

GEOGRAPHY

Paper 9696/01
Core Geography

General Comments

As usual, this examination produced a very wide range in the quality of response. There were, however, fewer candidates who did not at least attempt all the required questions. Most candidates were able to make some response to virtually all of the compulsory questions in **Section A** and to attempt one optional question in each of **Sections B** and **C**. Candidates also seem to have allocated their time better than has been the case in the past. There were far fewer instances of overlong answers to questions in **Section A** at the expense of the higher scoring questions in **Sections B** and **C** of the paper.

Candidates have obviously been well prepared in the use of the resource material in **Section A**, in the sense that they can successfully interpolate data as required in **Questions 2(a), 3(a) and 4(a)**. They were far less successful at describing relationships within the data (**Question 4(b)**) or describing patterns and locations (**Questions 2(b) and 5(a)**).

The second part of the questions in **Section A** are usually those that allow candidates to demonstrate their understanding of the processes of physical and human geography and as such carry more marks and act as discriminators in the examination. It was disappointing to find that few candidates could account for meandering or appeared to understand the nature and function of ocean currents. In the human geography questions there was a lack of appropriate exemplification to illustrate death rates or the nature of squatter settlements.

In **Section B**, all questions had a requirement to provide diagrams in **part b**. Some candidates continue to ignore this instruction and thus reduce their chances of obtaining all of the marks. The diagrams vary greatly in quality and accuracy but almost universally are under-annotated. Much of the explanation in physical geography can be achieved by the use of a well-annotated diagram, such as the use of hydrographs (**Question 6**), temperature/height diagrams (**Question 7**) and a divergent plate boundary (**Question 8**).

Questions in **Section C** often require a candidate to refer to a named area or a chosen country. Whilst nearly all candidates do produce a named area or country, it is common for them to then describe only vague, unspecific and generic material that lacks any precision or application to a particular area or country. Examiners will always reward exemplification and all examinations give opportunities for the use of case studies and local observation.

Rubric infringements were very rare and generally the clarity of handwriting and the use of English were commendable.

Comments on Individual Questions

Section A

Question 1

- (a) A very disappointing response, as there were few candidates who drew accurate cross sections depicting riffles, although the asymmetrical channel and deeper pool area were more frequently shown. A sizeable minority of candidates did not appear to understand the term 'cross section'. These candidates often repeated the plan view of the channel shown in Fig.1.

- (b) A very mixed, but often disappointing, response. Very few candidates described how meandering sequences can result in the deflection of the thalweg or how helicoidal flow moves material around the meander and thus aids undercutting on one bank and deposition on the other. A definite large number of answers erroneously stated that meandering was caused by obstructions in the channel or alternating bands of hard and soft rock.

Question 2

- (a) The vast majority of answers correctly identified St John's and Belem and calculated the temperature difference, thus gaining full marks.
- (b) Candidates were generally weak on the description of patterns and even more limited in their explanation of the moderating influence of ocean currents. Better answers identified the polewards movement of warm currents and the return of cooler water in a circular pattern that was clockwise in the northern hemisphere and anticlockwise in the southern. Few responses displayed any awareness of the importance of the role of ocean currents in redistributing heat around the earth's surface although some of the better answers did quote temperatures from Fig. 2 to show moderation and provide some explanation in terms of land and sea breezes. A significant minority considered ocean currents to represent global wind movements.

Question 3

Most candidates correctly identified the rates of both physical weathering in (a) and chemical weathering in (b) and thus obtained all four marks.

- (c) Many candidates displayed good levels of knowledge of some weathering processes, notably freeze-thaw, thermal fracture and carbonation. Unfortunately they were not able to apply this knowledge to the question; that is how climate can affect the **rate** at which weathering takes place. The better answers used the diagrams to describe the climatic parameters of more rapid physical and chemical weathering. They then illustrated this by reference to such things as the diurnal temperature and the precipitation requirements for freeze-thaw or thermal fracture.

Question 4

- (a) Most candidates successfully calculated the value of P (18.2 per 1000).
- (b) Many candidates failed to obtain the marks due to a failure to read the question sufficiently carefully. Instead of describing and explaining the **relationship** between infant mortality and birth rate, they attempted to describe and attempt an explanation for all of the data in Table 1.
- (c) Answers generally scored well in this section of the question. Better answers were those that contrasted a range of social, economic, environmental and even political factors that operate differentially in rural and urban areas in LEDCs. Weaker answers merely contrasted rural poverty and disease with supposedly urban wealth and health.

Question 5

- (a) As with **Question 2**, candidates experienced difficulty in extrapolating material from cartographic sources. Many gave vague descriptions of the two districts with only passing reference to the location and extent of squatter settlements. Even those that did produce some description of the number, size and location of squatter settlements failed to make any direct comparison between the two areas. The opportunity to obtain full marks by accurate observation and comparison was rarely taken.
- (b) Few candidates appeared to have any familiarity with the concept of squatter settlements as 'slums of hope'. Better answers contrasted the experience of rural poverty and homelessness with the positive opportunities for house ownership and informal employment in squatter settlements. Some described the support of neighbours who had migrated from the same area. Few, however, recognised the investment in built landscape and community life offered by many squatter settlements. Similarly, the development of self-help schemes to provide support networks and even the provision of services was overlooked. Many answers revealed little comprehension of the nature of squatter settlements and merely outlined the 'pull' factors involved in rural to urban migration.

