International Baccalaureate®
Baccalauréat International
Bachillerato Internacional

MARKSCHEME

May 2014

GEOGRAPHY

Higher Level and Standard Level

Paper 1

Core Theme – Patterns and Change

SECTION A

1.   **Populations in transition**

(a)   **Describe the population structure of this country.**   *[3]*

Any two valid, distinct and **descriptive** points for *[2 marks]* plus *[1 mark]* for quantification/use of data from the x/horizontal axis.

Possible descriptions include:
Few dependents; large economically active group; imbalanced gender ratio; 15–64 years old mainly male; youthful and elderly groups are more balanced.

Comments on rates or life expectancy etc. are explanations as opposed to description and should not be credited.

(b)   **Suggest *one* reason for the structure of the *economically active* population.**   *[2]*

Migrants coming into the country are overwhelmingly male *[2 marks]*.

(c)   **Explain *three* socio-economic impacts of an anti-natal policy in *one named* country.**   *[2+2+2]*

Award *[1+1 marks]* for each valid/distinct socio-economic impact, provided that it is developed by means of explanation and/or detail.

Possibilities can be positive or negative and may include (for example, using China's One Child Policy):

Skewed sex ratio; no siblings or aunts or uncles; little emperor syndrome; aging population with only child having to support two parents and four grandparents; forced abortions.

Estimate that policy prevented more than 300 million births; avoided Malthusian catastrophe; infant mortality fell; well educated population as families could afford schooling; may have helped contribute to China's recent economic growth.

If no valid country is named award a maximum of *[4 marks]*.

Demographic or environmental comment must linked to socio-economic impact.

2.   Disparities in wealth and development

(a)   (i)   With reference to the graph, identify which sub-target was furthest from being met in 2008. *[1]*

Target C / Pregnant women attended at least once by medical personnel.

(ii) State the Millennium Development Goal to which the sub-target you identified in part (i) relates. *[1]*

Improve maternal health or Millennium Development Goal 5.

(b)   State any *two* other Millennium Development Goals that are *not* represented in these graphs. *[1+1]*

Any two of the following:
- reduce child mortality
- promote gender equality and empower women
- combat disease (HIV, AIDS, malaria)
- environmental sustainability
- global partnership
- eradicate hunger (allow even though with poverty).

The responses do not have to have this exact wording, *eg* "combat HIV" would be acceptable as would "sustainability" and "cooperation between countries".

(c)   Suggest *two* reasons why primary school enrollment as a percentage has increased. *[2+2]*

Award *[1+1 marks]* for each valid/distinct reason, provided that it is developed by means of detail and/or exemplification.

Possibilities include:
- countries or regions abolishing school fees/*eg* Kenya abolished primary school fees in 2003 increased urbanization/increasing access to services such as schools
- schools offering meals/attracting students from families with low food security
- improved sanitation/attracting more girls
- improved infrastructure/ increases access.

eg Some governments are starting to prioritize education and are increasing funding *[1 mark]* this results in more schools being built increasing overall enrollment *[1 mark]*.

(d)   **Explain** *two* **reasons why aid may** *not* **help reduce disparities.**   *[2+2]*

Award *[1 mark]* for each basic explanation, with additional *[1 mark]* for extension and/or exemplification.

Aid can be interpreted broadly – allow food, emergency and financial aid.

Possibilities include:
- increases dependency/especially food aid *eg* Ethiopia
- corruption/aid may be utilized by an elite and not filter down to those who need it
- may be tied aid/conditions attached
- if aid is financial/it could increase the debt burden
- aid may be too short-term/does not have the duration to be effective
- top-down aid projects/may not target the poorest communities.

3.   Patterns in environmental quality and sustainability

(a)   Describe the pattern of *high* physical water scarcity shown on the map.   *[3]*

Any of the following for *[1 mark]* each:
- a valid comment on latitudinal location
- mainly found in the northern hemisphere
- especially in Northern and Eastern Africa and parts of Southern Africa
- Middle East
- SW and/or Central Asia
- SW North America
- West coast of South America.

