

## SECONDARY SCHOOL ANNUAL EXAMINATIONS 2010

Directorate for Quality and Standards in Education  
Educational Assessment Unit

**FORM 4                      GEOGRAPHY (OPTION)                      TIME: 1h 30 min**

**For Examiner's use only.**

Question No.	1	2	3	4	5	6	7	8	9	Written Exam	Fieldwork Report	Total
Maximum Mark	12	12	8	10	10	10	10	10	8	90	10	100
Score												

The total mark for this paper is 90. Answer all questions in the space provided. Write your answers neatly and in good English.

Name: \_\_\_\_\_ Class: \_\_\_\_\_

### Question 1

Read the following paragraph on hurricanes.

In the eastern Pacific, hurricanes begin forming by mid-May, while in the Atlantic, Caribbean, and Gulf of Mexico, hurricane development starts in June. For the United States, the peak hurricane threat exists from mid-August to late October although the official hurricane season begins June 1 and ends November 30. Over other parts of the world, such as the western Pacific, hurricanes can occur year-round. Developing hurricanes gather heat and energy through contact with warm ocean waters. The addition of moisture by evaporation from the sea surface powers them like giant heat engines.

Now work out the exercise by answering briefly or choosing the correct answer from the words given in *Italics*.

- Which of the following countries is affected by hurricanes? *USA; Italy; Canada*  
..... 2 marks
- When is a tropical storm classified as a hurricane? *The maximum winds are at 50km/hr; 30km/hr or 119km/hr.*  
..... 2 marks
- What happens to the hurricane as it comes into contact with the warm ocean waters?  
..... 2 marks

- d. How is the weather within the eye of the hurricane? *Period of Calm; Torrential Rain; Strong gusts of wind*  
 ..... 2 marks
- e. What is the geographical term for the high rise of water caused where the hurricane reaches the land? *Tide; Tsunami; Storm Surge*  
 ..... 2 marks
- f. What are the effects of hurricanes on urban areas?  
 ..... 2 marks

## Question 2

Examine carefully the given map extract on the following page to help you work out the exercise below.

- a. Give the six figure grid reference for :

Waterfall .....  
 Ox bow lake .....  
 Tributary of River Devon .....

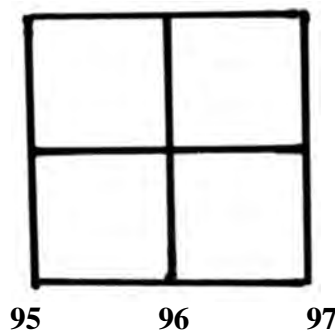
3 marks

- b. Tick those characteristics which describe the spring (burn) of the highland area and those which show the characteristics of the River Devon flowing across the flood plain.

Characteristics	Spring	River Devon
The valley is narrow.		
Follows a rather straight course.		
Meanders across the flood plain.		
Flows in an open valley floor.		
The oxbow lake indicates that deposition has occurred.		
The waterfall indicates erosion and fast movement of water.		