Section B

All questions in this section were attempted, although **Question 6** was the most popular and **Question 7** the least popular.

Question 6

- (a) The definitions of infiltration and groundwater were generally competently achieved. Similarly the impact of the intensity of rainfall on infiltration rates was well described, although some candidates confused 'amount' with 'rate' and others 'interception' with 'infiltration'.
- (b) Hydrographs were generally well drawn, with both discharge and time shown. The contrast that needed to be shown in terms of peak discharge, rising and falling limbs and lag time were generally recognised. It was in terms of the explanation that many candidates lost marks. Few candidates could relate soils and geology directly to infiltration and percolation and hence to overland flow and the slower baseflow and throughflow. Similarly, with slopes the explanation was usually little more than steepness of slope and the resultant speed of overland flow, with no mention of saturation and infiltration. Some candidates failed to produce any hydrographs, which clearly limited the amount of credit available.
- (c) A disappointing response, as few candidates were able to deal with the effects of human activities on **channel** flow. Most could identify the impact of land use changes upon overland flow within catchments but few could relate these changes to channel flows apart from flooding. The construction of dams and the abstraction of water were often mentioned but with little description of their impact upon river channels, other than the complete flooding of the channel or its drying up. Better answers concentrated on the channel effects and were able to produce apposite exemplification such as that of the Colorado or the Nile.

Question 7

- (a) Generally there was a sound knowledge of radiation, although some lost marks through a failure to identify long and short wave radiation. The lack of solar radiation input leading to night-time cooling was widely recognised and many explained the faster cooling of the earth's surface leading to atmospheric cooling.
- (b) Lapse rates continue to pose great difficulties for many candidates. Although there has been some improvement in the diagrammatic representation of unstable conditions and the formation of clouds, the diagrams produced still leave a lot to be desired in terms of accuracy and annotation. Better answers were those that produced simple but accurate temperature/height diagrams that showed ELR, DALR and SALR, condensation level and cloud development, accompanied by a short explanation of adiabatic cooling and subsequent condensation.
- (c) Most candidates were able to relate the existence of buildings, tarmac and concrete to urban heat island effects and the subsequent impact upon rainfall. Many were thus able to achieve Level 2 answers, but few were able to gain Level 3 due to a lack of understanding as to how heat is retained in urban areas. Similarly there was often confusion as to the impact of tarmac and concrete on humidity levels and the role of buildings in affecting wind speeds. These accounts were more successful in describing the climatic effects than they were in producing explanations.

Question 8

- (a) The definitions of tectonic plates and two differences between oceanic and continental plates were very rarely given with any degree of accuracy, such that few candidates achieved full marks. Candidates associated ocean trenches with subduction zones and frequently produced diagrams of convergent plate boundaries. Virtually no answers, however, actually described an ocean trench which was all that was required for the marks.

- (b) Most candidates produced a diagram showing a divergent plate margin. These varied in quality and accuracy. Few contained much accurate detail or were linked to any explanation of floor spreading. Both parallel magnetic striping and the role of convection currents were indicated or explained.
- (c) Most candidates continue to find Slopes a difficult topic. Many answers successfully outlined the impact of both climate and vegetation upon the type and prevalence of weathering, but few were able to relate this to the development of slopes. Even the terminology of slopes (free face, rectilinear, convex, concave etc.) was almost entirely lacking. Better answers were those that realised that vegetation and climate could affect slope stability, which could in turn affect the form of a slope. The impact on slope form was, however, very rarely described.

Section C

Most candidates attempted either **Question 9** or **Question 10**, with very few answers being received to **Question 11**.

Question 9

- (a) The definition of overpopulation as too many people for available resources was commonly given, but few added at a given level of technology. The general effects of overpopulation were listed, e.g. poverty, hunger, overcrowding, but few were able to give any specific evidence for such related to a particular area.
- (b) Optimum population as a concept was generally well understood, although its theoretical equilibrium position was less appreciated. The problems for many candidates was that of approaching the difficulty of achieving optimum population in that they generally only addressed natural population increase ignoring resource bases, technology or migration. Most answers were creditworthy, if somewhat limited in scope and exemplification.
- (c) Many found difficulty in expressing a coherent and structured answer to this question. In the course of an often rambling and disconnected account many, however, did manage to tease out the fact that increase in demand for foodstuffs due to increases in population could lead to increases in supply, although individual countries' abilities to respond to such demands were often limited. Better answers were able to set this within the context of the work of Boserup and Malthus and to illustrate their answer with appropriate examples. There was surprisingly little reference to technological change such as the Green Revolution, although the incidence of hunger and famine was invoked by many.

Question 10

By far the most common choice was that of China, which is a case study of the operation of a government population policy that most candidates have prepared well. The One child policy itself is generally better known than either its causes or effects, which meant a lot of answers were very uneven in quality. A small number of candidates produced excellent answers on countries other than China, notably Singapore, Zimbabwe, South Africa and Sweden.

