

## Geography

### Higher level

### Paper 2

Wednesday 20 May 2015 (morning)

2 hours

#### Instructions to candidates

- Do not open this examination paper until instructed to do so.
- Answer three questions. Each question is worth **[20 marks]**.
- Each question must be selected from a different optional theme, A – G.
- Do not answer two questions on the same optional theme.
- Use case studies, examples, maps and/or diagrams where relevant.
- A copy of the geography paper 2 resources booklet is required for this paper.
- The maximum mark for this examination paper is **[60 marks]**.

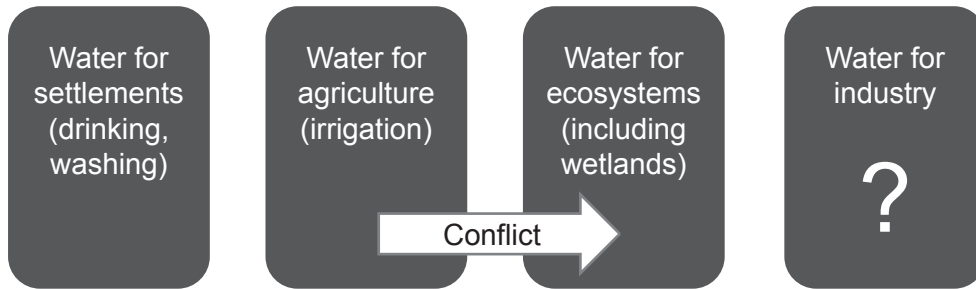
Option	Questions
Option A — Freshwater – issues and conflicts	1 – 2
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Answer **three** questions. Each question must be selected from a different optional theme.  
(Do not answer two questions on the same optional theme.)

Wherever possible, answers should include case studies and examples, and where relevant, large, well drawn maps and diagrams.

**Option A — Freshwater – issues and conflicts**

1. The diagram shows competing water demands and water conflict in a river basin.



[Source: © International Baccalaureate Organization 2015]

- (a) State **two** possible uses of water for industry. [2]
  - (b) Outline **two** possible reasons for the conflict shown. [2+2]
  - (c) Explain how a drainage basin functions as an open system. [4]
  - (d) Compare the importance of river erosion and deposition in the development of floodplain landforms. [10]
- 2.
- (a) (i) Define the term *stream discharge*. [1]
  - (ii) State **two** river transport processes **and** outline how each process operates. [2+2]
  - (b) Explain how hydrographs can be used to forecast **and** manage flooding. [5]
  - (c) Examine the possible impacts of the mismanagement of groundwater resources. [10]

**End of Option A**

**Option B — Oceans and their coastal margins**

3. (a) Outline the global distribution of oceans. [4]
- (b) Explain **two** ways in which wind action helps different coastal landforms to develop. [3+3]
- (c) “Geopolitical conflicts over oceans, including their resources, will only get worse in the future.” Discuss this statement. [10]
4. If you choose to answer this question refer to the photograph on page 2 in the resources booklet.
- The photograph shows an actively eroding cliff.
- (a) State **two** subaerial processes that may affect the cliff in the photograph **and** briefly outline how each process operates. [2+2]
- (b) Explain **two** conflicts that could arise from attempts to manage cliff failure. [3+3]
- (c) Examine the contribution that conservation can make to protecting oceanic fish stocks. [10]

