



SUBJECT: **Geography**  
 DATE: 14<sup>th</sup> May 2024  
 TIME: 9:00 a.m. to 12:05 p.m.

**Directions to Candidates**

Answer a total of **FOUR** questions: **TWO** questions from **each** of the two sections.  
 The use of non-programmable calculators is permitted. **ALL** questions carry equal marks.

**SECTION A: PHYSICAL GEOGRAPHICAL PROCESSES**

1. Figure 1 shows a synoptic chart for the North Atlantic and the Mediterranean.

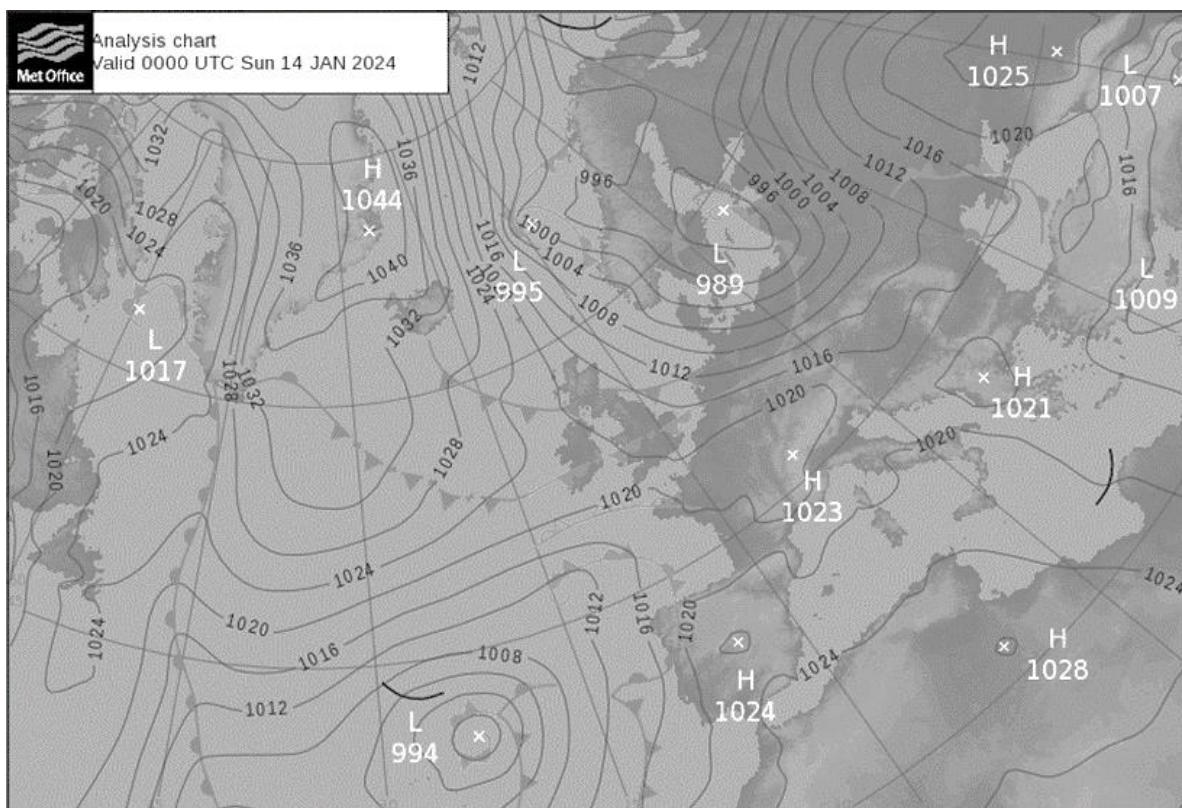


Figure 1: Synoptic chart 14<sup>th</sup> January 2024.

(Source: <https://www.metoffice.gov.uk/weather/maps-and-charts/surface-pressure>)

- a) Explain the formation and characteristics of:
  - i) depressions; and (5)
  - ii) anticyclones. (5)
  
- b) Describe how isobars show:
  - i) air pressure; (3)
  - ii) wind direction; and (3)
  - iii) wind speed. (3)
  
- c) By making reference to Figure 1, compare weather conditions over the central Mediterranean region and northern Europe. (6)

**(Total: 25 marks)**

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2. Figure 2 shows the Earth's internal structure.