- (a) Often the weakest part of many answers as the candidate launched into a general description of the provisions of population policy, rather than the circumstances that brought about its introduction. Many candidates appeared unaware that there were population policies in China that pre-dated the One child policy.
- (b) Virtually all candidates selected natural increase, although there were a few notable accounts of governmental attempts at the management of migration in South Africa and Zimbabwe. Although the basic policy provisions of the One child policy in China were well described, few answers could develop beyond attempts to control birth rates. Most candidates were able to gain significant credit in this section.
- (c) A far more varied response. Essays ranged from those that merely outlined the more sensational aspects of infanticide and abortion in China to those that gave insightful and informed assessments of the social and demographic impacts of gender imbalances and ageing population structures. The better accounts were also marked by the ability to cite demographic statistics rather than relying on vague quantitative statements.

Question 11

Very few answers were seen, the quality of which, with a few notable exceptions, was often poor.

- (a) Poorly answered, as most candidates were unable to distinguish the graph of land values of the growing industrial phase from that of the declining industrial phase. This led to very confused descriptions with some resorting to a description of the classic bid-rent model, ignoring the diagram given.
- (b) Most realised that this revolved around the increase in desirability of suburban or peripheral locations in a declining industrial phase. The descriptions of the reasons for this were variable. Better answers were able to point to the greater amenity value, the availability of land, transport provision and increasing accessibility to service provision. Weaker answers concentrated upon the negative aspects of the decline in desirability of inner city areas.
- (c) Those that understood the term re-urbanisation often produced good answers pointing to the benefits of locations proximate to city centres in extensively refurbished and redeveloped inner city areas. They could cite examples, the most common one being London Docklands, and provide some balance to the assessment by discussing which social groups benefited most. Those that saw re-urbanisation merely as CBD redevelopment or in narrow terms of gentrification could produce less well-balanced and more limited responses.

GEOGRAPHY

Paper 9696/02
Physical Geography

General Comments

This examination saw even further accentuation of the trend noted in previous examinations for candidates to select questions only from Coastal environments and Hazardous environments. In this paper, this produced a concentration upon just two questions, **Question 4** and **Question 6**. Very few answers were received to any of the questions on Tropical or Arid environments. This narrowing of the focus of the syllabus does not appear to work to the advantage of the candidates, producing a situation whereby many candidates appear to be facing little choice in the questions they are to attempt. I feel this narrowing of choice has had a deleterious effect upon the ability of candidates to demonstrate the geographical knowledge that they possess. This is reflected in the lack of detailed case studies or local exemplification that was demonstrated in this examination. This was particularly apparent in **Question 4 (b)** – a very popular question – where relatively few candidates were able to introduce a well-worked case study to evaluate the success of methods of coastal protection.

There was a wide range of performance by candidates, both between and within Centres. Those achieving the highest marks were those that were able to sift and sort their material to suit the question, to employ case studies and exemplification and to refer to physical processes throughout their answers. The scattering of such candidates throughout most Centres suggested that many candidates had been exposed to good teaching practice. As always there were examples of woefully underprepared candidates, but these are becoming far fewer in number. Nearly all candidates were able to demonstrate at least some sound geographical knowledge as a basis for their attempt upon the questions.

Some improvement was noted in the manner in which candidates approach the questions that contain resource material. This was evident in **Question 4(a)** where many candidates utilised the diagrams to frame their responses. Far fewer candidates now redraw the material provided or ignore it completely.

The diagrams that candidates employ as part of their answers generally improved in terms of relevance and execution, but are still often under annotated.

Rubric errors were very rare and the quality of handwriting and the use of English were generally pleasing.

Comments on Individual Questions

Tropical environments

There were relatively few candidates who attempted questions from this environment, even from those Centres located in the tropics.

Question 1

- (a) Most provided an adequate diagram to describe the vegetation structure of the tropical rainforest. Some failed to distinguish the emergents, the canopy spread and often the depiction of ground cover was very limited. Good candidates not only indicated the layering of the vegetation, but also provided details of scale and density. Well annotated diagrams could, of course, provide the main substance of the answer.
- (b) Candidates found this a difficult question and few were able to produce a response that displayed any depth or breadth of knowledge of tropical climates. Few appeared aware that within the tropics there is a range of climates from the arid through to humid and monsoonal. Many assumed that tropical climates were limited to that of the rainforest and those that were aware of a climatic range could often only describe them in terms of vegetation rather than climatic characteristics. A handful

of the better answers were able to tease out some common characteristics such as whilst pointing to the range of precipitation and seasonality.

Question 2

- (a) Many candidates approached this question by detailing the flows and losses within the nutrient cycle as shown on the diagram. This was a negative approach rather than accentuating the positive in an explanation as to why the biomass was the largest store. Relatively few answers recorded the large climatic inputs that produced the extensive biomass characteristic of the tropical rainforest. The rapid take-up of nutrients by the biomass was not commented upon by most candidates.
- (b) A disappointingly weak response. Most answers gave a broad account of the development of some granite landforms but were vague as to the nature and role of either weathering or of erosion. There was almost universally no detail of erosional processes and diagrams were lacking in appropriate detail or accuracy. Better answers were able to point to the role of hydrolysis in deep chemical weathering and the contribution of erosion to either etchplanation or pedepplanation. The physical processes of weathering were often poorly explained as were the properties of granite rock in shaping tropical landforms.

