

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	8	12	10	10	10	8	90	10	100
Score												

1. Study carefully Figure 1 on page 3, and then answer the following questions:

a. In what grid square is:

(i) Whale Chime -----	(ii) Brighstone -----
(iii) Little Atherfield -----	(iv) Rocken End -----







(2)

b. What would you actually find at each of these map references?
 Underline the correct answer.

- (i) 488771 (battlefield, telephone, antiquities)
- (ii) 483776 (church with spire, cathedral, church with tower)
- (iii) 482775 (monument, MS - Milestone, Westside Fm)
- (iv) 457830 (church with spire, cathedral, church with tower)

(2)

- c. Name any **two** of the following map symbols.

(2)

- d. The scale of the map is 1:50000 or 1cm represents $\frac{1}{2}$ km (0.5km). Use this scale to calculate the straight line distance from Presford Fm (GR 467823) to Beckfield Cross (GR 484809).

Distance in centimetres _____

Distance in kilometres _____

(2)

- e. From the map how can you tell that many tourists visit the area?

_____ (1)

- f. What is the compass direction from:

(i) Kingston (4781) to Corve Fm (4780)? _____

(ii) Pyle (4778) to Thorncross (4381)? _____

(2)

- g. Would you be walking **uphill** or **downhill** if you walked from the Monument (4978) to the MS - Milestone (4878)?