3 marks

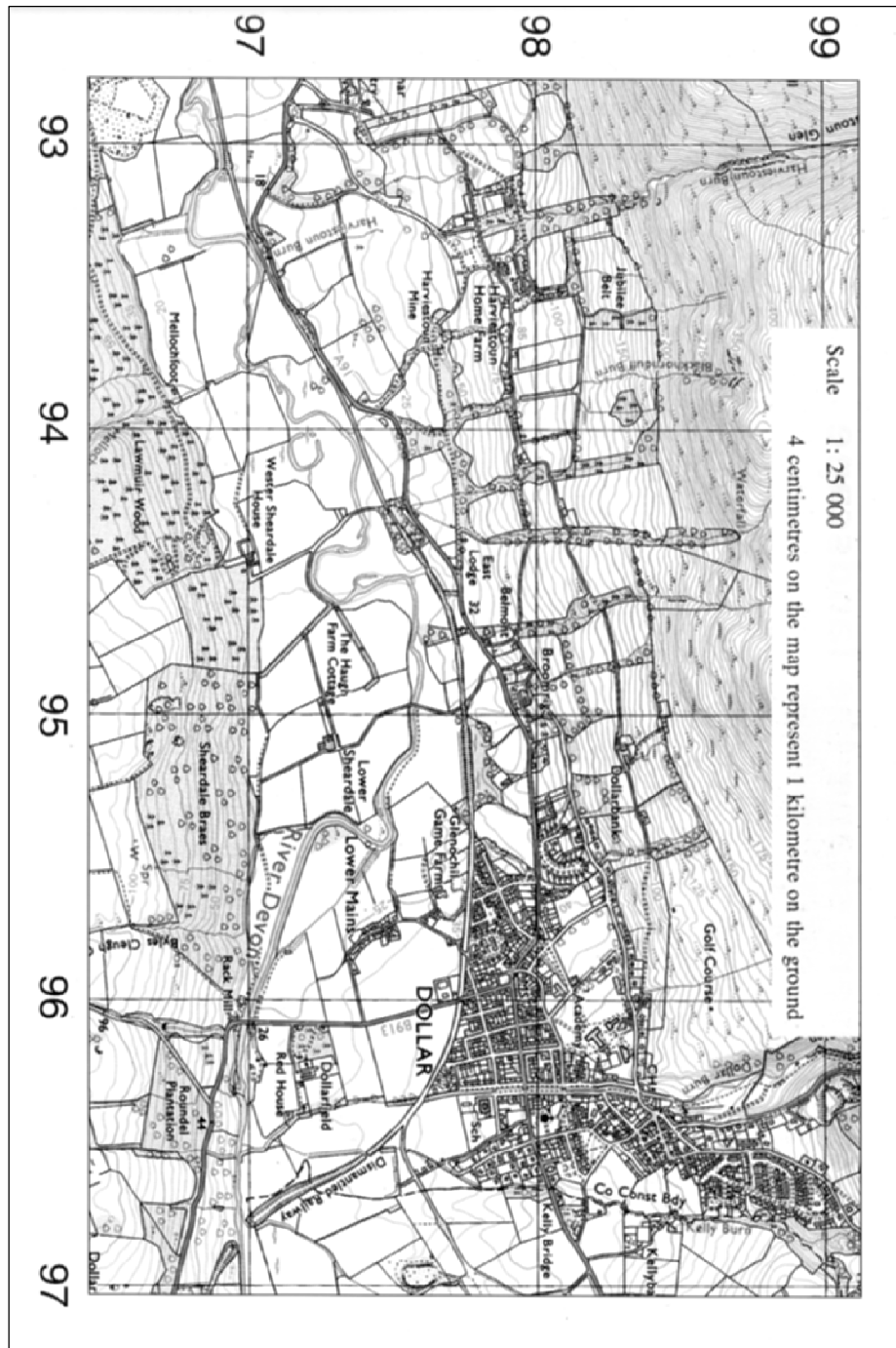
- c. In the given grid mark the northings of the grid boxes 9597; 9697; 9598; and 9698 to correspond with the given OS map. Then shade the area of the settlement Dollar to show its shape when the scale is 1:50000 or 2 cms on the map represent 1 km on the ground.