**End of Option B**

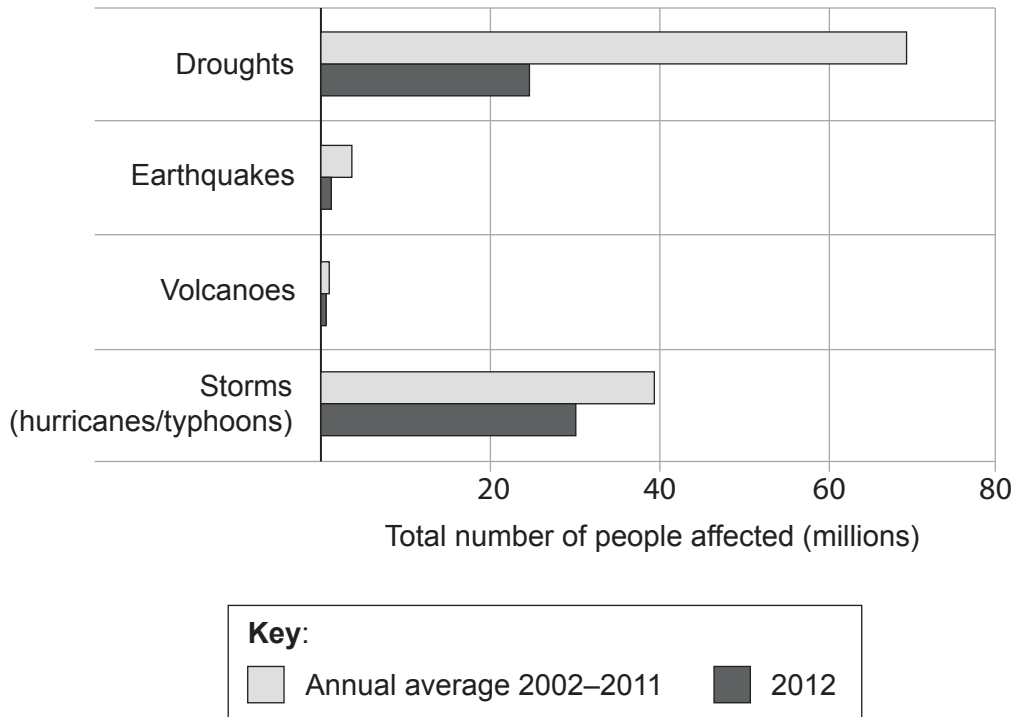
**Option C — Extreme environments**

5. If you choose to answer this question refer to the photograph on page 3 in the resources booklet.
- The photograph shows a feature formed by erosion in the Atacama Desert in Chile.
- (a) (i) Outline the main erosional process that accounts for the feature shown in the photograph. [2]
- (ii) Identify **and** explain the formation of **one** water-formed feature commonly found in a hot, arid environment. [4]
- (b) Explain how **two** factors (other than heat) restrict human settlement in hot, arid environments. [2+2]
- (c) “Some human activities in extreme environments are more sustainable than others.” Discuss this statement, with reference to **one or more** types of extreme environment. [10]
6. (a) (i) State **and** locate **one** example of mineral extraction in an extreme environment. [2]
- (ii) Outline **one** economic reason why the mineral identified in (a)(i) is extracted in this extreme environment. [2]
- (b) Explain **two** physical challenges for resource development posed by extreme environments. [3+3]
- (c) Examine why desertification has become a problem in some parts of the world. [10]

**End of Option C**

**Option D — Hazards and disasters – risk assessment and response**

7. The diagram shows the total number of people affected by different types of hazard event between 2002 and 2012.



[Source: © International Baccalaureate Organization 2015]

- (a) Identify which hazard:
  - (i) affected the least number of people in 2012; [1]
  - (ii) affected the greatest number of people between 2002 and 2012. [1]
- (b) Suggest **two** reasons why the number of people affected by storms in 2012 is lower than in previous years. [2+2]
- (c) Explain what is meant by the:
  - (i) rehabilitation response to a hazard event; [2]
  - (ii) reconstruction response to a hazard event. [2]
- (d) Examine why some areas of the world have a high hazard risk for **either** earthquakes **or** volcanoes. [10]

(Option D continues on the following page)