Coastal environments

An extremely popular environment, although more candidates attempted **Question 4** than **Question 3**.

Question 3

- (a) Most candidates produced a diagram showing the refraction of waves around a headland. Fewer, however, explained its occurrence or how it might be linked to coastal deposition. Generally longshore drift was better explained and most were able to link its occurrence in some manner with the formation of spits. A minority of answers ignored the processes of refraction and drift in favour of lengthy descriptions of landforms resultant upon coastal deposition.
- (b) A very disappointing response. Coral atolls and the theories propounded for their formation appear to be little studied and very poorly understood. Darwin's theory was often the only one that was advanced and that was frequently poorly described and explained. The diagrams, in particular, were poorly executed and inaccurate. A few candidates did give some account of the theory of Daly, but again were able to develop little beyond sea level change. The better answers, of which there were few, related the theories to the conditions required for coral growth and the necessity for growth keeping pace with both subsidence and sea level change.

Question 4

- (a) Candidates did use the diagrams to organise their responses realising that there was a combination of the processes of mass movement and of marine erosion. Many demonstrated a knowledge of both, but were unable to apply this knowledge to the question, i.e. to the production of cliff collapse and retreat and to cliff lowering. At A Level it is not acceptable merely to list or give lengthy descriptions of such things as the processes of marine erosion without any attempt to explain their contribution to the cliff profiles shown. The process of saturation leading to increased mass and subsequent slope failure was only developed by the better responses.
- (b) Most candidates saw methods of protecting coastlines as comprising 'hard' and 'soft' engineering solutions. Within these categories they listed sea walls, groynes, gabions, revetments and beach replenishment. Both descriptions and evaluation of their effectiveness were very limited. There was a general lack of an association of the method of protection with the marine processes that are operating. This was even the case where candidates had provided a detailed case study. The most successful answers were certainly those that utilised a case study or a series of examples, as they were able to provide an evaluation of success in terms of costs and benefits.

Hazardous environments

A very popular area with **Question 6** the most answered question on the paper.

Question 5

- (a) Most of the general conditions required for the generation of hurricanes were known by candidates but they experienced difficulty in forging these into an explanation. Thus sea temperatures, coriolis force and high evaporation were all described, but the generation of the cyclonic effect, the vast amounts of latent heat, leading to high wind velocities, were restricted to relatively few answers.
- (b) The hazardous impacts of hurricanes were frequently described in some detail, although the locations were at times vague (e.g. the Caribbean, Bangladesh). The fatal impacts of high winds, intense rainfall and storm surges were commonly described although the climatic nature of the hazard was frequently ignored. Better responses were those that related the hazard to the nature of hurricanes and assessed the impact in the context of a particular event or events.

Question 6

- (a) Most candidates identified the diagram as a subduction zone and produced some diagrammatic representation of the subduction of an oceanic plate. Few, however, were able to directly relate this to the production of an arc of volcanoes and most ignored the evidence that could be derived from the diagram provided. The terminology of plate tectonics was widely employed by candidates, but there was little demonstration of much understanding of the manner in which volcanoes are produced.
- (b) The hazardous nature of volcanoes was often described at some length with the quoting of high death rates and the destruction of both property and environment. Unfortunately these accounts were only rarely linked to the erupted materials. Again, the terminology was widely employed to describe erupted materials, such as lava flows, ash falls, pyroclastic flows, nuees ardentes, volcanic bombs and tephra. The actual descriptions of the erupted material were often lacking or inaccurate. Thus only the better accounts managed to link the hazard to the nature of the erupted materials. Examples of eruptions were widely cited, but were often limited in their assessment of the nature of the eruption and the hazards produced.

Arid and semi-arid environments

The least popular of the optional areas. Some Centres that did select this area, however, produced some excellent answers, particularly to **Question 7**

Question 7

- (a) Most answers identified the four main climatic factors that induce aridity, namely the sub tropical high pressure zones of the Hadley cell, rain shadow effects, ocean currents and continentality. The ability to explain these phenomena was far more varied. There were some praiseworthy clear accounts whilst others produced only vague statements such as that of mountains 'blocking rain' or cold currents 'stopping rainfall'.

A minority of candidates saw this as a question concerning desertification and hence gave accounts of human activities that contributed to that process. Only limited credit could be given to such an approach.

- (b) Most candidates produced a basic account of how moisture deficit was overcome through the agency of deep roots, waxy leaves, thorns and water storing properties. These adaptations were often only outlined with little reference to species or any fine detail. Better answers not only provided a wider range of adaptations, but also were able to develop explanations, give appropriate examples of species and differentiate between arid and semi-arid conditions. These explanations involved the effects of soil salinity induced by the high levels of evapotranspiration and upward movement of salts in arid soils.

Question 8

- (a) Few were able to demonstrate much understanding of how the nature of rainfall can affect runoff and stores in arid areas. Many merely repeated material from the diagram and failed to make any interpretation or explanation of the nature of base flows or of the impact of overland flows.
- (b) A very disappointing response, in that very few candidates appeared to have studied any schemes in any detail. A few answers concerned the Aswan Dam and some gave an account of the Aral Sea area, but the majority gave only vague general descriptions of such things as irrigation and tourism. There was no indication of the level of success or as to how such activities might be achieved. Sustainable management was only rarely defined or its implications explored.