3 marks

..3 marks

## Northings



**Question 3**

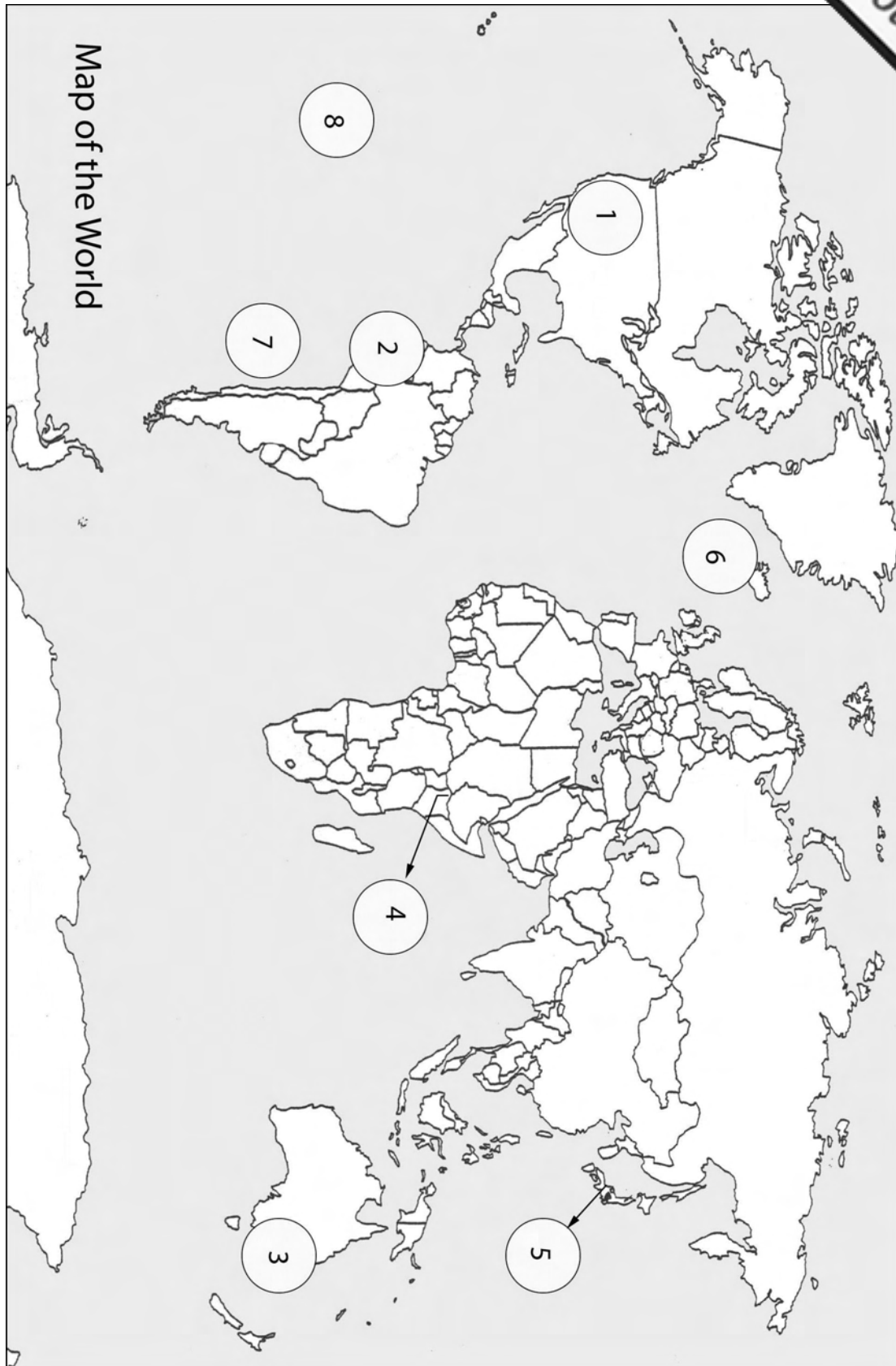
Examine the given map of the world and read the information that has been given about each location to help you.

Locations	Related information
1	They form the major mountain range in western North America. These mountains stretch more than 4,800 kilometres from the northernmost part of British Columbia, in Canada, to New Mexico, in the United States. The range's highest peak is Mount Elbert in Colorado at 4,401m above sea level.
2	These are the world's longest exposed mountain range. They lie as a continuous chain of highland along the western coast of South America. The range is over 7,000 km long, 200 km to 700 km wide and of an average height of about 4,000 m.
3	These mountains are part of the Great Dividing Range, the series of mountains and plateaus which run about 3,000 kilometres from northern Queensland to central Victoria.
4	This is a volcano in north-eastern Tanzania rising 4,600 m from its base and is additionally the highest peak in Africa at 5,892 metres, providing a dramatic view of the surrounding plains.
5	This is the highest mountain in Japan at 3,776 m. It is an active volcano and is located west of Tokyo, and can be seen on a clear day.
6	This is a volcanic island off the southern coast of Iceland. It was formed in a volcanic eruption which began 130 metres below sea level, and reached the surface on 14 November 1963. The eruption lasted until 5 June 1967, when the island reached its maximum size of 2.7 km <sup>2</sup> .
7	This plate is an oceanic tectonic plate in the eastern Pacific Ocean basin off the west coast of South America.
8	While most plates are comprised of both continental and oceanic crust this plate is almost entirely oceanic.

