the protection of environments at risk. Paragraph 12.4 the case study of 'the management of a degraded environment' should follow the idea of environment as set out in paragraph 12.4. Some centres and/or candidates are taking this to include social and economic aspects of degradation of urban environments. Whilst causes of degradation might be economic in origin the degradation - effect of the causes - should focus on at least one of land, air or water pollution. From the case studies of urban areas seen, those on London seem to fit this less well, even though some candidates did attempt to mention environmental aspects it is apparent that some case studies are inappropriately selected for this syllabus and for this option. Other candidates seemed over reliant on content about attempts to improve the environment and found it difficult to use this effectively to answer the question. This approach was mostly seen with case studies on Namibia or London. Some candidates chose an environmental accident, such as the Deepwater Horizon disaster which could be relevant but was often not directed closely to the focus of the question. Some very good responses were seen using examples such as the Pearl River Delta, the Niger Delta and Delhi.

The question required consideration of two aspects the causes and problems of a degraded environment, both of which needed comments and therefore had an evaluative element. It was not necessary to address the two separately for a clear assessment. Most responses could describe the causes, with better responses able to add comment based on evidence and with sound details. The problems aspect of the question required assessment comment on the severity of the problems, which is more than just a description. Sound comment was seen with regards to who or what suffered from the environmental degradation, the extent of the problem spatially or temporally or whether the problem could be 'solved'. Specific details about the chosen environment supported the answer well.

Global Interdependence

Question 7

- (a) Most candidates recognized and acted upon the command to compare and could identify the overall trends for North America and Asia and used data in support. Differentiation occurred because, although most candidates spotted the change in trend of North America, few noted that for Asia the increase was not at the same rate throughout the period shown.
- (b) Often quite well answered by candidates who maintained focus on trade and changes in trade rather than reasons for relative share. Reasons offered mostly focused on Asia with some reference to other regions. Reasons most commonly seen and quite effectively used were: development of NICs in Asia-linking increased development based on manufacturing producing goods with competitive prices leading to both increased exports and imports of raw materials, power sources and parts increasing overall trade; the role of TNCs and deindustrialisation in HICs and sector shift to tertiary and quaternary activities. Quite a large number recognised that the graph only referred to 'goods' so that it did not include invisible trade. Some candidates attempted to use examples which do not fit the time-period shown, e.g. the Trump administration in the USA moving towards protectionism. The role of WTO and free trade was also sometimes handled well. The overall impacts of trade agreements on trade by world region were less well handled.

Question 8

Some candidates defined an exporting country as a country where exports are dominant over imports. The syllabus does not include a definition of 'exporting country' and for this question a broader approach was acceptable. The key aspect of the question was the impacts of trade and the scale of the evaluation to be focused at the national level.

Stronger answers usually had background on more than one country and had a sound knowledge of benefits and disadvantages of trade and could evaluate the impacts on the country or countries. Impacts were often seen as economic and social and sometimes environmental or political. They were able to stress the positive and negative value of trade to exporting countries and to broaden the discussion from a simple approach of impacts of globalisation/industrialisation on LICs and NICs to a discussion along the lines of export lead development and the role of TNCs versus primary product dependency and international indebtedness etc. Many made good use of examples: China, Taiwan, Ghana, Jamaica, Zambia etc. Some good answers were clearly based on a sound understanding of economics and the positive and negative outcomes from the involvement of specific multinationals within certain countries.

Weaker answers struggled to see an overview of impacts of trade itself and some tried to use similar information from answers to **Question 6** (environmental degradation) or **Question 11** (globalisation). Some tended to consider the growth of trade rather than the actual impacts or reproduce case studies on Fairtrade as if this organisation controlled large section of trade.

Question 9

A very popular question and this reflects the popularity of the topic with candidates.