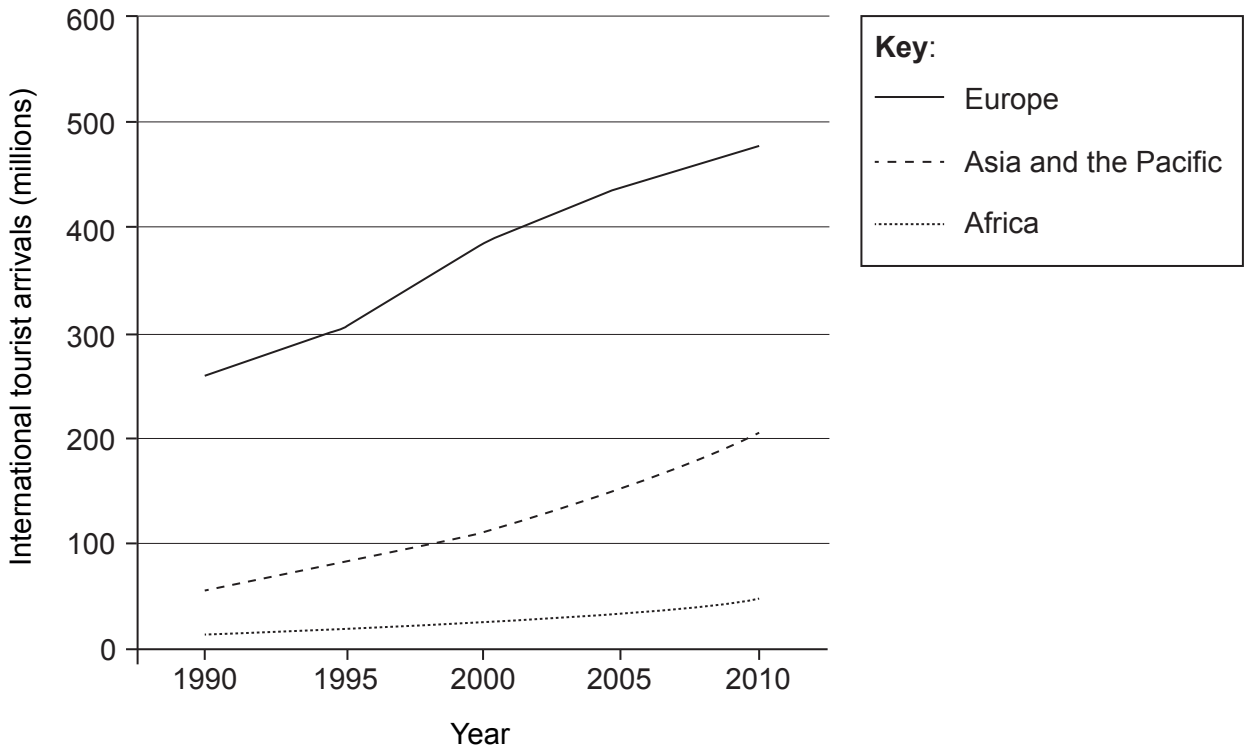
**(Option D continued)**

8. (a) (i) Define the term *disaster*. [1]
- (ii) Outline **two** long-term actions a community can take to reduce the economic impact of hurricanes. [2+2]
- (b) Explain the causes of **one named** human-induced hazard event. [5]
- (c) Examine the reasons why people continue to live in areas that have been affected by severe drought hazard events. [10]

**End of Option D**

**Option E — Leisure, sport and tourism**

9. The graph shows international tourist arrivals for three regions between 1990 and 2010.



[Source: © International Baccalaureate Organization 2015]

- (a) Describe the trends shown on the graph. [4]
- (b) Explain **three** reasons for the changes in international tourist arrivals shown on the graph. [2+2+2]
- (c) Examine the extent to which sustainable tourism might be successfully implemented in different environments. [10]

(Option E continues on the following page)

