

JUNIOR LYCEUM ANNUAL EXAMINATIONS 2007

Educational Assessment Unit - Education Division

FORM 5

GEOGRAPHY (OPTION)

TIME: 1h 45min

Name: _____

Class: _____

N.B. : Answer FIVE questions, one from each section. Questions 1 and 2 are compulsory. All questions carry equal marks (20). Write clearly and use good English.

SECTION ONE - **Map Reading** (compulsory question)

1. Study carefully the given map extract MALTA WEST (figure 1) and then answer the following questions. The scale is 1:25000 or 4 cm = 1 km.:

a. Four high places are shown on the map, namely: St Martins; tal-Merhia; Nadur Tower; and ta' Baldu. Give the height and 6-figure grid reference of each of them:

<u>place</u>	<u>height</u>	<u>6-figure grid reference</u>
i. tal-Merhia	_____	_____
ii. St Martins	_____	_____
iii. Nadur Tower	_____	_____
iv. ta' Baldu (spot height)	_____	_____ (8)

b. What is the compass direction from Nadur Tower to tal-Merhia? _____ (1)

c. In grid squares 4021 and 4072 the contours are closely spaced. What does this show?
_____ (1)

d. In grid square 4171 the contours are widely spaced. What does this show?
_____ (1)

e. The area includes a lot of blank white spaces and only a few grey spaces. What does this mean?
_____ (1)

f. Calculate the straight line distance between Nadur Tower and St Martins. The scale is 1: 25000 or 4 cm = 1 km. _____ (1)

g. Calculate the distance between the two same places along the second class roads.
_____ (2)

h. What does the bold dented line near Bingemma fort and north-east of Kuncizzjoni Church show? _____ (1)

i. Draw a rough cross section
along the line A - B
in the space hereby. (4)

SECTION TWO - **World Map** (compulsory question)

2. Study the World Map Figure 2 with numbers 1 to 10, as well as the following ten describing notes. Write the relative number that is on the map and the name of the place, country or geographical feature in the box near the correct description

(20 marks)

<u>Number</u>	<u>place/geographic feature</u>	<u>describing note</u>
		The most holy city for the Muslims is in this country. It is the largest oil-exporting country in the world. It is in the Middle-East and Riyadh is its capital city.
		These mountains lie between Nepal and China. They are fold mountains on the collision zone between the Eurasian and Indo-Australian plates. Mt Everest is one of them.
		The 0° longitude passes through London and sets the Universal Standard Time.
		The island-continent broke away from the African and Antarctic plates millions of years ago. It is home to thousands of Maltese migrants.
		The 23 ½° North latitude where the sun is overhead in late June. It crosses Mexico, Libya and India.
		This is the fourth most populous country in the world. Made up of thousands of small and large islands like Borneo, Sumatra and Java. Land of tropical rainforest, volcanoes, and earthquakes. Large oil producer.
		50th state of the U.S.A. Volcanic islands at the centre of the Pacific Ocean. Honolulu is capital city.
		Most populous state in Africa. Large oil producer and exporter. It is part of the Commonwealth and Lagos is the capital city.
		Large island of N.W. Europe in the middle of the North Atlantic Ocean on the Mid-Atlantic Ridge. It has volcanoes including Hekla, Vatna, and Hiamey. Its capital is Reykjavic.
		The 49th state of the U.S.A. Partly in the Arctic Circle. Producer of oil. Juneau is capital. People admire the whales from ships cruising its fjords. It too has volcanoes and earthquakes are common.

SECTION THREE - **Physical Geography** (Choose ONE question from 3 and 4)

either 3

- a. Briefly define the term *ecosystem*. _____

 _____ (4)
- b. Mention two elements of the non-living environment of an ecosystem.
 _____ (2)
- c. Mention two elements of the living environment of an ecosystem.
 _____ (2)

d. What is the process by which sunlight absorbed by green plants and converted to energy called?

_____ (2)

e. Here are TEN characteristics of 2 major biomes. In the blank space near each of them, write whether each characteristic belongs to **Tropical Savana** or **Mediterranean** biome.

(10)