The question states 'with reference to one or more examples', so in this type of question the case study alone is enough to achieve fully but candidates are equally able to use other examples. The question specifically expects candidates to demonstrate an understanding of sustainability and for candidates to take on the statement: 'it is easier for tourist destinations to achieve environmental sustainability than economic sustainability.' There were quite a few responses that were too focussed on the benefits and problems of tourism on, with passing reference to sustainability. Some responses were unclear at the start as to where the response was going, for others the view changed without justification at the end or the approach taken was pedantic and lacking in focus on what it takes to achieve sustainability. Overall there were some stronger responses, which were by comparison with others quite brief but were highly focused on the various aspects of an evaluation that can come out of the question when it is broken down into its constituent parts. Some of these better responses successfully used the Life cycle model with exemplar support to illustrate the dynamic aspect of tourism for part of the response. They were also able to demonstrate a very clear understanding of the two aspects of sustainability as well as discussing the ease and or difficulty of achieving both and possibly deciding and arguing a case for which was 'easier.' They also often recognised that management of environmental impacts alone may not create environmental sustainability. These responses were also able to identify key pieces of evidence which led to their overall judgement.

Weaker responses tended to think that there were easy fixes for environmental difficulties, e.g. create a law or call it ecotourism and all would be well or demonstrated a poor understanding of economic sustainability with for example the assumption that economic growth and other benefits from tourism meant that sustainability had been achieved.

Economic Transition

Question 10

- (a) Most candidates correctly attempted to describe the distribution of the countries who achieved MDG 4 – the blue colour on the map – some did not. One factor about the distribution is that it is not one which a candidate normally sees – the countries achieving the goal are not generally HICs but are mostly LICs or MICs. This was accepted as a valid general point about the distribution as well as the fact that many are within the tropics or close to the equator, especially in the northern hemisphere.
- (b) Most candidates suggested reasons for variation in the progress between HICs and LICs or MICs related to the starting point in each group. Very few were able to develop the quality of the response by linking factors influencing mortality rates to the specific age group of children shown as the under 5's. Some candidates incorrectly use the term infant mortality as being synonymous with the under 5 age group. Reasoning needs to develop away from basic statements such as better health care, more doctors, etc.

Question 11

Candidates presented varying definitions of globalisation which influenced the nature of the response. Some were very simplistic referring to increasing interconnectedness through trade and cultural exchange and others very broad-based using umbrella terms such as economic, social/cultural political and environmental. Others were more focused on content specified in this option where the focus is on the globalisation of economic activity. Any approach was valid but definitions per-se are not required to develop a response.

Stronger responses made clear links between specific aspects of globalisation and reducing inequalities or not, often qualifying global inequalities (GDP, social measures of development, quality of life). They were able to look beyond economic growth/industrialisation leading to reduced inequalities, by examining the mechanisms by which wealth creation could improve living standards or in fact why this might not occur. Reasons why some countries do not benefit from globalisation often meant looking at other factors, which may increase or decrease inequalities such as character of the government or lack of diversity in the economy. Some candidates miss opportunities to broaden the evaluative aspect of the response through the consideration factors other than globalisation and indeed some provide a narrative about the rise of NICs such as South Korea and attribute all of this to globalisation! Some candidates used content from the option Global Interdependence such as the role of the World Trade Organization, international debt and international aid. This synoptic approach may have validity but must be integrated into the terms of the question. Some handled this very well. Some sound responses considered the fact that whilst some countries had made progress through aspects of globalisation, overall the winners were those countries already at the head of the race – the leaders of globalisation.

Weaker responses were characterised by failing to make clear links between the globalisation and reducing inequalities; not clarify their meaning or simply illustrating the role of such concepts as FDI, NIDL and focusing on a limited idea about inequalities such as development of countries.

Question 12

Some high-quality responses were seen based on knowledge of specific regions and with an overall spatial approach to illustrate the extent to which a country has or has not experienced regional convergence and sometimes successfully integrating relevant theoretical concepts. The better responses commented on 'the extent' rather than just whether convergence had occurred or not and they often had useful statistics to support the assessment. Countries frequently used as examples were: Brazil, Canada and UK but with varying degrees of success. One distinguishing factor was how dated content was used. For instance, it is perfectly acceptable to look at historical factors which led to initial differences in regional development – convergence or divergence but of much less value to simply describe dated policies aimed at regional development. For the latter, the early attempts to try to achieve regional convergence should be summarized quite briefly. In contrast to dated content, examples from recently introduced plans and initiatives such as the