(b)   Explain why some of the world's arid areas are *not* areas of physical water scarcity.   *[3]*

Physical water scarcity occurs when water resource consumption is approaching or has reached unsustainable levels/demand exceeds 60 % of usable supply. Award *[1 mark]* for describing this concept. The world's arid areas have little available water, but usually have low population/density *[1 mark]* and therefore water usage/demand may still not exceed sustainable levels/supply *[1 mark]*.

(c)   Explain the energy flows involved in the greenhouse effect.   *[5]*

Any of the following:
- incoming solar radiation/short wave radiation/insolation
- some reaches the Earth's surface
- the Earth's surface re-emits terrestrial/longwave radiation
- some of this energy/radiation is absorbed/trapped by greenhouse gases
- a little energy is lost to space
- naming two or more valid greenhouse gases.

There is no requirement to explain the enhanced greenhouse effect.

A valid **annotated** diagram explaining five of the above is equally acceptable.

4.   Patterns in resource consumption

(a)   Describe the relationship shown on the graph.   *[3]*

The relationship is negative/inverse or the lower the income inequality, the more recycling takes place *[1 mark]*.   Use of valid example(s) to exemplify this relationship *[1 mark]*. Identification of an anomaly *[1 mark]*.

(b)   Explain *two* **environmental benefits of recycling.**   *[2+2]*

Award   *[1 mark]*   for   each   valid,   distinct   benefit,   and   *[1 mark]*   for explanation/exemplification.

Possibilities may include:
* recycling means that fewer non-renewable resources will be needed or used *[1 mark]*, if fewer new materials are made from scratch, the carbon footprint may be lower *[1 mark]*
* recycling reduces solid waste and the need for waste disposal/landfill *[1 mark]*, less green space lost/less harm to wildlife/less methane *[1 mark]*
* recycling usually saves on the energy costs associated with transport *[1 mark]*, since non-renewable resources often travel further to the factory than recycled resources *[1 mark]*.

(c)   Explain *two* **disadvantages of** *one named* **source of renewable energy.**   *[2+2]*

Award   *[1 mark]*   for   each   valid   disadvantage   and   *[1 mark]*   for explanation/exemplification.

The disadvantages depend on the choice of energy source.

Possible disadvantages:
The cost of development; the distance that power (electricity) has to be transmitted from where the resource is available; the reduction in landscape aesthetic values (*eg*, in the case of land-based wind farms); unreliable supply, dependent on weather and other conditions, meaning that the resource is not available at all times, or not available to meet peak demand times.

For example, if a candidate chooses "solar power", the two disadvantages might be: (a) not suited to certain regions of the world (*eg*, higher latitude areas), or certain seasons (winter), and (b) installation costs remain relatively expensive.

If no valid named renewable energy source, but disadvantages are analysed, award a maximum of *[2 marks]*.

Accept nuclear power as a renewable energy source.

SECTION B

Level descriptor	AO1 Knowledge/ understanding	AO2 Application/ Analysis	AO3 Synthesis/ evaluation	AO4 Skills	Paper 1 Section B Marks 0–15
A	No relevant knowledge; no examples or case studies	No evidence of application; the question has been completely misinterpreted or omitted	No evaluation	None appropriate	0
B	Little knowledge and/or understanding, which is largely superficial or of marginal relevance; no or irrelevant examples and case studies	Very little application; important aspects of the question are ignored	No evaluation	Very low level; little attempt at organization of material; no relevant terminology	1–3
C	Some relevant knowledge and understanding, but with some omissions; examples and case studies are included, but limited in detail	Little attempt at application; answer partially addresses question	No evaluation	Few or no maps or diagrams, little evidence of skills or organization of material; poor terminology	4–6
D	Relevant knowledge and understanding, but with some omissions; examples and case studies are included, occasionally generalized	Some attempt at application; competent answer although not fully developed, and tends to be descriptive	No evaluation or unsubstantiated evaluation	Basic maps or diagrams, but evidence of some skills; some indication of structure and organization of material; acceptable terminology	7–9
E	Generally accurate knowledge and understanding, but with some minor omissions; examples and case studies are well chosen, occasionally generalized	Appropriate application; developed answer that covers most aspects of the question	Beginning to show some attempt at evaluation of the issue, which may be unbalanced	Acceptable maps and diagrams; appropriate structure and organization of material; generally appropriate terminology	10–12
F	Accurate, specific, well-detailed knowledge and understanding; examples and case studies are well chosen and developed	Detailed application; well-developed answer that covers most or all aspects of the question	Good and well-balanced attempt at evaluation	Appropriate and sound maps and diagrams; well structured and organized responses; terminology sound	13–15

5. **"Investing in gender equality is the most effective strategy to promote economic and social development." Discuss this statement.** *[15]*

There are many possible approaches to this question; each should be assessed on its merits.

