



GEOGRAPHY HIGHER LEVEL PAPER 2

Monday 19 May 2014 (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].

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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. If you choose to answer this question refer to the satellite image on page 2 in the Resources Booklet.

The satellite image shows the area around the Australian city of Rockhampton flooded by the Fitzroy River in 2011.

- (a) Briefly describe **four** possible impacts of the flood on different types of traffic movement in the area shown on the satellite image. [4]
- (b) Explain **two** ways in which agriculture and/or irrigation on flood plains can affect water quality. [3+3]
- (c) Examine the factors that affect the response of a stream hydrograph to a rainfall event. [10]
- **2.** (a) Define the terms *drainage divide* **and** *wetlands*. [2+2]
 - (b) Explain how stream discharge is related to channel size **and** shape. [6]
 - (c) Using examples, examine the hydrological impacts that can result from the construction of a dam and reservoir across a river channel. [10]

Option B — Oceans and their coastal margins

3.	(a)	(i)	Define the term <i>littoral drift</i> (longshore drift).	[2]		
		(ii)	Briefly describe one named feature caused by littoral drift.	[2]		
	(b)	-	Explain the formation of two ocean floor landforms associated with volcanic or tectonic activity.			
	(c)	"The	e loss of coral reefs is not just a local concern." Discuss this statement.	[10]		
4.	If yo	If you choose to answer this question refer to the photographs on page 3 in the Resources Bookle				
	The photographs A and B show two coastal areas.					
	(a)	(i)	State which of these photographs shows an advancing coast.	[1]		
		(ii)	Identify one landform in the photograph you have chosen that shows it is an advancing coast.	[1]		
		(iii)	Define the term advancing coast.	[2]		
	(b)	Distinguish between the climatic conditions experienced on the east coast and the west coast of the Pacific Ocean during an El Niño event.		[6]		
	(c) Using examples, examine the geographic consequences of the pollution of oceans.			[10]		

Option C — **Extreme environments**

5. If you choose to answer this question refer to the map and key on pages 4 and 5 in the Resources Booklet.

The map extract shows a glaciated area of South Island, New Zealand. The scale of the map is 1:250 000. The contour interval is 100 m.

- (a) (i) Identify **and** describe a landform of glacial erosion in area A on the map. [2]
 - (ii) Identify **and** describe a landform of glacial erosion in area B on the map. [2]
- (b) Using map evidence, suggest **two** reasons why the area shown on the map has a low population density. [3+3]
- (c) "Mineral resources in extreme environments rarely bring benefits to the local people." Discuss this statement. [10]
- **6.** *If you choose to answer this question refer to the map on page 6 in the Resources Booklet.*

The map of Australia shows regions that are at high risk of desertification.

- (a) (i) Define the term desertification. [1]
 - (ii) Describe the pattern of areas with a high risk of desertification shown on the map. [3]
- (b) Suggest **three** reasons why some rainstorms in hot, arid environments result in flash floods. [2+2+2]
- (c) Examine how human activity may be affected by global climate change in **one named** extreme environment. [10]

Option D — Hazards and disasters – risk assessment and response

7. If you choose to answer this question refer to the map on page 7 in the Resources Booklet.

The map shows the track of Hurricane Charley in August 2004 and changes in the intensity of the storm. Dates are also shown.

(a) Describe the changes shown from 12 August to 14 August in:

(i) storm intensity; [2]

(ii) storm direction. [2]

(b) Explain **two** factors that affect the formation and development of hurricanes. [3+3]

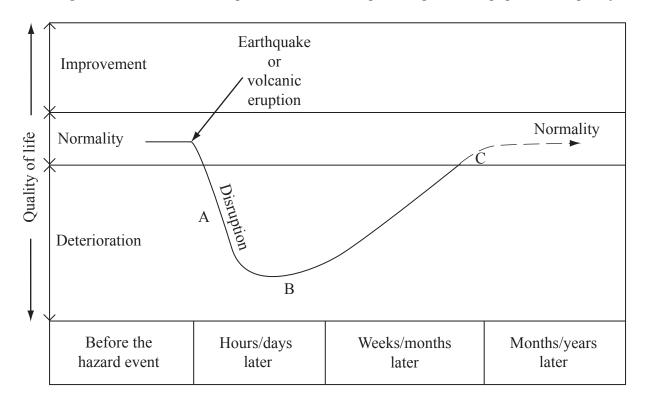
(c) Using examples, examine the demographic **and** socio-economic factors that affect the vulnerability of a community to hazard events. [10]

(Option D continues on the following page)

[6]

(Option D continued)

8. The diagram shows how an earthquake or volcanic eruption impacts on a population's quality of life.



[Source: adapted from V Bishop, (2001), Hazards and Responses, page 11]

(a) With reference to **either** earthquakes **or** volcanic eruptions, describe **two** ways in which people's quality of life deteriorates at point A on the diagram. [2+2]

(b) With reference to **either** an earthquake **or** a volcanic eruption, distinguish between the types of response to the hazard event that occur at point B and point C on the diagram.