_____ (1)

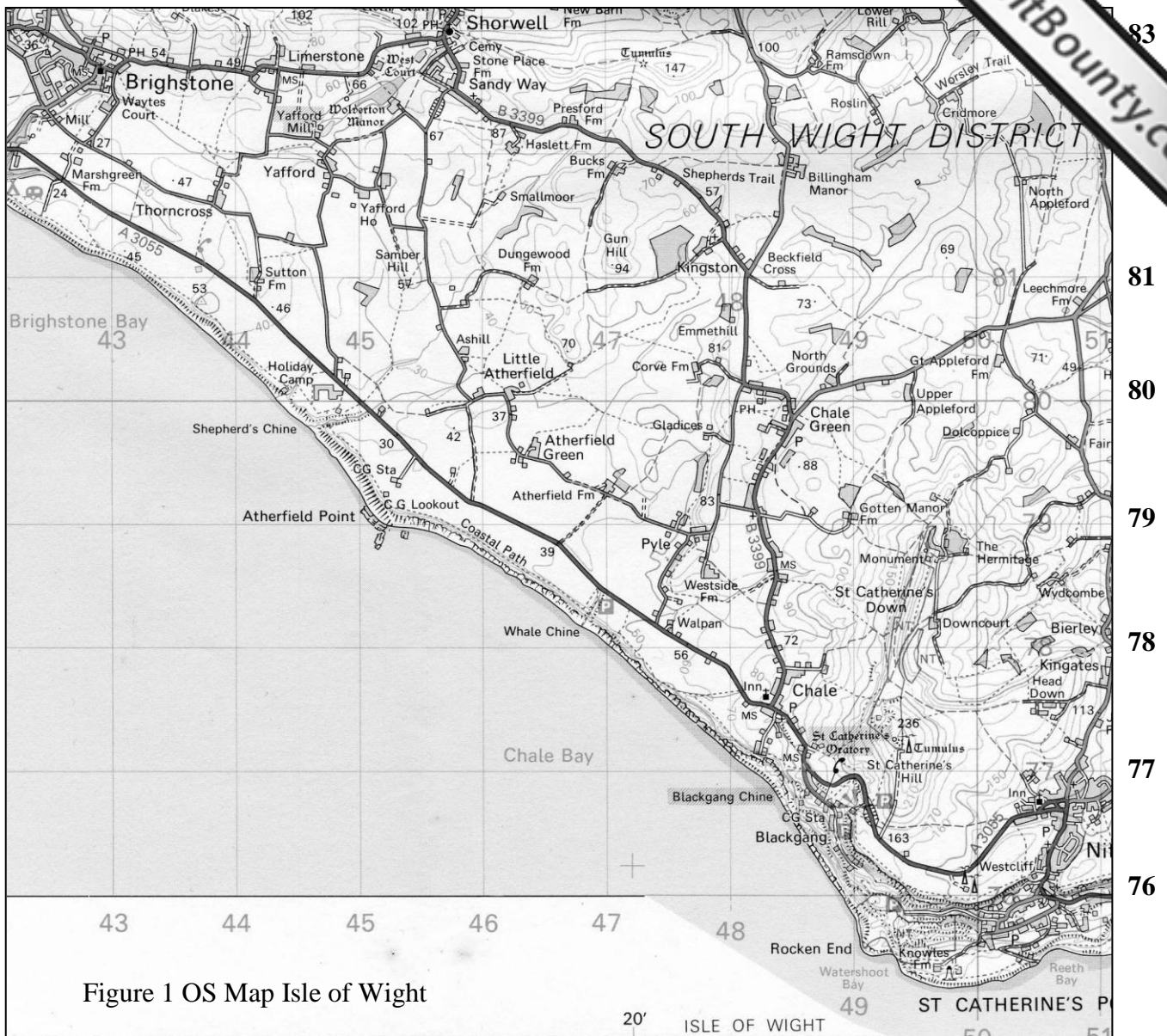


Figure 1 OS Map Isle of Wight

2. Study the **Map of South America** (Figure 2 on page 4) and then answer the following questions:

a. Underline the correct countries marked by the letters **A**, **B** and **C**.

	Countries
A	Vietnam, Ecuador, Venezuela
B	Chile, Brazil, Peru
C	Argentina, Guatemala, Brazil

(3)

- b. Underline the megacity marked by the letter **D**.

	Megacity
D	Sao Paulo, Buenos Aires, Caracas

(1)

- c. Name the oceans marked by the letters **E** and **F**.

	Oceans
E	
F	

(2)

- d. Underline the sea marked by the letter **G**.

	Sea
G	North Sea, Brazilian Sea, Caribbean Sea

(2)

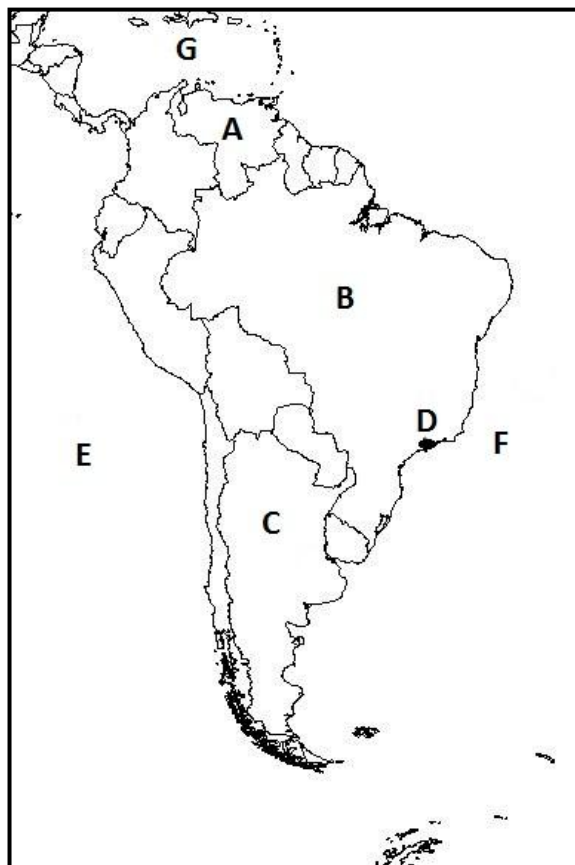


Figure 2 - Map of South America

3. Study carefully the weather map (Figure 3) below and answer the following questions.

- a. What are the lines covering the map called? Choose from: **isobars**, **latitudes** or **contours**.

(2)

- b. What is the air pressure at weather station A and B?
Choose from: 1000mb, 1004mb, 1008mb, 996mb.
Weather **station A** _____
Weather **station B** _____
(2)

