



MARKSCHEME

May 2011

GEOGRAPHY

Higher Level and Standard Level

Paper 1

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Core Theme – Patterns and Change

SECTION A

1. Populations in transition

- (a) **Referring to the graph, describe how female empowerment in politics varied between regions in 1997.** [3 marks]

Scandinavia as a region has the greatest with approximately 36 % involved in government [1 mark]; the Middle East has the lowest involvement of women in government with approximately 3 % [1 mark]; the rest of the world averages between 10 % and 14 % [1 mark]. No quantification or only a list with values should be awarded [2 marks] maximum.

- (b) **Suggest reasons why female empowerment in politics has risen since 1997.** [4 marks]

Any four valid reasons should be awarded [4 marks]. Any two valid reasons that are fully developed and/or make use of examples should be awarded [2×2 marks].

Cultural – changing value systems; Policies designed to increase female participation; *Education* – more women qualified; Many of the MDG's promote women's rights; Decreased *family size*/later marriage – women's roles changing; *Legal rights* increasing in some countries.

Italics relate to the syllabus bullet point – gender and change

- (c) **Analyse the pro-natalist policy of a country you have studied.** [5 marks]

A valid country and policy should be chosen as an example [1 mark]. Award additional marks for further description of the specific policy [2 marks]. The final [2 marks] are reserved for some analysis where candidates break down the policy in order to bring out the essential elements or structure and/or provide some evaluation of the policy's success/failure.

2. Disparities in wealth and development

- (a) Describe the global pattern of GNI per person shown on the map. *[3 marks]*

The map shows that most low income countries are in Africa and Central and South Asia *[1 mark]*; high income countries are in North America, Western Europe, and Australia *[1 mark]*. The rest of the world is classified as middle income *[1 mark]*. For full marks some quantification should be included or anomalies identified.

- (b) Suggest *two* reasons why GNI per person is not a reliable way of measuring global disparities. *[2+2 marks]*

Two reasons should be identified and explained for *[2+2 marks]*. These could be: GNI is not a composite indicator such as HDI, which allows more (non-economic) variables to be measured; it does not indicate spatial or demographic disparities within countries; it does not give any indication of human rights, health, gender equality; it does not take into account purchasing power parity; the informal economy is excluded, or any other explained valid reason.

- (c) Explain how debt relief may help to reduce global disparities. *[5 marks]*

Answers should explain/imply that they know what debt relief is *[1 mark]*. The rest of the response should look at how regions or nations would benefit or have benefited from having their external debt reduced or cancelled. Award *[1 mark]* for each basic explanation, with additional marks for extension and exemplification. Possible *[4×1 marks]* or *[2×2 marks]*.

Possible explanations would be: as the percentage of state revenue going towards debt is reduced, the state can channel funds into development projects; no debt means nations can be autonomous from organizations such as the WB or IMF in terms of pathways to economic development; no debt means no need for more loans to pay off interest.

It is possible for candidates to argue that debt relief does not reduce global disparities.

3. Patterns in environmental quality and sustainability

- (a) **State *one* natural external forcing which could have influenced the changes in temperature shown on the graph.** [1 mark]

Award [1 mark] for naming a natural external forcing. Any changes in solar radiation; changes in the orbital path of the Earth, volcanic eruptions (these are acceptable as external to atmospheric system). The answer must be external to the Earth's atmospheric system.

- (b) **Referring to the graph, describe how temperature has changed since 1850.** [3 marks]

Average temperatures remained more or less stable at first / until 1910–1930 [1 mark]. After that time, average temperatures have risen significantly/there has been an overall increase [1 mark]. The final [1 mark] is reserved for quantification or for describing how temperatures have always oscillated/fluctuated, though these have not altered the overall trend.

- (c) **Explain *three* possible environmental consequences of global climate change since 1950.** [3×2 marks]

There are many possible answers here. Award [1+1 marks] for each valid environmental consequence, provided that it is developed by means of examples, explanation **or** detail. No credit should be awarded for any consequence that is not environmental in nature, or for statements such as “temperatures have risen” since that is implicit in the question.

Valid possible environmental consequences include: poleward shift in some natural vegetation belts; rise in sea levels; alterations to migration routes of animals; expansion of some deserts; greater frequency and severity of tropical storms and hurricanes; record-breaking climate extremes; melting of Arctic ice; retreat of glaciers in most parts of the world.

4. Patterns in resource consumption

(a) Identify *three* fossil fuels.

[2 marks]

Fossil fuels include: oil, natural gas, coal, and oil shale. Peat and tar sands are also acceptable. Award **[2 marks]** if three are correctly identified, or **[1 mark]** if two are correct. No credit may be given if only one of the three is correct.

