

# **MARKSCHEME**

**November 2003**

**GEOGRAPHY**

**Higher Level and Standard Level**

**Paper 1**

1. (a) **Identify countries A to D in the table and briefly justify your identification.** **[6 marks]**

The correct identification of the countries would be as follows:

- Country A - Mozambique **[1 mark]**
- Country B - Australia **[1 mark]**
- Country C - Chile **[1 mark]**
- Country D - South Africa **[1 mark]**

Reasons for making the identifications could vary, but it would be expected that Mozambique would be identified because it has the poorest values throughout while Australia has the highest and richest **[1 mark]**. Differentiating between Chile and South Africa could be more difficult – the most obvious distinctions are in the rural population and access to safe drinking water values. The **[1 mark]** for this should be awarded for reasonable explanations, even if the identifications of South Africa and Chile are reversed.

- (b) **Name any two countries of your choice with contrasting levels of development and state their crude birth rates. Briefly explain the factors responsible for these birth rates in both the countries chosen.** **[7 marks]**

It would not be necessary to provide the most accurate and up-to-date values for the two crude births to obtain the full **[2 marks]** allocated to this part of the question – the table that follows provides guidance, and values deviating by no more than plus or minus 5 % for birth rates should be accepted.

	<b>Crude birth rate</b>
More economically developed	11 ‰
Less economically developed	25 ‰
Less economically developed (excluding China)	28 ‰
Sub-Saharan Africa	41 ‰

Values for all countries can be accessed at <http://www.prb.org/content/navigationmen/>

As the choice of countries is not prescribed, it is impossible to provide detailed guidance in allocating the remaining marks, but it would be expected that responses would have to consider economic and socio-cultural factors for the **[5 marks]**. Both sets of factors should be covered, but it would not be necessary to divide the marks evenly between the two of them.

- (c) **With reference to the indicators given in the table, discuss their relevance in attempting to assess the level of development of a country or region.**

***[12 marks]***

Up to ***[2 marks]*** should be allocated to each of the five sets of indicators ***[2 × 5 marks]*** although it would be possible to transfer the occasional mark if a response is particularly strong in the discussion of one or other indicator. All the indicators are of relevance in assessing the level of development, but a distinction could be made between those indicators that have a direct bearing on development (GNP *per capita* and education) and those remaining that are a consequence of development. To obtain the additional ***[2 marks]*** responses would be well ordered and logically developed with accurate and relevant comments and could include a definition of development. The weakest would simply list the indicators and give little evaluation of them and where this happens, no more than ***[3 marks]*** should be awarded.

2. (a) **With reference to the countries shown in the diagram, describe the relationship between the rankings for GNP *per capita* and the Human Development Index.** [3 marks]

The correct response would be that there is a general correlation between the two sets of rankings [1 mark]. However, at the higher rankings, the correlation is closer than at the lower rankings [1 mark]. Some quantification should be rewarded with the final [1 mark].

- (b) **Explain how the Human Development Index is obtained and then assess its relative merits as an indicator of development.** [5 marks]

The HDI is a multi-component indicator obtained by averaging three sets of indices that reflect a long and healthy life, knowledge and a decent standard of living [3 marks]. [1 mark] should be awarded for specific mention of some or all of the indicators used (life expectancy, adult literacy rate, gross enrollment rate and GDP *per capita*), or for some comment about the HDI measuring not only economic elements. The final mark [1 mark] could be given to any comment about the HDI not being a satisfactory indicator of economic development.

- (c) **With reference to any named country that would be ranked near the top in GNP *per capita*, give some indication of its life expectancy and analyse the problems that could arise as a consequence of this value.** [7 marks]

As the World Bank life expectancy figures for the MEDCs are given as 74 years (males) and 81 years (females), an answer that falls between these two values should be awarded [1 mark]. The problems addressed should all arise as a consequence of the “greying” (aging) of the population and cover both economic and social aspects: declining workforce and deteriorating dependency ratios, increased pressure on health and social services, growing demand for financial support (pensions) [4 marks]. The remaining [2 marks] should be allocated for the effective use of examples from the named country.