GEOGRAPHY

Paper 9696/03
Human Options

General Comments

The quality of the entry and standards reached were encouraging after the slightly depressed performance overall in the May/June examination session in 2007. The majority of candidates answered **Question 6** from **Global interdependence**. A significant proportion of these teamed it with a question from **Environmental management**. Beyond this, candidates chose the full range of questions in smaller numbers. Over time the decline in popularity of **Question 1**, usually about production, location and change in agriculture, is notable, although it remains the preferred choice in certain parts of the world. Some newer Centres favoured **Economic transition** as an option and linked the teaching and learning of its subject content to that of manufacturing and related service industry in **Question 2**.

Examiners commended candidates' use of language and expression and handled few scripts where a candidate's meaning was hard to discern except in isolated sentences. Time was handled well by nearly all candidates, which itself has a positive effect on overall performance. Candidates are being trained to take note of the mark allocation and divide their time accordingly, although many still produced brief and underdeveloped response to parts **(b)**, each of which carried 15/25 marks. Rubric errors were isolated occurrences and this session tended to be where candidates answered too many questions, rather than where they had chosen two questions from the same option. A small proportion of candidates answered all parts of all questions using bulleted or numbered points, for example, five points for an allocation of 5 marks, etc. Whilst it is always worth providing notes if time is short, rather than simply failing to answer part of a question at all, the routine use of notes is better avoided. This is because such an approach does not allow a candidate to develop a fully coherent response which has suitable depth and development at this level.

Although there was little potential to offer maps and diagrams in several of the questions on the paper, Examiners are always pleased to see a sketch map which locates an example, or diagrams which support the text. For instance, some candidates drew an annotated diagram of the operation of the tourism multiplier to support their response to **Question 6(b)**, or one of the links suggested in **Question 7(a)**, and may have saved themselves a little time by so doing.

The demands found in parts **(a)** vary greatly and are dealt with in detail in the question-specific comments below. Parts **(b)**, although differing in subject content, have some similar requirements and characteristics. Therefore, to improve candidate performance in future examinations, teachers' attention is drawn to three key areas in relation to framing suitable responses to **(b)**.

1 Enhancing skills in evaluation and the expression of evaluative responses

The awarding of credit to part **(b)** of nearly all questions set rests primarily on the quality of the assessment offered by candidates. This helps distinguish each of the three Levels used for marking, such that, for example, Level 1 responses tend to be descriptive or explanatory and to contain little or no evaluation. Examiners observe that some candidates are trained to respond to all questions using the phrase "to a certain extent", whether it is appropriate or not. Other candidates simply begin their response by agreeing with the phrase or issue in the question which should be evaluated and then support that by a narrative text. Yet, in relation to assessment, certain skills and abilities are particularly creditable:

- to offer counter-argument, as well as argument. For example, in response to **Question 1(b)**, to be able to identify negative economic effects, rather than just the positive ones in the question.
- to seek to judge what might be the more or the most important element in a particular context. For example, in response to **Question 2(b)** and the relative importance of different factors.
- to explore alternative explanations whilst evaluating the significance of one. For example, in response to **Question 3(b)** and demand for electricity.

- to assess effectiveness or success, identifying what has and has not been achieved, and how it varies spatially, over time or between groups of people. For example, in **Question 4(b)** and environmental quality or **Question 8(b)** and development.

2 Encouraging the selection and application of learned material to the actual question set

Examiners noted that a lot of candidates struggle to use their material, especially case studies or examples, in a manner other than that in which they were first learned, or perhaps previously used. This skill, of directing material to address the question, rather than simply being able to remember it, sometimes called knowledge recall, is fundamental to an A Level approach to the subject.

It was notable for example, that in otherwise solid responses about changes resulting from tourism in **Question 6(b)**, many candidates focused insufficiently on 'the lives of local people' and tended to talk about changes to the national economy, the environment, or the country at large. Examiners note relevant, well-directed pieces of writing which reflect the intention of the question and reward such responses accordingly. Whilst it is often helpful to introduce an example or topic and give some descriptive background to it, simply displaying additional knowledge which has no bearing on the question set, does not impress.

3 Employing appropriate case studies and examples

In the same way that Levels are distinguished in part by the quality of evaluation, as outlined above, so too Level descriptors take into account the quality of the example or examples used. Examiners commented positively on the variety and development of many examples used in answers across the paper. The use of home country, or home world region, examples continues to be encouraged for a number of reasons including access to information (and, perhaps, to the places for a visit or fieldwork), and familiarity and relevance to the candidate. There is also good use of recently published material for example on the emergence of China and India as world powers, or about particular tourist destinations, such as in SE Asia. Teachers are encouraged to seek up-to-date examples, or to update the case studies found in text books. For example, some candidates outside Zimbabwe portrayed a buoyant and highly profitable tourist industry there, which does not reflect current economic and political realities.

There are two principal areas for improvement to consider in relation to examples: one is number, and the other is scale and the associated level of detail.

