

**JUNIOR LYCEUMS ANNUAL EXAMINATION**  
**Educational Assessment Unit - Education Division (Malta)**  
**2001**

**FORM 3**

**GEOGRAPHY (Option)**

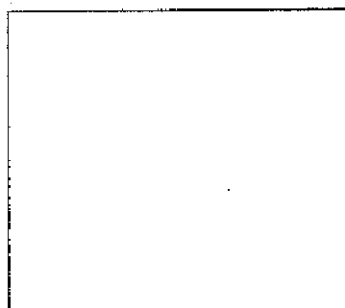
**Time: 1 hr 30 min.**

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

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

**N.B.** Answer all EIGHT exercises as specified. Use good English to answer your questions. You may answer question 8 on a foolscap.

1. Study the 1:25000 (4cm=1km) Ordnance survey map extract of the north-west region of Gozo provided and then answer the following. Kindly note that the contour heights are shown in feet.
  - a. What compass direction from ta' Pinu Church (294913) are
    - i. San Lawrenz School (284904)? \_\_\_\_\_ (1)
    - ii. Hekka Point (283932)? \_\_\_\_\_ (1)
    - iii. Lighthouse at Gordan (297924)? \_\_\_\_\_ (1)
  - b. Give the grid reference (six figure notation) of the following:
    - i. Taz-Zejt Chapel \_\_\_\_\_ (1)
    - ii. Fungus Rock (il-Gebla tal-General) \_\_\_\_\_ (1)
  - c. What can be found at grid reference
    - i. 291905 \_\_\_\_\_ (1)
    - ii. 237899 \_\_\_\_\_ (1)
  - d. Find the distance between ta' Pinu Church and chapel at Dwejra Point (271903)
    - i. in a straight line \_\_\_\_\_ (2)
    - ii. along the main roads \_\_\_\_\_ (2)
  - e. Give an estimate of the area (in square kilometres) covered by land in the map.  
\_\_\_\_\_ (2)
  - f.
    - i. How high is the trigonometrical station at Ghar Ilma? (295899) \_\_\_\_\_ (1)
    - ii. Ta' Dbiegi (292902) is the highest point in Gozo. Judging by the contours shown, it cannot be higher than \_\_\_\_\_ feet. (1)
  - g. In the box below, draw a rough cross-section from ta' Dbiegi Hill to ta' Ghammar Hill (298911). Show the position of the two main roads that are intersected by the cross-section. The cross-section must be about 4 cm (representing 1 km distance) wide.



(g) rough cross-section

h. What evidence is there that this is mainly an agricultural area? \_\_\_\_\_ (1)

i. Name one other economic activity in the area. \_\_\_\_\_ (1)

2. Write the letter of the HEADS near the matching TAILS. (10 marks)

- a. The Richter scale \_\_\_\_\_ intensities run from 1 to 12.
- b. Richter scale 4 is \_\_\_\_\_ measures the amount of energy given out by earthquakes.
- d. The modified Mercalli scale \_\_\_\_\_ is an instrument which records shock waves.
- e. The focus at epicentre \_\_\_\_\_ first put forward the theory of continental drift.
- f. The seismograph \_\_\_\_\_ builds up squat flat volcanoes.
- g. Agadir, Skoplje, and Anchorage \_\_\_\_\_ is 1000 times more powerful than scale 1.
- h. Alfred Wegener \_\_\_\_\_ is where the earthquake started.
- i. Basaltic magma \_\_\_\_\_ builds up cone shaped high volcanoes.
- j. Acidic magma \_\_\_\_\_ includes smaller cones on the side of the main one.
- k. Composite dome volcano \_\_\_\_\_ were all destroyed by earthquakes in the 1960s.

3. Write TRUE or FALSE near each statement: (10 marks)

- a. The earth's crust is one solid mass. \_\_\_\_\_
- b. Most earthquakes occur on plate boundaries. \_\_\_\_\_
- c. W. J. Morgan first explained why plates moved. \_\_\_\_\_
- d. Collision zones are places where continental plates move towards each other.  
\_\_\_\_\_
- e. The last geological period is called the pleistocene. \_\_\_\_\_
- f. The instrument which measures temperature is called the thermometer.  
\_\_\_\_\_

- g. The instrument which measures how damp the air is is called the thermometer.  
\_\_\_\_\_
- h. We get night and day because of the earth's revolution around the sun. \_\_\_\_\_
- i. 94 % of heat units from the sun heat up the earth's surface. \_\_\_\_\_
- j. Large cities are colder than the countryside in summer. \_\_\_\_\_