Northern Powerhouse and HS2 in the U.K. were often offered as examples of successful policies in the U.K., even though little has been completed. Candidates here are missing an opportunity of using these examples as evidence that convergence was not occurring. Specific knowledge of the regions for the selected countries were surprisingly better for most examples taken from countries other than the U.K. Centres selecting the U.K. should ensure that candidates have clearer knowledge about specific regions, perhaps recognizing that that London is not the only hot spot in the UK or indeed in what might be called the core of the country and that the north is not one huge homogenous mass of divergence. Equally they should demonstrate an understanding of the spatial scope of certain examples taken from government attempts to try to reduce inequalities, e.g. the move of the DVLA from London did not influence the whole of Wales let alone the whole of the 'north'. Indeed, very few candidates whether selecting the U.K., Canada or especially Brazil appreciate that the size of these countries is part of the issue. Some candidates successfully extended the assessment of the extent element of the question by acknowledging that whilst attempts to bring about regional convergence are present in a country also present and progress is being made, core areas are still developing fast or faster than other regions. Others considered the success of more general social policies such as Bolsa Familia in Brazil and were able to link the success to regional convergence.

Paper 9696/42

Advanced Human Geography Options

Key messages

Candidates had to choose two from the four different options. Within these options was a compulsory twopart question, worth a total of 10 marks, and the candidates then chose one essay question from two options, worth 20 marks.

Teachers are reminded of the necessity to teach all content within each option, since even where candidates have a favoured part(s) to the option, the structured question may have a focus on another part of the option or the essay choice might not match with content selected by the teacher or student.

The time allocated by a candidate and length of response expected has not changed – it is still possible to achieve a high-level response within three sides of normal handwritten text. More is not necessarily better. 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.

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 students. 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'.

Any 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 practiced by centres.

General comments

Many candidates scored well on the point marked questions (a), however, it is worth noting that development of one point could only reach maximum 2. Some candidates would benefit from considering the number of marks allocated for the question and making the same (or more) number of observations from the resource. Comment about the main feature of the data/overall trend/pattern/impression is always useful, with specific data to back this up, and anomalies, if present. Where data is presented in tabular form-either numbers or percentages-as in **Question 7(a)** – data manipulation is required, rather than just repeating the information from the resource.

In the part (b) answers, those who achieved level 3, gave examples and addressed all parts of the question being asked.

For the essay questions, the stronger responses were structured overall as an assessment (a Level 3/4 response); some provided assessment in the introduction and the conclusion (a Level 2/3 response); some omitted it or made a simple statement (Level 1). Examples should be used throughout, as requested by the question, and the best responses do more than a narrative approach of learnt content, but apply knowledge and understanding to the question being asked.

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. Many scripts had one or more paragraphs crossed out. As essays carry 20 marks they should take more time and be longer than the responses to **parts (a) and (b)** 10 marks.

Comments on specific questions

Production, Location and Change

This was generally not a popular option, with fewer candidates choosing these questions compared to others.

Question 1

(a) Almost all candidates achieved credit for noticing the overall correlation/pattern as being positive. Very few noted that the relationship is unclear/not necessarily related to the herd size.

Candidates then used data from the graph to illustrate this pattern, but often stopped at the 'highest profit is...' and 'lowest loss is...' so achieved 3 marks from a possible 4. This is a valid approach, but candidates should be trained and encouraged to notice anomalies and points on graphs where patterns may change. Candidates should also be encouraged to use data to support comments made.

(b) Most candidates chose either manufacturing or agriculture, and the development of their answers reflected these choices. Some candidates misread the question and wrote about the economies of scale. The use of an appropriate graph, showing the tipping point between size and profit was useful. Note: diagrams should be fully labelled and referred to in the text to prove most useful. The key to achieving Level 3 is in the range of factors. Some candidates developed one or two reasons and this could be limiting. Responses combining theory and named examples achieved well.

Candidates who used theory and named place examples will find this enhanced their answers to reach the next level.