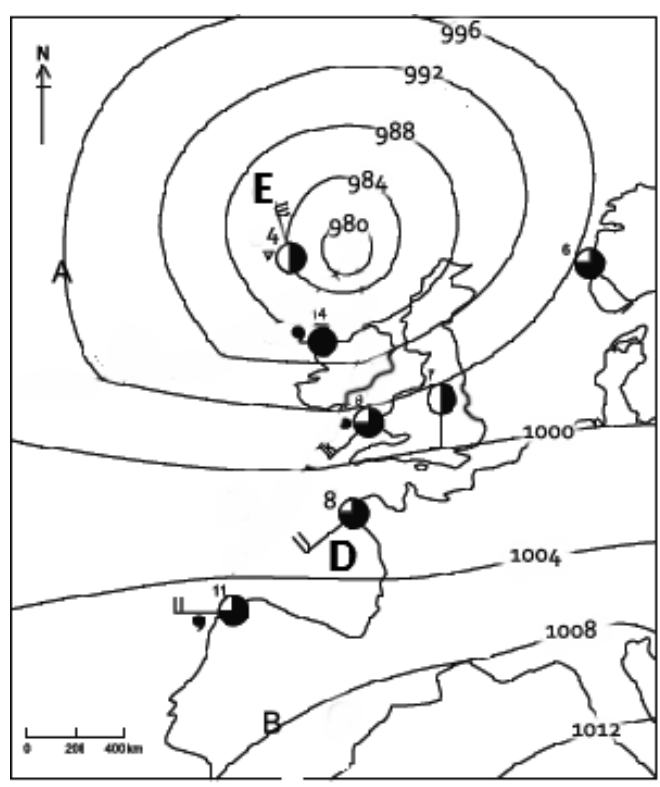


Figure 3
Weather map of Western Europe.

c. Mark **true** (✓) or **false** (✗).

i.	At station D there are no clouds.	
ii.	The wind is blowing from the north at station D .	
iii.	The temperature at station E is 4 degrees Celsius.	
iv.	At station E the wind speed is 30 knots.	
v.	At station E the cloud cover is 4 oktas.	
vi.	There is a thunderstorm at station D .	

(6)

- d. Name **one** country with an atmospheric pressure reading of 1008 mb. Choose from **Norway, England or Spain**

(2)

4. Study carefully Figure 4 below.

- a. Fill in the labels with the following words:

stalactite

stalagmite

cave

swallow hole

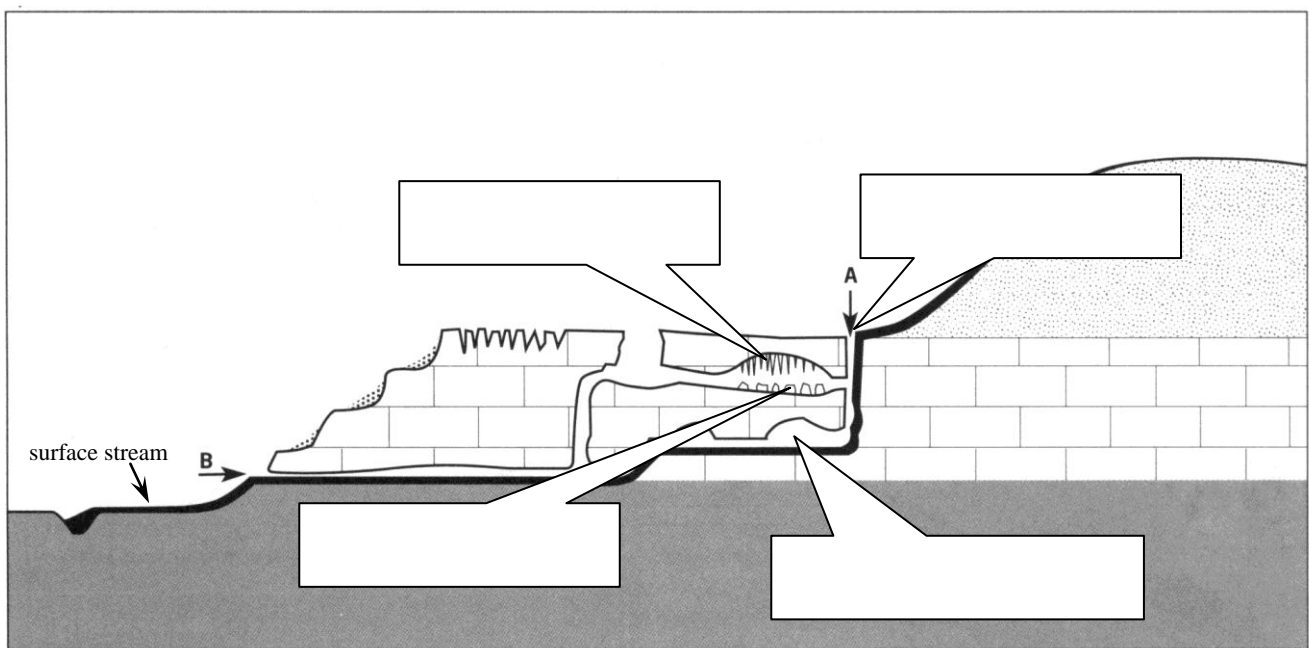


Figure 4

(4)

- b. Fill in the paragraph with the following words to explain why the surface stream disappears at **A** and reappears at **B**.

spring, caves, impermeable, hole

When a river reaches limestone it begins to dissolve joints and bedding planes. In time it will disappear down a swallow _____. The water flowing below the ground dissolves the limestone to produce underground _____ or caverns. The stream finally emerges from the limestone at the joint where it meets _____ rock. This forms a _____.