4. Fill in the blanks with the following words (10 marks)

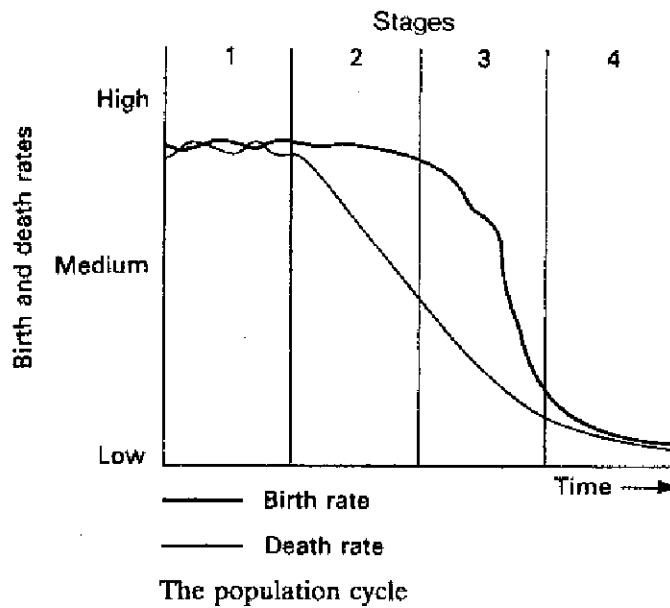
unstable air; clouds; dew point; condenses; warm front;  
air mass; depression; evaporation; stable; dust.

The process of turning water into vapour is called \_\_\_\_\_. On the contrary, when wet or humid air is cooled the vapour turns into water. It \_\_\_\_\_ on to any surface. Water vapour condenses into water droplets around bits of \_\_\_\_\_; ice; and salt floating in the air, forming \_\_\_\_\_. The lower temperature at which water vapour condenses is called \_\_\_\_\_ or condensation level. Air that tends to rise is called \_\_\_\_\_. When it rises and cools as much as its surrounding air it becomes \_\_\_\_\_. A great area of air which has the same properties like temperature, direction and humidity is called an \_\_\_\_\_. If a warm air mass meets a cold one in a \_\_\_\_\_, the warm air rises in what is called a \_\_\_\_\_.

5. Answer the following questions briefly in one or two sentences:

- a. What happens in onion-skin weathering? \_\_\_\_\_ (1)
- b. How can rock erode under the effect of heat or cold? \_\_\_\_\_ (3)
- c. How can lichens help in the erosion of rocks? \_\_\_\_\_ (3)
- d. How does soil creep occur? \_\_\_\_\_ (3)

6. Here is a typical population chart:

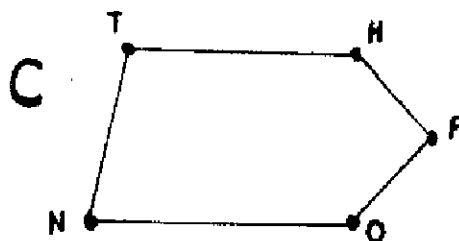
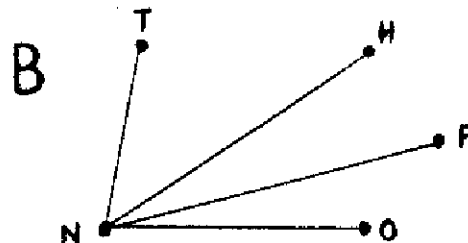
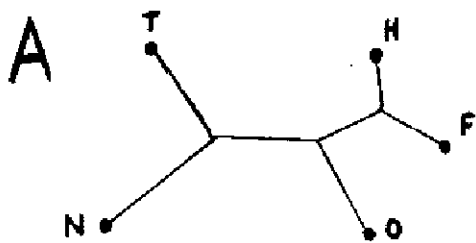


- a. Describe the chart by inserting the following words in the table:  
 high (three times) ; little (twice); low (twice); decreasing (twice);  
 rapid to slow (once); medium-low (once); rapid (once) (12 marks)

stage	1	2	3	4
Birth Rate		high		low
Death Rate	high	decreasing		
Natural Increase	little		rapid to slow	

- b. Which stage have most developed countries reached? \_\_\_\_\_ (1)  
 c. In which stage would Amazonia in Brazil be? \_\_\_\_\_ (1)  
 d. In which two stages would most developing countries be? \_\_\_\_\_ (2)

7. Here are three maps of the same FIVE towns N, T, H, F, O, with three differently planned transport networks A, B, and C. Study them and then answer the following questions:



Which network would be preferred by...:

- ...a salesman who lives in T and has to go round all the other towns before returning home. \_\_\_\_\_ (2)
- ...the District Council who are interested in building the shortest total amount of motorway possible? \_\_\_\_\_ (2)
- ...The Chamber of Commerce of town N who are interested in making town N easier to get to than the other four towns \_\_\_\_\_ (2)
- Calculate the Connectivity Index (**edges divided by vertices**) of each network: (3 )
  - A \_\_\_\_\_
  - B \_\_\_\_\_
  - C \_\_\_\_\_

8. On a separate sheet, write a paragraph on one of the following: (15 marks).

**EITHER**

- Which were the ideas on population put forward by Thomas Malthus?  
Why can his theory be criticised?

**OR**

- What are the major problems of agriculture in developing countries?  
How can these problems be lessened?

# NORTH-WEST REGION OF GOZO

