

SECONDARY EDUCATION CERTIFICATE LEVEL
SAMPLE PAPER SEC 15

SUBJECT : GEOGRAPHY
PAPER NUMBER: IIB
DATE:
TIME:

Direction to Candidates

**Answer any two questions from Section A and two other questions from Section B.
Answers are to be written on the booklet provided.**

Each question carries 25 marks. Marks allocated to parts of questions are indicated.
Good use of language and orderly presentation are important. Credit will be given for relevant illustrations.

The use of non-programmable calculators and geometric instruments is permitted.

Section A

Answer two questions from Section A.

1. Figure 1 shows typical features found in a karst area.

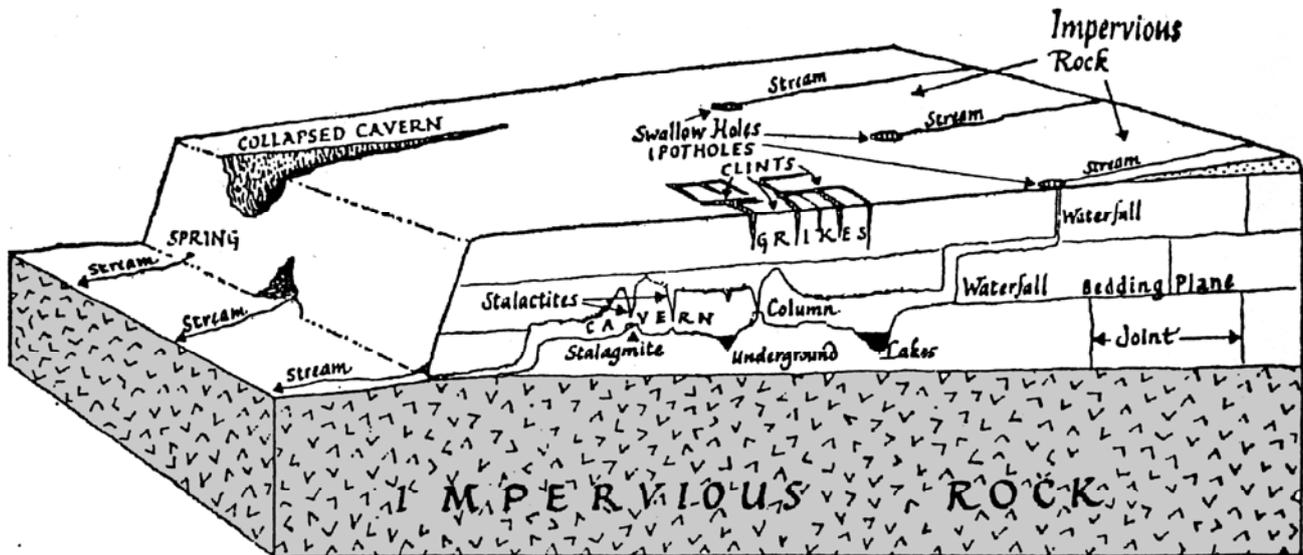


Figure 1

- (a) What is a karst area? (2)
- (b) Briefly describe each of the following surface features in a karst area:
- (i) swallow hole
 - (ii) clints and grikes (6)
- (c) Chemical weathering is very active on the surface of karst landscapes. Explain what chemical weathering is and describe two effects that it may have on limestone. (7)
- (d) Explain how each of the following underground features are formed:
- (i) stalactites and stalagmites
 - (ii) column
 - (iii) underground lake (6)
- (e) Use Figure 1 to help you explain what a resurgence or resurgent stream is. (4)

2. Figure 2 is a plan view of an area under constant attack by the sea. The left diagram shows the original state of the area while the right diagram shows it changed, after coastal erosion and deposition.

Study the figure carefully and then answer the following questions.