Many responses are likely to focus on the positive aspects that improved gender equality has on societies and economies. These include the role of women in influencing trends in demography (via age of marriage, number of children), employment (via presence in the workforce), education, health care and politics, among others. It is also possible that reference is made to the Millennium Development Goals, three of which directly focus on improving the status of women. It is also possible that candidates will refer to composite indexes of development and link strategies to empowering women with these indexes.

Discussion may also include some mention of at least one other strategy that promotes economic and social development such as trade and market access, debt relief, aid and remittances.

It is also possible that responses may take an alternative approach and consider that investing in gender equality is not the most effective strategy to promote development. They would need to make their case and be able to describe and explain other strategies that they consider to be more effective.

Responses that are generalized, with few or no examples, are unlikely to advance beyond band D.

Responses that offer a sound discussion with examples and arrive at a clear conclusion either agreeing or disagreeing with the viewpoint are likely to be awarded band E or above.

Marks should be allocated according to the markbands.

6.   **"Rapid population growth is the main cause of soil degradation and reduced biodiversity." Discuss this statement.**   *[15]*

Responses should show some understanding of what is meant by rapid population growth and should be able to explain what is meant by soil degradation and reduced biodiversity. The main focus of the response should then be on discussing the extent to which both of these environmental issues are the outcome of increased population growth. The scale of discussion will depend on the examples chosen.

It is expected that responses will tend to give a balanced view:
- explaining how both soil degradation and biodiversity are caused by population growth: loss of habitat, deforestation to make way for human settlements, infrastructure, agricultural land to feed more people, growth of urban areas in both number and size
- explaining how factors other than population growth are contributing to the loss of biodiversity and soil degradation: increased standard of living, increased consumption, oil dependence, climate change, potential physical factors.

Responses that are generalized, with few or no examples, are unlikely to advance beyond band D.

Responses presenting accurate, specific and well detailed knowledge on the causes of reduced biodiversity and soil degradation and discussing the extent to which population growth is the main cause are likely to reach band E or F if the answer makes use of effective examples.

Marks should be allocated according to the markbands.

7. **"The world is far too dependent on oil."   To what extent do you agree with this statement?**   *[15]*

Candidates are expected to consider the importance of oil in today's world as the major source of energy as well as its significance for geo-politics. Responses are also expected to consider the changing importance of other energy sources.

Most responses are likely to focus on the finite/non-renewable nature of oil stocks and argue that the use of renewable resources is urgently needed in order to guarantee sufficient energy availability for the future and to mitigate the adverse effects of dependence on oil, especially its adverse environmental impacts such as pollution and global climate change. It is anticipated that more than one non-renewable resource would be considered, but the discussion of non-renewable sources need not be balanced for this approach to reach the highest markbands, provided any examples given are valid and well developed.

Some candidates may argue (correctly) that the world's oil reserves are currently as high or higher than they have ever been, and that therefore there is less pressing need to develop alternatives than supporters of renewable energy sources advocate. To reach the highest markbands such an approach would need to be well-balanced (taking into account environmental impacts, especially) as well as well-evidenced, with reference to newly discovered deposits being added to reserves, to the development of less conventional sources of oil such as tar/oil sands, and to improved technologies that have enabled higher effective extraction rates.

Alternative approaches may be equally valid and should be considered on their merits.

Responses that are generalized, with little or no data, figures or examples, are unlikely to advance beyond band D.

At band F, the conclusion should be well-grounded in evidence or will demonstrate different perspectives of the ways in which dependency is a problem.

Marks should be allocated according to the markbands.