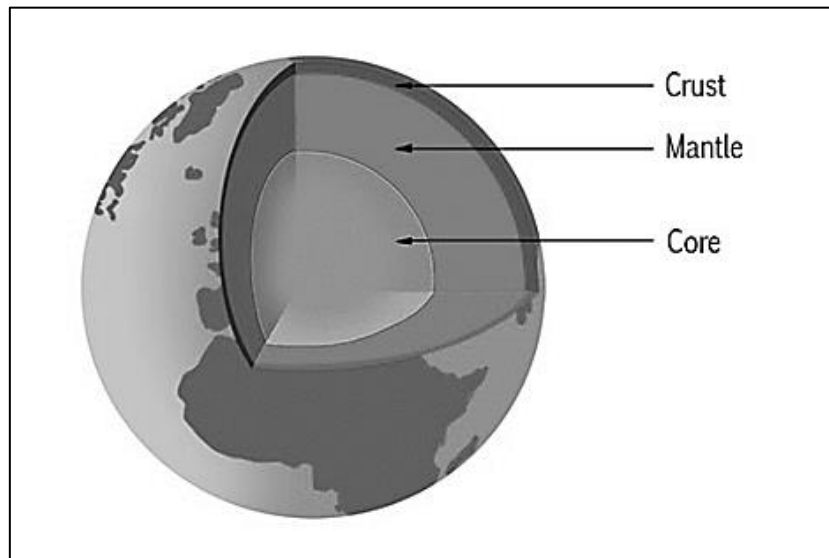


Figure 2: Earth's Internal Structure

(Source: <https://mammothmemory.net/geography/geography-vocabulary/tectonic-hazards/the-earths-structure-summary.html>)

- a) Refer to Figure 2 and explain the composition of **each** of the **THREE** layers in Earth's structure. (9)
- b) What is the main driving force for plate tectonic movement? (4)
- c) Describe the main tectonic movement found in the Mediterranean Basin. (8)
- d) Identify **TWO** geomorphic landforms in the Mediterranean resulting from the tectonic movement mentioned in c). (4)

**(Total: 25 marks)**

- 3. a) Draw a simple labelled diagram to show the main features of the hydrological cycle. (5)
- b) Discuss the impact global warming may have on the following parts of the hydrological cycle:
  - i) Precipitation; (5)
  - ii) Evapotranspiration; and (5)
  - iii) surface runoff. (5)

- c) Describe **ONE** measure that can decrease the impact of global warming. (5)

**(Total: 25 marks)**

- 4. a) Define the term deforestation. (3)
- b) Define the term soil erosion. (2)
- c) Discuss how deforestation can lead to soil erosion. You may use diagrams to illustrate your answer. (12)

- d) Describe **THREE** mitigation measures that can be taken to prevent soil erosion. (8)

**(Total: 25 marks)**

**SECTION B: HUMAN GEOGRAPHICAL PROCESSES**

5. Table 1 shows the population in the districts of Malta from 1921 to 2021.

Table 1 The population in the districts of Malta (1921 - 2021)

District	1921	1957	1967	1985	2005	2011	2021
Southern Harbour	79,001	90,705	87,879	86,843	81,047	79,438	86,009
Northern Harbour	52,347	104,889	102,938	113,730	119,332	120,449	157,297
South Eastern	20,090	36,854	35,224	42,475	59,371	64,276	77,948
Western	23,587	36,196	36,142	44,580	57,038	58,129	65,266
Northern	14,672	23,375	23,933	32,108	57,167	63,765	93,755
Gozo and Comino	22,561	27,601	25,978	25,682	31,007	31,375	39,287

(Source: NSO, 2024)

- a) Create another table with the data from Table 1 rounded to the nearest thousand, and draw a graph with trendlines per district and year. (10)
- b) Discuss the emerging patterns within the districts and amongst the districts. (10)
- c) Describe **ONE** measure the Maltese government can take to control an increase in population. (5)

**(Total: 25 marks)**

6. Figure 3 shows the conurbation around the Grand Harbour in Malta.



Figure 3: The conurbation around the Grand Harbour in Malta  
(Source: <https://www.britannica.com/place/Valletta>)

- a) Explain in detail the role of the Grand Harbour in shaping its conurbation. (10)
- b) Discuss **TWO** problems that arise as a result of the high population density and human activity in the Grand Harbour conurbation. (10)
- c) Briefly explain **ONE** solution to one of the problems mentioned in b). (5)

**(Total: 25 marks)**

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7. a) Explain the **TWO** different types of quarrying that take place in Malta. Support your answer with examples of **ONE** location for **each** type of quarry. (8)
- b) Explain **TWO** benefits of the quarrying industry. (8)
- c) Explain **ONE** problem created by the quarrying industry. (5)
- d) Describe **ONE** way how the negative impact of quarrying can be reduced. (4)
- (Total: 25 marks)**

8. Tourism provides a substantial contribution to Malta's Gross Domestic Product.
- a) Explain **THREE** reasons why tourists visit Malta. (9)
- b) Discuss **TWO** negative impacts that the tourism industry has on the host country. (10)
- c) Explain **ONE** measure that could be used to improve **ONE** of the negative impacts mentioned in b). (6)
- (Total: 25 marks)**