

MARKSCHEME

May 2003

GEOGRAPHY

Higher Level and Standard Level

Paper 1

Core Theme: Population, Resources and Development

Question 1

- (a) **Describe briefly and explain the difference in the relationship between population and resources, as shown in the two diagrams.** [5 marks]

To obtain full marks, the response should recognize that Malthus shows a population growing more rapidly than resources, leading eventually to a shortage of resources [1 mark], while Boserup shows resources availability always outstripping population growth [1 mark]. It would be expected that the explanation for such relationships would elaborate on the unexplained geometric growth of population against the arithmetic growth of resources in the case of Malthus, and Boserup's contention that population pressure has always led to innovation and increased resource production [3 marks].

- (b) **Explain how the condition of “overpopulation” could be measured.** [5 marks]

Responses would be expected to be based on an assessment of the relationship between population size and resource availability, using demographic indicators (crude birth rate etc.) [1 mark] and basic economic indicators (GNP *per capita* etc.) [1 mark]. A further [2 marks] should be awarded to responses that show an awareness that such measurements alone are insufficient and should include an evaluation of social development indicators, and other composite indicators such as literacy and health rates. Where there is an awareness that overpopulation can only be measured over time, the remaining [1 mark] should be awarded for any other relevant comment.

- (c) **Outline what is meant by “sustainable development” and show, using examples, how resources can be managed in a sustainable way.** [15 marks]

An accurate description or definition of “sustainable development” would refer to development meeting the current needs of the population while maintaining the same or improved conditions for future generations. It would be expected that responses would show how resources can be managed by conservation, recycling and substitution and a discussion of technology might also be appropriately included. It would be important that the examples used to illustrate these strategies are both relevant and fully developed. Where no examples are offered responses cannot be awarded more than [7 marks]. It would not be necessary for all examples to be treated in equal depth.

The marks should be allocated according to the markbands.

Question 2

- (a) Identify the trends shown in the graph. [3 marks]**

At least two trends should be identified. [3 marks] should be awarded for accuracy, possible quantification and depth of analysis. Some of the trends that could be identified could be: the number of refugees and asylum seekers outweigh the number of internally displaced; with the exception of Europe the internally displaced are found in LEDCs; regions with large numbers of migrants have both refugees and internally displaced whereas those with low migrant numbers tend to have only one category of migrants.

- (b) Explain the values for the groups of migrants in one named region shown in the graph. [4 marks]**

A variety of answers are possible depending on the region chosen but responses should name values [1 mark]. Answers should also provide acceptable reasons for these values and may include distance from the source of migration and various push-pull factors such as mobility, legal restrictions, perceived economic benefits, political instability, civil strife, conflict, environmental degradation [3 marks].

- (c) Briefly describe the main demographic features which characterize the three types of migrants shown in the diagram (refugees, asylum seekers and internally displaced persons). [3 marks]**

[1 mark] should be awarded for any accurate statement concerning age and gender differentiation for each group [3 × 1 mark]. For example, refugees have no particular age or sex differentiation in the group, asylum seekers are initially and most frequently the younger adult age group, with males predominant and internally displaced persons will be the same as for the refugees.

- (d) Evaluate the advantages and disadvantages of responding with aid, especially food aid, when and where conditions result in major refugee movements. Support your evaluation with actual examples or case studies. [15 marks]**

Responses would be expected to assess the importance of most of the following: aid is essential in the short-term to mitigate the immediate effects of the disaster by preventing starvation and death and by providing shelter and basic health facilities; it may affect the further movement of people; it is expensive; in the long-term it encourages a culture of dependence; it is sometimes inappropriate and changes the traditional diet; it delays the solution to the cause of the migration. Valid comments could be made about the donor countries, such as cost, potential political and economic benefits, the “feel-good” factor, *etc.*

It is possible that some responses would consider international aid in general and care should be taken to assess only that part which is relevant to a refugee movement.

The marks should be allocated according to the markbands but in the absence of any examples no more than [10 marks] should be awarded.

Question 3

- (a) **Identify the main trend in the global pattern of malnutrition as shown in the graph.** [3 marks]

The most obvious and broad trend shows hunger dominant in the South and the overweight dominant in the North [1 mark]. However, closer analysis shows that this trend does not apply to the Middle East and Latin America [1 mark]. Some quantification should be given to justify the remaining [1 mark].

- (b) **With reference to any one of the regions shown in the graph, discuss the factors that are responsible for the malnutrition values shown.** [4 marks]

Whatever region is chosen, marks should be awarded for accurate and pertinent comments and these could include factors such as a rapidly growing population putting pressure on the land, drought and/or unfavourable environmental conditions, high personal incomes and the access to “fast foods”, lack of education about diet, cultural factors, political factors *etc.* [4 marks]. Full marks should not be awarded unless both conditions of malnutrition are covered.

- (c) **Describe the impact that malnutrition has on population structure.** [3 marks]

The only measurable elements directly affected would be life expectancy/mortality rates and population totals [2 marks]. Some discretion could be shown if other values are suggested. The remaining mark should be awarded for development/explanation.

- (d) **Malnutrition is not due to a shortage in the global production of food. Choose a country that is suffering from a long-term shortage of food and explain why this happens.** [15 marks]

The main points expected to be covered in response to this question would focus on the inequalities in having access to food and the factors responsible for the failure in its distribution. These should include comments on external factors, such as the structure of international trade, trading barriers and tariffs, government policies and the level and availability of technology, as well as internal factors such as a poor infrastructure and inadequate marketing arrangements. Depending on the choice of country it is possible that responses could also include a discussion on the consequences of the environmental conditions being exacerbated by a set of human actions. It would not be necessary to have discussed all these elements as they may not all be relevant in the country chosen – however, in order to obtain high marks, all the relevant factors for the specified country should be considered in depth.

The marks should be allocated according to the markbands.