(b) Suggest *two* reasons for the changing importance of nuclear energy.

[2×2 marks]

Award up to **[2 marks]** for two distinct valid reasons, provided that they are developed by means of examples, explanation **or** detail.

Possible reasons include: issues associated with the disposal of nuclear waste; issues associated with safety/radiation leaks; relative cost of constructing nuclear power stations compared with other sources of power; increased need to generate electricity without relying on fossil fuels; acceptance that nuclear power is less polluting; anti-nuclear protests; decline in availability of non-renewables; costs of fossil fuels – peak oil scenario; meeting international targets for CO₂.

Note that answers may explain either an increase or a decrease in the importance of nuclear power, and do not need to consider both for the award of full marks.

(c) Explain the relationship between energy usage and ecological footprint for *one or more* countries.

[5 marks]

Countries with a higher energy usage generally have a higher ecological footprint **[1 mark]**. This stated relationship must be relevant to the named country or countries chosen.

Explanations for the relationship must explicitly link the country's energy usage to its ecological footprint: a possible explanation for the usual relationship could be the fact that most energy is derived from fossil fuels such as coal, oil and natural gas, the use of which inevitably raises a country's ecological footprint since an ecological footprint includes the area (land) required for absorbing waste – in this case carbon dioxide emissions. Answers could also look at how increased use of renewable energy decreases the footprint.

Four basic statements of explanation **[4×1 marks]**.

Two developed statements of explanation **[2×2 marks]**.

One explanation that is very good detail **[4 marks]**.

If no country/countries are utilized in the response a maximum **[3 marks]** may be awarded.

SECTION B

5. To what extent do migrations bring benefits to both their origins and their destinations?

[15 marks]

Responses should consider the benefits at both the point of origin and the final destinations and the strongest responses may refer to both voluntary/economic and involuntary/forced migrations. At the origin, benefits include: income derived from remittances and the alleviation of poverty; the reduction in population pressure and demand for resources.

Benefits for the receiving region or society include an increased availability of workers, often willing to work for lower wages, or in unpopular jobs, and with less stringent working conditions. Cultural mixing may also be seen as either a benefit or a disadvantage, depending on the example(s) discussed. Forced migrations generally benefit only the migrants themselves, through the better provision of food and shelter, and increased security.

It is possible for responses to include the costs of migration as the question is “to what extent”.

Responses must make use of examples and have an evaluation to reach markbands E and F.

While many responses are likely to conclude that the benefits at the destination outweigh the benefits at the point of origin, all conclusions/evaluations should be judged strictly on the merits of the arguments presented and of any example(s) chosen.

Marks should be allocated according to the markbands.

6. Examine the view that rapid population growth will prevent some countries from meeting their Millennium Development Goals.

[15 marks]

Responses would be expected to show a clear understanding of the MDGs.

Responses may show that increased population numbers could be an obstacle to health, welfare and education provision, especially where there is poor governance of resources. However, there are other issues to consider, such as growing wealth inequalities, innovation resulting from population growth, corruption, civil war.

It is expected that there should be some discussion here about the link between population growth and poverty. Reducing population is not an MDG, rather it is an expected outcome that will become evident as countries reach their MDGs.

The strongest answers may conclude that some MDGs are easier to reach than others or that rapid population growth in some countries may have the opposite effect.

Responses presenting accurate, specific and well detailed knowledge and understanding of MDGs with relevant examples and evaluation of the links with rapid population growth will reach level E or F.

Marks should be allocated according to the markbands.

7. **“Of all the environmental challenges we face, soil degradation is the most serious.” Discuss this statement.**

[15 marks]

A good response may define the term “soil degradation”, which includes erosion (wind, water), or nutrient depletion, salinization, duricrust growth, loss of soil structure, and others.

There are a number of possible responses as the environmental challenges in the syllabus relate to soil and also to climate change, water, biodiversity and sustainability in general. The focus of the answer should be on assessing the importance of soil degradation, but reference to other issues is needed as well in discussing the statement as it calls for some evaluation. However, a candidate cannot dismiss soil and write an essay on climate change; they must answer the question posed and use their knowledge of soil degradation to explain why it is serious or why it is less serious than other challenges we face.

Responses must develop a substantiated argument that agrees or disagrees with the statement (either by saying other challenges are more important or that soil degradation does not prevent all forms of food production *e.g.* aquaculture).

Responses demonstrating a thorough knowledge and understanding of soil degradation with specific and accurate case study material and offering some evaluation of the statement will reach level E and F.

Marks should be allocated according to the markbands.