Some questions demanded one country or one example, such as **Question 6(b)**, others required more than one, such as **Question 7(b)** or allowed the candidate to choose their approach, as in **Question 2(b)** with its 'one or more examples'. If a candidate, when asked for one example, uses more than one, Examiners mark each account separately and only credit the candidate with the best one. If a candidate is asked for examples, plural, but uses only one, Examiners usually operate a maximum mark, commonly in the middle of Level 2, irrespective of the quality of the response. Candidates are encouraged to pay careful attention to the question and to do what it says and no more than that.

Whilst many candidates have excellent examples, choosing something at an appropriate scale can be an issue. This was most notable in relation to **Question 4** and the choice of an example of a degraded environment. It was acceptable to choose a large-scale example, such as the world's tropical rainforests (TRF), but most candidates find this macro-scale challenging to deal with effectively and tend to resort to loose generalisations. In the case of TRF, it may, for instance, have assisted them to have used an example such as Amazonia which offers great potential. Some candidates attempted to use an example which was not really 'a degraded environment' such as "desertification". This kind of attempt can only be marked on merit. At the other end of the scale, some examples were somewhat self-limiting because they were rather small. This was the case in relation to one isolated hotel in **Question 6(b)**, or one local waste tip in **Question 4(b)**. Responses on a resort on the one hand, or a larger area such as a shanty town or urban area more generally on the other, tended to perform better in that they had greater potential for detailed coverage and depth of comment. Lastly, it is worth mentioning the use of examples in name only, of the "e.g. USA" sort, in an otherwise general account. Examiners do not accept this practice as amounting to giving an example. On the other hand, locational detail, names of specific locations or enterprises, dates of events and statistical data in support of points made, are all highly creditable and also convey the veracity of the example chosen.

Comments on Specific Questions**Production, location and change**

Question 1 was more popular than **Question 2**. Both yielded responses across the mark range.

Question 1

There were issues of interpretation which affected answer quality in both parts.

- (a) (i) A full response comprised a comparison covering the three villages, the four fallow periods and had some data support from Table 1. Some accounts which were arithmetically correct were diminished by a candidate's misinterpretation of the table, for example interpreting the percentages given as fertility, crop output, or even those farmers who did or did not return to their farms. Most answers simply identified the highest values for each village (column) or fallow class (row) and did not offer fuller analysis.
- (ii) Any misinterpretation in (i) impacted the reasoning here. The best accounts offered reasons in more than one dimension (economic, social, environmental, political) and demonstrated real understanding of the reality of agricultural production systems, inputs and outputs. For example, some candidates explored the nature of subsistence farming and the effects of population pressure on demand for food and the shortening of the fallow. Better accounts also tried to link the reasons offered back to the variation outlined in (i) by referring back to Table 1. Some candidates only managed to make basic observations or give a simple list such as "soil, climate, hazards".
- (b) Candidates interpreted 'positive economic effects' and 'negative environmental effects' appropriately. Few, however, differentiated intensification (the process of increasing the intensity of cultivation on a given area of land) from the more straightforward and less dynamic term *intensive agriculture*. This not only limited overall answer quality but opened the door to a number of irrelevant issues, most commonly deforestation and land clearance for intensive cultivation, which has sometimes been called *extensification*. Better accounts tended to be reasonably balanced between economic and environmental observations with suitable exemplar support. Although there was good use of local examples from the home country, many candidates, from different parts of the world, used the Green Revolution in India and the EU or UK context in the last 30 years well. The very best accounts identified economic negatives, such as indebtedness in rural communities or increasing disparities between rich and poor farmers, or environmental positives, such as soil management or water control, in addition.

Question 2

- (a) (i) The term *industrial inertia* caused the most confusion on the paper. There were some highly effective definitions of industry remaining in its original location despite its being sub-optimal. Explanations explored how factors may no longer apply, such as when a raw material is exhausted, or why it may be prudent to remain, such as the loss of a skilled labour force or the high costs of relocation. Other candidate left the sub-part blank or offered something else, mistakenly, such as a definition and explanation of industrial agglomeration.
- (ii) The term *diseconomies of scale* was better understood than inertia, but few candidates made clear the implications of an increase in the scale of operations for unit costs, which rise. Most candidates managed to offer at least one explanatory element, such as the greater challenges of communication, or the growth of inefficiency, as scale increases, but better accounts comprised several strands. It was acceptable to address either internal or external diseconomies of scale, and to demonstrate how diseconomies may represent the loss of economies of scale derived earlier. Some candidates simply misinterpreted the term, one error being seeing it as loss-making, rather than profit-making, production.
- (b) Most candidates demonstrated suitable awareness of the factors which influence industrial location decision-making, but few were able to make more than a basic quality attempt at considering their relative importance, i.e. which ones were the more or the most, or the less or the least, important for the chosen example or examples. This left many responses being descriptive or explanatory, rather than evaluative. Some of the more effective answers looked at change over time as factors shifted relative to each other, for example as transport costs changed. Others considered how

government policy affects the choice of location. Examples varied from an export processing zone (EPZ) or industrial agglomeration near a port, to a single steel plant.

Environmental management

Question 3 was much more popular than **Question 4**. Examiners wondered whether some candidates had been attracted to **Question 3** by the straightforwardness of Fig. 1, but had, perhaps, paid insufficient attention to the demands of **(b)** before starting to write.

