

**FORM 3** **GEOGRAPHY (Option)** **TIME: 1h 30min**

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

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

**Instructions to Candidates**

Answer all questions in the space provided. Write your answers neatly and in good English. Credit will be given for relevant illustrations. The marks for individual questions are shown in round brackets: e.g. (4). There are 9 questions in all. The total mark for this paper is 90.

**Examiner's use only**

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

1. Study carefully the topographical map, Map 1 on page 2.

a. In which grid squares are the islands of St Paul found?

\_\_\_\_\_

(2)

b. What would you actually find at each of these map references?

**458788**

\_\_\_\_\_

**485757**

\_\_\_\_\_

(2)

c. Draw and place the following features on the map itself, using the exact location provided and the appropriate map symbol.

Information centre	479796
Quarry	465765

(4)



d. Use the linear scale to measure the straight line distance from **Qawra Tower** to **Mignéna**.

e. Shade with a dark pencil colour two areas higher than the **350 contour line**.

(2)

f. Why do you think that the South Western area of the map is unsuitable for settlement?

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(1)

2. Study the **map of Africa** (Map 2 on page 4) and then answer the following questions.

a. Name the lines of latitude marked by the letters **A**, **B** and **C**.

	Line of Latitude
<b>A</b>	
<b>B</b>	
<b>C</b>	

(3)

b. Name the ocean marked by the letter **D**.

	Ocean
<b>D</b>	

(1)

c. Name the major seas marked by the letters **E** and **F**.

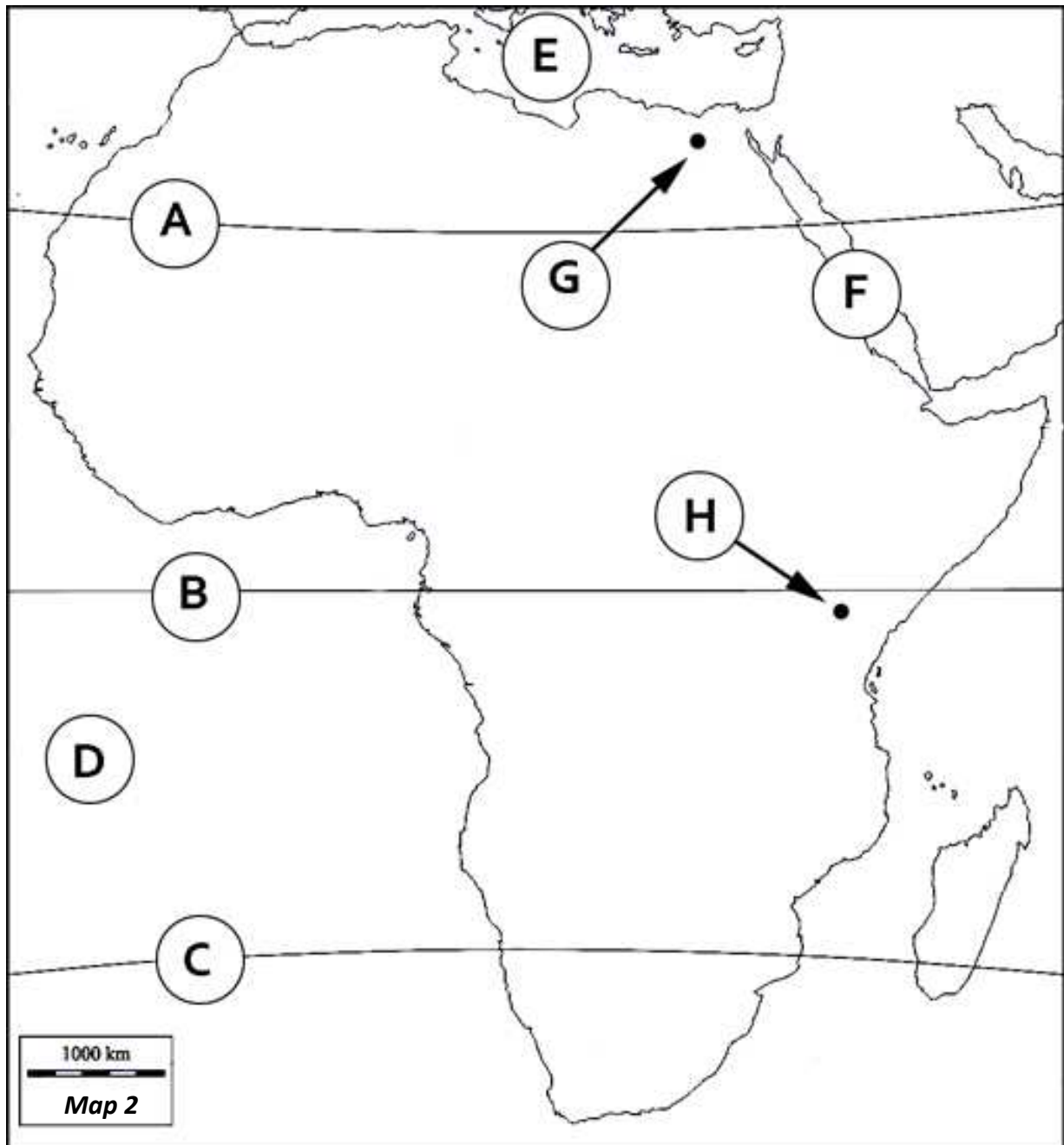
	Seas
<b>E</b>	
<b>F</b>	

(2)

