

# Markscheme

November 2021

Geography

Higher level and standard level

Paper 2

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## Section A

### 1. Changing population

- (a) Outline what is meant by the rate of natural increase. [2]  
*Award [1] for comment on relationship between BR and DR and [1] for development*

For example: Birth rate – death rate/difference between birth rate and death rate [1], usually expressed as a % or per 1000 population OR does not take into account migration [1].

- (b) Explain **one** political cause **and one** political consequence of forced migration. [2+2]

Award [1] for identification of a valid political cause/consequence (this may concern political groups, nations, international organisations etc) and [1] for development/exemplification.

#### **Political cause**

For example: Civil war [1] in Somalia conflict has led many to flee to safe neighbouring countries such as Kenya [1].

The persecution of minorities [1] means that sub-national groups are afraid and flee to avoid discrimination [1].

Other possibilities could include:

- government policies
- changing borders
- civil unrest
- limited civic freedom
- political instability.
- lack of political liberties.

#### **Political consequence**

For example: Rise of extremist groups in refugee camps [1] increased Al Shabaab terrorist attacks in Nairobi, Kenya [1].

Other possibilities could include:

- changing government policies
- rise of far-right groups in host countries
- establishment of harsh borders
- destabilisation of government due to actual or perceived pressures
- loss of trust in policy makers to control flows/alienation hypothesis transmission of political values of host country back to country of origin.
- Conflict between states – Belarus/Poland

- (c) Explain **two** policies that are used to promote gender equality. **[2+2]**

Identification of valid and distinct policy **[1]** and **[1]** for further development and/or exemplification.

For example: A quota system whereby a number of positions are reserved for women **[1]**; in Afghanistan a quarter of the parliamentary seats are reserved for women **[1]**.

Possibilities include but are not limited to:

- legislation – such as sex discrimination acts which make it unlawful to discriminate on the basis of sex
- education – put gender equity into the curriculum, promote women in STEM subjects
- empowering mothers with prolonged paid maternity leave, financial rewards, free childcare, paternity leave
- campaigns/Legislation promoting equal pay for women
- quotas for females in government so they have an influence on gender equality laws/legislation
- financing of women's groups to aid their economic and social development.

## 2. Global climate — vulnerability and resilience

- (a) Describe the trend in flood events. [2]

Award **[1]** for identifying the overall trend of increase over time and **[1]** for identifying the fluctuation/periods of decline.

Quantification required for full marks.

- (b) Suggest **two** ways in which increased global temperatures can cause changes in sea levels. [2+2]

In each case award **[1]** for identification of a valid way and **[1]** for further development of how it has led to changing sea levels.

For example: Glacial melt of continental ice **[1]**. Increased volume of ocean water resulting in sea level rise **[1]**.

Other possibilities include:

- thermal expansion
- inland sea level falls as a result of water courses drying up and increased evaporation
- isostatic readjustment after glacial melting lifts weight of ice on the land. Land then rises which leads to sea level drop.

- (c) Explain **two** corporate strategies used to address global climate change. [2+2]

In each case award **[1]** for identification of a valid corporate strategy and **[1]** for further explanatory development/exemplification related to how it addresses global climate change.

For example: The Lego company has established emission targets for manufacturing and distribution in partnership with the WWF **[1]**. This will reduce the amount of greenhouse gas emissions which are responsible for climate change **[1]**.

Other possibilities include:

- measurement of carbon footprint
- address carbon footprint of supply chain components
- renewable energy will reduce energy use in production processes
- reduce energy use in transportation/virtual meetings
- working from home
- Reduce waste/cut down on consumption at meetings
- set targets for emissions of company
- use the cloud to decrease the amount of IT hardware needed
- support political movements to address climate change
- recycling
- carbon offsetting
- carbon trading
- sequestration.

**3. Global resource consumption and security**

- (a) Describe the relationship shown in the graph. [2]

*Award [1] for each valid point.*

A negative relationship / the more one spends on food per capita per annum the less the share of total income spent on food [1] exemplification or development of pattern [1].

