GEOGRAPHY

Paper 9696/11
Core Physical Geography

General comments

This examination once again produced a wide range of responses in terms of knowledge and understanding. There were a number of excellent responses to some of the questions as well as some questions where responses were less satisfactory.

Description and thorough analysis of the resources are essential requirements of the questions in ***Section A*** and there was some indication of increased attention to detail and analysis this series. Candidates are increasingly aware of the need for careful reference to the data provided. **Part (b)** questions in ***Section A*** all required some reference to the information provided on the resource whether that is specific data or general observations of what is portrayed in the resource. The other point to stress about the resource-based questions is that the **part (c)** questions, although partially related to the resource, do not usually need reference to the resource in the response. The information and ideas portrayed in the resource will usually be insufficient for answering the question. This has been stressed in previous reports but is worth repeating here. It must not be assumed that the **part (c)** questions are specifically related to the resource.

Most candidates appear to be familiar with the relevant geographical issues and concepts, and most were able to apply their knowledge and understanding appropriately. In most questions there was an opportunity to produce relevant diagrams that could have been used to enhance the answers. However, diagrams continue to be imprecise and sometimes demonstrate inaccurate knowledge and understanding of the issues raised in the question.

As stressed in previous reports, examples do much to support answers. When using specific examples, it is important that sufficient detail is provided, and that the examples are appropriate. It is also important that the information provided is accurate and not speculative. Also, simply referring to a country without the specific location mentioned is often inappropriate. Answers to **Questions 4(c)**, **5(c)** and **6(c)** all benefited from relevant and accurate examples.

Questions 4(c), **5 (c)** and **6(c)** all required some element of evaluation and a conclusion based on the evidence provided in the answer. Evaluation is difficult if the discussion is almost entirely generic. Evaluation does not have to appear just at the end of the answer but, in many cases, continuous evaluation throughout the answers might be more logical, especially if there are many threads to the argument. The final evaluation was too often unconvincing and not related to the evidence and discussion in the answer.

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

Comments on specific questions

Section A

Hydrology and fluvial geomorphology

Question 1

(a) Most candidates produced answers within the tolerance stated in the mark scheme. A few candidates omitted the units. It is worth stressing that the units are usually required in answering questions of this nature.

(b) There were many points that could be mentioned in describing the relationship between annual peak discharge and recurrence interval. Most candidates were able to mention the generally positive relationship and the point that the rate of change of peak discharge was greater between lower recurrence intervals. The slight anomaly between recurrence intervals of 2 and 4 years was also noticed. Many candidates achieved the three marks allocated to this question.

(c) It was clear that many candidates were unclear as to what recurrence interval was and what it was describing. Many thought that it indicated when the next discharge of a particular value was going to occur rather than it being a probability based on past events. This meant that it was difficult for them to suggest how recurrence intervals could be used to inform flood prediction and prevention. However, there were many useful suggestions about the possibility of engineering response to events of a particular discharge. It needs to be stressed that high discharges do not necessarily mean that flooding will always occur. Discharge has to be related to bankfull discharge and any engineering strategies that might be in place. A few candidates noted that recurrence interval could be used to implement a cost-benefit analysis to assess whether it was beneficial to instigate certain strategies.

Atmosphere and weather

Question 2

(a) (i) Although some candidates identified the resource as portraying the greenhouse effect, most were able to identify the urban heat island effect.

(ii) Virtually all candidates calculated the temperature range correctly, although there were some answers where the unit was omitted.

(b) Description of a pattern still causes confusion. It is a general synthesis that is required rather than simply repeating the data throughout the transect. However, good marks were achieved by many candidates although the slightly different pattern either side of the urban area was often not identified.

(c) There were many good answers to this question. The low albedos of the surfaces in the urban areas with the effect on heat absorption and subsequent radiation of heat were mentioned by many candidates, although sometimes the albedo values were incorrect. Anthropogenic heat and the effect of heat dispersal by wind were often discussed. Greenhouse gas emission was mentioned quite frequently but this is not as significant as a pollution dome of particulate matter.

Rocks and weathering

Question 3

(a) The majority of candidates were able to correctly identify heave or creep as the mass movement shown in the photograph.

(b) The question did not ask for a sketch of the photograph but for a labelled diagram of the mass movement identified. Thus, the diagram could be a representation of soil creep on a slope. If the diagram was a representation of the actual slope shown then this was very acceptable. However, many diagrams were unrepresentative of either a slope or soil creep.

(c) There were some excellent answers to this question with afforestation, netting and pinning being the favourite slope modifications discussed. However, answers needed more detail than just mentioning pinning or netting but some indication as to how they were applied and how they could reduce mass movement. Afforestation was frequently mentioned because it combined strengthening the soil by roots as well as reducing water content which reduced the possibility of lubrication and loss of cohesion in the slope material.

Section B

Hydrology and fluvial geomorphology

Question 4

(a) (i) Answers to this question were generally sound and most candidates were able to define the essential characteristics of infiltration and interception even if not the precise definitions.

(ii) Most candidates understood what a levee was but some, rather than describing what it was, produced lengthy explanations as to how they were formed.

(b) Most candidates were able to provide some explanation for the formation of meanders and oxbow lakes but detail was often lacking. Uncertainty about the nature and operation of helicoidal flow is still prevalent. Diagrams still show helicoidal flow as a squiggle down the centre of the channel which is erroneous. Helicoidal flow is the cross-channel flow on the surface returning at depth in a downstream direction. Erosion of the outside bend was often mentioned but with no discussion of the nature of the processes that might cause such erosion. There was often a similar lack of clarity as to how the river cut through its banks to produce the oxbow lake.

(c) There were many excellent, detailed answers to this question with many factors other than climate discussed. However, there was a variable interpretation of discharge. Many candidates equated it with flooding and most discussed factors in terms of storm hydrographs, peak discharge and lag times rather than discharge in total. Thus, circular drainage basins were equated with more rapid runoff although the total amount of discharge might have been similar to drainage basins with other shapes. It would have been perfectly valid to answer the question with respect to annual discharge. There was occasionally a lack of explanation as to how rainfall led to high discharge such as increased surface runoff. However, as mentioned, there were many excellent answers with a wide range of other factors and located examples.

Atmosphere and weather

Question 5

(a) (i) Most candidates were able to describe the albedo effect with realistic examples to substantiate their descriptions.

(ii) Most candidates mentioned reflection by clouds but often omitted absorption and scattering by dust and aerosols.

(b) There were very few good answers to this question. Even if the basic mechanisms of the respective ways that the air is forced to rise were discussed, the subsequent processes of temperature decrease, latent heat transfer and condensation, were often inaccurately described and little understood.

(c) Many candidates found this a difficult question. The majority of candidates saw the question as an opportunity to answer with respect to how the processes of global warming, such as the greenhouse effect, varied with location rather than discuss the atmospheric impacts. Thus, urban areas were blamed for most of global warming and answered to the effect that urban areas were affected more than other locations. Few answers attempted to evaluate atmospheric impacts such as those outlined in the mark scheme.

Rocks and weathering

Question 6

(a) (i) Most candidates were able to define freeze-thaw weathering in a satisfactory way. Pressure release (dilatation) was less well understood and was often confused with exfoliation.

(ii) This was answered well by most candidates.

(b) There were many good answers to this question, with the role of rock type and rock structure in influencing physical weathering being well explained. However, the question addressed the rate of weathering and many candidates simply answered with respect to type of weathering and not rate of weathering. Those candidates that emphasised rate were awarded higher marks.

(c) The response to this question was very good. It was clear that many of the recent theories of plate tectonics, and how plates move, are now part of mainstream teaching. Convection currents are still a major factor in plate movement but the role of slab pull and ridge push is now prominently discussed. Slab pull is related to subduction but many candidates noted that the plates have to be moving somehow before subduction can occur. The lack of subduction at some plate boundaries was noted. In contrast to such answers, many candidates explained tectonic landforms at great length, which was not really required.

GEOGRAPHY

Paper 9696/12
Core Physical Geography

Key messages

A variety of data was provided in ***Section A***, and this included a photograph, maps, and a diagram. The diagram was straightforward and caused few problems, but candidates were less secure with the sketch map drawing required in **Question 1(b)**. Some candidates still confuse sketch maps and cross-sections, but in this particular example too many candidates chose the whole area of the photograph, rather than the specified location in area B. Furthermore, the labelling of geographical features was often too generic and not sufficiently geographical e.g. 'water' rather than 'meander'.

The two maps provided for **Question 2** were not always used very effectively. Candidates could identify areas of cloud cover, but descriptions of patterns and general locations lacked clarity. Some answers failed to use the compass directions provided, resorting to 'at the bottom' or 'to the left side', etc.

Observation and description remain essential elements of ***Section A*** questions, but explanations or reasons are required to access at least half of the marks available. Many relevant processes were clearly understood by candidates but were not always explained in sufficient detail. For example, the sequential stages of oxbow lake development in **Question 1(c)** were clearly identified, but with limited detail of the processes involved.

The use of illustrative sketch maps/diagrams continues to be limited. They can provide clarity and essential detail. Many candidates did make a good attempt to illustrate oxbow lakes in **Question 1(c)**, but 'slides' and 'flows' in **Question 3(c)** would have benefitted from the addition of labelled diagrams.

The use of examples continues to be a key element, particularly in ***Section B***. Examples need to include relevant detail to be effective, and in this examination both **Question 4(c)** and **5(c)** required a case study, which requires even more specific detail. Candidates need reminding that case studies should be post 1980, if possible, and in both **Question 4(c)** and **5(c)** a single case study had been specified. This does not exclude the use of other exemplar material but does indicate where the emphasis should be.