- d. Name the capital cities marked by a dot and lettered **G** and **H**.

	Capital Cities
<b>G</b>	
<b>H</b>	

(2)





3. a. Name the weather instrument used to measure **atmospheric pressure**.

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(1)

- b. What do we call the box seen in the picture below?



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(2)

- c. Name one weather instrument that is placed in this box in order to give accurate reading of the weather condition.

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(1)

- d. Give **four** main characteristics of the box seen in the picture.

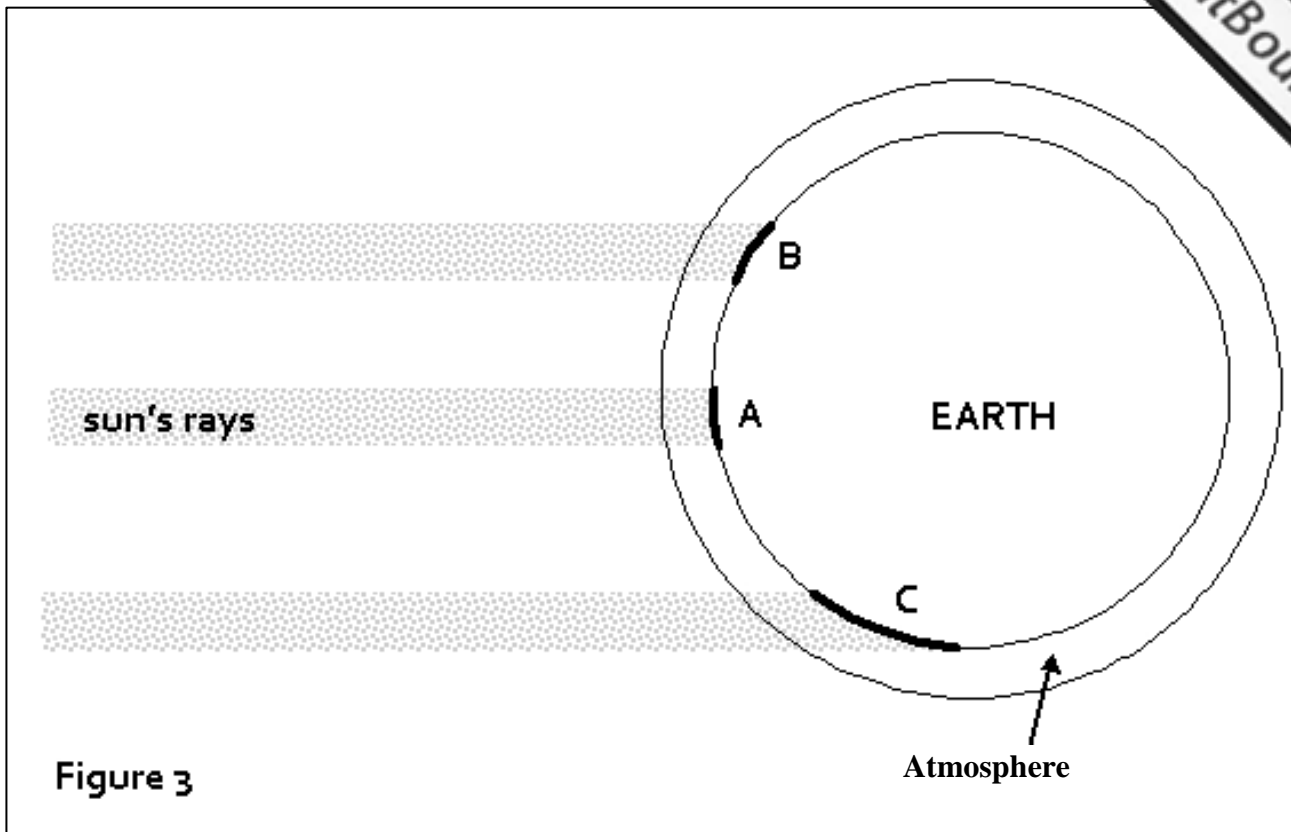
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(4)

- e. Look carefully at the diagram (Figure 3 on page 6) showing the sun's rays reaching the earth. Explain why place A is hotter than places B and C.