**(Option E continued)**

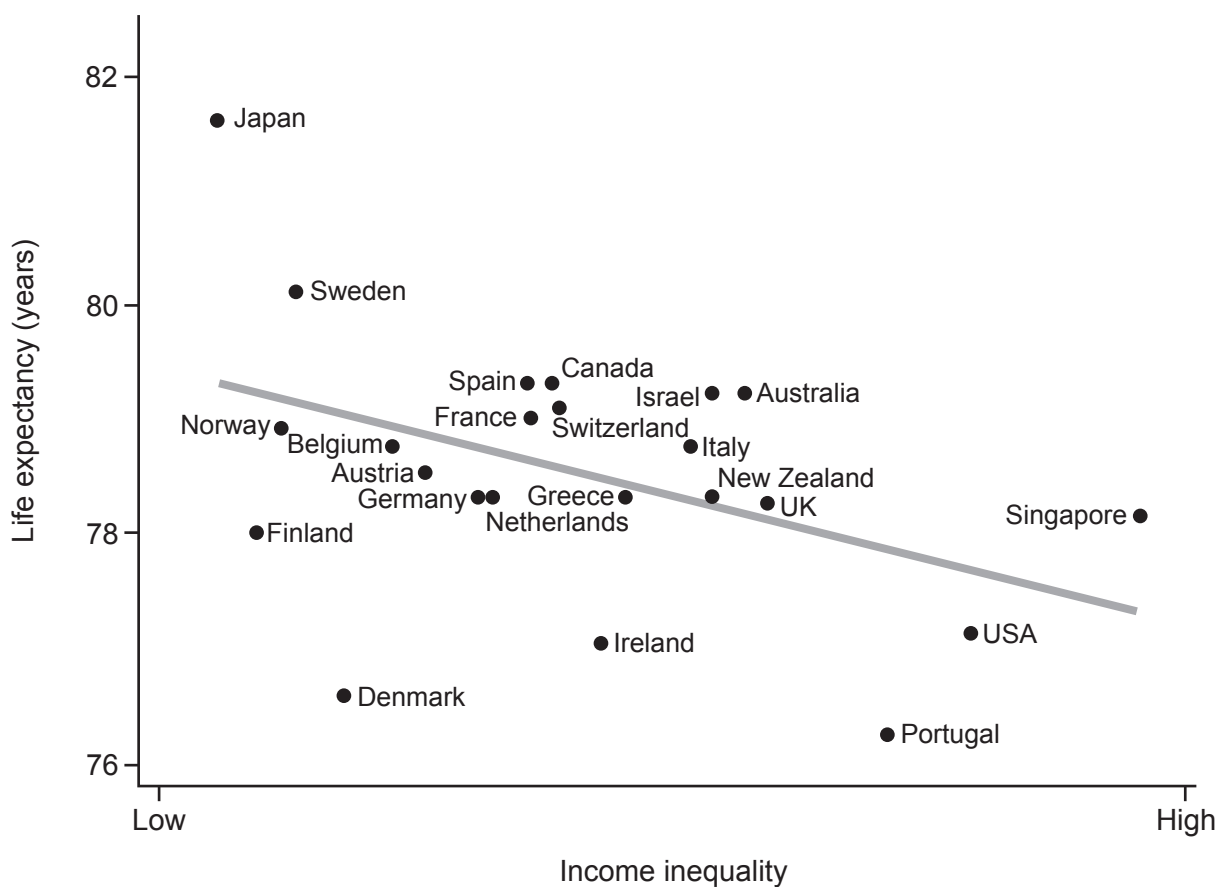
10. (a) Briefly describe what is meant by:
- (i) heritage tourism; [2]
  - (ii) ecotourism. [2]
- (b) Explain **three** political factors that affect participation and success in international sport. [2+2+2]
- (c) “The benefits of hosting an international sporting event always outweigh the costs.” Discuss this statement, using appropriate examples. [10]