In ***Section B***, all the essay questions (**Question 4(c)**, **5(c)** and **6(c)**) require evaluation or assessment to reach Levels 3 and 4. This is a crucial part of the answer but needs emphasising. Although many understand what is required, this essential element is often addressed at the end of the examination when time is limited. The most successful answers are often those which incorporate evaluative considerations into the main discussion of the essay.

General comments

Candidates generally displayed a good understanding of the relevant geographical concepts. Most seemed well prepared for this examination and the quality of answers has improved from year to year. Many answers were thoughtful and logical. Detail was often impressive, but it is important to ensure that it is also appropriate.

There were few rubric errors. Generally, planning in terms of time allocation was effective, although the evaluation aspect of essay questions needed more emphasis in some instances.

There was less confusion than in previous examinations over 'description' and 'explanation', but the concept of 'pattern' was not always very convincing. There can be a tendency to locate distributions, such as clouds in **Question 2(b)**, in extensive locational detail, but without identifying patterns such as 'linear' or 'clustered'.

Comparisons are often required within questions, and this continues to be an area of weakness. There is a tendency to list characteristics which are not directly comparative. The differences presented in **Question**

3(c), for example, too often consisted of simple statements which were at best implicit in terms of comparison.

Comments on specific questions

Section A

Hydrology and fluvial geomorphology

Question 1

(a) Most candidates answered this question correctly, but a few regarded A as being a general rather than precise location and identified this as a water feature such as river, meander or oxbow lake. Some even suggested delta.

(b) As identified earlier, many sketch maps included the whole area of the photograph, and not just the area specified as B. In some cases, this also invalidated the labelling of the main features.

(c) There were some clear and detailed explanations of oxbow lake formation, although some answers drifted towards description at the expense of explanation. The erosion and deposition processes were not always discussed in sufficient detail.

Atmosphere and weather

Question 2

(a) Most candidates answered in terms of percentages rather than oktas but figures tended to be rather exaggerated.

(b) As referenced to in general comments, some candidates obscured any general concept of pattern, by excessive information from the map provided. Furthermore, distribution details were not always very precise. However, many did try to use information from both Fig. 2.1 and Fig. 2.2.

(c) There were many good answers to this question. Most used information from Fig. 2.1 and Fig. 2.2 to discuss the significance of orographic uplift, but many went beyond this to discuss convection and availability of moisture from oceans and the rivers in the north. Temperature differences between land and sea were also considered.

Rocks and weathering

Question 3

(a) (i) A large number considered 'heave' to be a mass movement in its own right. It is often an essential element of 'soil creep' but only in explanatory terms.

(ii) Most candidates answered this correctly.

(b) This was also well answered. Candidates used the information provided in Fig. 3.1 very effectively in terms of both rate of movement and water content.

(c) This proved a difficult question. Many candidates were able to describe some of the differences between 'slides' and 'flows', but few could effectively explain these differences in terms of internal deformation, or the lack of it. It is a difficult topic, complicated by geology and gradients etc., particularly when discussing velocity of movement. As noted earlier, illustrative diagrams could have helped considerably.

Section B

Hydrology and fluvial geomorphology

Question 4

(a) (i) Clearly and correctly answered by the majority of candidates.

(ii) Shape of drainage basins was not always understood and consequently linkages to discharge were not easily described. Some confused description with explanation.

(b) Explanations of recurrence intervals were often vague and too generic. There was often a reasonable attempt to relate prediction to long term planning, but some answers drifted into excessive detail on the impacts of flooding.

(c) Many candidates displayed excellent knowledge of a relevant case study event. However, the focus was often directed at the post flood attempts to limit future flooding problems. This is not irrelevant but can divert attention from established procedures implemented to reduce the impact of the flood event in the first place.

Atmosphere and weather

Question 5

(a) (i) Once again, some very precise and valid definitions.

(ii) Candidates found this difficult because the question linked land/sea distribution with seasonal temperature variations. This link was not fully understood by many candidates.

(b) The concept of excesses and deficits of radiation was clearly understood but explanations were not always as convincing. Candidates too often used distance from the sun to explain temperature differences between high and low latitudes. The increased distance is minimal and insignificant. What is significant is the angle of the sun's rays together with the loss of energy when passing through the atmosphere. An illustrative diagram would have enhanced clarity but was rarely used.

(c) Case study material was often rather limited, although Vancouver was used effectively. Global warming and acid rain, although not irrelevant, figured too prominently in some answers. Some candidates were able to give detailed descriptions of urban weather characteristics such as temperature, precipitation and wind, but lacked the evaluative aspects which are necessary to access Levels 3 and 4.

Rocks and weathering

Question 6

(a) (i) Generally well answered in defining subduction. Some candidates did confuse conservative with constructive plate boundaries.

(ii) Not particularly well answered. Most recognised the importance of convergence but not necessarily that the two plates were oceanic.

(b) There were some excellent answers on afforestation. The concept and importance of interception was discussed in good detail. Understanding of grading was less convincing. Exemplar material was limited.

(c) Candidates discussed effectively the influence of temperature on weathering. The need for temperature fluctuations was clearly understood. Rainfall tended not to be given the same emphasis with the result that discussions of chemical weathering were less effective. The role of vegetation was considered but there was less emphasis on factors such as rock structure/type or human activity. Nevertheless, there were some excellent answers to this question.

GEOGRAPHY

Paper 9696/13
Core Physical Geography

Key messages

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There were few rubric errors. Generally, planning in terms of time allocation was effective, although the evaluation aspect of essay questions needed more emphasis in some instances.

There was less confusion than in previous examinations over 'description' and 'explanation', but the concept of 'pattern' was not always very convincing. There can be a tendency to locate distributions, such as clouds in **Question 2(b)**, in extensive locational detail, but without identifying patterns such as 'linear' or 'clustered'.

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Section B

Hydrology and fluvial geomorphology

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(c) Candidates discussed effectively the influence of temperature on weathering. The need for temperature fluctuations was clearly understood. Rainfall tended not to be given the same emphasis with the result that discussions of chemical weathering were less effective. The role of vegetation was considered but there was less emphasis on factors such as rock structure/type or human activity. Nevertheless, there were some excellent answers to this question.

GEOGRAPHY

Paper 9696/21
Core Human Geography

Key messages

Candidates should carefully read all the parts of a question before they answer it. Some responses included material in one part of the question that was relevant to a subsequent part, for example in **Question 6** where some candidates included explanation required in **6(b)** within their answer to **6(a)**.

Candidates should appreciate that the marks indicate the number of points and the amount of detail expected. For example, a question worth 5 marks requires a longer answer with multiple points and some developed ideas compared to a question worth 2 marks. Often candidates wrote excessively for 2 marks in **Question 1(b)**, **2(b)**. Similarly, some candidates waste time by giving more than the required number of ideas such as in **1(b), 2(b), 3(b)**. Only the best two (or three) points will be taken.

Section B questions were answered more successfully in this exam than in previous years. However candidates should remember that the part **(c)** answers are worth 25 per cent of the total mark, which is often the key discriminator as it is an evaluation: they should leave sufficient time to do themselves justice.

Where a question refers to a particular context such as LICs/MICs in **Question 3(c)**, **4(c)** and **6(c)**, candidates are expected to relate their answers to this context rather than give generic answers or use examples from HICs.

Candidates should avoid using vague terms without saying what they include. A typical example from **Question 2(a)** was: *'Poor infrastructure in the area and a lack of services.'* Such answers gained no credit.

Good case study knowledge is needed, especially in ***Section B***, but it must be appropriately applied to the question. The best answers remain focused on the question and use selected details of the case study, rather than simply repeating everything the candidate had memorised.

Examples should be used to support points being made. Too many candidates give an example in name only, for instance 'e.g. Nigeria', which does not add a great deal to an answer. Examiners saw too many examples from the distant past: examples should be recent, in the lifetime of the candidate. Where questions ask for examples, candidates will not be able to access the higher levels of marks without them.

General comments

- Candidates should be clear that population growth is about net natural increase and/or net migration. Often only one aspect was given in **Question 1(b)**, **3(b)** and **3(c)** – usually some aspect of birth rates, usually lack of contraception, without any reference to death rates.

- Photographic analysis needs to be improved. Many candidates included characteristics in **Question 2(a)** that were not visible such as poverty, lack of water etc., or went beyond the camp to describe the surrounding area.

- Some candidates seemed unclear about what a refugee camp is, and the characteristics of refugees, as demonstrated throughout **Question 2**. Many confused a refugee camp with a squatter settlement (shanty town).

Comments on specific questions

Section A

Population

Question 1

(a) Many candidates struggled with the command to describe a pattern. Many simply stated the figures for a continent:
'Africa has the greatest population change with most countries over 2% increase.'

There were some candidates who did attempt to identify a pattern such as:
'The HICs have static or declining populations such as Spain with -2.0 – 0.0 whilst LIC have increasing populations such as Ethiopia with 2.1 – 3.0'.

Such responses then went onto point out any anomalies to the pattern such as:
'Clearly Australia is an anomaly in the HICs as it has an increase of 1.1 to 2.0.'

(b) The best responses recognised that population growth is a function of net natural increase and net migration. Candidates needed to link their reason to high rates of population growth. Typically responses were often simplistic and assumed the link such as: *'The need for child labour as incomes are often poor.'*

Such a response then needed to link this valid statement to the impact on population growth – i.e. it led to an increase in the birth rate compared to the death rate which increased population growth. Candidates seemed to overthink this question. Often a simple statement would have gained credit such as:
'A large in-migration into the country would increase population growth.'

(c) Responses tended to be rather basic such as:
'The government may try to increase the population if there is a lack of workforce and a great demand for workers.'

Contrast the above response with:
'There may be a lack of people working in essential jobs such as health care or social services, so the Government tries to attract workers with these skills into the country so increasing the population.' This second response includes more specific details, therefore gained a higher mark.