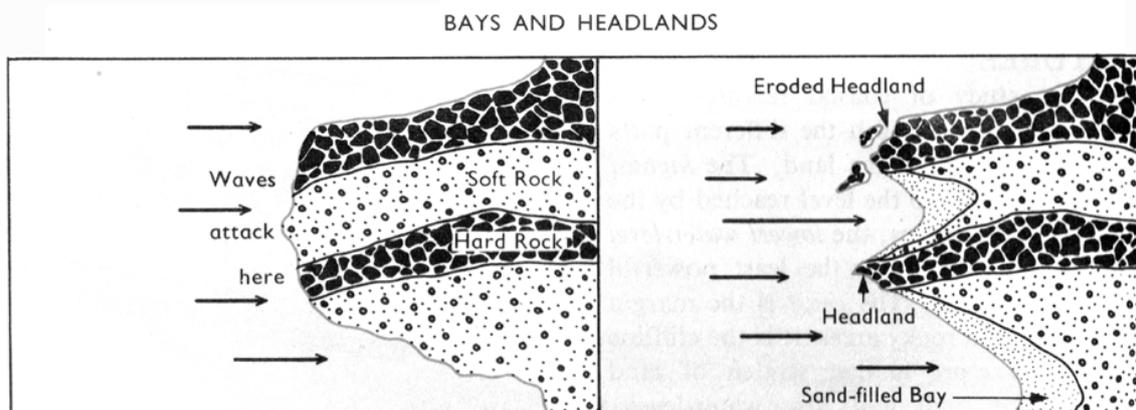


Figure 2

- (a) Explain in detail what is happening in Figure 2. (6)
- (b) What difference does the type of rock do to coastal formations? (3)
- (b) Explain the process of cliff recession and how a wave-cut platform is formed. (8)

- (c) Name **two** coastal places in the Maltese Islands where the features of cliff recession are very prominent. (2)
- (d) Describe **two** methods used to protect coastal areas from erosion. (6)

3. Read carefully the following information on desert records.

Table 1

Desert Records – The largest, the driest and hottest	
The largest tropical desert	Sahara, covering most of northern Africa, from the Red Sea and the Mediterranean coasts to the outskirts of the Atlantic ocean.
The driest desert	The Atacama Desert is the driest on Earth: the average annual rainfall is about 25 mm and in some mid-deserts spots rain has never been recorded.
The hottest desert	The Death Valley, located in eastern California and western Nevada, is the hottest land in North America. At Furnace Creek, the air temperature registered the record of North America: 57°C. However, this value was overcome in Libya by the temperature of 58°C.

- (a) Give the main characteristics of the hot desert climate. (5)
- (b) Give the general position of the hot deserts. (5)
- (c) Examine carefully Figure 3.

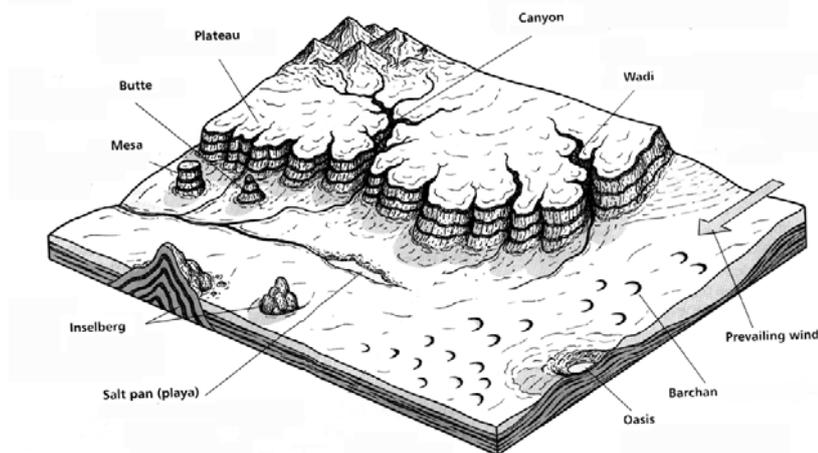


Figure 3

- (i) Copy Table 2 on your booklet and indicate by ticking (✓) the right column which of the features listed is the result of running water or caused by wind.

Table 2

Features	Running Water	Wind
Mesa		
Butte		
Wadi		

(3)

- (ii) Explain in some detail how barchans are formed.

(6)

- (iii) Other desert features include playas, deflation hollows, yardangs and zeugens. Draw labelled diagrams and explain any **two** of these features.

(6)

4. (a) Name **three** regions or countries in the world where rainforests grow.

(3)

- (b) Explain each of the following;

under canopy, emergent, shrub layer, main canopy

(8)

- (c) Trees that grow in tropical rainforests are special so that they can grow in the hot wet conditions. Explain why :

(i) Most rainforest leaves are large with the tips of the leaves ending in a narrow point.

(ii) The trunks of the forest trees are tall and straight with some trees having special buttress roots.

(iii) Most trees spread their roots just beneath the surface of the ground.

