

MARKSCHEME

November 2002

GEOGRAPHY

Higher Level and Standard Level

Paper 2

Notes on individual questions

1. (a) **Describe and explain the differences in population structure between the *two* countries.** **[6 marks]**

[6 marks] should be allocated for description and explanation, but the allocation may not be evenly balanced between the two. Description should cover both age and sex balance in each case. For full marks there should be a breakdown into structural age components e.g. 0–15, 16–64 and 65+ and some estimate of the % values for each component.

Explanation should recognise the influence of different birth rates and death rates upon structure and factors leading to sex imbalance. Only a brief mention of background causes for these differences (levels of development, health care) would be required for full marks.

- (b) **Describe and give reasons for the differences in the level of economic dependence of each population shown.** **[6 marks]**

[6 marks] should again be split between description and explanation but the split may be uneven. Description should refer to employment data and estimates of the population employed/not employed should be made for the three age components. Both age and sex differences should be mentioned.

Explanation should focus upon economic and social differences between MEDCs and LEDCs leading to greater affluence and old age dependence in the former and child labour, lower status of women and youth dependence in the latter.

- (c) **With reference to *either* one MEDC *or* one LEDC that you have studied, discuss the ways in which the population structure has changed over time.** **[8 marks]**

[6 to 8 marks]

A detailed description and reasoned explanation of one country's demographic change with accurate reference to birth rate, death rate changes and realistic dates. Either a detailed description or a sequence of annotated pyramid diagrams will be present to illustrate structural change. Reference to the Demographic Transition model is made in the context of changing structure in the chosen country.

[3 to 5 marks]

A sound description of structural demographic change. There is reference to both birth rates and death rates but illustrations are probably missing. There may be some vagueness on dates.

[1 to 2 marks]

An example is used but there is no clear reference to structural demographic change over time and vague or missing dates / statistics. Generally an unconvincing answer.

2. (a) **With reference to *either* a region of low population density *or* a region of high population density, describe at least *three* physical factors that have contributed to this population distribution.** [6 marks]

Some candidates may choose to describe just three factors in depth, while others may adopt a broader approach.

The physical causes influencing density can be drawn from the following: distance from the sea, climate, relief, water supply, soil fertility, availability of natural resources. Human factors such as communications, economics or politics are unacceptable. A brief explanation of how physical factors influence density is required. The size of the region chosen may be interpreted flexibly.

- (b) **Define population density and evaluate how useful it is in determining whether a region is overpopulated or underpopulated.** [4 marks]

Candidates should define density as number of people divided by area. When evaluating this as a measure of overpopulation candidates should stress the limitations of considering density in isolation and the importance of relating density to resource availability. For full marks candidates need to consider levels of technology and how these allow resource exploitation. There should also be at least one named country to illustrate the issue of overpopulation or underpopulation.

- (c) **Briefly outline the ways that governments can control:**

(i) **the growth rate and**

(ii) **the movement of population.** [5 marks]

The growth rate of population can be increased by pro-natalist policies or decreased by anti-natalist policies and [1 mark] should be allocated for each. The movement of population can involve three possibilities; immigration, emigration and internal migration and [3 marks] should be allocated accordingly.

The term “outline” involves a brief description and those candidates providing only a list should be awarded a maximum of [3 marks].

- (d) **With reference to the population policy of *one* country that you have studied, explain the need for that policy and evaluate the degree to which it has been a success.** [5 marks]

The answer should cover both the need and the success of the policy and a purely descriptive answer with no evaluation would gain a maximum of [3 marks]. There should be plenty of accurate factual and statistical evidence and a clear understanding of the time frame.

3. (a) **Describe and account for the relationship shown between the *three* variables *A*, *B* and *C* on the table.** [6 marks]

Description and explanation may be difficult to separate here. Candidates need to show that wealth (A), controls % agricultural employment (B), and investment in agriculture (C), and that there are inverse relationships between A and each variable - B and C. Country names, statistics and anomalies should be quoted. For full marks some reasoning behind the relationships shown should be given.

- (b) **Explain what is meant by each of the following agricultural terms:**

(i) **intensive**

(ii) **extensive**

(iii) **subsistence**

(iv) **commercial.**

[4 marks]

Intensive – relies upon a high level of inputs (capital, labour) and/or outputs per unit of farmland.

Extensive – involves relatively low levels of input and output per unit of farming.

Subsistence – involves production to satisfy the needs of the farmer and family. There is no surplus for sale.

Commercial – involves producing commodities for sale.

For full marks candidates should briefly elaborate on each of these explanations and [1 mark] should be allocated to each one.

- (c) **Examine, with reference to examples, some of the problems that have arisen as a result of recent attempts to increase agricultural output.** [10 marks]

Candidates should refer to at least two examples and these might be countries or agricultural regions. The negative effects of the Green Revolution in the LEDCs and of intensive overproduction in the MEDCs should be covered along with the effects of agribusiness in general. For full marks the candidate should acknowledge a wide range of environmental impacts and social impacts, although these need not be balanced.