Many responses discussed issues of underpopulation as a factor which would encourage a government to try and increase a country's population. A significant amount of candidates offered poorly focused discussions about tax. Many gave confused statements such as:
'The government would try to bring in migrants to reduce unemployment.'

Migration

Question 2

(a) This question required characteristics to be identified from the photograph. Most candidates focused on the nature of the tents and the cramped conditions. Others suggested limited services:
'There appear to be no power lines and there are only two toilet blocks for the large number of people.'

Weaker responses suggested characteristics that were not visible in the photograph. Some candidates described simply what they could see in the photograph rather than the characteristics of the refugee camp. This often resulted in candidates discussing the items such as children/truck/tyres rather than the characteristics. Many candidates discussed locational features such as *'the camp is built away from the city, next to farmland.'* Such responses did not focus on characteristics and often made assumptions that were not clear from the photograph.

(b) Candidates offered a range of reasons usually well-linked to the characteristics of refugees such as:
'Males are left in the country of origin as they are in the army fighting the war.'

Others suggested that males were away from the camp abroad working to send remittances to support their families in the camp.

(c) Many candidates explained why refugees were only in the camp for a short period which wasn't what the question asked. Candidates gave a variety of reasons for the short term nature of refugee camps. Most stronger responses recognised the refugees might return home after any fighting or disaster was over. Other responses focused on the problems of refugee camps such as:
'Refugee camps are overcrowded with limited sanitation etc so there is often a spread of disease such as cholera, so the camp has to be closed to limit the outbreak.' and
'Such camps are costly to run. Funds from the host government and/or NGOs can only last for so long so it is in their interests that such camps are not long term.'

Settlement dynamics

Question 3

(a) Candidates compared the rate of growth between the two cities supporting their responses with data taken from the Figure. Stronger responses went on to identify the slight changes in the growth trends of the two cities:
'Berlin briefly declined in population between 1977 and 1981 whilst Mumbai suffered no periods of decline.'

Weaker responses gave two separate accounts which is not a comparison. Candidates should ensure that the language they use is clearly comparative.

(b) Often responses did not link reasons directly to the population growth of Mumbai:
'The infant mortality rate has increased therefore people feel the need to have more children as the likelihood of death is high.'

Responses were much stronger when in-migration was suggested:
'Rural unemployment is high and wages are low, so workers migrate into Mumbai to work in the higher paying industries so increasing the population.'

(c) Candidates should appreciate that this is a question based on settlement rather than population. Some candidates saw this as another question requiring reasons for falling birth rates. As previously commented such answers needed to directly link to declining population. A more effective answer was:
'As people's incomes have risen, they prefer to move out of the crowded, high price cities to cheaper rural areas with less pollution. This urban-rural migration greatly reduces the city's population.'

The word city was often missed by candidates, which resulted in responses discussing country wide policies which focus on lowering birth rates. Occasionally there were also errors where candidates had not noticed the location needed to be focused upon a HIC city rather than a LIC.

Section B

General comments

Most candidates answered **Question 4** with very few attempting **Question 6.**

Population

Question 4

(a) Candidates responded effectively to this question giving a range of environmental, economic and political causes usually supported with some detailed examples:
'Another cause of food shortages is war. The movement of soldiers and vehicles may destroy crops and farmers may be killed in the fighting. Some accuse the war in Sudan as using food shortages as a weapon.'

The strongest responses clearly linked the cause to how it produced food shortages.

(b) Most candidates gave a wide range of consequences supported by examples from countries such as Sudan and Ethiopia. Famine, malnutrition and disease were common responses. Stronger responses suggested other economic and political consequences such as:
'Food shortages can often cause social unrest or even civil war as people desperate for food try to take it from those, often wealthy, who do have food.'

Some responses also suggested some positive consequences:
'Food shortages can often trigger international aid that tries to improve farming techniques to increase food security.'

The best examples were contemporary and were well-integrated into answers. This included reference to Sudan, Ukraine and Syria. Occasionally the examples were very old, including references to Ireland's Great Famine, the Great Chinese Famine and impacts of the Second World War in the UK. Examples should be taken from the lifetime of candidates.

(c) Responses tended to fit into two contrasting approaches. One focused on a wide range of technological solutions such as hybrid crops, mechanisation, irrigation, use of chemicals etc and evaluated their relevance to reducing food shortages such as:
'Technology is effective, but it is often expensive so is unsuitable for LICs which lack the funds and education level to manage it.'

An alternative approach was to dismiss technology as unaffordable and consider other solutions to food shortages. Often this included reference to China's one child policy. Beside population control, international aid and economic development were considered:
'Improved trade relations, especially the terms of trade, would allow the import of food from other countries.'

Responses that combined both types of approaches were often the most effective. Weaker responses often ignored the MIC/LIC context so gave examples from HICs.

Population/Migration

Question 5

(a) Candidates often responded effectively to this question and recognised the subtle differences such as:
'Obstacles get in the way of migration but can eventually be overcome unlike barriers that block migration making it almost impossible.'

This was a question where exemplification was less about place and more about examples of each of the terms such as:
'A constraint limits movement and may cause the potential migrant to reconsider the move. Typically it may be the pull of friends and family in the source area or the sheer cost of migrating that constrains the migrant.'

It was the constraint element that saw the most confusion.

(b) Weaker responses missed the focus on 'internal migration' and based their answers on international migration so giving inappropriate points.

Stronger responses recognised a number of environmental, economic, social reasons such as:
'China tightly controlled rural to urban migration to avoid excessive urbanisation but also to ensure sufficient workers stayed in the villages to ensure sufficient food supplies.'

(c) Most candidates recognised that transport has improved, both in terms of time and cost, so making migration more possible for levels of international migration for more people. Stronger responses went on to suggest other reasons for increased levels of migration such as:
'The widespread use of mobile phones, IT, television etc., has opened up more possibilities for potential migrants. At the touch of a button they can see lots of information about potential destinations. This greatly reduces the worry about migrating and they know they can keep in touch with their family and friends via the internet.'

Other responses considered the increased pushes, especially wars, and pulls, usually economic, as being more important such that improved transport is seen as an enabling factor.

Some responses divided the international migration into voluntary and forced migration. These candidates provided some interesting discussions on how the type of migration was significant in determining whether transport was the main reasons for a global increase in international migration. Some candidates concluded that with forced migration that the proximity of a safe neighbour was a more important consideration for migration than the issue of transport.

Settlement dynamics

Question 6

(a) The most effective responses were those that looked at the functional zoning in one city. Others gave vague accounts of the Burgess model or the Hoyt model so producing simplistic answers with little supporting exemplification:
'There is the central CBD with offices and shops surrounded by a zone of light industry and associated terraced houses.'

Far more effective was:
'In Oxford there is a zone of University colleges which in turn has a zone of supporting services next to them such as stationers, bookshops etc.'

(b) Surprisingly few candidates considered the impact of rent-bid and instead considered the effect of transport routes, government planning (including redevelopment), historical factors and environmental factors such as:
'As Newcastle developed along the River Tyne a zone of industry grew alongside the river using imports or building ships.'

An alternative approach was to consider some of the economic driving forces such as functional linkages, competition between functions or their complementarity:
'Some functions locate near each other as they supply complementary goods and services. A typical example is the growth of the legal zone of solicitors that has developed around the courts in Birmingham.'

(c) Candidates approached this in two ways. One approach was to consider the impacts of rural to urban migration that such cities have on both the source and destination. Others looked more at the economic, social and political consequences of having one large primate (or parasitic) city. The latter was a more effective approach with candidates considering notions of core v periphery with the resulting processes of backwash and spread:
'Such cities have a backwash effect drawing in population and resources from other areas of the country. This in turn further develops the city but retards the development of remoter rural areas.'

Stronger responses did question the negative role, suggesting there might be some benefits as well:
'By having one large city such as Accra in Ghana, that holds a high percentage of the country's population (6 million out of 33 million) the government can focus its investment in one place, so gaining economies of scale rather than spread investment thinly over the country.'

GEOGRAPHY

Paper 9696/22
Core Human Geography

Key messages

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Additionally candidates should remember that the last part of ***Section B*** answers are worth 25 per cent of the total mark, which is often the key discriminator as it is an evaluation: they should leave sufficient time to do themselves justice.

Some questions ask for examples, which are a requirement to gain the higher levels of marks. Examples should be recognisable and specific, and ideally recent (in the lifetime of the candidate). Too many responses give an example in name only such as 'e.g. Sudan', which does not really add to an answer. Where a question refers to a particular context, such as LICs/MICs in **Question 4(b)** and all parts of **Question 6,** candidates are expected to relate their answers to this specific context and to use relevant and valid examples.

Candidates should avoid using vague terms without saying what they include, such as 'resources' in **Question 2(c).** These gain no credit. Similarly, candidates should avoid sweeping and inaccurate statements such as *'Africa has low literacy rates.'* Candidates should also avoid using spurious data to support a point.

Good case study knowledge is needed, especially in ***Section B***, but it must be appropriately applied to the question. The best answers remain focused on the question and use selected details of the case study, rather than simply repeating everything the candidate had memorised. For example, many candidates wrote at length about China's One Child policy in **4(c)** as their main response to the question, including a lot of irrelevant information for the question.

General comments

- Candidates should be clear that population growth is about net natural increase and/or net migration. Often only one aspect was given in **Question 1(b)** – usually some aspect of birth rates, usually lack of contraception, without any reference to death rates.

- Some candidates appeared to confuse refugees with economic migrants as demonstrated in **Question 2(b)** and **2(c)**.

- **Part (c)** questions in **Section B** always require an element of assessment or evaluation. This requires a balanced consideration of different aspects of an issue. Many responses either have no concluding remarks or simply end their answer with a simple sentence stating that they agree with or disagree with a statement.