(9)

- (d) Refer to Figure 4 and explain why the rainforest exists thanks to the nutrient cycle. (5)

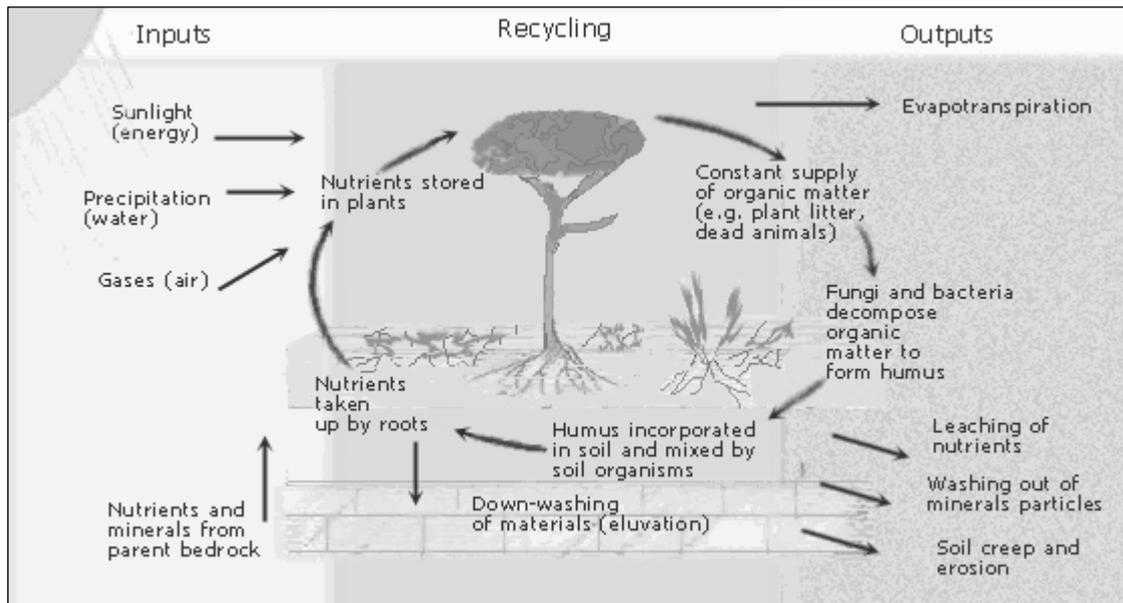


Figure 4

Section B

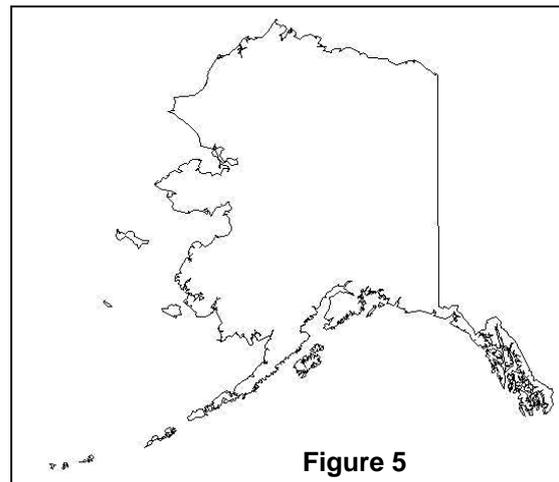
Answer two questions from Section B.

5. (a) Give the meaning of the following terms:
- international migration
 - counter-urbanisation
 - rural-to-urban migration
- (9)
- (b) What is the difference between forced and voluntary migration? Name an example for each type. (6)
- (c) Many thousands of people migrate every year from Mexico to the USA. Give **three** reasons to explain why this movement of people takes place. (3)
- (d) List **three** types of jobs done by Mexican workers in the USA. (3)
- (e) Give **two** reasons to explain why the USA authorities try to restrict Mexican workers from entering the USA. (4)

6. Traffic congestion is a major problem in most cities and this is creating numerous problems in most urban areas.
- (a) List **three** reasons why traffic has increased in urban areas. (6)
 - (b) Discuss the effects off increased traffic in urban areas? (10)
 - (c) Describe the solutions that have been put forward by some cities to reduce the damaging effects of increased traffic. (9)

7. (a) What are non-renewable energy resources? (2)
- (b) Give **two** advantages and **two** disadvantages of using coal and oil as energy resources. (6)

(c) In 1962 large quantities of oil were discovered in Prudhoe Bay in Alaska. The field contained 25% of North America's oil reserves. The problem was how to move the oil to refineries in other states of the USA. It was decided to build a pipeline, 1,242 km in length, from Prudhoe Bay to the Port of Valdez.



- (i) On your booklet draw a sketch-map of Alaska and on it mark and name: **Prudhoe Bay, Port of Valdez** and the **Trans-Alaskan Pipeline**. (5)
- (ii) Why was there the need to build the Trans-Alaskan Pipeline? (2)
- (iii) List four problems that had to be overcome before the construction of the Trans-Alaskan Pipeline could commence. (4)
- (iv) How were these problems solved? (6)

8. (a) What are primary, secondary, tertiary and quaternary industries? (8)
- (b) Give an example for each. (4)
- (c) Where is the M4 Corridor located? What type of industry is found in this area? (4)
- (d) Name and explain the factors encouraging the location of these industries in the M4 corridor. (9)