*Some quantification required for full marks.*

- (b) Suggest **one** reason for a recent change in the diets of people in middle-income countries. [2]

Award [1] for identification of a valid reason, and [1] for further development of dietary change.

For example: Rising incomes [1] so people have more money to spend on processed foods [1].

Other possibilities include:

- increased urbanization – greater choice of foods/access to technology such as refrigerators/different social profile/proximity to supermarkets
- influence of TNCs/globalization
- increased awareness of health issues
- lifestyle changes and growth of fast-food consumption
- liberalized markets – removing tariffs allows import of different foods
- FDI – increased finance to invest in factories that process food
- food marketing that encourages consumption of specific foods/targeting of younger age groups which continues habits into old age.

- (c) Explain **one** way in which ecological footprint measures an individual's resource consumption. [2]

*Award up to [1] for identification of a valid way (reference to land, water or waste), and [1] for development/exemplification [1].*

It determines the amount of the environment necessary [1] to produce the goods and services necessary to support a particular lifestyle [1].

- (d) Explain **two** ways in which different resources are developed to support Boserup's optimistic view.

**[2+2]**

*In each case, award [1] for a valid and distinctive way and [1] for further development or exemplification.* For example: Improved technology through the use of mechanization [1] to increase yields of food [1].

Other possibilities include:

- substitution (renewable energy)
- desalination
- vertical farming
- multicropping
- land reclamation
- circular economy
- second green revolution/GM.

**Section B**

4. (a) (i) Determine the range of hours lost in congestion per year in the selected megacities. [1]  
232 or 40 - 272 [1]
- (ii) Identify **one** megacity that will see an estimated decline in population between 2017 and 2030. [1]  
Tokyo or Osaka [1]
- (b) Describe the pattern of estimated GDP growth in Asian megacities between 2017 and 2030. [2]

*Award [1] for valid comment on overall pattern and [1] for development or exemplification.*

Mostly above 100%  
Mostly SE/S/E Asia  
Mainly coastal cities  
No BR/DR relationship or migration  
Highest Dhaka – 35% [34–36%]  
Smallest growth in Osaka and Tokyo – 2% [1–3%]

*Quantification required for award of full [2].*

Example: Estimated GDP growth in Asian megacities between these years is expected to be mostly over 100% [1]. The biggest single increase is expected in Dhaka – at least 35% [1].



- (c) To what extent does the infographic indicate that the consequences of megacity growth are always negative? [6]

The question is asking candidates to examine the positive and negative consequences of megacity growth shown on the infographic. Answers should focus on the identification and development of consequences of megacity growth and not a critique of style.

*Award [1] for each positive or negative consequence and further [2] for each supported development/explanation up to a maximum of [5].*

*Award the final [1] for a supported overall appraisal which weighs up the infographic as a whole.*

*Award maximum of [4] if only one perspective (positive or negative) is given.*

For example:

**Initial negative focus:**

- Produces high population densities [1] but these are variable [1]: higher in Asian cities [1], lower in the Americas
- Produces urban sprawl [1] mostly in megacities of HICs [1]
- Results in congestion [1], variable magnitude in hours lost [1] (less in US cities [1], no discernable in other cities cited)
- Results in high rates of population growth [1]: African cities growing fastest [1], European cities not growing as fast [1].

**Strength:**

- Nodes of investment
- High rates of GDP growth [1] mostly Asian cities
- Contribution to countries GDP [1], over-reliance with some cities [1]; some countries have more than one megacity contribution [1].

Overall appraisal can be found at the beginning or end of the answer and maybe a comment such as: The negative consequences are related more to the ordinary lives of people.

For example: The infographic shows that congestion is a negative consequence of growth as drivers in 5 cities lose over 200 hours per year [1]. Some cities are predicted to grow at very fast rates with the population of Lagos estimated to increase by 34% from 2017-30 [1]. Often growth produces high densities of population, especially where the city only covers a limited area [1]. However in Asian megacities there will also be impressive growth in wealth with the GDP of Dhaka growing by about 170% [1]. Megacities also house the most affluent sections of the population [1]. Overall the infographic provides a balanced view of megacity growth [1].

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