Comments on specific questions

Section A

Population

Question 1

(a) (i) Most candidates were able to give the correct answer and show their workings. A number of different ways of calculating the population growth were seen, and examiners credited any valid method. A significant number of candidates used a valid method but gave the answer as the new population total (65.508 m), not the growth (1.908 m) and therefore could only be credited with a method mark.

(ii) Many responses did not answer the question correctly and gave reasons why the population growth might be different referring to points such as whether the countries were LICs or MICs or giving reasons for variations in birth and death rates.

Candidates who explained that as Angola has a larger population than Chad, the same rate of growth will give a different actual total, were able to achieve two marks.

(b) The best responses recognised that population growth is a function of net natural increase and net migration.

Most candidates answered in terms of reasons why birth rate might be high in some African countries but made no reference to death rates and so did not achieve two marks.

Very few candidates referred to net migration.

(c) Most candidates were able to give valid reasons, the most common being the cost of implementing family planning schemes, the tradition of large families and cultural attitudes to birth control.

Migration

Question 2

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

(ii) Many candidates did not read the graph correctly and gave their answer as 1250 instead of 1250 thousand.

(b) It appeared that many candidates had not read the question properly and answered in terms of different countries – why one might be a source and the other a destination. Many wrote separate reasons for source and destination and did not link the two as the same country. These responses gained no marks.

However, there were some good succinct responses such as:
'*Türkiye is an example of a country that receives refugees from Syria, but then some of these refugees move on to other destinations in Europe.'*

(c) It was clear that some candidates did not fully understand what a refugee is and simply answered in terms of economic migrants, and this limited their responses. There were some vague responses such as *'because refugees will put pressure on resources',* and occasionally sweeping statements such as *'because refugees will commit crimes',* which gained no credit.

More considered responses did gain marks such as *'large numbers of refugees can overwhelm a country's housing and health services, for example Jordan has received over 500,000 refugees from Syria.'*

Population/Settlement dynamics

Question 3

(a) Most candidates were able to identify advantages such as the pleasant and well-kept surroundings and possible scenic views. Some also said that as it was an inner area of Vancouver, they might be close to or have good access to the shops, services, and attractions of the city centre.

(b) Many candidates gave valid answers including relating to fire risk and noise from neighbours. Some gave disadvantages which could not be identified on the photograph or did not have enough explanation, such as *'high crime rates.'*

(c) The emphasis of this question is on settlement rather than population, and answers that gave reasons based on birth rates gained little credit. The best responses answered in terms of the pull of the suburbs and rural areas, and negative aspects of living in the centre of cities.

Section B

Population

Question 4

(a) Many candidates answered this well, although some did not include overall population change in their description of each stage. Most responses included a diagram to good effect, although this was not a requirement. Some answers included detailed explanations for each stage which was not required as the command word was 'describe'.

(b) There were many good answers to this question, and it was clear these candidates had learned the topic well.

Some candidates did not answer in terms of limitations of the model but instead gave explanations, sometimes not very accurate, of the different stages of the DTM.

(c) Many candidates explained how economic factors such as investment in family planning, improved food production and distribution, and the development of housing, energy and sanitation infrastructure influence population growth rates and recognised that as countries become more economically developed, population growth rates tend to fall. The best responses considered other factors that affect population growth rates such as social and cultural traditions, female participation in the labour market, immigration levels and government policies.

However, many responses lacked valid examples, which resulted in few candidates achieving higher level marks. Many simply added country names *'e.g. in Nigeria'* which does not qualify as 'with the aid of examples.'

Some responses referred to China's One Child policy, however extensive details of the policy's origins, implementation, and problems were less relevant.

Population/Migration

Question 5

(a) Many candidates gave good answers that distinguished between several types of internal migration including rural-urban, urban-rural, intra-urban and between urban centres.

The best answers gave examples of each type of migration, such as:

'In China in recent years a lot of young people have moved from rural villages in the west to big cities in the east such as Beijing and Shanghai because of the education and employment opportunities there'.

'People in Auckland have moved to small towns like Clevedon and Whitford where they can enjoy a rural life while still keeping connections, like work, with the city'.

Some candidates also described internal movements in terms of stepped and chain migration, which were creditable responses.

(b) Candidates who had answered **5(a)** well often went on to give good responses to this question.

The most common explanations given were that in MICs there is often a lot of rural-urban migration as the economy develops, while in HICs counter urbanisation is a characteristic of internal migration as people move out of cities either due to retirement or because well-developed transport systems enable workers to commute from small towns and villages to cities. Some candidates also explained how the development of fast internet connections enable people to work remotely without having to live in a city.

Again, the best answers gave recognisable examples, often from their own country, while weaker exemplification was limited to statements such as *'In Brazil people have moved from the Northeast to Rio to look for jobs*' or gave historic examples such as urban growth in the UK during the Industrial Revolution.

(c) There were many good answers with relevant and recognisable examples. The best responses often contrasted attempts to restrict international migration from Central and South American countries into the USA by visas and hard borders with examples where governments have enabled greater freedom of movement, such as in the European Union.

Some examples were hindered by inaccurate sweeping statements such as '*the USA has very strict rules and does not allow any migration.'* Some responses contained lengthy case studies about all aspects of migration streams such as Poland to the UK or Mexico to the USA which did not focus on the question and therefore gained little credit.

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(a) Good responses were based on a well-learned case study of a named squatter settlement, the most common being Dharavi in Mumbai and Rocinha in Rio de Janeiro. The best responses seen were clearly based on non-textbook examples, and examiners saw some excellent case studies of squatter settlements in Port Vila in Vanuatu, Lagos in Nigeria, and Jakarta in Indonesia.

Weaker responses gave generic descriptions with little sense of place.

(b) The quality of the responses to this part largely reflected what candidates had written in **6(a)**, however, some candidates who had written in good detail in **6(a)** did not focus on management challenges, and instead gave general accounts of the problems faced by residents.

(c) Again, the quality of the responses was linked to what had gone before in **6(a) and 6(b)**. The best answers discussed how city authorities had attempted to deal with issues of housing, sanitation, transport, education employment and crime.

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GEOGRAPHY

Paper 9696/23
Core Human Geography

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GEOGRAPHY

Paper 9696/31
Advanced Physical Geography Options

General comments

The response of many candidates was creditable but there were some incidences where answers were misdirected and unbalanced because of a misinterpretation of the question or lack of knowledge and understanding. This was true of answers to **Question 5** which will be discussed later. It is important to stress that questions need to be analysed in full rather than concentrating on a few terms as this can lead to responses not fully answering the question. This is especially important in the evaluation essay questions. Some questions might seem familiar to previous questions but there will usually be a different emphasis that needs identifying. This will be seen in discussion about **Question 9**, where the question was not directly about management solutions but about problems faced for management. Management would constitute part of any answer, but the focus of the question should have been about 'problems'.

It is worth making a few general comments, some of which have been mentioned in previous reports and will be explored in greater detail later. There continues to be a tendency to use concepts and processes in the wrong context, thus demonstrating incomplete understanding. Detailed examples are useful, but simply stating a general location where some issues might occur, such as an entire country, is often not. This was especially true of answers to **Question 9** and **11**. Also, as noted in reports before, it is important that discussion of specific events, such as earthquakes and mass movement examples, is reasonably accurate.

General performance was variable but there were many excellent responses which showed a broad knowledge and secure understanding of physical geography. There was only the occasional rubric error but no more than in previous examinations

Comments on specific questions

Tropical environments

Question 1

(a) Candidates had to describe the pattern of biomass shown at different trophic levels in a pyramid form. A pattern requires a general synthesis of the data being portrayed. Many candidates simply repeated the biomass stores up the various trophic levels and not a pattern.

(b) Answers to this question were also weak. Few candidates seemed to understand what trophic levels and biomass values implied and therefore found it difficult to explain the pattern. The key concept is the decrease in available energy at successive trophic levels. Many candidates attempted an explanation based on the influence of climate on the nature and growth of characteristic vegetation in savanna ecosystems. This approach made it very difficult to explain the pattern of biomass stores.

Question 2

This was the least popular question in this option. Some candidates misinterpreted the question and answered in terms of granite landforms. A few candidates answered with both granite and karst landforms. In general, answers were often limited. However, there was good knowledge of the carbonation weathering process in many answers with some understanding of the role of limestone rock structure such as joints and bedding planes. Hydrolysis was sometimes incorrectly described. Knowledge of the nature and characteristics of the karst landforms was often limited as was an explanation of their formation.

Question 3

This question required an assessment of the role of atmospheric pressure in influencing tropical climates. Thus, both humid tropical and seasonally humid tropical climates needed discussion. There was considerable uncertainty among candidates as how to interpret atmospheric pressure. The most straightforward approach would be to base the assessment in terms of the nature and movement of the intertropical convergence zone (ITCZ) but few candidates seemed to recognise that this was all about pressure. The ITCZ moves north and south during the year, following the movement of the overhead sun. As the ITCZ moves it takes the low pressure, created as a result of high temperatures in equatorial regions, and the related rain belt with it. This has a major influence on the humid tropical (savanna) climate, determining wet and dry seasons. As the distance moved by the ITCZ is not the same every year, the savanna lands closest to the hot deserts have very unreliable rainfall, leading to occasional droughts. Discussion of monsoon climates was also relevant as it relies on pressure differences. The possible effect of sub-tropical anticyclones was also discussed in very general terms. The question required an assessment of other factors such as latitude, air masses, altitude, ocean currents and vegetation. Therefore, the narrow interpretation of atmospheric pressure of many answers restricted the marks available.

Coastal environments

Question 4

(a) Most candidates were able to describe the pattern of erosion rates quite well. The anomaly at site 10 was recognised by most and maximum marks were frequently awarded.