- (d) **With reference to countries of your choice that would be ranked near the bottom in GNP *per capita*, discuss the problems they may have in developing their resources.** [10 marks]

The strongest responses would be expected to produce a clear exposition covering most, if not all, of the following points:

- resource development is hampered by a lack of technology, expertise and finance
- LEDCs do not control the markets and suffer from trading restrictions (tariffs and barriers)
- resource development is often undertaken by transnationals (TNCs)
- there is an absence of infrastructure and the necessary skilled labour needed to develop a resource [7 marks].

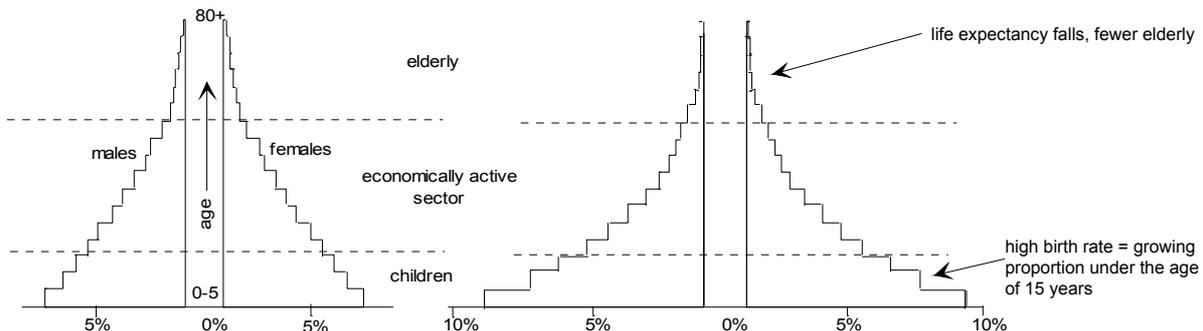
The appropriate use of examples would account for the remaining [3 marks].

3. (a) **With reference to the diagram explain what is meant by the term *demographic trap*.** [5 marks]

It is probable that most responses would provide an explanation based on the concept of a vicious circle or of positive feedback – either would be appropriate. However, it would be insufficient to simply state, for instance, that poverty causes a growing population – some explanation should also be given why this should occur. A mark should be allocated for each developed, if brief, explanation [4 × 1 mark], with the remaining [1 mark] given for a fuller account or for the use of examples.

- (b) **By means of *two* annotated diagrams, show how the population structure of a country caught in the demographic trap would change over time.** [8 marks]

It would be expected that candidates present two sketch population pyramids to illustrate the changes. The allocation of so many marks for this question should indicate that diagrams of a reasonably high standard would be expected: neatly drawn [2 marks], fully labelled [2 marks] with annotations indicating the main points of interest [4 marks]. The pyramids should reflect a population characteristic of an economically less developed country, as the demographic trap would hardly operate in an industrialized country where economic downturn is temporary and of a cyclical nature.



- (c) **The relationship between a human population and its resource base differs from that found in the natural environment. Describe how this human population/resource relationship differs and provide examples to illustrate it.** [12 marks]

Responses would be expected to develop the idea that in a natural environment the size of the population is determined by the carrying capacity of that environment, whereas human populations can exceed the carrying capacity/resource base by adopting different strategies [4 marks]. As examples, it would be expected that reference would be made to Boserup, quoting situations where food production had increased as population had grown, and/or to a case study where food aid or migration has allowed a population to exceed the environmental carrying capacity. Up to [8 marks] would be available for these two contentions, and the marks need not necessarily be allocated equally between the two. It is also possible that a candidate could adopt a completely different approach as for example in interpreting resources much more broadly and, provided the analysis was accurate and pertinent and was supported by example(s), the same allocation of marks could be applied.