



# **MARKSCHEME**

**November 2013**

**GEOGRAPHY**

**Higher Level and Standard Level**

**Paper 1**

10 pages

*This markscheme is **confidential** and for the exclusive use of examiners in this examination session.*

*It is the property of the International Baccalaureate and must **not** be reproduced or distributed to any other person without the authorization of the IB Assessment Centre.*

**Core Theme – Patterns and Change**

**SECTION A**

**1. Populations in transition**

- (a) Briefly describe the global pattern of the maternal mortality ratio shown on the map.**

**[3]**

The map shows that highest maternal mortality ratios (MMR) are in sub-Saharan Africa and South Asia **[1 mark]**; the MMR is low in Europe, North America, Australasia and most of the rest of Asia **[1 mark]**, variation in MMR within Latin America and the Caribbean **[1 mark]**, identification of anomalies **[1 mark]**.  
Award up to a maximum of **[2 marks]** if no quantification/use of data.

- (b) Suggest two reasons why the maternal mortality ratio is so high in some countries.**

**[2+2]**

Award **[1 mark]** for each valid reason, and an additional **[1 mark]** for its development, exemplification or further explanation.

Possible reasons include: lack of trained health personnel; lack of access to health care; higher fertility; age of mothers; birth spacing; conflict; remoteness; lower status of women; malnutrition; poverty.  
Allow other valid reasons.

If not related to maternal mortality award up to a maximum of **[2 marks]**.

- (c) Explain the recent trends in life expectancy at birth for a named country or region.**

**[5]**

Answers will depend on the country/region chosen.

Award up to a maximum of **[2 marks]** for describing the recent trends and up to **[3 marks]** for explaining why they occur.

For example, increased life expectancy could be linked to improved nutrition, health care, sanitation.

For example, reduced life expectancy could be linked to HIV, AIDS, lifestyle issues, diet.

If no named country/region or outdated examples are used, marks will be limited to a maximum of **[3 marks]**. If no reference to trends or change award up to a maximum of **[2 marks]**.

If more than one country/region is used, credit the best one only.

**2. Disparities in wealth and development**

- (a) Define the term *remittances*. [2]**

Transfers of money/goods [1 mark] by foreign/migrant workers to their home countries [1 mark].

- (b) Referring to the graph, describe the trend in remittance flows since 1989. [3]**

**Increasing** steadily from 1989 (US\$ 50 billion) to a peak (US\$ 325 billion) in 2007 [1 mark]; from 2007 onwards **sharp decline** to below US\$ 300 billion [1 mark]. Accurate quantification (+/- 10 billion) and use of dates **essential** for final [1 mark].

- (c) Suggest *three* reasons why international financial aid is *not* always effective. [2+2+2]**

Award [1+1 mark] for each valid reason, provided that it is developed by means of explanation and/or exemplification.

Possibilities include: insufficient aid (few donors achieving UN target of 0.7 % of GDP); wrong type of aid; some aid results in debt; aid targets specific groups within a population who are not always the poorest; unreliable source of funding (can be tied/withdrawn); there are other more reliable sources of income; can be subject to corruption; conditionality; spatial isolation; not spent in the correct manner; targets short term problems.

Allow other valid reasons.

**3. Patterns in environmental quality and sustainability**

- (a) Identify Category X on the diagram. [1]**

Agriculture/farming [1 mark].

- (b) Define the term *physical water scarcity*. [2]**

Physical water scarcity occurs when the use of water resources [1 mark] approaches or exceeds sustainable levels [1 mark] (that is, it relates water availability to demand, meaning that arid areas are not necessarily water-scarce areas if demand is small).

For a partial definition, eg water demand exceeds supply, award [1mark] only.

- (c) Explain *two* physical factors that affect the availability of safe drinking water for a community. [2+2]**

Award [1 mark] for each factor and a further [1 mark] for explaining why it relates to a safe water supply.

Physical factors that affect access to safe water include climate (amount, type and timing of precipitation eg drought; climate change), geology (groundwater and aquifers), relief (surface water depressions, poor access probable if slopes are steep), drainage (rivers, lakes), isolation or distance from supply, natural hazard events such as earthquakes.

Note that the factor must be physical. This may lead to contamination, eg earthquakes lead to contamination by sewage. Do not award human factors alone such as industrial or agricultural pollution.

- (d) Analyse the role of water in the causes of soil degradation. [4]**

At least two ideas associated with causes should be developed for the award of the full [4 marks]. A greater range of ideas (in less depth) may also be awarded full marks.

Possibilities include: erosion by water, removing soil, may follow overgrazing and the removal of vegetation. Flash floods can strip surface soil within minutes, leaving barren rock. The upward movement of water through soil may result in salinization, rendering the soils infertile. The downward movement of water through soils may leach valuable minerals out of the soil, reducing its fertility.

**4. Patterns in resource consumption**

- (a) Identify Country A. [1]**

China [1 mark].