(b) The resource showed erosion rates along a barrier island near Lagos, Nigeria. In general, barrier islands are depositional features and there would be no or little solid rock. However, a considerable number of candidates either ignored this, or did not know, and provided explanations based on the possible nature of the rock along the island. This being so, explanations based on rock characteristics were accepted to a certain level. However, explanations based on rock characteristics were usually too vague or inaccurate to achieve many marks. Candidates still discuss rocks in terms of hard and soft which provides little insight into processes. Also, to state that limestone is a soft rock is erroneous and demonstrates a lack of understanding. Rock characteristics have to be related to the processes, marine or subaerial, that might lead to erosion. Similar considerations apply to wave characteristics such as fetch and strength. Such characteristics are only relevant if applied to the processes of erosion and deposition. Simply to state that high energy is a factor is a starting point not a complete explanation. Many answers demonstrated a lack of understanding of the depth of explanation required.

Question 5

This question was less popular than the other essay question in this option and in general was not as well answered as **Question 6**. Answers to this question demonstrated some misconceptions. Coastal saltmarshes are influenced by low energy environments such as in estuaries and behind spits, deposition of fine-grained material, and flocculation of clay in salt water. They develop in inter-tidal zones, on mudflats, exposed to the air at low tide which allows halophytes to grow. Halophytic vegetation traps sediment and raises the level, reducing the time it is covered by the tide. Vegetation succession occurs as the marsh develops. Many candidates thought that saltmarshes only developed behind spits and that spits were essential. This meant that many candidates described the formation of spits at length often ignoring the saltmarsh that might develop behind it. A minority of candidates thought that salinity was a requirement, whereas saltmarshes develop despite the salinity. There were also misconceptions about mangrove formation. Many of the requirements for formation are similar to saltmarshes. Mangroves are also influenced by the inter-tidal zone, though intertidal range can be much smaller. Mangroves, depending on the species, of which there are three main ones, can tolerate roots being above water for some of the day. Mangroves do not necessarily need sheltered coasts as the greater rigidity of trees provides protection from storm surges and tsunami. Some of these points were mentioned by candidates as well as some material that was either irrelevant or incorrect.

Question 6

This question was better answered than **Question 5**. The following characteristics of the respective reefs were present in many of the answers. Fringing reefs form close to the land with a narrow channel nearest the shore. Barrier reefs develop further from shore, separated by a wide, deep lagoon, broader in size and continuous but sometimes broken into sections at river mouths. Atoll reefs are confined to the flanks of

submerged volcanic islands, rise from their volcanic foundations and support small islands of wave-borne debris. Although fringing and barrier reefs do surround islands, they do not do so exclusively which was the conclusion of many candidates. Discussion of formation included conditions needed for growth which is where many candidates gained most of their marks. Fringing reefs grow seaward from the land and, as many candidates mentioned, may develop into barrier reefs if sea level rises. Barrier reefs rely on sea level rise or land subsidence. If sea level rise or land subsidence is slow, the reef grows upwards forming a larger reef and lagoon. Atoll reefs grow around islands and if the (volcanic) island subsides or sea level rises to cover it, an atoll develops. This sequence was well described by many candidates.

Hazardous environments

Question 7

(a) Most candidates were able to describe the pattern of pyroclastic flows. Full marks were achieved by many candidates.

(b) There was a very weak response to this question with few candidates demonstrating knowledge or understanding of pyroclastic flows. They were often confused with lahars and many candidates thought they were essentially magma flows. Pyroclastic flows are rapidly moving mixtures of air and gases and very hot volcanic fragments, usually of ash formed from explosive eruptions at destructive plate boundaries in highly acidic magma. Even if pyroclastic flows were misinformed the type of volcanic eruption was often described correctly. Pyroclastic flows can be formed by column collapse where the lava, ash, and gases/incandescent ash clouds expelled from a volcano loses its upward momentum due to cooling and falls back to the ground, flowing down the sides of the volcano. They can also be formed by side-flank eruptions which occur when a lava plug blocks a volcanic vent, and gas charged lava can escape through a gap in the volcano's flank, leading to a hot, incandescent cloud of gas and fine particles (like hot sand), which also flows rapidly downhill due to its high density. The map of the pyroclastic flows suggests that side-flank eruptions were the main way that they occurred in Montserrat.

Question 8

Hazards from large-scale atmospheric disturbances (cyclones, hurricanes, typhoons) include storm surges, coastal flooding, intense rainfall leading to severe river floods and mass movement, and high winds. Hazards from small-scale atmospheric disturbances (tornadoes) include intense precipitation (rain and hail), high winds and pressure imbalances. Many candidates were able to describe the impacts of many of these hazards and assess how the hazards varied using relevant specific examples. Comparison was often in terms of variation associated with specific disturbances or between different types of disturbance. Occasionally, impacts were described in economic and cultural terms with little reference to the specific physical hazards, but these were in the minority. The range of hazards and the nature of the atmospheric disturbance (such as only tornadoes) discussed was often limited. A few candidates wasted time explaining at great length the formation of the respective hazards. However, there were some excellent and detailed answers.

Question 9

This was a popular question and there were some good answers but there were many cases where the question was misinterpreted. The question concerned an evaluation of the problems of sustainable management of a hazardous environment. Many candidates concentrated on sustainable management without detailed description of the problems that were being managed. Analysis of management solutions often mentioned problems at the same time but only implicitly. Thus, it was difficult to assess the evaluation part of the question. The choice of case study in such a question will always be crucial. In this respect it is encouraging to note that comments in previous reports about the suitability of case studies is being acted upon. There were some excellent case studies with the issues facing the Philippines prominent. Other appropriate case studies, such as Haiti with several hazardous problems, were weaker because of the limited range of hazards discussed. There were many case studies that did not provide the breadth of problems to allow successful evaluations. A single hazardous event, such as the Vargas, Venezuelan mudflows, offered limited discussion of problems. Similarly, discussion of solutions to land instability in Hong Kong, rarely discussed the problems facing Hong Kong, such as steep slopes, unstable weathered granite, high population density and frequent tropical storms with high rainfall. Emphasis was often on solution of problems and not the general problems. However, there were some excellent detailed answers if the case studies used were sufficiently varied to allow this to happen.

Hot arid and semi-arid environments

Question 10

(a) This question was answered reasonably well. Sometimes candidates did not produce a diagram and sometimes only a diagram was produced but with insufficient annotation to provide description of the main features of the sand dune. Candidates could have described the crescentic shape with long, narrow horns/ridges on either side, one horn longer than the other. Other features were one steep and one less steep side with bare/smooth surfaces. Simply stating features was not describing them.

(b) Answers were often limited in detail. Most candidates were able to discuss the movement of sand particles by the wind but were unable to explain how the particular dune was formed. The dune is a barchan but could be identified as a parabolic dune where the wind blows from the opposite direction. Barchans form in areas with adequate sand supply, unidirectional winds and a lack of vegetation to stabilise the sand. Creep and saltation transport sand up the windward slope. As sand accumulates on the crest it eventually exceeds the angle of repose, causing miniature avalanches down the slip-face which restore equilibrium. In barchans the windward face is typically under 20°, while the leeward face is steeper, typically 32°. The wind blows up the windward face and once over the crest, the wind slows and eddies, encouraging deposition on this leeward side. In parabolic dunes, similar processes apply but the horns and the dune face in opposite direction to the wind. They are formed from blowout dunes where the erosion of vegetated sand leaves a U-shaped depression.

Question 11

As with **Question 9**, the choice of case study was crucial. Unlike **Question 9**, this question was about 'solutions' and this was noted by candidates. Specific geographical examples were often very generalised, such as the entire area of the Sahel and even stating just China with no specific location mentioned. In contrast, there were some good case studies showing detailed knowledge and understanding, but these were in the minority. The main problems discussed usually resulted from overgrazing, deforestation, overcultivation and population pressure. Such problems were often made worse by the high wind energy environments, unpredictable levels of precipitation, possible effects of climate change and low biomass productivity. Salinisation as a result of overirrigation was also a problem mentioned. Many solutions to these problems were discussed depending on whether they applied to the specific nature of the case study. Sustainable methods of resource exploitation, education programmes around population pressure and around farming techniques, such as encouraging mixed farming to prevent overgrazing, were also assessed. Tree planting projects to act as shelter belts, that will provide earnings and food, such as the Great Green Wall, were often discussed but the evaluation of the effect of the Great Green Wall, was often partial and limited.

Question 12

This was a popular question and there were many excellent answers. Most candidates were able to discuss the main causes of aridity. Apart from the rain shadow effect these are cold ocean currents, the descending air of the Hadley Cell and continentality. Description was often excellent, but the evaluation was sometimes limited with candidates not recognising that some arid areas were caused by more than one factor. Specific arid locations were often omitted with the answers being purely generic.

GEOGRAPHY

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Advanced Physical Geography Options

General comments

This was a reasonably well-answered paper overall, with some definite favourite questions amongst the candidates. Several candidates met the demands of the questions very well but there were a large number of responses that only partially answered the question, providing either unbalanced or incomplete arguments. This was especially true of the evaluative essays – **Question 6** for example asked for evaluation of 'problems' of sustainable management but candidates often took this to mean an evaluation of the management itself. Whilst this will have gained some credit it showed many candidates were not focusing in on the precise demands of the question.

In other cases, there was a lack of specific knowledge when applying examples accurately. Sometimes only the name of a country was given which does not really help in answering the question. Detailed and precise knowledge of located examples is a key to success. This was true in **Question 6**. However, some examples were used inappropriately, such as in **Question 9**, where candidates often gave examples of mass movements without any reference to management schemes.