4. (a) **How useful is each of the *three* indicators as a measure of quality of life in cities?** **[6 marks]**

The strongest indicator would be the percentage of income spent on food (indirectly proportional to income); the number of persons per room showing overcrowding and poverty; finally, the weakest measure of all would be murders, as the values for New York and Calcutta demonstrate. Allocate up to **[2 marks]** to each indicator provided there is reference to quality of life.

- (b) **Discuss *two* other indicators which you consider to be useful measures of quality of life in cities.** **[4 marks]**

There are many possibilities here, but they need to be measurable and to indicate quality of life in urban areas (which the best responses will define).

Possibilities are: years of secondary schooling, noise levels, air pollution, traffic levels, availability of leisure facilities and open space. Allocate **[2 marks]** to each indicator chosen. Indicators must be specific to urban quality of life.

The discussion should focus upon the extent to which the chosen indicators are useful measures of the quality of life and full marks should be allocated for a sound discussion of two suitable indicators.

- (c) **With reference to a city *or* large urban area that you have studied, describe and account for the economic, social and environmental problems that exist there.** **[10 marks]**

The emphasis here is on a large urban area even if it is not called a city. **[4 marks]** should be allocated for description of the problems and the remainder for the explanation. The marks need not be evenly distributed between economic, social and environmental conditions, but all three problems need discussion. Beware of fantasy cities which lack reference to named areas within the city and have no statistics.

5. (a) **Describe the main changes in global GDP that have occurred over the period of 30 years.** **[4 marks]**

Candidates would have to note that there has been an overall increase for all areas, but that some areas have changed more rapidly than others **[2 marks]**, with the remaining **[2 marks]** allocated to quantification and elaboration of this statement.

- (b) **Define and evaluate GDP as a measure of development.** **[6 marks]**

An evaluative response is expected, therefore the candidate needs to acknowledge both advantages and disadvantages of GDP as a measure of development, but these are unlikely to be balanced.

Advantage

GDP is a universal measure of economic strength

Disadvantages

it would be more useful as a *per capita* figure

it does not indicate disparities in wealth within a country

it does not recognise subsistence production

statistical information in some countries may be inaccurate

currency values distort GDP values

it does not indicate quality of life

For a maximum **[6 marks]**, candidates must define **[2 marks]**, and evaluate by developing four of the above points **[4 marks]**.

- (c) **With reference to *one* country or region of your choice, discuss the external and internal forces responsible for its level and rate of development.**

[10 marks]

Candidates are most likely to choose a country, but a range of scale is acceptable from continent to region within one country. For full marks they should discuss both the level and rate of development referring to economic, social/cultural and physical factors and the example chosen should display detailed, factual and accurate knowledge. The external and internal forces listed below need not all be covered as depth of discussion may compensate for breadth in some cases, but overall, those that are chosen should have sound coverage.

External forces – cultural contact, trade, financial flows, technological change, transnational corporations, aid and international agreements.

Internal forces – planning, social structures, cultural attitudes, health, education, transport and accessibility, population structure, availability of natural resources, environmental quality and internal capital formation.

[8 to 10 marks]

A full reasoned discussion that covers both internal and external forces, is set in a realistic time frame and has plenty of hard factual evidence.

[4 to 7 marks]

A sound description of the development process, but with a limited range of forces considered and superficial discussion. The factual support and time frame may be unconvincing especially at the bottom end.

[1 to 3 marks]

The candidate has given a country but the response appears to be largely guesswork.

6. (a) **With reference to examples from the map, describe and explain why earthquakes commonly occur close to plate boundaries. You should illustrate your answer with one, or more, labelled diagrams.** *[10 marks]*

Candidates should discuss the circumstances leading to the occurrence of earthquakes close to plate boundaries, but it is not necessary for them to mention intra-plate locations.

[8 to 10 marks]

A detailed knowledge of the processes occurring at conservative, collision, constructive and destructive plate boundaries. There are fully labelled diagrams of specific plate boundaries to illustrate each of the four types and close reference should be made to examples given on the map.

[4 to 7 marks]

A sound understanding of the processes occurring at three boundaries or a more superficial understanding of four. Some reference is made to examples from the map, while diagrams may lack some labels and may not name specific plates.

[1 to 3 marks]

A scant understanding of processes is evident with no real knowledge of actual locations, and with weak and generalised diagrams. There is little or no reference to examples from the map.

- (b) **With reference to the table, give reasons for the variation in the number of deaths caused by earthquakes occurring globally between 1900 and 1999.** *[10 marks]*

[8 to 10 marks]

Candidates will need to acknowledge that there is a variation in the number of deaths both temporally and spatially. The fundamental control is economic and the best responses will recognise that, with a few exceptions, those countries with more developed technologies and higher standards of living will suffer fewer fatalities both in the long and short term after an earthquake event. Data from the table should be quoted and the best responses will show some knowledge of specific earthquake events listed. Physical and non-economic factors such as depth of focus, duration of earthquake, Richter magnitude, nature of ground, proximity to coast, time of day, and density of population at the epicentre should also be mentioned (but not necessarily all of these).

[4 to 7 marks]

A sound but limited response that concentrates mainly on the economic differences between the countries concerned and the way that this influences vulnerability. There will be some limited reference to examples and some knowledge of earthquake technology.

[1 to 3 marks]

A limited response that recognises only economic controls over fatalities. Knowledge of specific events and mitigation is weak.