**Fill in the right names which correspond to the numbers from 1 to 8 on the map.**

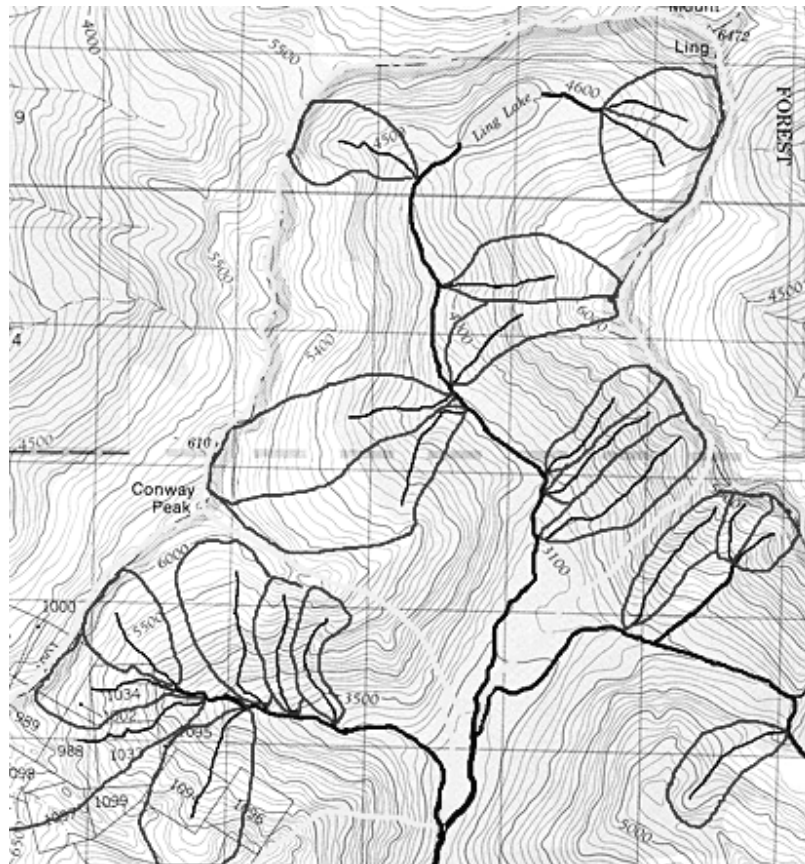
- Mountain chain 1 located in North America .....
- Mountain chain 2 located in South America .....
- Mountain chain 3 located in Australia .....
- Volcano 4 located in Tanzania .....
- Volcano 5 located in Japan .....
- Volcano 6 located off the coast of Iceland .....
- Plate 7 off the coast of South America .....
- Plate 8 is the ocean floor .....

8 marks





#### Question 4



- a. On the given map the watersheds for the drainage basins of the tributary streams have been drawn.  
Using a coloured pencil mark the watershed for the drainage basin of the river that is flowing out from the lake before it joins the other two main rivers. 2 marks
- b. On the given map mark the numbers 1 to 2 to indicate the following features of the drainage basin. 2 marks
1. Source
  2. Confluence
- c. Mark which are the inputs and outputs of a drainage system:

Factors	Inputs	Outputs
Evaporation		
Precipitation		
Snow melt		
Run-off		

d. How does the surface rock of the area affect the water level of a river?

.....

.....

6 marks

### Question 5

a. The following are names of plates: *Nazca; Pacific; Eurasian Plate; African Plate*

Give one example of an oceanic plate .....

Give one example of a continental plate .....