- (b) Briefly describe what is meant by the OPEC cartel. [2]**

Award [1 mark] for a comment that recognizes what OPEC is – eg the Organization of Petroleum Exporting Countries or names of the members (Algeria, Angola, Ecuador, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates and Venezuela). Award [1 mark] for the operation as a cartel – formed to fix prices and/or production quotas.

- (c) Explain two geopolitical impacts of the rise in global oil consumption since 1990. [2+2]**

There are many possibilities.

Award [1 mark] for each basic explanation of a valid impact and a further [1 mark] for its development.

The increase in global consumption has led to geopolitical pressures in some parts of the world as oil-hungry countries seek additional supplies of oil to meet their anticipated future demand. It has increased tensions in parts of the Middle East since that area has the world's largest oil reserves to which oil-importing countries such as the US want to preserve their access. Equally, it has led to growing international tension over likely sources of oil, such as those in the Arctic, Sudan and South China Sea, that are currently not exploited. On the other hand, the rise in consumption has led to higher prices for oil, leading to more investment in non-oil sources of energy. Reference may be made to conflicts that have their origin in the securing of access to oil supplies. Comments may refer to variations in the rate of increase with NICs having a faster increase in demand which causes tensions. Some impacts may arise through the transport of oil and pollution incidents that are a consequence – be careful to credit only where they lead to geopolitical impacts.

- (d) Suggest *two* reasons why sources of renewable energy have become more important in many countries in recent years. [2+2]

Award [1 mark] for each valid reason, and an additional [1 mark] for its development, exemplification or further explanation.

Possible reasons could include:

- adoption of a green agenda
- energy security
- the desire to increase sustainability
- the declining availability and/or rising costs of fossil fuels
- the need to avoid global warming
- meeting pledges, for example, Kyoto-Copenhagen
- an increased investment in renewable energy technologies
- technological breakthroughs that have reduced the costs of renewable energy infrastructure
- alternative to nuclear since Fukushima.

**SECTION B**

	AO1	AO2	AO3	AO4	Paper 1 Section B
Level descriptor	Knowledge/ understanding	Application/ analysis	Synthesis/ evaluation	Skills	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. Examine the negative environmental impacts of economic development on water and biodiversity.**

**[15]**

There are many possible approaches to this question, and each should be marked on its merits.

Negative impacts arise from development as the use of resources (and ecological footprint) increases. Both water quantity and quality may be adversely affected by development, and biodiversity is often reduced as forests are felled and land cleared for settlement or agriculture. Responses may consider how climate change, as a product of global development, may have a wide range of impacts on water and biodiversity.

It is possible that some responses may explore the idea that as countries become more developed they enact environmental controls and adopt strategies to reduce the stress on water and biodiversity.

Responses that fail to look at both biodiversity and water (does not have to be in equal depth) are unlikely to go beyond band D. To access bands E and F responses should either provide a range of case studies that show understanding or take an evaluative approach that recognizes that economic development is a complex concept.

Marks should be allocated according to the markbands.

**6. “Greater gender equality is the most effective way to reduce poverty and stimulate development.” Discuss this statement.**

**[15]**

There are many possible approaches to this question and each should be marked on its merits.

Many responses are likely to focus on the Millennium Development Goals and positive aspects of greater gender equality 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 expected that the discussion will also include some mention of other factors affecting development, such as the resources available, total size of population and economic and political framework. The strongest responses may challenge the question, either by concluding that they disagree with it, or exploring the meaning of “development”.

Responses that do not offer some form of discussion/evaluation are unlikely to go beyond band D. Discussion could involve either looking at multiple ways in which gender equality meets these goals, or looking at other ways of combating poverty, for example, trade, aid. Some responses may choose to disagree with the statement and this is equally acceptable if they can provide a relevant evidenced argument.

Stronger responses that include some discussion of other factors or discuss the meaning of poverty or development in more depth are likely to access bands E and F.

Marks should be allocated according to the markbands.

7. **“A falling fertility rate is always beneficial to a country.” Discuss this statement.** **[15]**

There are many possible approaches to this question, and each should be marked on its merits.

Fertility rates should be defined, this can be stated or implied.

Benefits could be: reduced costs for schooling, adults can begin to save; less environmental pressure; possible reduction of resource consumption; traditional roles of women changing, increased number of women in the workforce; potential for greater gender empowerment.

Problems could be: aging population; smaller workforce; increased tax burden; reduced market; closure of schools/clinics; need for migrants to boost employment.

Responses should make use of examples.

Responses that focus on describing population policies in some nations and not the consequences of falling fertility rates in that country will be self-limiting as this is not the question. Responses that consider only one side of the argument are unlikely to progress beyond band D. Responses that look at both benefits and problems of a falling fertility rate in a more balanced manner are likely to access bands E and F.

Marks should be allocated according to the markbands.

---