(4)

5. a. There are 4 main processes taking place along the coast. These are: **Hydraulic Corrosion/Solution, Attrition** and **Abrasion**. Write the words in bold next to the meaning.

Meaning	Erosion
Large waves throwing beach material against a cliff.	
When waves cause rocks and pebbles to bump into each other and break into smaller pieces.	
Salts and other acids in sea water slowly dissolve minerals of the rock.	
The explosion of compressed air trapped in cracks of cliffs by waves.	

(4)

- b. Rewrite the following in the correct order to explain how a **stack** forms.

Further erosion causes the arch to collapse.
Wave action widens the cracks to form a cave.
The sea attacks small cracks.
The cave is eroded to form an arch.
A pillar of rock called a stack is left behind.

(5)

- c. In time, further wave action will result in the stack collapsing to leave a _____. (1)

- d. Underline the correct answer.

- (i) Caves, arches and stacks are features of coastal (erosion, transportation, deposition).
(ii) A spit is a feature of coastal (erosion, transportation, deposition).

(2)

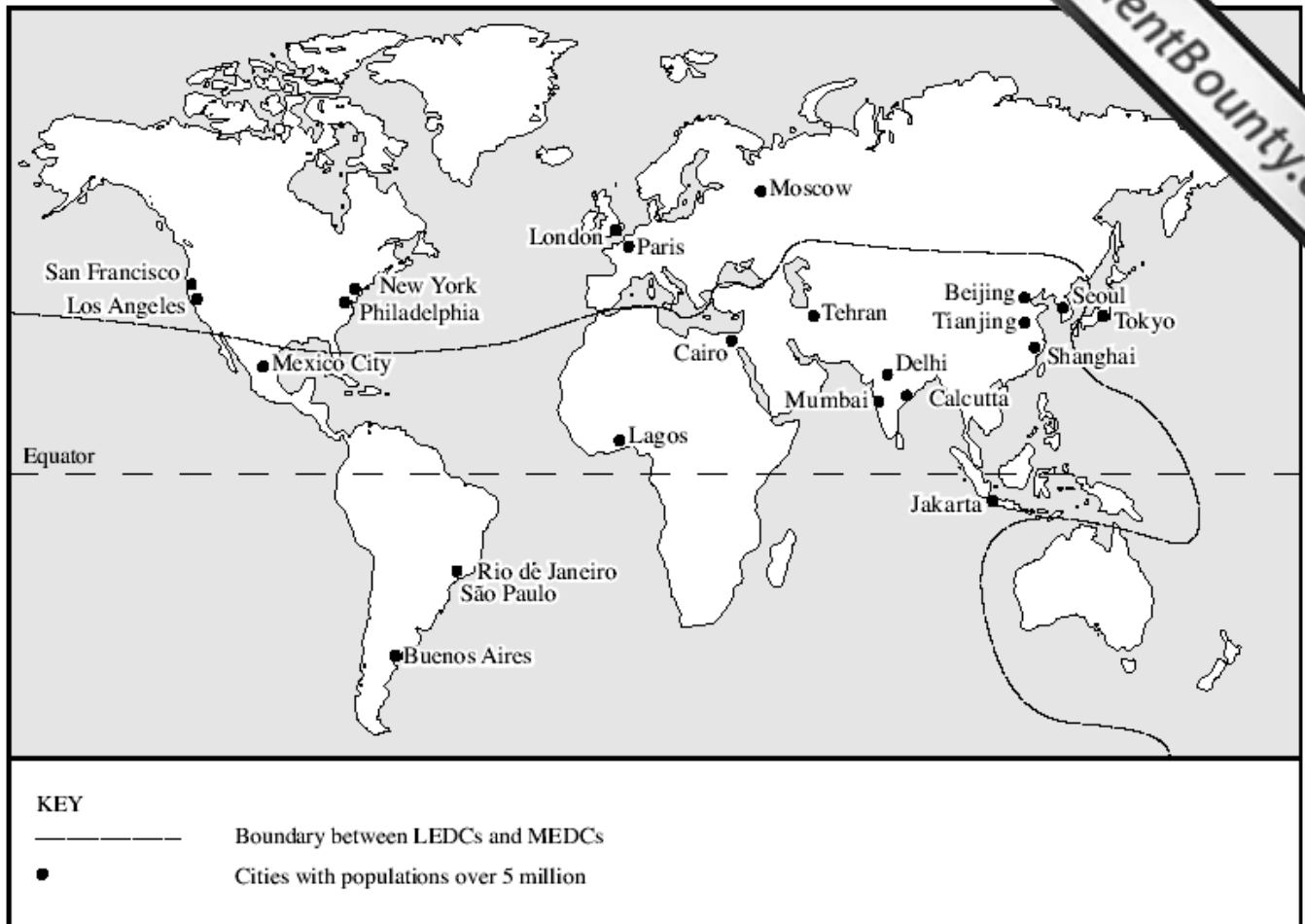


Figure 5

6. Study Figure 5 above which shows a world map of large cities with a population of over 5 million.

a. Using Figure 5, how many cities are found in the MEDCs?