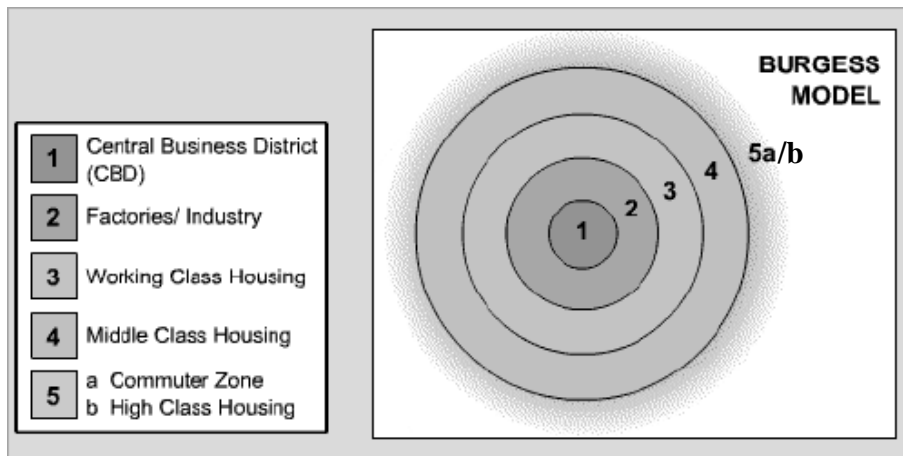
2 marks

**b. Re-write each given point under the right column in the table to show the differences between Oceanic and Continental Plates:**

<b>Thickness –</b> <ul style="list-style-type: none"> <li>• 6-11 km thick.</li> <li>• 30 to 40 km and with a maximum of 70 km.</li> </ul>	
<b>Age of rocks –</b> <ul style="list-style-type: none"> <li>• These rocks are older 3.8 billion years old.</li> <li>• The rocks are very young, not older than 200 million years.</li> </ul>	
<b>Weight –</b> <ul style="list-style-type: none"> <li>• lighter</li> <li>• heavier</li> </ul>	
<b>Effects caused by tectonic movement –</b> <ul style="list-style-type: none"> <li>• sinks through the subduction zone and is constantly being destroyed and replaced.</li> <li>• cannot sink and is permanent so will end up being folded and form mountain chains</li> </ul>	
Oceanic Plate	Continental Plate

8 marks

### Question 6



Refer to the diagram above and then work out the exercise below.

a. Give three characteristics of the Central Business District or CBD.

.....

.....

..... 3 marks

b. Give three main characteristics of zones 2 and 3 which form the Inner City area.

.....

..... 3 marks

c. In which zone would you find the most modern buildings?

..... 2 marks

d. Explain why a good number of people would like to live in Zone 5.

.....

..... 2 marks



### Question 7

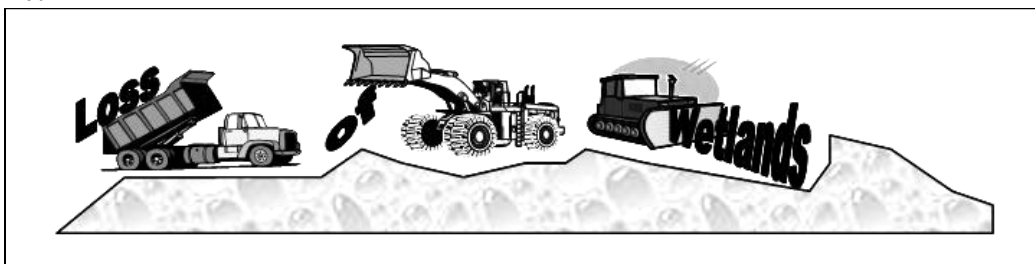
***"We know that adults should have about 2,000 calories a day to survive healthily," says Oxfam co-ordinator. "If you cut back to 1,000 they will get sick. Children are especially vulnerable to malnutrition. Hunger means more illness, more medical care, more time to recover, more deaths. It's a cruel circle of misery."***

**Read the above and then continue the sentences below:**

- a. Malnutrition is a medical condition caused by .....  
..... 2 marks
- b. In children malnutrition can .....  
..... 2 marks
- c. Subsistence agriculture is when farmers grow only enough .....  
..... 2 marks
- d. Indian subsistence farmers have to use manual labour to .....  
..... 2 marks
- e. One recent change made by the Indian authorities to help raise the standard of living of the subsistence farmers is .....  
..... 2 marks

### Question 8

**Farming can cause negative effects on the environment. Explain why for each given point?**



Farming	Harms the environment
The draining of wetlands	

Removal of hedgerows and rubble walls	
The use of chemicals	
Over cultivation	
Deforestation to increase farmland	

10 marks

**Question 9**

Explain why some of the Chinese people have been protesting against the building of the **Three Gorges Dam**. You can refer to **any four** of the following points:

*Animals; Silt; People; Farmland; Earthquakes; Local attractions.*

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8 marks

*End of Paper*