**End of Option E**



**Option F — The geography of food and health**

11. The graph shows the life expectancy (in years) and income inequality (from low to high) for high-income countries.



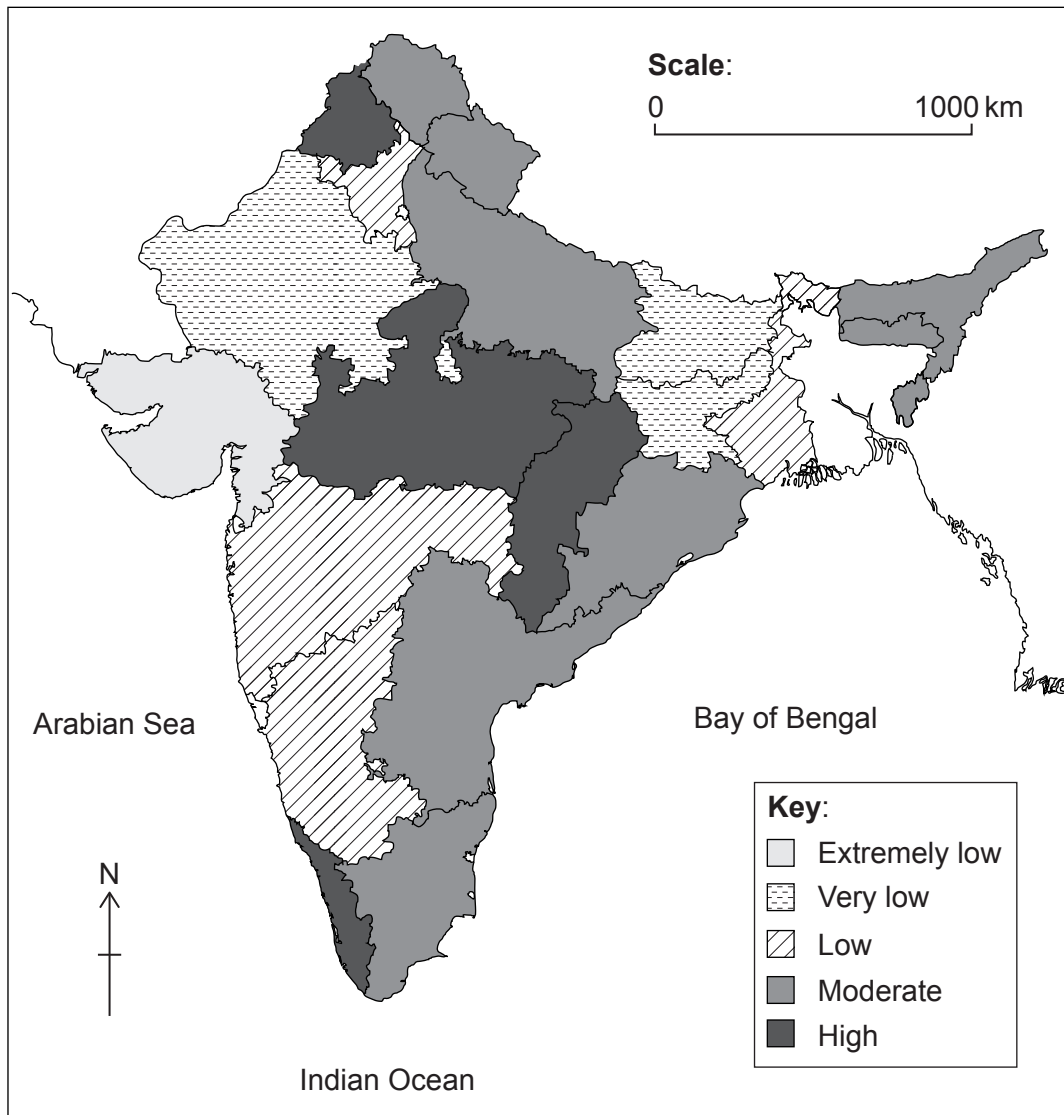
[Source: R Wilkinson and K Pickett, *The Spirit Level: why equality is better for everyone*, reproduced in *The New Internationalist*, (Nov 2012), <http://newint.org/>]

- (a) Describe the relationship between life expectancy and income inequality shown on the graph. [3]
- (b) Suggest **one** possible reason for the relationship you have described in (a). [3]
- (c) Using **one** example, explain how agricultural subsidies can affect food production. [4]
- (d) Examine the relative importance of the human **and** physical factors that led to a recent **named** famine. [10]

**(Option F continues on the following page)**

(Option F continued)

12. The map shows food availability in rural areas of India.



[Source: *Food Insecurity Atlas of Rural India*, M S Swaminathan Research Foundation / World Food Programme (2001)]

- (a) Describe the pattern of food availability in rural areas of India shown on the map. [4]
- (b) Distinguish between food availability and food security. [6]
- (c) Examine how the impacts of diseases are affected by diffusion **and** barriers. [10]

**End of Option F**

**Option G — Urban environments**

**13.** If you choose to answer this question refer to the map on page 4 in the resources booklet.

The map shows Nazareth, an urban area in Pennsylvania, USA. The scale of the map is 1:24 000.

- (a) (i) Identify the economic activities located at 760122 **and** 736133. [1+1]
- (ii) State **two** reasons for the location of the sports stadium (Nazareth Speedway) in 7211. [1+1]
- (b) Referring to map evidence, explain **three** likely types of urban stress in Nazareth. [2+2+2]
- (c) Using **one or more** examples, examine the social **and** economic impacts of in-migration on cities. [10]

**14.** (a) With reference to urban environments, describe:

- (i) **one** type of centrifugal movement; [2]
- (ii) **one** type of centripetal movement. [2]
- (b) Explain **two** features of the internal structure of the central business district (CBD). [3+3]
- (c) Evaluate the success of **two** different urban management strategies. [10]

**End of Option G**

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