



SUBJECT: **Geography**
PAPER NUMBER: Specimen Paper I
DATE:
TIME:

The paper is divided into **TWO** sections.
Candidates must answer **FOUR** questions, **TWO** from **EACH** of the sections.
All questions carry equal marks.

SECTION A: PHYSICAL GEOGRAPHY

- 1) Explain how the seasonal shift of the Hadley Cell determines the climate of the Mediterranean Region. (25)
- 2) Figure 1 shows a synoptic chart of Australia.

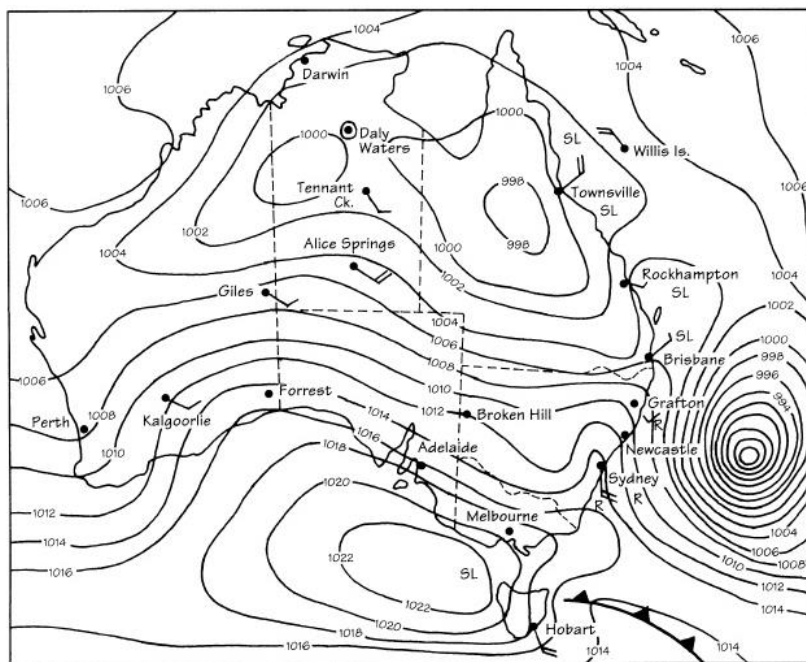


Figure 1 – Synoptic chart of Australia

<https://www.slideshare.net/rmarchetto/geography-skills-revision>

- a) Account for the different pressure systems occurring over Alice Springs and Newcastle. (8)
- b) Describe the type of weather conditions that these areas are expected to have. (6)
- c) Describe the weather symbol used to show wind strength and direction. (4)
- d) Describe the weather conditions associated with a cold front moving over Hobart. (7)

- 3) In Malta, sand dunes are considered to be rare and vulnerable ecosystems, which occupy a very small percentage of the Islands' coastline.
- Describe **THREE** physical factors which are needed for the formation of a coastal sand dune. (6)
 - Over the years, many sand dune ecosystems have been completely destroyed or extensively degraded as a result of human activities. By making reference to specific examples from Malta, explain how different human activities have had a negative effect on sand dunes. (6)
 - Describe **TWO** measures that can be taken to protect sand dunes from human intervention. (4)
 - Sand dunes are ideal sites for fieldwork sessions. Explain briefly **THREE** fieldwork activities that can be carried out to investigate coastal sand dunes. (9)
- 4) Volcanic eruptions and earthquakes are severe natural hazards to populations that live around tectonically active zones.
- List **TWO** methods commonly used to predict volcanic eruptions and earthquakes. (2)
 - With the use of examples, describe the main hazards associated with volcanic eruptions. (8)
 - Explain how communities have benefited from their proximity to volcanoes. Refer to specific examples to illustrate your arguments. (6)
 - Earthquakes vary in 'magnitude' and 'intensity'. Define these terms and compare and contrast their effect on developed and less developed countries. (9)

SECTION B: HUMAN GEOGRAPHY

5) Figure 2 shows the population pyramids of West Africa and Western Europe.

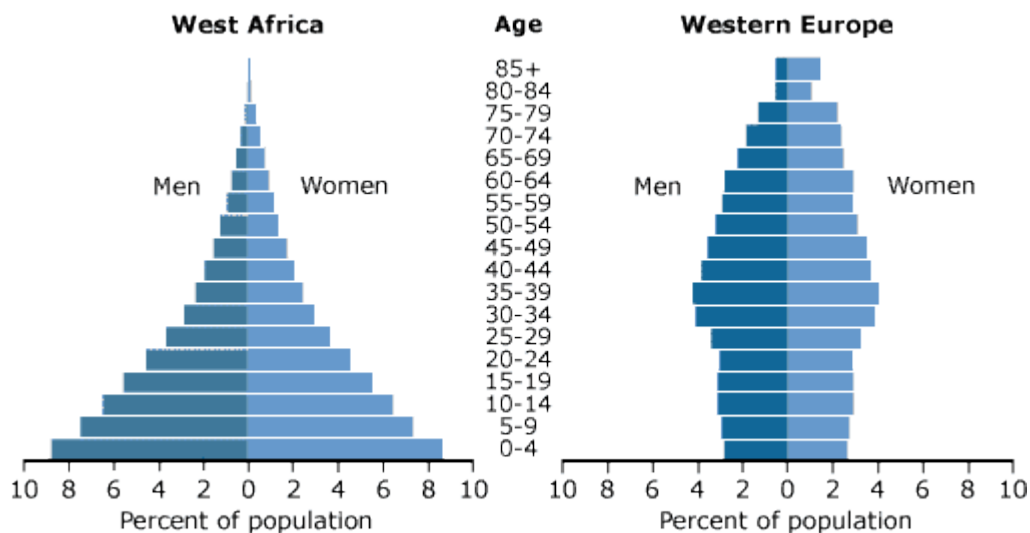


Figure 2: Population pyramids of West Africa and Western Europe
 (<http://www.prb.org/Publications/Lesson-Plans/PopulationBuildingaFoundation/Activity3.aspx>)

- Outline the importance of population pyramids when studying the population of a particular country. (3)

- b) Describe the main differences in the population structures of the two pyramids present in Figure 1. Enhance your description with reasons that influenced and are influencing the shape of the two pyramids. (12)
- c) Describe the changes that are forecasted in the shape of both pyramids. (6)
- d) Ageing population is a phenomenon that is already experienced by most Western European countries. Outline **FOUR** social and /or economic issues encountered by these countries. (4)
- 6) One of the most cited models of urban structures is the Burgess Model developed in 1925.
- a) List **FOUR** assumptions made by Ernest Burgess in his urban land-use model. (4)
- b) Draw a diagram and describe and explain the location of the different land-uses and social groupings in Burgess' concentric model. (10)
- c) Outline **THREE** limitations of the Burgess model. (3)
- d) Does the urban structure of Malta fit the Burgess' model? Explain making use of examples to clarify your position. (8)
- 7) Different activities compete for space in urban areas and as a result different land use zones develop.
- a) Define the term 'urbanisation'. (4)
- b) Explain how land use zones change as urban centers grow. (6)
- c) Account for the role of transport networks in the development of urban land uses. (7)
- d) Describe the causes and consequences of rapid urbanisation in world cities. (8)
- 8)
- a) With reference to the construction industry, explain its positive and negative socio-economic and environmental impact on the Maltese Islands. (16)
- b) Describe **THREE** mitigation measures that could be adopted and enforced to minimise the negative impacts of the construction industry. (9)