

# AS Level Geography

H081/02 Geographical debates

# Thursday 24 May 2018 – Morning 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.
- Do **not** write in the barcodes.

### 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

2

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

#### Topic 2.1 Climate Change

- 1 (a) Explain two methods used to reconstruct past climates.
  - (b) Suggest how changes in atmospheric factors influence the global mean energy balance.
  - (c) Study Fig. 1, which shows carbon dioxide emissions in 2013 (metric tons per capita) for a number of countries, and one stage of the standard deviation calculation.
    - (i) Using the data from **Fig. 1** and the formula provided, calculate the standard deviation value. You must show your working. Give your answer correct to 1 decimal place.

[4]

[4]

[6]

(ii) Using evidence from **Fig. 1**, analyse reasons for differences in carbon dioxide emissions between countries.

[6]

(d) 'The media is as influential in the climate change debate as scientific evidence.' How far do you agree with this statement?

[12]

#### **Topic 2.2 Disease Dilemmas**

2 (a) Explain two ways physical barriers negatively affect disease mitigation.

[4]

(b) Suggest how rising standards of living influence a country's epidemiological transition.

[6]

- (c) Study Fig. 2, which shows neonatal mortality rates per 1000 live births in 2013 for a number of countries, and one stage of the standard deviation calculation.
  - (i) Using the data from **Fig. 2** and the formula provided, calculate the standard deviation value. You must show your working. Give your answer correct to 1 decimal place.

[4]

(ii) Using evidence from Fig. 2, analyse reasons for differences in neonatal mortality rates between countries.

[6]

(d) 'Disease vectors are influenced more by physical factors than by human factors.' How far do you agree with this statement?

[12]

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#### Topic 2.3 Exploring Oceans

3

		[4]
(b)	Suggest how pollution can impact marine organisms.	[6]
(c)	Study <b>Fig. 3</b> , which shows the amount of cargo imported via oceans (in millions TEUs 2014 for a number of countries, and one stage of the standard deviation calculation.	s) in

(a) Explain two ways ocean ecosystems are influenced by changes in temperature.

(i) Using the data from **Fig. 3** and the formula provided, calculate the standard deviation value. You must show your working. Give your answer correct to 1 decimal place.

[4]

(ii) Using evidence from Fig. 3, analyse reasons for differences in the amount of cargo imported via oceans between countries.

[6]

(d) 'Treating the oceans as 'global commons' has been detrimental to them.' How far do you agree with this statement?

[12]

[4]

[6]

#### **Topic 2.4 Future of Food**

- **4** (a) Explain two ways globalisation of the food industry has created opportunities.
  - (b) Suggest why the pattern of food security within a country is dynamic.
  - (c) Study Fig. 4, which shows the Global Food Security Index score in 2016 for a number of countries, and one stage of the standard deviation calculation.
    - (i) Using the data from **Fig. 4** and the formula provided, calculate the standard deviation value. You must show your working. Give your answer correct to 1 decimal place.

[4]

(ii) Using evidence from Fig. 4, analyse reasons for differences in the Global Food Security Index score between countries.

[6]

(d) 'Food security is most likely to be affected by human factors.' How far do you agree with this statement?

[12]

#### **Topic 2.5 Hazardous Earth**

5 (a) Explain two pieces of evidence that support the theory of continental drift. [4]
(b) Suggest how volcanic hazards are affected by types of volcanic eruption. [6]
(c) Study Fig. 5, which shows the number of deaths from volcanoes in thousands from 1900 – 2014 for a number of countries, and one stage of the standard deviation calculation.
(i) Using the data from Fig. 5 and the formula provided, calculate the standard deviation value. You must show your working. Give your answer correct to 1 decimal place.

[4]

(ii) Using evidence from **Fig. 5**, analyse reasons for differences in the number of deaths from volcanoes between countries.

[6]

(d) 'Volcanic hazards are easier to manage than earthquake hazards.' 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	the impact o	of climate	change o	n landscape	systems
		might vary globally.						
								[8]

(b) Examine how climate change could influence the informal representation of place.

[8]

#### Topic 2.2 Disease Dilemmas

- 7 (a) With reference to Fig. 7, suggest how the healthcare mitigation strategies of organisations might impact social inequality in places.
  - (b) Examine how patterns of disease and landscape systems can both be influenced by climatic factors.

[8]

[8]

#### **Topic 2.3 Exploring Oceans**

- 8 (a) With reference to **Fig. 8**, suggest how oceans are used in determining place profiles.
  - (b) Examine how oceans and landscape systems can both be influenced by climate change.

[8]

[8]

#### **Topic 2.4 Future of Food**

9 (a) With reference to Fig. 9 suggest how food security might be affected by migration to cities. [8]
(b) Examine how food security can be negatively affected by landscape systems. [8]
Topic 2.5 Hazardous Earth
10 (a) With reference to Fig. 10, suggest how tectonically active areas are important in influencing the representation of place. [8]
(b) Examine how responses to tectonic hazards might be influenced by landscape systems. [8]

[8]

#### Section C

6

Choose one topic and answer one question in the topic.

#### **Topic 2.1 Climate Change**

11\* 'There is strong evidence that the world has warmed since the late-nineteenth century'. To what extent is this true?
[20]

#### Or

**12\*** Discuss the view that the most effective responses to climate change require more than international directives.

[20]

[20]

[20]

#### Topic 2.2 Disease Dilemmas

13\* Evaluate the success of mitigation and response strategies for a named noncommunicable disease.[20]

#### Or

**14**\* Discuss the view that global mobility makes it more difficult to respond to disease diffusion.

#### **Topic 2.3 Exploring Oceans**

15\* To what extent could impacts of climate change on high latitude oceans provide opportunities as well as threats?
[20]

#### Or

**16\*** Assess the extent to which oceans have become locations of conflict.

#### Topic 2.4 Future of Food

17\* To what extent are shocks to the food system the result of natural rather than human factors? [20]

#### Or

**18**<sup>\*</sup> 'International co-operation is essential to guarantee future food security for all nations'. Discuss. **[20]** 

## **Topic 2.5 Hazardous Earth**

**19\*** To what extent are impacts of tectonic activity related to a country's level of development? [20]

Or

20\* Assess the extent to which people's ability to cope with tectonic hazards has changed over time. [20]

#### END OF QUESTION PAPER



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