Question 2

Most answered as required, in terms of one country but often failed to focus on evaluating success of attempts to manage agricultural change. Case studies should be selected on the basis that there has been time for specific attempts to manage change to lead to change or not. Attempts mentioned in responses which are recent or merely aims are unlikely to enable candidates to make valid comment on the success or not of any changes that have occurred. Many introduced their country and gave the context of why agricultural change was needed, then in the main part of the extended writing gave examples of agricultural farming techniques (GM seeds, fertilisers, irrigation etc.) and a description of whether they worked or not. This approach works, but with limited time, some candidates spent too long giving the context, and then ran out of steam towards the end, therefore their evaluation was not well focused. There is a need to specify what the attempt to manage agricultural change is-who is involved, where does the money come from, who is responsible for the idea. For example, if irrigation is introduced why is it needed, who provides the infrastructure, where does the water come from, what are the pros and cons, how successful is it etc.

Stronger responses are evaluative throughout, making a statement of how far the attempts were successful in the introduction. This style of approach may be helpful for some centres to practice, to help candidates to be focused on the question throughout. Those candidates who discussed ways the attempts to manage agricultural change were successful or not with balance and insight into the contextual issues involved in managing agricultural change achieved highly. Local knowledge clearly allowed many to discuss this topic from the point of view real situations.

Question 3

This question was less popular than **Question 2** but those candidates who chose this question generally did well.

The command word 'Discuss' allows for some flexibility in approach as illustrated by the definition of discuss in the syllabus: present points for and against, or present different viewpoints. There is also the consideration of 'no longer'/over time. Candidates needed to discuss with this temporal idea in mind and this is one way to broaden the discussion. In this question, examples may have been taken from types of industry and their raw materials, place examples, other factors influencing location etc., however, it is worth noting that the mark scheme has maximum 8 for a response without examples. Better responses clearly discussed how changes in technology have influenced the location of manufacturing industry, and/or the changing nature of manufacturing industry. Stronger responses were able to use a variety of locational examples, manufacturing

industry examples, technological examples, and showed understanding of the wide range of influences on modern location of manufacturing industry. Context was useful as an introduction (e.g. during the Industrial revolution, industries chose to locate near raw material due to... etc.) however, unlike **Question 2**, context is more useful in a question focused on 'over time' and can lead to direct comparisons of how changes have led to raw materials no longer being so important.

Environmental Management

A very popular option.

Question 4

(a) Most candidates made some reference to the USA and Europe. However, credit can only be gained from describing the pattern, not just stating locations. This is a good example of where candidates need to manipulate the data, by using a qualifying statement, such as 'the majority are in the USA'

The better responses described overall patterns such as most in the northern hemisphere and/or most in HICs, then made more specific comments about regions. It is worth reminding candidates that to gain 4 marks, they need either 4 different quantified observations, or 2/3 detailed quantified observations e.g. 'The majority are in the USA, and within this, there are more along the western coastline, spreading north into Canada.'

(b) The majority of responses to this question were done well suggesting at least 2 reasons with detail to support the reasons with comment on both urban and rural areas. Candidates should note that better responses would always use examples of locations and pollutants/polluters.

Question 5

This was a very popular question. Many candidates used the Three Gorges Dam, or another located HEP scheme. It is worth noting, that to evaluate success there should be some reference to negative aspects also, not just a list of positives. A full evaluation of success is balanced and comes to an overall conclusion of success vs failure. This could be done by evaluating supposed success (i.e. is it a claimed success or actual? Can it be critically evaluated and come out wanting?) or by describing successes and describing failures that are not necessarily linked, as long as an overall justified statement of success is included. This is required in a response to evaluate success. Stronger responses had clear evidence of success linked to electricity production for the country.

Quite a few candidates did not name a scheme, instead describing a whole country strategy, which, as stated in the mark scheme, limits the credit available. Candidates should be clear on the difference in the syllabus between: 'overall electrical energy strategy' for a country and 'one named located scheme to produce electricity'.