(c) "Improved building design is the most effective way for people to reduce their vulnerability to hazards." Discuss this statement. [10]

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Option E — Leisure, sport and tourism

9.	(a)	(i) Define the term <i>environmental carrying capacity</i> .		[2]			
		(ii)	Define the term <i>perceptual carrying capacity</i> .	[2]			
	(b) Referring to specific activities, analyse why the leisure facilities in a central business district (CBD) differ from those in the rural–urban fringe.						
	ort and recreation are an effective means of regeneration for urban areas." euss this statement.	[10]					
10.	If you choose to answer this question refer to the map on page 8 in the Resources Booklet.						
	The map shows participating teams for one international sport.						
	(a)	Desc	cribe the distribution of the participating teams.	[4]			
	(b)		ng examples, suggest how social and cultural factors can affect people's cipation in international sports.	[6]			
	(c)	-	vsical factors influence the location of tourist activities more than an factors." Discuss this statement, with reference to examples.	[10]			

Option F — The geography of food and health

11. If you choose to answer this question refer to the map on page 8 in the Resources Booklet.

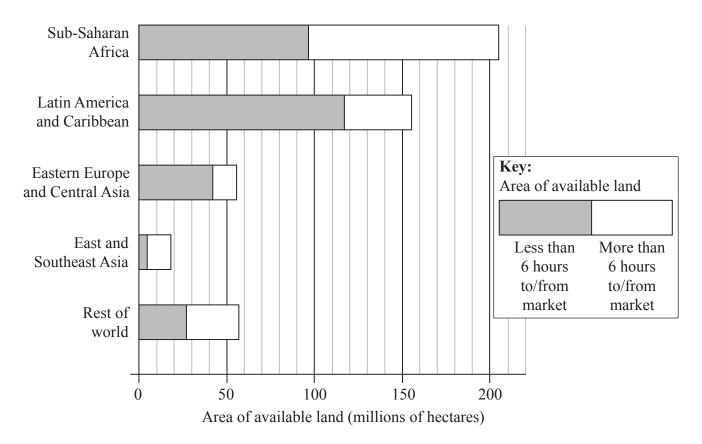
The map shows the spread of a disease between 2005 and 2009.

- (a) Referring to the map, describe the spread (diffusion) of this disease between 2005 and 2009. [4]
- (b) Suggest **three** possible reasons why the disease spread to some countries and not others. [2+2+2]
- (c) Referring to **named** areas, examine the reasons why their populations may experience food deficiency. [10]

(Option F continues on the following page)

(Option F continued)

12. The graph shows how much unused land is still available for farming in several major regions, and how accessible it is to local markets.



[Source: ©The Economist Newspaper Limited, London (February 26, 2011). Data sourced from the World Bank.]

(a) Referring to the graph, describe the global pattern of land available for farming. [4]

(b) Using examples, explain how trade barriers and/or trade agreements can affect the production of food. [6]

(c) Contrast the geographic impacts of **two named** diseases. [10]

Option G — Urban environments

13. The two maps show millionaire cities (cities with at least 1 million inhabitants) in 1950 and 2010.

Maps removed for copyright reasons

- (a) (i) Define the term *urbanization*. [1]
 - (ii) Describe the changes in the distribution of millionaire cities as shown on the maps. [3]
- (b) Explain **three** reasons for the movement of **named** economic activities within urban areas. [2+2+2]
- (c) Examine the reasons why it is difficult to manage urban areas sustainably. [10]

(Option G continues on the following page)

(Option G continued)

14. The map and graphs show employment characteristics for the populations of two contrasting areas of Dublin, Ireland. Area A is a new residential area on the edge of Dublin whereas Area B is an inner city location.

Map and graphs removed for copyright reasons

(a) (i) Identify **one** group of working people that have been classified as "not formally employed". [1]

Distinguish between the main employment characteristics for the two

- [3]
- areas shown.

Explain **two** population movements taking place **within** large cities.

- [3+3]
- (c) "Most large cities suffer from a serious problem of urban poverty for which there is no solution." Discuss this statement.

[10]

(ii)

(b)