The best essay answers, those with sustained evaluation, were the ones that gave value judgements throughout the answer, rather than just in the conclusion. This allowed candidates to focus on the specific demands of the question as they would be constantly referring back to it in their answer.

Comments on specific questions

Tropical environments

Question 1

(a) Candidates were asked to describe the global distribution of humid tropical climates as shown in Fig. 1.1. Answers needed to provide an overview of the distribution, and not just give a country-by-country description as this does not give the global distribution. Therefore, mention of overall pattern between the Tropics or along the Equator was credited, as was detail about highest concentration, the fact it is discontinuous and also mention of areas where it was not found. Overall, this question was answered quite well.

(b) This question was not as well answered. Most candidates were able to describe the climate of humid tropical environments, but often did not explain them. These answers limited the candidates to Level 1 (1–2 marks). Some candidates described the vegetation and ecosystem characteristics, which gained no real credit as the question is about climatic characteristics. Some better answers gave figures of temperature and rainfall. Several candidates were able to explain the high annual temperature but not as well on linking in the high rainfall. The best answers were those that explained the link between the overhead sun, how it created the ITCZ, the movement of the ITCZ and the nature of the rainfall created by convection. Some even made mention of the role vegetation plays in climate through high rates of transpiration in rainforests. Although diagrams of the Hadley cell could have aided the explanations here, very few candidates decided to draw diagrams in their answers.

Question 2

This was the more popular essay question in this option. It asked candidates to assess the relative importance of the factors influencing characteristic granite landforms in tropical environments. Candidates were expected to write about factors such as climate, rock type, human activity, etc. and the better answers

made references to processes such as etchplanation, peneplanation and pediplanation. However, the main drawback of many answers was that candidates did not explain the formation of the landforms themselves. There was often passing mention of bornhardts, kopjes and tors but candidates concentrated more on the processes rather than how they formed the landforms. This limited the scope of many answers. Some candidates confused granite landscapes with karst (limestone) landscapes. The best answers showed understanding of how processes/factors led to landform creation, and these were evaluative in the sense they attributed a level of importance to the different processes/factors they discussed.

Question 3

This was a less popular question and most candidates that attempted it did not find it straightforward to answer. There was a requirement to argue whether plant communities in seasonally humid tropical (savanna) ecosystems rarely reached their climatic climax. Most candidates decided they did not, saying that communities were hindered by the nature of the climate. Unfortunately, this did not consider the fact that most plants were adapted to the climate and so the climatic climax could be reached. There was little recognition of the fact that savanna ecosystems have a range of climates, and therefore a range of vegetation communities. Only a few stronger candidates realised this and gave further details of alternative scenarios such as plagioclimax or subclimax where humans or drought/wildfires hindered the development of the climax communities. Overall, most candidates seemed to lack an understanding of what a climatic climax plant community meant.

Coastal environments

Question 4

(a) This question required a description of the main landscape features shown in the photograph. Many candidates simply listed features which is not really enough – these features needed to have some form of adjective that described what they were like. A few candidates attempted to explain the features which was not part of the question. Overall, this was quite a well-answered question.

(b) Most candidates were able to recognise that landform A was a tombolo. Most candidates mentioned longshore drift but often did not explain how it was created in terms of prevailing winds and a change of direction of coastline, nor how the change in wave energy led to deposition of material. Better candidates suggested that the tombolo might also be the result of wave refraction where the island caused there to be an area of calm water into which waves bent and lost energy, so deposited any material they were carrying. A few candidates noted that this was in fact a cuspate tombolo. Some candidates used diagrams to good effect, as they often helped to explain the processes more accurately.

Question 5

This question was significantly less popular than the other essay question in this option and in general was not as well answered as **Question 6**. Most candidates knew that waves are generated by wind, but different aspects of the wind were not always referred to e.g. fetch, wind speed and duration. There was some confusion over the types of waves created in terms of constructive or destructive and many candidates did not recognise that these are the characteristics of the waves, rather than the generation. Factors affecting this would include depth of the sea, orientation of coastline, nature of beach materials, etc. Thus, this is in effect a two-part question which many candidates did not really take into consideration. Only the best candidates recognised the command to 'assess the relative importance' where some idea of a comparison of each of the factors influencing generation and characteristics was required.

Question 6

By far the most popular essay question in this option, this question required candidates to evaluate the problems of sustainably managing a stretch or stretches of coastline. Most candidates did provide located examples – answers without these could not get out of Level 2. However, the majority of answers, whilst mentioning problems, did not really evaluate them. Most candidates wrote about a case study, with some reference to sustainable management and occasional problems, but the best candidates were the ones who gave an idea of how big each problem was relative to the others, and how difficult it was therefore to manage. There were quite a range of case studies used. Many candidates had clearly learned a lot of details about specific places, but the information needed to be applied more precisely to the question. Just writing about 'sustainable management' was unlikely to gain a great deal of credit without the recognition that management aimed to address the problems, but also in many cases created new ones.

Hazardous environments

Question 7

(a) This was a very popular question, which was in general reasonably well answered. However, some candidates simply went through the heights of waves at different times which was not really enough to gain more than 1 or 2 marks. Ideally candidates should be looking to describe the way in which the tsunami developed across the whole Pacific region, including times, locations of higher/lower waves and perhaps the highest/soonest (Japan at 2.4+ metres) and lowest/furthest (Chile at 21 hours). Better candidates also gave a description of the thin bands of larger waves e.g. across the North Pacific towards the USA.

(b) Whilst most candidates made the link between an earthquake and a tsunami, many indicated that the vibrations of the plates created tsunamis. Some suggested erroneously that conservative and constructive boundaries produced tsunamis. Better candidates knew that up-thrusting plates at a subduction zone forced water upwards, which then spread out and as it reached land, the base of the wave slowed, decreasing the wavelength and increasing the height. The best answers included alternative suggestions, such as submarine volcanoes and landslides – but these were not seen often. Most candidates over-simplified the process and did not gain much credit.

Question 8

This question required candidates to evaluate how important the Coriolis force is relative to other factors in both the formation and the development of large-scale atmospheric disturbances. Most candidates knew what the Coriolis force was but there was much confusion about what it actually did. Some candidates strayed into answers that basically described a case study, giving details about hazards and impacts which gained little credit. Better answers indicated that there are several requirements for the formation of large-scale atmospheric disturbances, such as water temperature of 27°C to a depth of 60 metres, low wind shear and atmospheric instability, and they compared the importance of these to the influence of the Coriolis force. The best answers concluded that without the water temperature storms would not form in the first place, and so without it there would not be the atmospheric conditions for the Coriolis force to spin into a large-scale atmospheric disturbance. Evaluation was lacking overall – it is best for candidates to try and evaluate each factor as they go through their essay, potentially even comparing to the Coriolis force each time.

Question 9

This was a popular question and candidates generally showed a good understanding of a range of management strategies. Evaluation was not always very thorough – it seemed many candidates had learnt case studies of mass movements, some without any management, and so struggled to evaluate effective strategies. A few candidates got mixed up with tectonic hazards and wrote almost exclusively about earthquakes and/or volcanoes. The best answers gave a range of different strategies, from hard and soft engineering to early warning, hazard mapping and evacuation. The limitations of each of these were addressed and sometimes reference was made to the applicability of these strategies to LIC or HIC examples. Many candidates concluded that different mass movements require different strategies, and that a combination often worked best where there was the financial capability.

Hot arid and semi-arid environments

Question 10

(a) The graph proved to be quite a challenging resource for the majority of candidates who attempted this question. Some candidates did not really understand the graph and gave little indication of what it showed. The best answers recognised the intense variability, with high and low values and the periods of relatively low and relatively high windspeeds. Very few scored full marks for this question.

(b) This question also proved difficult for candidates. The main reason that many candidates recognised was the lack of vegetation, so fewer obstacles for the wind. However, they did not appreciate that the intense heating in an arid environment can create localised low-pressure systems which combine with high pressure areas to produce wind. Also, many arid landscapes have low relief, so again few obstacles to the wind.

Question 11

This was the least popular question on the paper and the few candidates that attempted it did not really understand what the question was asking. There should have been mention of other soil processes such as humification, leaching, laterization and weathering, as well as perhaps human influence and wind or water erosion. Answers generally gave very simplified accounts of what salinisation is, but then candidates did not really have the knowledge to be able to compare and evaluate it with other soil processes.

Question 12

This question required candidates to compare the influence of wind and water in the creation of landforms in hot arid and semi-arid environments. Many candidates were able to name different landforms but few gave details of how they were formed. The difference between erosional and deposition landforms, both in terms of wind and water, was generally not well explained. Whilst many candidates concluded that arid environments lacked water, and so wind was more important, only the best candidates realised that past pluvials had a role to play and were important in the production of relict features in the landscape.

GEOGRAPHY

Paper 9696/33
Advanced Physical Geography Options

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

GEOGRAPHY

Paper 9696/41
Advanced Human Geography Options

Key messages

1. Please update case studies and encourage candidates to use examples which are familiar and relevant. Particularly **Questions 2, 5, 8, 9** and **12**. Case studies from the 1930s and 1950s were seen in this paper.

2. Encourage candidates to plan their responses by deconstructing the question and planning a sequence of ideas which contribute and build towards an evaluation. Particularly **Questions 6** and **8**.

General comments

There were some very good responses to all questions and some high achieving scripts which is commendable for candidates and centres. Key differentiating factors are the specificity of examples and case studies, the ability to engage with all of the question and the degree of evaluation present. Typically, Level 2 responses to essays (Level 1 being relatively rare) are descriptive accounts with thinly developed evaluative comments which are statements without examples and/or evidence. These responses frequently lack planning and tell the Examiner all a candidate knows about the topic rather than answering the question. A better approach would follow a structure, plan the essay more carefully and think what point they want to make in each paragraph and would use paragraphing correctly. The best responses have a series of points they make throughout the response, and each paragraph builds on the previous one. Some candidates follow a format for each paragraph of point, example and a short evaluative statement. This is arguably formulaic, but it works, keeps the candidate focused on the question and generally leads to a Level 3 response. Level 4 responses are less common but usually take on the question, are not necessarily long but use precise language and geographical terms, with integrated examples and selective use of case study details, whilst displaying a strong conceptual understanding of the topic and question.