(1)

b. Using Figure 5, which **continent** has the greatest number of cities with populations over 5 million?

(1)

c. Complete the following sentence:

Urbanisation is the increase in the proportion of people living in t_____ and c_____.

(2)

- d. People migrate from one place to another to get away from things they do not like because they are attracted to things that they do like.

The following are **push** and **pull factors**. Put each factor in the correct column in the table below.

Better housing and better quality of life.
Low wages and few jobs.
Little opportunity to progress.

Few services such as schools and hospitals.
Many places of entertainment.
More food available.

Push factors	Pull factors

(6)

7. Study Figures 6 and 7 below and then answer the questions.

Year	Tourists (millions)
1950	25
1960	69
1970	160
1980	285
1990	425

Figure 6 – World Tourist Arrivals (1950-1990)

Top 10 tourism destinations 2002	
RANK	COUNTRY
1	France
2	Spain
3	USA
4	Italy
5	China
6	UK
7	Canada
8	Mexico
9	Austria
10	Germany

Figure 7 - Top ten Tourist Destinations (2002)

- a. Give two reasons why tourism has increased since 1950.

(4)

- b. Write down the name of the **European countries** that are in the top ten tourist in Figure 7.

(3)

- c. Define the term **ecotourism**.

(3)

8. In 1986 the largest oilfield in North America was discovered at Prudhoe Bay in Alaska. A pipeline was built from Prudhoe Bay southwards to the ice-free port of Valdez.

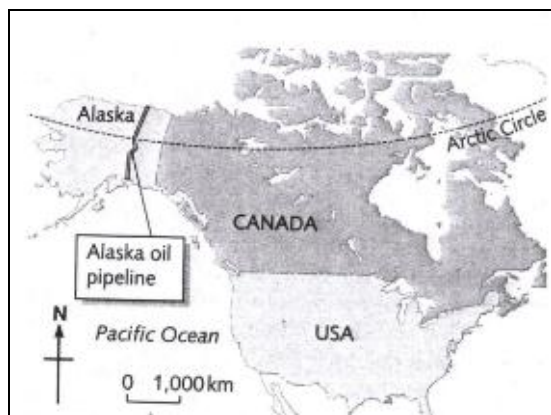


Figure 8 – Alaska's oil pipeline

- a. Pipeline builders in Alaska had to face physical difficulties and opposition from environmental groups.
State whether the following are **physical difficulties** or **environmental concerns**.

	Physical difficulty or environmental concern
Heavy snowfall endangers buildings.	
Tundra vegetation is very fragile and easily damaged.	
Pipeline crosses National Parks.	
Pipeline crosses earthquake belt.	

(4)

- b. Give **one** reason why people in Alaska may be in favour of the oil industry.

- c. Give **one** reason why some people are against the extraction of oil in Alaska.

(1)

- d. Match the following terms to explain how the pipeline builders overcame the physical problems and constructed the Alaska oil pipeline.

Terms		Solution
1. Sliding shoes		built to carry pipeline across rivers.
2. Suspension bridges		sunk through permafrost to give stability.
3. Pumping stations		allow sideways movement in the event of an earthquake.
4. Support pylons		can cut off oil flow if section of pipeline is damaged.

(4)

9. Read the following passage and then answer the questions below.

France has developed an ambitious nuclear programme as it had to rely upon expensive oil imports from the politically unstable Middle East and North Africa. In 1980, 37% of electrical energy was obtained from nuclear power. This increased to more than 50% in 1986. In 1996 France continued its nuclear testing on Mururoa Atoll in the Southern Pacific inspite of protests from people, organisations and countries all over the world.

- a. Which raw material is required for nuclear power?

Choose from: **coal, oil, gas, uranium, wood.**

(2)

- b. Is nuclear energy a renewable or non-renewable source of power?

(2)

- c. List **two** advantages of nuclear energy.

(2)

- d. List **two** disadvantages of nuclear energy.

(2)