Question 6

This question is an evaluation of a statement about factors, with a focus on one factor. To evaluate the importance of the stated factor, consideration of other factors would be the logical approach to develop the evaluative aspect of the response. The style of this question will be unfamiliar to some candidates, so should be practiced by centres. The question states: 'how far do you agree with this statement?', so candidates should not simply explain the statement. Quite a few candidates took this approach, giving detailed exemplar support to an essay illustrating that economic factors are the most important constraint but limiting the response to level 2 (10 marks) – unless other factors were included implicitly. A better approach, was to consider economic factors (in this case) and then consider other factors (such as government policy or inaction, social opposition or apathy, lack of education, scale of degraded environment etc. etc.). The best responses were able to link many of these other factors back to economic factors, therefore cleverly argued that economic factors are the overall constraint, as they dictate the effectiveness and effectiveness of all other factors.

Global Interdependence

This was a popular option choice.

Question 7

- (a) This table is another example of how candidates can miss out on credit by repeating what is in the table, rather than using the data to 'describe the distribution'. Candidates should try to identify regions that have larger percentages, that have the least, or that are missing altogether from the percentages. Candidates should look for overall trend, most, least, anomaly, and describe each on in the context of global distribution. Data should always be used with any statements.
- (b) A significant number or candidates confused Fairtrade with Free trade. Responses which were only about free trade were awarded some generic credit for ideas such as raising LIC farmers out of poverty. Those candidates who did well, had specific examples of co-operatives and practical ways that communities have benefitted from being part of the Fairtrade scheme; demonstrated knowledge and understanding of aspects such as: the Fairtrade minimum price mechanism; the nature of the Fairtrade premium; how farmers and worker organisations benefit from owning 50% of the global Fairtrade system etc.

Question 8

This question was generally answered well, with many candidates knowing the issues with tied aid, or development aid that benefitted donor companies more than receiving countries. Some responses however, focused too much on loans. Loans and SAP's can be used in the context of 'aid' if considered as a tool for helping a country get out of poverty, however, candidates who focused completely on loans were missing the main point of the question. Stronger responses argued that the UN encourages all HIC's to give a percentage of GDP but that this can be misdirected to benefit the donors (through job creation in home country etc.). Many insightful comments were made about China's involvement in Africa and where the benefits accrue. Contextual detail such as: colonialism and strengthening political alliances was helpful. Balance was needed in this response, so the best responses included positives of aid, with examples, such as relief aid or bottom-up projects. Very few candidates gave no examples.

Question 9

A very popular question. The use of located examples was apparent in almost every response, and these were generally used to show a location where tourism has been unsustainable and another where it has been sustainable (or almost). The question states 'with reference to one or more examples', so in this type of question the case study alone is enough to achieve fully but candidates are welcome to use other examples to illustrate different aspects of the development of International tourism and the management of a tourist destination. One approach was to take the three elements of sustainability: economic, environmental and social but this was not the only approach to achieve a high level. What the question is specifically expecting is an understanding of sustainability and for candidates to take on the statement: 'cannot be completely sustainable'. There were quite a few responses that were too focused on the pros and cons of tourism on a location(s), with passing reference to sustainability. The use of a model or models such as the Life cycle model or Doxey's was valid but candidates needed to demonstrate understanding of how they relate to sustainability to and need exemplar support.

Economic Transition

This was a less popular option.

- (a) For the most part, this question saw candidates gain full credit. It requires a simple description of the direction of the arrows/flows.
- (b) Some responses only used human factors which is self-limiting. Stronger responses saw physical factors as initial factors for the dominance of a core region, with human factors used to explain the continued dominance of the core and were able to consider why other regions lag behind adding to the idea of dominance of the core region. This question was worth 7 marks, so should have been well developed, with a variety of examples and theory shown.

Question 11

This question was generally answered with good insight in to the ways that inequality is measured. It was not a popular question, but those who chose to answer it had a good understanding between the different quantitative measured used to record both and the qualitative nature of many of the social measurements, which can therefore be more subjective. Good answers included reference to country-wide indicators not making allowance for regional inequality, and that there are certain measurements that are fairer comparisons between nations (such as Purchasing Power Parity) Many answers used examples of statistics they knew, which improved responses and illustrated the points being made.

Question 12

This was a popular question within this option. Most candidates have a clear understanding of the nature of TNC's and their role in globalisation. Some responses lacked the focus on globalisation of economic activity and/or other factors and their roles.