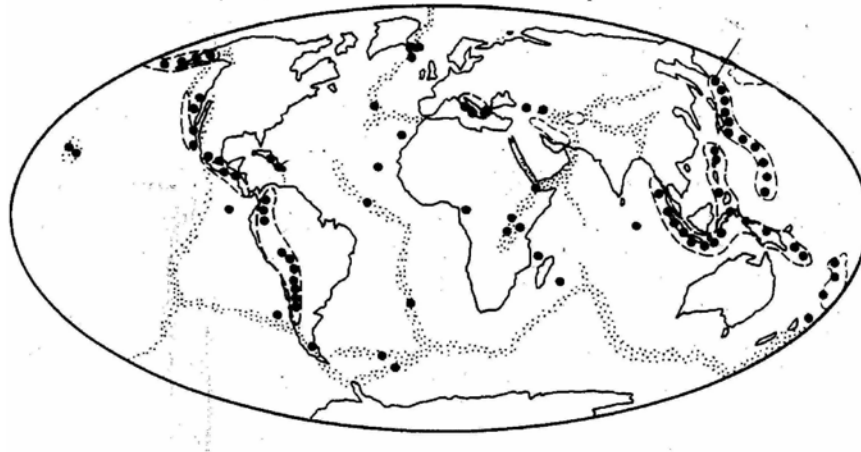
- i. Herds of sheep and goats eat leaves of trees and plants. _____
- ii. Forest fires sometimes started deliberately destroy much of the forest. _____
- iii. On impermeable rocks, a dense undergrowth called maquis grows. _____
- iv. Towards the equator, this biome merges into the rain-forest. _____
- v. The typical vegetation here is high grass with scattered trees. _____
- vi. Most plants are xerophytic, like the baobab tree. _____
- vii. On limestone, a sparse low-lying scrub called garigue grows. _____
- viii. When the sun is overhead, the rainy season starts. _____
- ix. Nomadic herders such as Fulani and Maasai herd their cattle. _____
- x. Trees have been cut to create fields, for fuel, or to construct buildings and ships. _____

or 4

Study the World Map figure 3 showing large active volcanoes and then answer the following questions:

figure 3

World map showing earthquake activity and active volcanoes



a. Name one volcano in each of : (4)

- i. North America _____
- ii. South America _____
- iii. Europe _____
- iv. Asia _____

b. Using figure 3 describe where most volcanic eruptions are likely to occur.

(3)

c. Using figure 3 explain why most volcanic eruptions occur in the places you mentioned in your answer to 4 b.

(3)

d. With the aid of a simple labelled diagram, explain why volcanoes occur at constructive plate margins.

(6)

(space for labelled diagram)

e. For either Mt St Helens or Montserrat:

i. Explain briefly why there is a volcano there. _____

(2)

ii. Why did people live near the volcano? _____

(2)

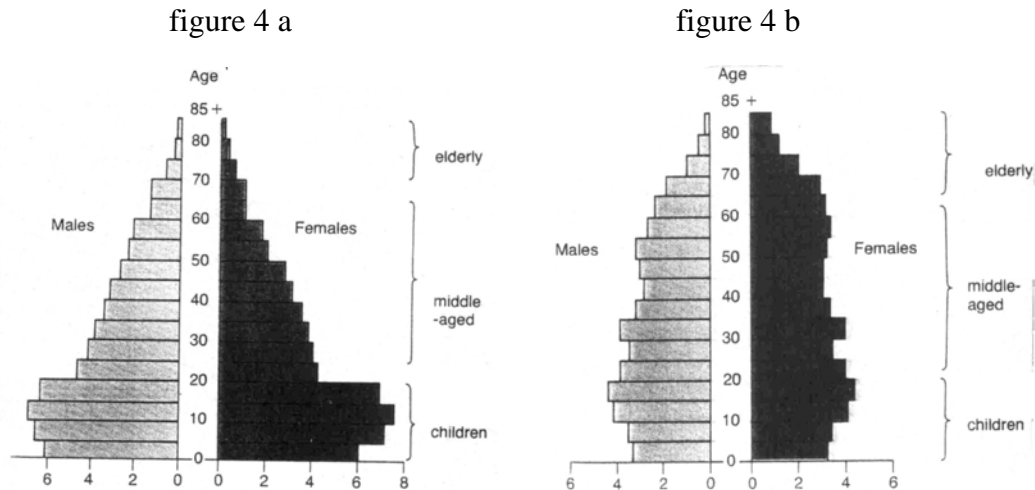
SECTION FOUR - **Human Geography** (Choose ONE question from 5 and 6)

either 5

a. Study the two diagrams Figures 4 a and 4 b in the following page, and then answer the following questions:

- i. What are these two diagrams called? _____ (2)
- ii. Which diagram represents India? _____ (1). Why do you think so?

_____ (2)



iii. Mention one country which may be represented by the diagram in figure 4 b.

_____ (1)

iv. Compare the two diagrams under the following headings: (6)

- A. children - _____
- B. middle aged - _____
- C. elderly - _____

v. In which country (a or b) do you expect the population to increase? _____ (1)

Why? _____ (2)

b. Answer briefly the following questions about the population of Brazil:

- i. Where do 90% of the people of Brazil live? _____ (2)
- ii. Give one reason for the growth of Sao Paulo. _____

_____ (1)

iii. Why is the population of the Amazon region considered to be still in Stage 1 of the Demographic Transition Model? _____

_____ (2)

or 6.