Question 3

- (a) (i)** The correct answer was France, with its three values of zero, although many identified Sweden, wrongly.
- (ii)** The range could be expressed as 47, 4-51 or 51-4. Most included the unit, %, and some offered the formula used, although there was only 1 mark available. A common error was to offer a figure of approximately 19%, which was the mean, rather than the range, i.e. the lowest to the highest value.
- (iii)** Answers were seen across the full range of quality. The best responses set coal in the wider context of electricity generation from all sources and considered reasons in more than one dimension (mainly economic and environmental, but also political). Some linked their observations either to the countries in Fig. 1, which was not required, or to other examples, such as China or where they lived. Common reasons included resource endowment, the viability of reserves, comparative costs, green issues, political choices and energy policies. Weaker candidates tended to write what they knew about coal, such as "it is dirty and bulky", rather than to consider variation in electricity sources.
- (b)** Only a small proportion of candidates found an effective approach to answering this rather more demanding part of the question. Many offered an explanation of how rising standard of living increases demand for electrical appliances in the home and amenities such as electric light which may previously have been inaccessible or considered a luxury. Some recognised that other sectors might also be affected, such as transport, but many included cars and even aircraft in their answers and lost contact with the demand for electricity. Better quality responses considered economic growth more widely, increasing industrialisation, the growth in services from hospitals to entertainment and other factors, unrelated to standard of living such as population growth or changes in trade. Creditable use was made of ideas such as the shift to energy-saving appliances and the pressure to conserve energy by switching off lights, etc. as a counter to the increases otherwise examined. There was some good to very good use of home country as the chosen example, but, of the others taken, China had great potential.

Question 4

The issue of the choice of a degraded environment is covered in the General comments above.

- (a)** The allocation of ten marks and approximately twenty minutes in which to answer gave candidates some freedom in how they approached and structured their response. Some decided to tell the story, that is to narrate what happened, usually chronologically. This worked reasonably well if the factors were embedded in the account. A tighter approach was to organise the response around the clear identification of specific factors. Some took these under one or more of the headings, social, economic, environmental and political. Others pinpointed factors more precisely, for example, citing population pressure from a high natural increase rate combined with immigration, or the inadequacy of government provision. The best accounts combined the interaction of different factors with convincing exemplar detail.
- (b)** Clarity in **(a)** contributed to quality in responses to **(b)**. A few candidates had either chosen an example where few or no attempts had been made to upgrade the environment, which was self-limiting, or lacked sufficiently detailed knowledge of what had been tried to offer more than a low quality response. Moderate quality responses often detailed such attempts but offered a limited assessment simply claiming that something worked, or that it was "not effective". The best responses, as well as offering a fuller assessment often gave evidence, such as the improvement in water quality, in the case of a lake, or the reduction in the incidence of smog, in the case of

urban air pollution. Many candidates would have benefited from a firmer grasp of the concept of environmental quality and a deeper understanding of the key concept of environmental quality.

Global interdependence

Question 6 was chosen by the great majority of candidates and handled well to very well indeed. There were also some high quality responses, from prepared candidates, to **Question 5**, as those who chose it over **Question 6** seemed to do so purposefully.

Question 5

This was an example of a question being set which spanned the two themes of the option: trade in **(a)** and tourism in **(b)**.

- (a)** A broad view of what was acceptable as 'changes in the global market' was taken by Examiners. Candidates used examples which included changes in supply, e.g. the emergence of the NICs; in demand, e.g. for oil, or in relation to world recession; in the availability of substitutes, e.g. where copper for wire was replaced by synthetics; and in trade agreements and trade blocs (various). Weaker accounts tended to take maybe one or perhaps two changes only and to offer generic examples, such as "in LEDCs", rather than actual, detailed ones. A few took the word 'may' in the question as determinant and wrote careful, but rather soft, hypothetical accounts of what may or may not occur within world trade.
- (b)** The full range of answer quality was seen with a few outstanding responses. Moderate accounts tended simply to be narrow in scope, for example focused simply on leakage, which, whilst a key concept, only goes part way to explaining such global inequalities. Better quality accounts built up a picture of the interaction of factors in a number of dimensions: social, e.g. fashion; economic, e.g. the structure of the tourism industry; environmental, e.g. resource endowment; and political, e.g. instability or government policy. Many candidates were able to support their response not only with country names but with data or other evidence. A few observed, shrewdly, that export earnings from tourism for extensive, populous countries with varied tourism products, such as the USA or emerging China, would be greater than those for, say, a small island.

Question 6

The inclusion of Doxey's Irridex (index of tourist irritation) in Fig. 2 was innovative. Although not specified in the syllabus, its connections to the life cycle model of tourism are clear and the level of detail offered in the figure provided candidates with sufficient information to interpret it appropriately. Examiners were impressed by the way candidates responded to the figure and by their appreciation of the two stages chosen for **(a)**.

- (a) (i)** A full response comprised development of the ideas of a novel experience creating interest and the prospect of economic benefit from tourists, and one or more other elements. Some candidates wisely observed the fact that local people may be unaware of the possible negative consequences of tourism which come later. Others that the small number of arrivals means that there is little disruption to their lives. The two main weaknesses of responses were repeating the text which accompanied EUPHORIA in Fig. 2, or moving far beyond this early phase and the word 'initially' in the question to rapid large-scale growth associated with the later development of mass tourism.
- (ii)** Examiners noted that a significant proportion of candidates were unable to suggest possible ways to reduce conflicts between local people and tourists, without first explaining what these conflicts might be. Whilst it is understandable why candidates may have done this, **(ii)** required higher order application and interpretation and as such no credit was available for any explanation given. A few candidates only offered an explanation of the conflicts and so gained no marks.