As with all 'assess' questions candidates should be considerate of other factors/roles. Some candidates have not been prepared for this approach, and simply explained what TNC's have done to increase globalisation, missing out assessment which is done by including role compared to other influences. A few responses took an approach of: positives of TNC's and negatives of TNC's and although they could achieve credit, this approach was limiting as clearly TNC's are not the only player with a role in the globalisation of economic activity. Therefore, candidates should be encouraged to plan out their essays, considering what other organisations, policies, technologies, advancements of human-kind etc. have contributed to the globalisation of economic activity. Those candidates who took the time to plan out their essays, generally did better on this (and other) questions.

Paper 9696/43

Advanced Human Geography Options

Key messages

Candidates had to choose two from the four different options. Within these options was a compulsory twopart question, worth a total of 10 marks, and the candidates then chose one essay question from two options, worth 20 marks.

Teachers are reminded of the necessity to teach all content within each option, since even where candidates have a favoured part(s) to the option, the structured question may have a focus on another part of the option or the essay choice might not match with content selected by the teacher or student.

The time allocated by a candidate and length of response expected has not changed – it is still possible to achieve a high-level response within three sides of normal handwritten text. More is not necessarily better. 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.

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 students. 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'.

Any 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 practiced by centres.

General comments

Many candidates scored well on the point marked questions (a), however, it is worth noting that development of one point could only reach maximum 2. Some candidates would benefit from considering the number of marks allocated for the question and making the same (or more) number of observations from the resource. Comment about the main feature of the data/overall trend/pattern/impression is always useful, with specific data to back this up, and anomalies, if present. Where data is presented in tabular form-either numbers or percentages-as in **Question 7(a)** – data manipulation is required, rather than just repeating the information from the resource.

In the part (b) answers, those who achieved level 3, gave examples and addressed all parts of the question being asked.

For the essay questions, the stronger responses were structured overall as an assessment (a Level 3/4 response); some provided assessment in the introduction and the conclusion (a Level 2/3 response); some omitted it or made a simple statement (Level 1). Examples should be used throughout, as requested by the question, and the best responses do more than a narrative approach of learnt content, but apply knowledge and understanding to the question being asked.

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. Many scripts had one or more paragraphs crossed out. As essays carry 20 marks they should take more time and be longer than the responses to **parts (a) and (b)** 10 marks.

Comments on specific questions

Production, Location and Change

This was generally not a popular option, with fewer candidates choosing these questions compared to others.

Question 1

(a) Almost all candidates achieved credit for noticing the overall correlation/pattern as being positive. Very few noted that the relationship is unclear/not necessarily related to the herd size.

Candidates then used data from the graph to illustrate this pattern, but often stopped at the 'highest profit is...' and 'lowest loss is...' so achieved 3 marks from a possible 4. This is a valid approach, but candidates should be trained and encouraged to notice anomalies and points on graphs where patterns may change. Candidates should also be encouraged to use data to support comments made.

(b) Most candidates chose either manufacturing or agriculture, and the development of their answers reflected these choices. Some candidates misread the question and wrote about the economies of scale. The use of an appropriate graph, showing the tipping point between size and profit was useful. Note: diagrams should be fully labelled and referred to in the text to prove most useful. The key to achieving Level 3 is in the range of factors. Some candidates developed one or two reasons and this could be limiting. Responses combining theory and named examples achieved well.

Candidates who used theory and named place examples will find this enhanced their answers to reach the next level.

Question 2

Most answered as required, in terms of one country but often failed to focus on evaluating success of attempts to manage agricultural change. Case studies should be selected on the basis that there has been time for specific attempts to manage change to lead to change or not. Attempts mentioned in responses which are recent or merely aims are unlikely to enable candidates to make valid comment on the success or not of any changes that have occurred. Many introduced their country and gave the context of why agricultural change was needed, then in the main part of the extended writing gave examples of agricultural farming techniques (GM seeds, fertilisers, irrigation etc.) and a description of whether they worked or not. This approach works, but with limited time, some candidates spent too long giving the context, and then ran out of steam towards the end, therefore their evaluation was not well focused. There is a need to specify what the attempt to manage agricultural change is-who is involved, where does the money come from, who is responsible for the idea. For example, if irrigation is introduced why is it needed, who provides the infrastructure, where does the water come from, what are the pros and cons, how successful is it etc.