Study Table 1 below and answer the following questions. You may use the calculator:

Table 1 : **Employment figures for Malta, Years 2000 and 2004**

	<i>September 2000</i>	<i>September 2004</i>
gainfully occupied	136,993	137,274
<u>unemployed</u>	<u>7,253</u>	<u>8,140</u>
<u>total Labour Supply</u>	<u>144,246</u>	<u>145,414</u>
Primary Industry	6,433	7,144
Secondary Industry	29,850	27,443
<u>Tertiary Industry</u>	<u>100,710</u>	<u>102,687</u>
<u>total gainfully occupied</u>	<u>136,993</u>	<u>137,274</u>

- a. How many people were working in Malta in September 2004? _____ (1)
- b. How many people worked in direct Primary Industry in Malta in 2000?
_____ (1)
- c. How many people worked in Secondary Industry in Malta in 2004?
_____ (1)
- d. How many people worked in Tertiary Industry in Malta in 2000?
_____ (1)
- e. How many people, both employed and unemployed, could work in Malta in 2004?
_____ (1)
- f. In which Industry are Malta's farmers included in the above Table?
_____ (1)
- g. In which Industry are Malta Government employees included in the above Table?
_____ (1)
- h. Which type of Industry suffered loss in number of employees between 2000 and 2004?
_____ (2) By how many? _____ (1)
- i. This Table is compiled by *economists*, and lists construction workers (*bennejja*) with the Primary (direct) Industry. According to *geographers* what type of Industry is construction (building)? _____ (2)
- j. What was the unemployment figure as percentage of gainfully occupied in 2000?
_____ (1)
- k. What was the unemployment figure as percentage of gainfully occupied in 2004?
_____ (1)
- l. In 2004, 46,649 persons had jobs paid for by Government (public sector). What percentage of total gainfully occupied was this? _____ (1)
- m. Calculate the employment of the THREE types of Industry in 2004 as percentage of gainfully occupied. (3)
A. Primary _____ B. Secondary _____ C. Tertiary _____
- n. Judging by your results in question (m), would you say that Malta is a More Economically Developed Country (MEDC), or a Less Economically Developed Country (LEDC)?
_____ (2)

SECTION FIVE - **Environmental Geography** (Choose ONE from 7 and 8)

either 7

a. Fill in the blanks with the following words :

jobs; railways; growing; resources; timber;
slash and burn; deforestation; trees; land; farmland

One-third of the world's _____ grow in the Brazilian rainforest. Their numbers are being reduced due to _____. Brazil's population is _____ rapidly since the 1960s. _____ is needed for people to live on, more _____ to produce food for the extra numbers, more _____ required for people to earn a living. More _____ were needed if people's standard of living were to improve. The rainforest is cleared for three types of farming, including subsistence farming, _____ farming, and commercial cattle rearing. It is also cleared for better transport and open new roads and _____. Apart from building houses, trees are also cut for resources such as minerals and _____. (10)

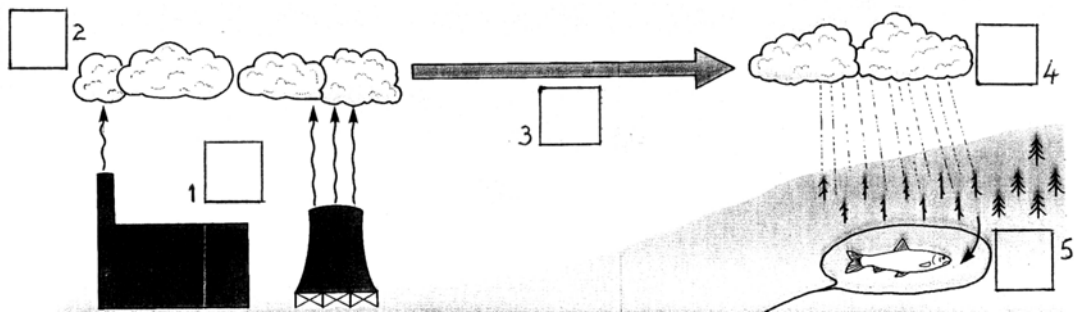
b. Explain briefly FIVE main effects (results) of clearances in the tropical rainforests, especially the Amazon rainforest of Brazil. (10)

or 8.

a. Figure 5 in the next page explains the problem of *Acid Rain*. Add the following labels by writing letters A to E in the right box. (5)

- A. Acid rain falls on Scandinavia and Finland.
- B. Rain bearing winds are blown across the North Sea.
- C. The gases mix with water droplets in the atmosphere.
- D. Conifers increase soil acidity.
- E. Power stations release sulphur dioxide and nitrogen oxides in the air.

Figure 5. The problem of *Acid Rain*



b. Answer briefly:

i. Mention TWO European countries that produce acid rain.

_____ (2)

ii. Which part of Europe suffers acid rain most? _____ (1)

iii. Why is this so? _____ (2)

iv. Give TWO ways by which this type of pollution can be reduced.

_____ (4)

v. Why does soil become infertile through acid rain?

_____ (2)

vi. Why is this an international problem?

_____ (2)

vii. What is the main problem for reducing sulphur dioxide (SO₂) emissions?

_____ (2)

-----*end of paper*-----

Figure 2 for Question 2
WORLD MAP