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(4)



4. a. What are **igneous rocks**? Name an example.

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(3)

b. Explain how *metamorphic rocks* are different from *sedimentary rocks*.

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(4)

- c. Briefly explain the meaning of the following terms:

**Bedding plane:**

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**Joint:**

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**Impermeable Rock:**

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(3)

5. a. What type of weathering is represented in the photograph below?

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(1)

b. Describe how the rocks in the photograph on page 7 are being broken down by

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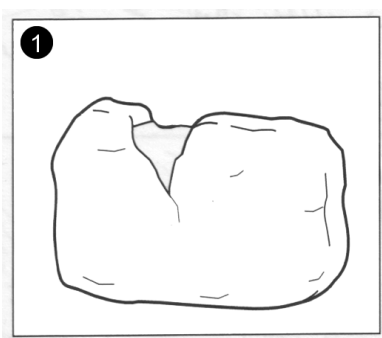
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(2)

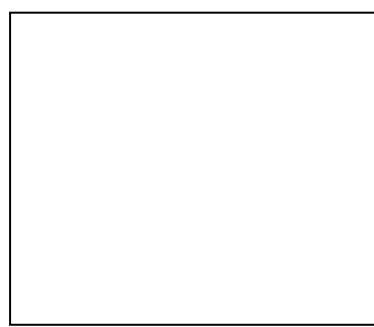
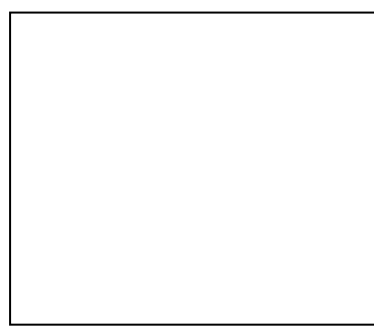
c. The diagram below shows the initial stage in the breaking down of rocks through **freeze-thaw weathering**.



i. In the space provided draw two other diagrams to show how freeze-thaw weathering will finally break up rocks. Label each diagram.

(4)

ii. Write a brief description to show what is happening.



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(3)



6. a. Define the terms:

i. **Birth rate:** .....

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ii. **Death rate:** .....

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iii. **Natural Population Increase:** .....

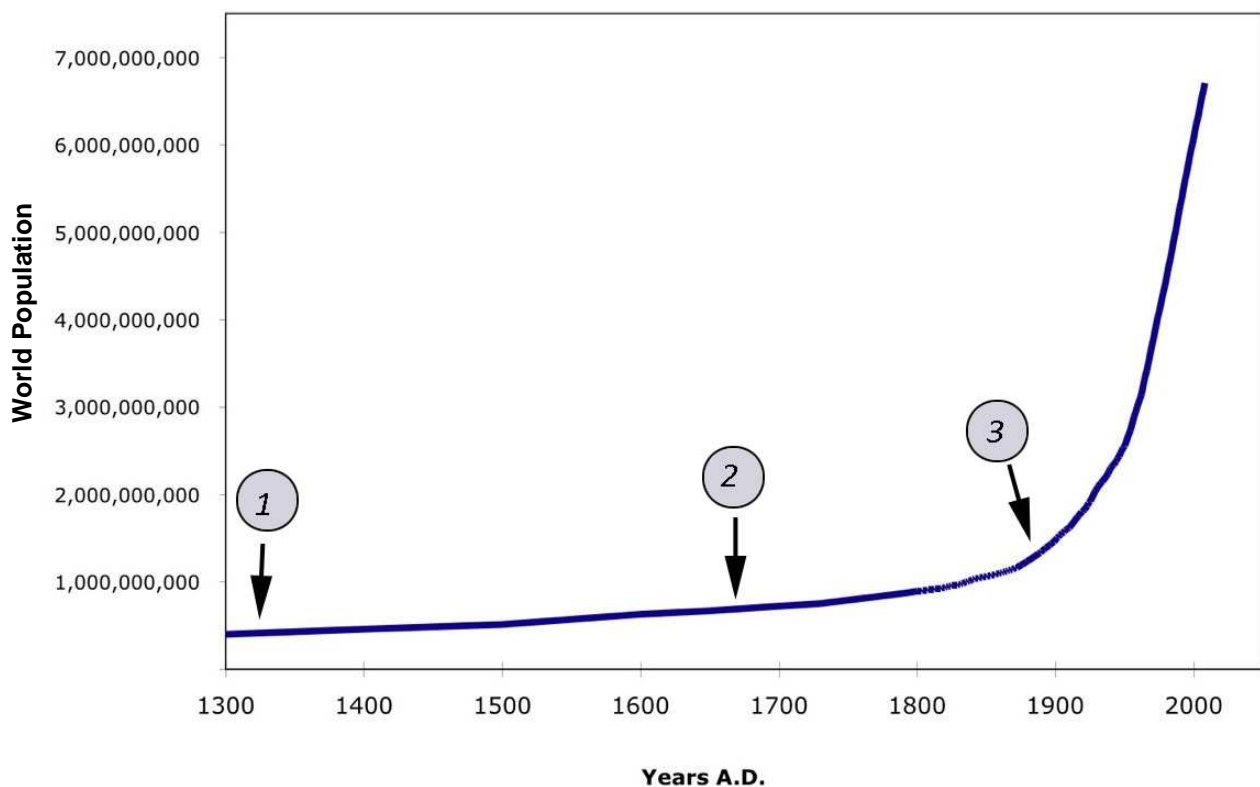
(6)