Although there were some vague answers to the question of how to reduce conflicts between local people and tourists, many candidates answered this sub-part better than **(i)**. Indicators of quality included a specific focus on 'ways', and how to go about them, rather than general statements on what should be done; the appreciation that the conflicts were the responsibility of both parties; and the appreciation of the place of information and/or education addressing key issues, such as dress code. Many ways showed good conceptual understanding of tourism as a sector, for example, when candidates suggested the introduction of a more sustainable form of tourism, such as eco-tourism, or the idea of remarketing the destination for a higher end market. Some interesting spatial suggestions were creditable, such as some form of zoning, or the purposeful development

of tourist enclaves. Although it was not necessary, many candidates supported the proposed with examples and some used personal experience, from where they lived, or taken to reduce such conflicts.

- (b) The aspects of assessment, the application of material and the choice of a suitable example each addressed in the General comments above. Response quality was fair to outstanding and many candidates did well. These better quality responses were set in the context of a contemporary detailed example, or considered how the lives of local people were affected over time, as a tourist area or resort moved through the stages of the life cycle model, or, interestingly, those shown in Fig. 2. A balanced approach was not required, but some appreciation of negative changes as well as positive ones was needed in order to assess 'extent' meaningfully. The uncritical appreciation of how tourism benefits local people was probably the major weakness of responses. Some candidates mentioned local people's "qualms" or "difficulties" without exploring, even briefly, what these were, leaving their responses with unfulfilled potential. Even in relation to more sustainable forms of tourism, such as an eco-lodge, better responses offered some critical comment, for example in relation to disparities between those employed there and those not employed. In terms of the 'positive changes', moderate responses often concentrated on jobs and income and standard of living rising consequentially. Fuller responses covered wider ground, such as the empowerment of local women; training and skills learned in the tourism sector being transferable into other employment; and local people's environmental awareness and attitudes changing for the better, for example, in relation to waste disposal.

Economic transition

This option attracted a small, but well-prepared, proportion of candidates as well as some who attempted to respond from what appeared to be their general knowledge, or in the case of **Question 8**, what they may have learned for Paper 1 about population policy.

Question 7

- (a) Candidates showed firm to good understanding of the connections between industrial growth in some LEDCs and deindustrialisation in MEDCs, usually approaching it through issues of profit-making and comparative costs, and weaker legislation and government incentives in LEDCs/NICs. The two principal limitations on answer quality, were where candidates did not use examples and only used the terms 'LEDCs' and 'MEDCs', and where little attention was paid to the aspect of deindustrialisation.
- (b) Examiners were impressed with the critical appreciation of the North-South divide from candidates. The date of 1980 was included as a hint and many candidates pursued the idea of its being outdated in terms of the changes to the global economy since then. Some of the better responses included strong content on the emergence of the NICs, sometimes differentiating groups helpfully; considered OPEC and oil as a global phenomenon which spans the North and the South; or considered the international spatial division of labour and spatial organisation of TNCs. A few included some comments on the divide, whether it exists and how it manifests, whilst supporting the continued usefulness of the notion of MEDCs and LEDCs and, therefore, of what Brandt sought to show on the world map. A significant number of candidates, however, lacked such up-to-date information about the global economy and wrote in generalities.

Question 8

Examiners noted that some candidates had difficulty appreciating the change of scale between **(a)(i)** which was about priorities in development policy; **(a)(ii)**, which was about a 'government development project or scheme', irrespective of scale; and **(b)**, which returned to the overarching scale of development policy. The question was marked flexibly in order to allow candidates to use the example they had studied.

- (a) (i) Better accounts identified 'priorities' clearly, rather than writing a description or offering an undifferentiated list. Most focused on economic priorities, but social priorities, for example in relation to education, were creditable.



- (ii) Response quality was highly variable, from vague generalisations about what was needed to improve things, to tight accounts, maybe naming and dating an initiative and detailing what is being done, where, how, by whom, etc. Almost any project or scheme was accepted. For example, a literacy project, the provision of a new element of infrastructure, land reform, agriculture or the establishment of an export processing zone (EPZ).
- (b) As detailed above, firmer responses returned to the overarching scale of the example first chosen and of **(a)(i)**, and assessed whether the priorities outlined there had been or were being met. Better accounts offered detailed exemplar support often including data, for example on the convergence or divergence of regional incomes, or changes in measures such as the Human Development Index (HDI), infant mortality rate (IMR) or GDP per person. Some candidates were able to point out how outcomes vary spatially for their chosen country, for example between rural areas and urban areas, or between groups of people, for example the elite and the majority. Irrespective of answer quality, most candidates wrote something about why the development policy had or had not been successful. Such comments often included the key issues of funding, management and the inclusion and involvement of all parties from government officials to local people. Weaker responses remained almost purely descriptive and many were poorly informed about the chosen country.