Stronger responses are evaluative throughout, making a statement of how far the attempts were successful in the introduction. This style of approach may be helpful for some centres to practice, to help candidates to be focused on the question throughout. Those candidates who discussed ways the attempts to manage agricultural change were successful or not with balance and insight into the contextual issues involved in managing agricultural change achieved highly. Local knowledge clearly allowed many to discuss this topic from the point of view real situations.

Question 3

This question was less popular than **Question 2** but those candidates who chose this question generally did well.

The command word 'Discuss' allows for some flexibility in approach as illustrated by the definition of discuss in the syllabus: present points for and against, or present different viewpoints. There is also the consideration of 'no longer'/over time. Candidates needed to discuss with this temporal idea in mind and this is one way to broaden the discussion. In this question, examples may have been taken from types of industry and their raw materials, place examples, other factors influencing location etc., however, it is worth noting that the mark scheme has maximum 8 for a response without examples. Better responses clearly discussed how changes in technology have influenced the location of manufacturing industry, and/or the changing nature of manufacturing industry. Stronger responses were able to use a variety of locational examples, manufacturing

industry examples, technological examples, and showed understanding of the wide range of influences on modern location of manufacturing industry. Context was useful as an introduction (e.g. during the Industrial revolution, industries chose to locate near raw material due to... etc.) however, unlike **Question 2**, context is more useful in a question focused on 'over time' and can lead to direct comparisons of how changes have led to raw materials no longer being so important.

Environmental Management

A very popular option.

Question 4

(a) Most candidates made some reference to the USA and Europe. However, credit can only be gained from describing the pattern, not just stating locations. This is a good example of where candidates need to manipulate the data, by using a qualifying statement, such as 'the majority are in the USA'

The better responses described overall patterns such as most in the northern hemisphere and/or most in HICs, then made more specific comments about regions. It is worth reminding candidates that to gain 4 marks, they need either 4 different quantified observations, or 2/3 detailed quantified observations e.g. 'The majority are in the USA, and within this, there are more along the western coastline, spreading north into Canada.'

(b) The majority of responses to this question were done well suggesting at least 2 reasons with detail to support the reasons with comment on both urban and rural areas. Candidates should note that better responses would always use examples of locations and pollutants/polluters.

Question 5

This was a very popular question. Many candidates used the Three Gorges Dam, or another located HEP scheme. It is worth noting, that to evaluate success there should be some reference to negative aspects also, not just a list of positives. A full evaluation of success is balanced and comes to an overall conclusion of success vs failure. This could be done by evaluating supposed success (i.e. is it a claimed success or actual? Can it be critically evaluated and come out wanting?) or by describing successes and describing failures that are not necessarily linked, as long as an overall justified statement of success is included. This is required in a response to evaluate success. Stronger responses had clear evidence of success linked to electricity production for the country.

Quite a few candidates did not name a scheme, instead describing a whole country strategy, which, as stated in the mark scheme, limits the credit available. Candidates should be clear on the difference in the syllabus between: 'overall electrical energy strategy' for a country and 'one named located scheme to produce electricity'.

Question 6

This question is an evaluation of a statement about factors, with a focus on one factor. To evaluate the importance of the stated factor, consideration of other factors would be the logical approach to develop the evaluative aspect of the response. The style of this question will be unfamiliar to some candidates, so should be practiced by centres. The question states: 'how far do you agree with this statement?', so candidates should not simply explain the statement. Quite a few candidates took this approach, giving detailed exemplar support to an essay illustrating that economic factors are the most important constraint but limiting the response to level 2 (10 marks) – unless other factors were included implicitly. A better approach, was to consider economic factors (in this case) and then consider other factors (such as government policy or inaction, social opposition or apathy, lack of education, scale of degraded environment etc. etc.). The best responses were able to link many of these other factors back to economic factors, therefore cleverly argued that economic factors are the overall constraint, as they dictate the effectiveness and effectiveness of all other factors.

Global Interdependence

This was a popular option choice.

