



Oxford Cambridge and RSA

Tuesday 21 May 2019 – Morning

AS Level Geography

H081/02 Geographical debates

Time allowed: 1 hour 30 minutes



You must have:

- the Resource Booklet (inserted)
- the OCR 12-page Answer Booklet (OCR12 sent with general stationery)

You may use:

- a ruler (cm/mm)
- a scientific or graphical calculator

INSTRUCTIONS

- The Resource Booklet will be found inside this document.
- Use black ink. You may use an HB pencil for graphs and diagrams.
- Section A: Choose **one** topic and answer **all** parts of the question in the topic.
- Section B – Synoptic questions: Choose **one** topic and answer **all** parts of the question in the topic. You must use your knowledge and understanding from across the course of study to answer these questions.
- Section C: Choose **one** topic and answer **one** question in the topic.
- Write your answers in the Answer Booklet. The question number(s) must be clearly shown.

INFORMATION

- The total mark for this paper is **68**.
- The marks for each question are shown in brackets [].
- Quality of extended responses will be assessed in questions marked with an asterisk (*).
- This document consists of **8** pages.

SECTION A

Choose **one** topic and answer **all** parts of the question in the topic.

Topic 2.1 Climate Change

1 (a) Explain how **two** of the Milankovitch cycles influence climate change. [4]

(b) Suggest how understanding the carbon cycle influences human response to climate change. [6]

(c) Study **Fig. 1**, a scattergraph showing the relationship between GDP per capita and the percentage of renewable energy consumption in 2015.

(i) Using evidence from the scattergraph **Fig. 1** describe the relationship between GDP per capita and the percentage of renewable energy consumption. [4]

(ii) Using evidence from **Fig. 1**, analyse reasons for differences in the percentage of renewable energy consumption. [6]

(d) 'Challenges to climate change adaptation are easiest to overcome in Advanced Countries.' How far do you agree with this statement? [12]

Topic 2.2 Disease Dilemmas

2 (a) Explain **two** ways that rainfall can influence the outbreak of disease. [4]

(b) Suggest why there are conservation issues relating to the international trade in medicinal plants. [6]

(c) Study **Fig. 2**, a scattergraph showing the relationship between GDP per capita and the percentage of adults (aged 15–49) living with HIV in 2016.

(i) Using evidence from the scattergraph **Fig. 2** describe the relationship between GDP per capita and the percentage of adults (aged 15–49) living with HIV. [4]

(ii) Using evidence from **Fig. 2**, analyse reasons for differences in HIV rates between countries. [6]

(d) 'Mitigating against non-communicable diseases by government and international agencies is most effective through direct strategies rather than indirect strategies.' How far do you agree with this statement? [12]

Topic 2.3 Exploring Oceans

3 (a) Explain how nuclear waste and plastics **each** pollute the ocean system. [4]

(b) Suggest how climate change alters sea levels. [6]

(c) Study **Fig. 3**, a scattergraph showing the relationship between the amount of crude oil transported globally by sea and the number of oil spills of greater than 7 tonnes and less than 700 tonnes from 2008 to 2015.

(i) Using evidence from the scattergraph **Fig. 3** describe the relationship between the amount of crude oil transported and the number of oil spills. [4]

(ii) Using evidence from **Fig. 3**, analyse reasons for differences in the number of oil spills over the years identified on the scattergraph. [6]

(d) 'Biological resources within oceans can be used in sustainable ways.' How far do you agree with this statement? [12]

Topic 2.4 Future of Food

4 (a) Explain food security using **two** of the World Food Programme's three pillars. [4]

(b) Suggest how extreme weather events can affect food production. [6]

(c) Study **Fig. 4**, a scattergraph showing the relationship between GDP per capita and calorie supply per capita in 2011.

(i) Using evidence from the scattergraph **Fig. 4** describe the relationship between GDP per capita and calorie supply per capita. [4]

(ii) Using evidence from **Fig. 4**, analyse reasons for differences in calorie supply per capita. [6]

(d) 'Long term strategies to ensure food security are the most effective.' How far do you agree with this statement? [12]

Topic 2.5 Hazardous Earth

5 (a) Explain **two** scales used to assess earthquake magnitude. [4]

(b) Explain how movements of the Earth's crust form rift valleys. [6]

(c) Study **Fig. 5**, a scattergraph showing the relationship between the magnitude of an earthquake and the number of deaths caused by that earthquake.

(i) Using evidence from the scattergraph **Fig. 5** describe the relationship between earthquake magnitude (Richter scale) and the number of earthquake deaths. [4]

(ii) Using evidence from **Fig. 5**, analyse reasons for differences in earthquake deaths. [6]

(d) 'Environmental impacts of volcanic activity are the most damaging.' How far do you agree with this statement? [12]

SECTION B – Synoptic questions

Choose **one** topic and answer **all** parts of the question in the topic. You must use your knowledge and understanding from across the course of study to answer these questions.

Topic 2.1 Climate Change

6 (a) With reference to **Fig. 6** suggest how climate change affects social inequality. [8]

(b) Examine how climate change affects landforms in landscape systems. [8]

Topic 2.2 Disease Dilemmas

7 (a) With reference to **Fig. 7** suggest how the spread of infectious diseases is linked to social inequality. [8]

(b) Examine how non-communicable diseases are affected by the processes of economic change. [8]

Topic 2.3 Exploring Oceans

8 (a) With reference to **Fig. 8** suggest how the use of ocean energy affects sense of place. [8]

(b) Examine how a change in sea level affects place-making processes. [8]

Topic 2.4 Future of Food

9 (a) With reference to **Fig. 9** suggest how the globalisation of the food industry is linked to economic change. [8]

(b) Examine how food security can reduce economic inequality in a country. [8]

Topic 2.5 Hazardous Earth

10 (a) With reference to **Fig. 10** suggest how risk of mortality from seismic activity is affected by global patterns of social inequality. [8]

(b) Examine how volcanic activity contributes to changes in landscape systems. [8]

SECTION C

Choose **one** topic and answer **one** question in the topic.

Topic 2.1 Climate Change

11* To what extent have human activities influenced the balance between incoming and outgoing energy through the atmosphere? **[20]**

Or

12* 'International organisations have been more successful in shaping the climate change debate than other interest groups.' How far do you agree with this statement? **[20]**

Topic 2.2 Disease Dilemmas

13* Examine the extent to which communicable diseases are more prevalent in Low-Income Developing Countries (LIDCs) than in Advanced Countries (ACs). **[20]**

Or

14* Assess the effectiveness of strategies used to minimise impacts of a named disease in a country that has experienced a natural hazard. **[20]**

Topic 2.3 Exploring Oceans

15* Examine the extent to which an oil spill can pose a threat for the physical environment and marine ecosystems. **[20]**

Or

16* Examine the extent to which light and temperature explain ocean biodiversity. **[20]**

Topic 2.4 Future of Food

17* Examine the view that land ownership is the most important factor influencing food security. **[20]**

Or

18* Assess the extent to which the theories of Malthus and Boserup are relevant to food security today. **[20]**

Topic 2.5 Hazardous Earth

19* To what extent do other physical factors contribute to hazards caused by volcanic eruptions? **[20]**

Or

20* To what extent do other physical factors contribute to hazards caused by earthquakes? **[20]**

END OF QUESTION PAPER



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