Comments on specific questions

Production, location and change

Question 1

(a) Most candidates were able to describe changes on the farm, but few identified these changes as either land use or practices. They generally identified a land use on the 'before' diagram and stated how this changed on the 'after' diagram. A basic way to describe change. For maximum marks candidates were expected to describe a 'main' change such as: increase in diversity/types of crops or increased ground/tree cover.

(b) Most candidates were able to suggest positive environmental impacts such as reduction in erosion (given in the diagram), improvements in soil fertility and structure, increase in habitats and biodiversity, whilst some suggested negative impacts from intensification of farm practices. The latter was accepted since candidates are not expected to have specific knowledge about the farm and the increase in crop diversity and ground cover could have come from intensification.

Question 2

The most common case study used was Jamaica, though others included Kazakhstan and occasionally their own country. In the latter case exemplar support tended to be stronger. Case studies from unfamiliar locations or with a long history are often less successful. Better responses had a clear structure covering

each reason as to why there was a need for agricultural change and then reviewing how far the difficulty was/was not overcome, with reference to a specific attempt. These responses were enhanced by a general introduction to agriculture in the chosen country and a summation of the extent to which the difficulties have been overcome, the challenges which remain or the difficulties which are not possible to overcome. One aspect of agriculture in Jamaica which is not well understood is the loss of preferential treatment by the European Union for Jamaican products. Though this is now a dated issue, centres could explain this in terms of loss of a market, market competition, domination of the market by TNCs. As a dated issue there have been responses to this issue and to others by the Jamaican government and the farmers themselves in the last decade or more. This illustrates the need for centres to update the case studies used.

Question 3

Generally, this question was not well done. Candidates need to have specific knowledge in this option about different manufacturing industries and factors which influence their location. This question was about location which could be covered theoretically and/or with specific examples. Most candidates used the concept of weight losing and weight gaining manufacturing industries, with the former linked to sources of materials and the latter more to a market location. Examples were often in name only. It would be good to see some more specific knowledge about locations and manufacturing industries, as we see in questions for other options. Some candidates looked at perishability of materials but there was a tendency to drift into agriculture not manufacturing. Other aspects of materials less frequently seen were localisation/ubiquity, value, bulk, components, whilst very few candidates considered manufacturing types such as light or heavy, primary processing, component based or footloose industries. Comments on transport costs and developments in transport technology were valid. The evaluative element in this question required candidates to consider the extent to which materials are more important as a locational factor in some manufacturing industries than in other manufacturing industries. Better responses noted this and were able to discuss the role of materials before moving on to a range of other factors such as labour and markets (most seen) and others e.g. land, capital, agglomeration, government policies.

Environmental management

Question 4

(a) Most candidates understood how to read the compound/divided bar graphs in Fig. 4.1 and were able to accurately use data to support the changes they were describing. They were however less successful at following the command of the question: describe the main changes. The main change was the rise in percentage (and number) of people having access to safe water (from both sources) and a decline in the percentage (and number) having access to unsafe water (from both sources).

(b) Candidates tended to look at issues connected to development and particularly capital for infrastructure, water treatment or dealing with domestic waste or personal affordability. Some candidates described separately different causes of water pollution without linking each to how this affects the access to safe water. This could have been done by explaining how polluted groundwater sources reduce the quality of water in wells or boreholes or heavy pollution of river water leads to increased cost of water purification. Some candidates explained how conflicting demands for water arise from agriculture (world's largest user) or population growth.

Question 5

A range of case studies were used such as: large scale producers such as China – the Three Gorges Dam, Ethiopia – the Grand Ethiopian Renaissance Dam, Norway – Ulla-Førre, UK – Hinkley Point and Drax Power Station, and some smaller scale and even very small-scale projects. The key for a successful response was clear and specific details about the location of the case study chosen. Centres should be aware that schemes which are either in construction or have only just started operating can pose a problem for candidates particularly in terms of evaluating the success or not of a scheme. In some cases, there may have been a forerunner at the same location, which should be given some consideration. A small number of candidates used an overall electrical energy strategy of a country and not a named located scheme.

Question 6

Candidates attempting this question needed to plan a response and consider what role education has in the successful protection of environments at risk and to evaluate this against other factors. Some better responses considered education as a factor in the protection of environments at risk, at different scales, such as the personal involvement in the 3Rs (Reduce, Reuse, Recycle), choice of agricultural practices, education

campaigns from government or other NGOs and looked at constraints on education and other factors. They also used a mixture of general comment and evidence from their case study. Other factors commonly seen included capital, legislation, law enforcement and scale of degradation.

Global interdependence

Question 7

(a) To describe a distribution, candidates need to start with the idea that distribution involves individual points (in this case countries) and the question to ask is how these points are spread: are they evenly spaced, randomly placed, clustered or dispersed/isolated? In this case, the countries in the 0.0–4.9% category are found in 5/6 continents (6 if the isolated example in North America is noted), there are more in the northern hemisphere than southern hemisphere and large clusters in west/north Europe and Asia and isolated examples in Africa. Care is required when using terms such as many, most, several, not many. For example, 'most of South American countries' is not valid as more are not in this category or Europe does have the highest number but not the most or the majority of countries and smallest number comments – small number in Africa is not true [8] (more than South America) but 8 is a small proportion of the total African countries. Some candidates made comments related to HICs/LICs. This cannot be deduced from the information given.

(b) Most candidates explained two problems for countries which have high levels of international debt but some had more than three problems or the difference between one problem and another was unclear. For some candidates it could be useful to number the problems e.g. 'The first problem is…' and to have a separate paragraph starting with 'A second problem is…' The better responses displayed knowledge about international debt and the problems which follow. Common themes included debt interest payments and especially when interest rates are increased for further loans; debt payments reduce the amount available to invest in improving public services/invest in infrastructure; high or growing levels of debt can discourage foreign and private investment because of concerns that the debt is unsustainable; the impact of unexpected economic/political/environmental shocks reducing ability to repay the debt; loss of sovereignty and the debt spiral. Candidates need to be clear that the problems are distinct e.g. it is better to consider lack of funds to invest as one problem of high levels of international debt which can lead to multiple problems for a country, rather than repeating 'lack of funds' for each of infrastructure and improving public services.

Question 8

This was the most popular essay question and the key to a successful response was the degree to which comments about resource endowment and other factors were linked to aspects of global patterns of trade. Very few candidates saw the question as being about global patterns of trade. Since global patterns of trade are very complex and the causal factors themselves complex and interrelated this is understandable, but candidates could outline some aspects of global patterns of trade in their introduction such as: dominance of HICs with majority of trade by HICs with other HICs; LICs have issues such as primary product dependency; exports of HICs consist of more high-tech and mid-tech/high value products than LICs which are dominated by low-tech products/low value; trade is becoming more regionalised/within trade blocs; the role of the World Trade Organisation (WTO); free trade versus protectionism. Most candidates had a narrow approach to resource endowment, displaying knowledge of the dominance of the middle east and OPEC in having oil and gas reserves but little about other resources which are more influenced by market demand out of their control, or other factors influencing supply such as disease or natural disasters. They largely then described other factors such as locational advantage, historical links, trade agreements and the role of the WTO.

Question 9

Better responses not only focused on how impacts/problems change over time, for one or more examples of a tourist destination, but also demonstrated a clear understanding of how these impacts link to issues of sustainability. Most candidates consider sustainability as problems or impacts on the environment, society or economy with simple connections between these. Some developed this to consider how some positive impacts such as income generation may lead to other impacts such as negative impacts on society or environment. Very few considered how sustainability includes visitors and the industry itself or how far the damage to an area may be irreparable. Some successfully developed comparisons between locations where sustainability has been more or less considered, often using ecotourism as the example of the former. Examples of locations seen included the Galápagos Islands of Ecuador, Jamaica, the Masai Mara and

Mombasa coastal area in Kenya, the Costas in Spain, Blackpool and the Lake district in the UK. Some candidates have very detailed knowledge of these or smaller-scale locations, whilst others have a very simplistic view or are confused over historical accounts – the worst case of this being Blackpool. Centres should also note that Blackpool is overwhelmingly a destination for internal not international tourists.

Economic transition

Question 10

(a) Candidates responded well to the resource provided with valid comments. The better approach was to use the coloured tiers to assess the difference or not for each column (category) and to make an overall comparison. Some candidates correctly added up the number for each tier and used this to back up their comparisons.

(b) Most candidates noted the use of multiple indices across three categories giving variety in comparison to single measures e.g. GDP or multiple indices e.g. HDI and the use of arrows to indicate direction of change. Less noted the use of colour and tabular form as visual stimuli. Some used the footnote about the OECD and the reference in the title to the 'other OECD countries' to develop the advantage of comparing countries with similar levels of development rather than all countries.

Question 11

This was the most popular essay question in this option. Candidates have a good knowledge of the concepts linked to the question providing a range of interesting answers about the impacts of globalisation of economic activity on a variety of specific and/or generalised locations linked to levels of development. Most focused on the globalisation of economic activity, whilst some less successfully focused on globalisation in general. The responses were well founded in the syllabus for this option focusing upon the operations of TNCs, FDI, the new international division of labour (NIDL) and the growth of newly industrialised countries (NICs) with better responses linking these changes to global patterns of resources, production and markets. The evaluative element needed a view of whether the impacts of the globalisation of economic activity are mostly positive, with candidates often discussing social, economic and environmental impacts, whilst some also considered political impacts. Some candidates offered content from Global interdependence such as tourism, aid and/or debt. This content should have been linked to the globalisation of economic activity but frequently was not. This option is about economic transition and candidates have sufficient content to respond well to the question.