Question 7

- (a) This table is another example of how candidates can miss out on credit by repeating what is in the table, rather than using the data to 'describe the distribution'. Candidates should try to identify regions that have larger percentages, that have the least, or that are missing altogether from the percentages. Candidates should look for overall trend, most, least, anomaly, and describe each on in the context of global distribution. Data should always be used with any statements.
- (b) A significant number or candidates confused Fairtrade with Free trade. Responses which were only about free trade were awarded some generic credit for ideas such as raising LIC farmers out of poverty. Those candidates who did well, had specific examples of co-operatives and practical ways that communities have benefitted from being part of the Fairtrade scheme; demonstrated knowledge and understanding of aspects such as: the Fairtrade minimum price mechanism; the nature of the Fairtrade premium; how farmers and worker organisations benefit from owning 50% of the global Fairtrade system etc.

Question 8

This question was generally answered well, with many candidates knowing the issues with tied aid, or development aid that benefitted donor companies more than receiving countries. Some responses however, focused too much on loans. Loans and SAP's can be used in the context of 'aid' if considered as a tool for helping a country get out of poverty, however, candidates who focused completely on loans were missing the main point of the question. Stronger responses argued that the UN encourages all HIC's to give a percentage of GDP but that this can be misdirected to benefit the donors (through job creation in home country etc.). Many insightful comments were made about China's involvement in Africa and where the benefits accrue. Contextual detail such as: colonialism and strengthening political alliances was helpful. Balance was needed in this response, so the best responses included positives of aid, with examples, such as relief aid or bottom-up projects. Very few candidates gave no examples.

Question 9

A very popular question. The use of located examples was apparent in almost every response, and these were generally used to show a location where tourism has been unsustainable and another where it has been sustainable (or almost). The question states 'with reference to one or more examples', so in this type of question the case study alone is enough to achieve fully but candidates are welcome to use other examples to illustrate different aspects of the development of International tourism and the management of a tourist destination. One approach was to take the three elements of sustainability: economic, environmental and social but this was not the only approach to achieve a high level. What the question is specifically expecting is an understanding of sustainability and for candidates to take on the statement: 'cannot be completely sustainable'. There were quite a few responses that were too focused on the pros and cons of tourism on a location(s), with passing reference to sustainability. The use of a model or models such as the Life cycle model or Doxey's was valid but candidates needed to demonstrate understanding of how they relate to sustainability to and need exemplar support.

Economic Transition

This was a less popular option.

- (a) For the most part, this question saw candidates gain full credit. It requires a simple description of the direction of the arrows/flows.
- (b) Some responses only used human factors which is self-limiting. Stronger responses saw physical factors as initial factors for the dominance of a core region, with human factors used to explain the continued dominance of the core and were able to consider why other regions lag behind adding to the idea of dominance of the core region. This question was worth 7 marks, so should have been well developed, with a variety of examples and theory shown.

Question 11

This question was generally answered with good insight in to the ways that inequality is measured. It was not a popular question, but those who chose to answer it had a good understanding between the different quantitative measured used to record both and the qualitative nature of many of the social measurements, which can therefore be more subjective. Good answers included reference to country-wide indicators not making allowance for regional inequality, and that there are certain measurements that are fairer comparisons between nations (such as Purchasing Power Parity) Many answers used examples of statistics they knew, which improved responses and illustrated the points being made.

Question 12

This was a popular question within this option. Most candidates have a clear understanding of the nature of TNC's and their role in globalisation. Some responses lacked the focus on globalisation of economic activity and/or other factors and their roles.

As with all 'assess' questions candidates should be considerate of other factors/roles. Some candidates have not been prepared for this approach, and simply explained what TNC's have done to increase globalisation, missing out assessment which is done by including role compared to other influences. A few responses took an approach of: positives of TNC's and negatives of TNC's and although they could achieve credit, this approach was limiting as clearly TNC's are not the only player with a role in the globalisation of economic activity. Therefore, candidates should be encouraged to plan out their essays, considering what other organisations, policies, technologies, advancements of human-kind etc. have contributed to the globalisation of economic activity. Those candidates who took the time to plan out their essays, generally did better on this (and other) questions.