b. Apart from birth rates and death rates, what other aspects of population might affect population change in a country?

..... (1)

c. Study the graph showing **world population growth**.

**World Population Growth**



Describe the population growth at the points marked by the numbers 1, 2 and 3 on the graph above.

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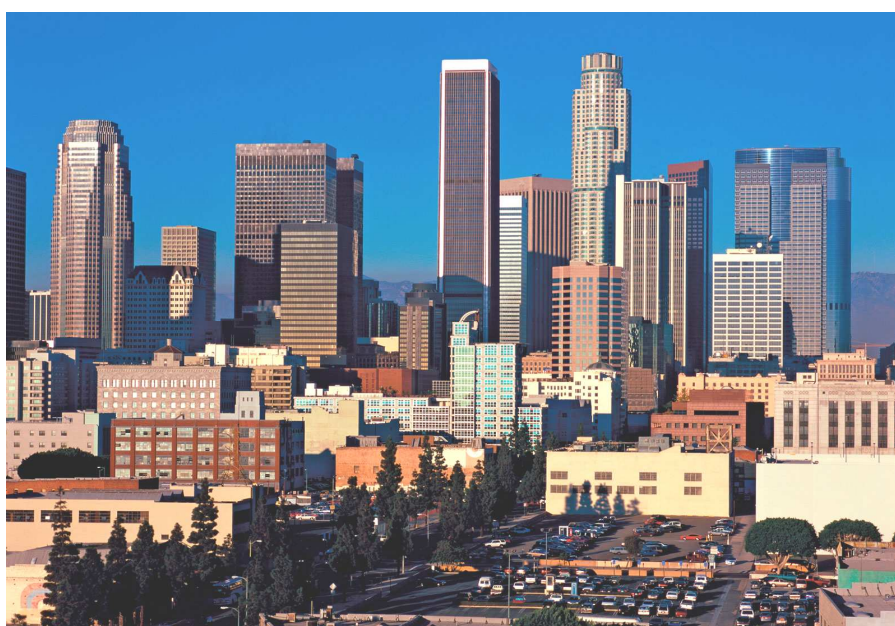
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(3)

7. Study the photographs shown below.



Wooden shacks in Mexico City



The Central Business District of Los Angeles (California)

- a. State and explain possible push and pull factors that might encourage the people to leave the wooden shacks in Mexico City to migrate to Los Angeles.

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(5)

- b. Describe the advantages and disadvantages of illegal Mexican emigration to the USA.

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(5)

8. Read carefully the following newspaper article about acid rain in China.

### **Third of China 'hit by acid rain'**

**One third of China is suffering from acid rain caused by rapid industrial growth, an official report quoted by the state media says.**

Pollution levels have risen and air quality has deteriorated, the report found. This comes despite a pledge by the authorities to clean up the air. China has some of the world's most polluted cities and rivers. A report published recently stated that more than 25.5 million tonnes of sulphur dioxide were spewed out, mainly from the country's coal-burning factories last year - up 27% from 2000. Emissions of sulphur dioxide - the chemical that causes acid rain - were double the safe level, the report said. In some areas, rainfall was 100% acid rain, it added.

Increased sulphur dioxide emissions meant that one-third of China's territory was affected by acid rain, posing a major threat to soil and food safety.

- a. According to the report, what chemical is causing acid rain in most Chinese cities?

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- b. What is the main source of this chemical in China?

.....(1)

- c. Name another chemical not mentioned in the report that can also cause acid rain.

.....(1)

- d. What are the likely effects of acid rain in China?

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(3)

- e. What can be done by the Chinese government to reduce the effects of acid rain?

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(3)



9. Look carefully at the photo seen below.



a. What do we call the type of energy generated from water seen in the picture?

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(1)

b. Briefly explain how such energy is produced.

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(2)

c. Explain **two** advantages and **two** disadvantages of this source of energy.

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(4)



- d. Name another renewable source of energy that uses water to generate electricity.

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(2)