Question 12

For this topic, the key is to have specific knowledge about at least one country and at least two contrasting regions linked to regional disparity and in this case to divergence and convergence. There is frequently a lack of detail and reality about the knowledge and comments offered. Sound responses were seen using one of Brazil, Canada, China, UK for the main support in the response, whilst some candidates used examples from more than one country. Better responses integrated knowledge and understanding about the theories behind divergence and convergence.

GEOGRAPHY

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Advanced Human Geography Options

Key messages

1. For the **Question 1**, **4**, and **10 (a)**'s graphs on this paper, candidates are encouraged to read the graph title which gives a description of what the graph is showing, as well as the axis, to help them to interpret what the graphs are showing. Graphs are often not as straightforward as they may first appear. Teachers are encouraged to use a range of visual representations of data to prepare candidates, and to discuss the various ways that 'change over time' can be represented on graphs as well as different graph types. For example, answers to **Question 4** showed a lack of awareness of stacked line graphs and their variables. Teachers should be giving candidates as much opportunity as possible to practice these questions from past papers, of which Cambridge International Education makes a wide number available.
2. For **part (b)**'s most candidates reached Level 2, but some candidates still do not develop their answers much at all, and for 6 marks candidates need to understand that explanations should show detailed knowledge and understanding. Including examples with context helps with this, but candidates can also consider using models or theories that they have learned about to enhance their explanations.
3. For essays, some candidates still begin without having spent enough time thinking through all the demands of the question. It was good to see examples being well used in essays, but candidates who use case study knowledge without applying it to the question very well are limited to Level 1 or 2. Spending a few minutes planning where the essay is going to lead, and how it is going to end, is invaluable.

General comments

Teachers are reminded that all of the content within each of the two chosen topics should be taught. For example, **Question 8** revealed a lack of knowledge about changes in the global market, with candidates much more secure on the other factors listed in the syllabus.

Encourage candidates to ensure that they know the most up to date case studies which may be found beyond textbooks. This could be given as extended reading/research tasks outside of the classroom with teachers suggesting websites and articles that candidates could read and access.

It is useful for teachers to highlight for their candidates where content of topics compliments each other, known as synoptic links. This can greatly enhance understanding for the candidate.

Comments on specific questions

Production, location and change

Question 1

(a) Many candidates identified the summative change, by grouping Level 1–3 and Level 4–7 in to negative and positive change. However, this is a question where 'greatest' had to be used carefully because the greatest per cent change was a negative number, Level 2. The greatest positive change was Level 6, but some candidates incorrectly interpreted negative values as low change or disregarded them altogether. Additionally, for graphs like this where it is relatively simple to get numerical data using the axis, candidates should include this at all times to gain marks within their descriptions.

(b) Most of the candidates who answered this question used availability and cost as their two ways and were able to explain the global shift of secondary industry in the late 20th century, early 21st century. Teachers are encouraged to provide contextual place examples for their candidates when teaching the factors affecting the location of industry. Ideally these should be local to the candidates themselves. Alternatively, there are well known locations around the world which can be used to enhance learning. Reference to new international division of labour (NIDL) worked well as a synoptic link from the Economic transition option.

Question 2

This style of question should show balance. In this case, between issues and productivity. The best essays explained the issues with intensification of agriculture, assessing importance as they went and potentially offering solutions. They were then able to explain the benefits of increased productivity and conclude which was more important. Good essays discussed long-term degradation which comes from intensive use of soils, a link to the Environmental management option, considering if this was inevitable in the need to feed a growing population for emerging nations.

Question 3

Many candidates explained the management of change to manufacturing industry without focussing on the issues faced. The focus of this question was on the extent to which the issues faced have been overcome and that focus was often not quite there. Additionally, the use of Bangalore in India was only acceptable if candidates were using the manufacturing industry located there. Some focused on discussing the tertiary/service industry in Bangalore and issues faced with the move away from secondary industry which was only partially relevant.

Environmental management

Question 4

(a) Answers to **Question 4** showed a lack of awareness of stacked line graphs with many candidates reading the top line of a section as the actual amount from 0. Some candidates were effectively saying that the rest of the world had the worst access (more than triple that of sub-Saharan African countries) to basic drinking water services. Additionally, accuracy with reading from the axis is important. Quite a few candidates wrote ‘approximately/around 400’, etc. Each small square on the grid equalled 25 million people and only +/–10 million was allowed. Candidates are always encouraged to use data but this needs to be done accurately.

(b) Most candidates explained why people do not have access to clean water, however, without considering why ‘there may be an increase’ candidates could not get more than Level 1. Some candidates explained population increase in great detail – explaining how poverty leads to a need for large families, lack of contraception, etc. but were limited as this is essentially one reason. Questions which ask for ‘reasons’ can be answered with two very well explained reasons, but ideally, more should be included. However, each one should be explained fully with strong conceptual understanding. Many candidates linked their answers to **(a)** which was often helpful.

Question 5

Candidates mostly did well with this question and large HEP schemes featured quite heavily. Undoubtedly, flooding large areas of land leads to a wide range of issues. Where candidates did less well, was when they went straight to the scheme, ignoring the country’s overall electrical energy strategy. Often this was implied, through a shift to renewables mentioned later on when assessing the issues, but better answers showed that they had understood the whole question, and that the strategy led to the subsequent change in location. These candidates explained the country’s strategy, and then went on to assess issues from more than one scheme in more than one location. That being said, candidates had a sound awareness of issues and most dealt with ‘extent to’ to a reasonable level.

Question 6

This was a popular essay question and most candidates understood constraints. However, there are still some centres who teach a narrow view of constraints as being the same as causes. One constraint can be ‘ability to remove the cause/source’ but this is one constraint, so candidates need to move away from this inaccurate and narrow view of constraints. Constraints can be anything which reduces the impact of

management or protection methods and will vary depending on the examples chosen. Candidates who did show an awareness of constraints tended to focus on economic ones and better essays showed an awareness of the connection between social, economic, and political priorities as well, and the links between these dimensions and the scale of the environment.

Global interdependence

Question 7

(a) When describing distribution candidates should be looking for individual countries and how they are spread across the globe. This could be evenly spread, random, there may be clusters or other patterns that they can identify. Candidates should be careful using 'most of' in the context of continents as the size of countries varies widely between continents and quite a few countries had 'no data'.

(b) This question seemed to highlight that many candidates see debt as something which only occurs in heavily indebted poor countries (HIPCs). Most explained that debt comes from aid given in a crisis or borrowing because of poverty. Many explained the cause of the international debt crisis. Fig. 7.1 can be used as a discussion point for why many HICs are also in debt and how the flows of capital around the world are incredibly complex as governments borrow to boost growth and GDP, or (as in 2020 which 7.1 shows) to cope with global shocks such as COVID-19.

Question 8

Most candidates had a sound understanding of factors affecting global patterns of trade but with limited understanding of changes in the global market. Many essays gave a short account of changes in the global market and then moved on to assess the other factors. This approach only works if the other factors are being assessed against a clear understanding of what the global market is, and how it has changed and the importance it has relative to the other factors. Often global patterns of trade were not developed well either, with many candidates writing about the ability of a country to trade, or not, and not developing the idea of patterns. For example, invisible trade for HICs has not changed much compared to visible export trade patterns which have reduced significantly in volume.

Question 9

This was the most popular essay question. Candidates overall did well at this question and were confident with using details of their case study from this topic and applying this to changes over time. Better essays considered a range of dimensions – environmental, social and economic – and considered which impacts changed the most over time and whether this change was positive or negative. Usually, the economic impacts came first and were largely positive with this changing over time. Use of the tourism life cycle model (Butler) and other models showing impacts on society (Doxey), or the environment (Kuznet), were used well in some essays. Many candidates are using Blackpool, UK, as their case study, which is the resort the life cycle model is based upon. Centres are encouraged to consider updating their case study to a more recent one in a location that gives a more modern perspective, and possibly one which it is more likely candidates will be aware of or have visited themselves.

Economic transition

Question 10

(a) Most candidates did well at describing the trends and identifying that there were two rapid declines. It was also good to see candidates grouping time spans together into similar trends. Candidates need to be careful with reading the axis accurately and avoid 'approximately' wherever possible when the graph is clear like this one.

(b) Most candidates answered this with two social indices but there were a significant minority who explained economic indices such as GDP or GINI. Additionally, some candidates were limited in their answer because they explained what the index measured, without mentioning its effectiveness at showing inequality. This inequality could have been social or economic, only the indices needed to be social ones.

Question 11

This was the most popular essay question in this option. Overall, this question was not answered very well by candidates, with many assessing the extent to which physical factors allowed a country to develop, or not, without mentioning the inequalities in social and economic well-being part of the question. Some good essays argued that physical factors may be the 'initial advantage' and considered how these change over time. Good essays considered how physical factors can hold back a country's government from being able to improve the well-being of its citizens. Better essays considered global inequalities in more detail with lots of examples in context.

Question 12

This question most often included content on Southeast Asian countries as the part of the world where secondary industry labour has increased significantly over the years. Better essays considered more than just secondary industry, including content on other economic sectors of a society, such as primary production of oil, corn, minerals and other commodities and the concentration of tertiary service industry in some global hub cities. Good essays considered other factors, the influence of trade blocs or others, and considered the inter-relationship between these and the new international division of labour (NIDL).

GEOGRAPHY

Paper 9696/43
Advanced Human Geography Options

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