MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD
UNIVERSITY OF MALTA, MSIDA

SECONDARY EDUCATION CERTIFICATE LEVEL

MAY 2013 SESSION

SUBJECT:	**Geography**
PAPER NUMBER:	I
DATE:	30th April 2013
TIME:	9:00 a.m. to 11:00 a.m.

Answer ALL questions

1. Examine the map extract (Scale 1: 25,000) showing Mellieha Ridge, Bajda Ridge, and Wardija Ridge and answer the following questions.
   (a) Give the six-figure grid reference of:
       (i) St George's chapel at Wardija, marked A   (1 mark)

   _____

       (ii) The Neolithic Tombs at Xemxija, marked B   (1 mark)

   _____

   (b) What is the compass direction from the trigonometrical station marked O, near Il-Ħotba ta' San Martin, to the following:
       (i) St Martin Church, marked C   _____ (1 mark)

       (ii) Roman Baths, marked D   _____ (1 mark)

       (iii) Victory Church, marked E   _____ (1 mark)

       (iv) Temple at Skorba (near Żebbieħ), marked F   _____ (1 mark)

   (c) What is the length of the road from X to Y in kilometres which is shown along the Pwales Valley? (2 marks)
   _____

   (d) The road from Mizieb Pumping Station (M) to Żebbieħ (Z) does not trace a straight path all the way.
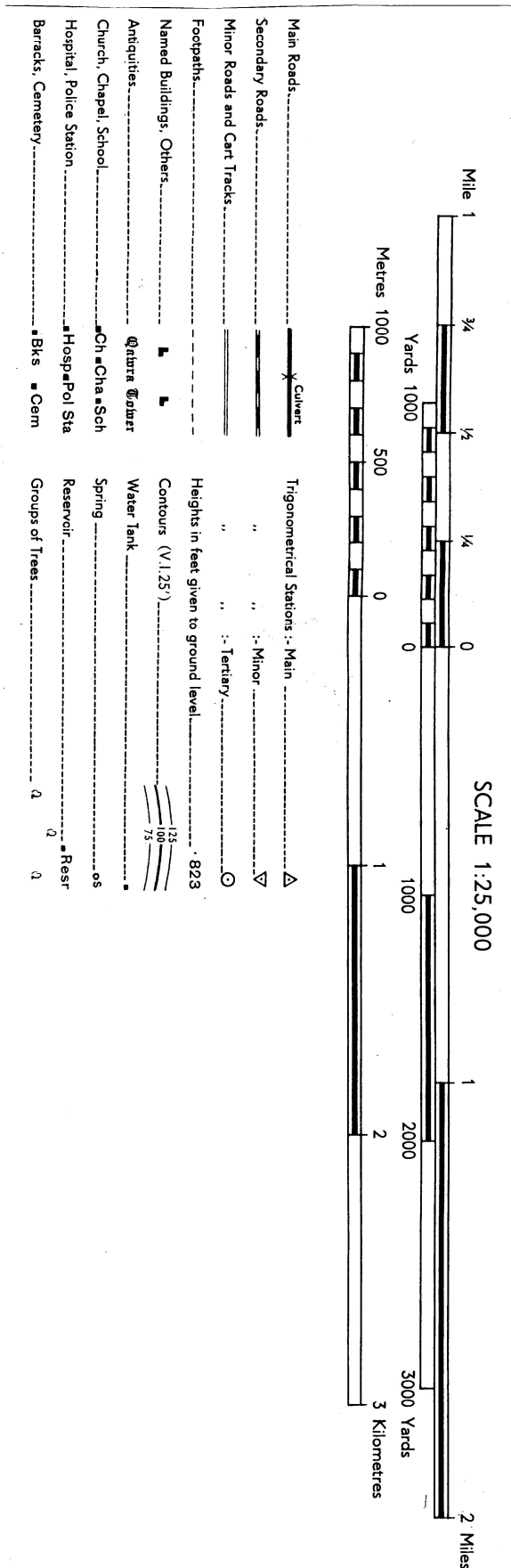   In 4 sentences describe the topography over which the road passes. (8 marks)

   _____

   _____

   _____

   _____

Main Roads.

Secondary Roads.

Minor Roads and Cart Tracks.

Footpaths.

Named Buildings, Others.

Antiquities.

Church, Chapel, School.

Hospital, Police Station.

Barracks, Cemetery.

Culvert

Trigonometrical Stations :- Main

Heights in feet given to ground level

Contours (V.I. 25')

Water Tank

Spring

Reservoir

Groups of Trees

Qatara Tower

Ch ■ Cha ■ Sch

Hosp■Pol Sta

■ Bks   ■ Cem

:- Minor

:- Tertiary

· 823

125
100
75

Mile 1   ¾   ½   ¼   0

Metres 1000   500   0

Yards 1000   0

SCALE 1:25,000

1000

2000

3000 Yards

3 Kilometres

1

2

1

2 Miles

2. Study the World Map (**Figure 2**) and then answer the following questions.

   (a) Match the following descriptions with locations marked on the map and numbered **1** to **4**.

Description	Name of Location
Major HEP station	
An area prone to flooding	
A major port	
A major Tsunami event in 2004	

   (2 marks)

   (b) Name the countries marked **A** to **D**.

   A _____   **B** _____

   C _____   **D** _____   (2 marks)

   (c) Name the tectonic plates marked by the numbers **5** and **6**.

   5 _____   **6** _____   (2 marks)

   (d) Explain how these tectonic plates move.

   _____

   _____

   _____

   _____
   (5 marks)
   (e) Name the rivers numbered **7** to **11**.

   7 _____   **8** _____

   9 _____   **10** _____

   11 _____   (5 marks)
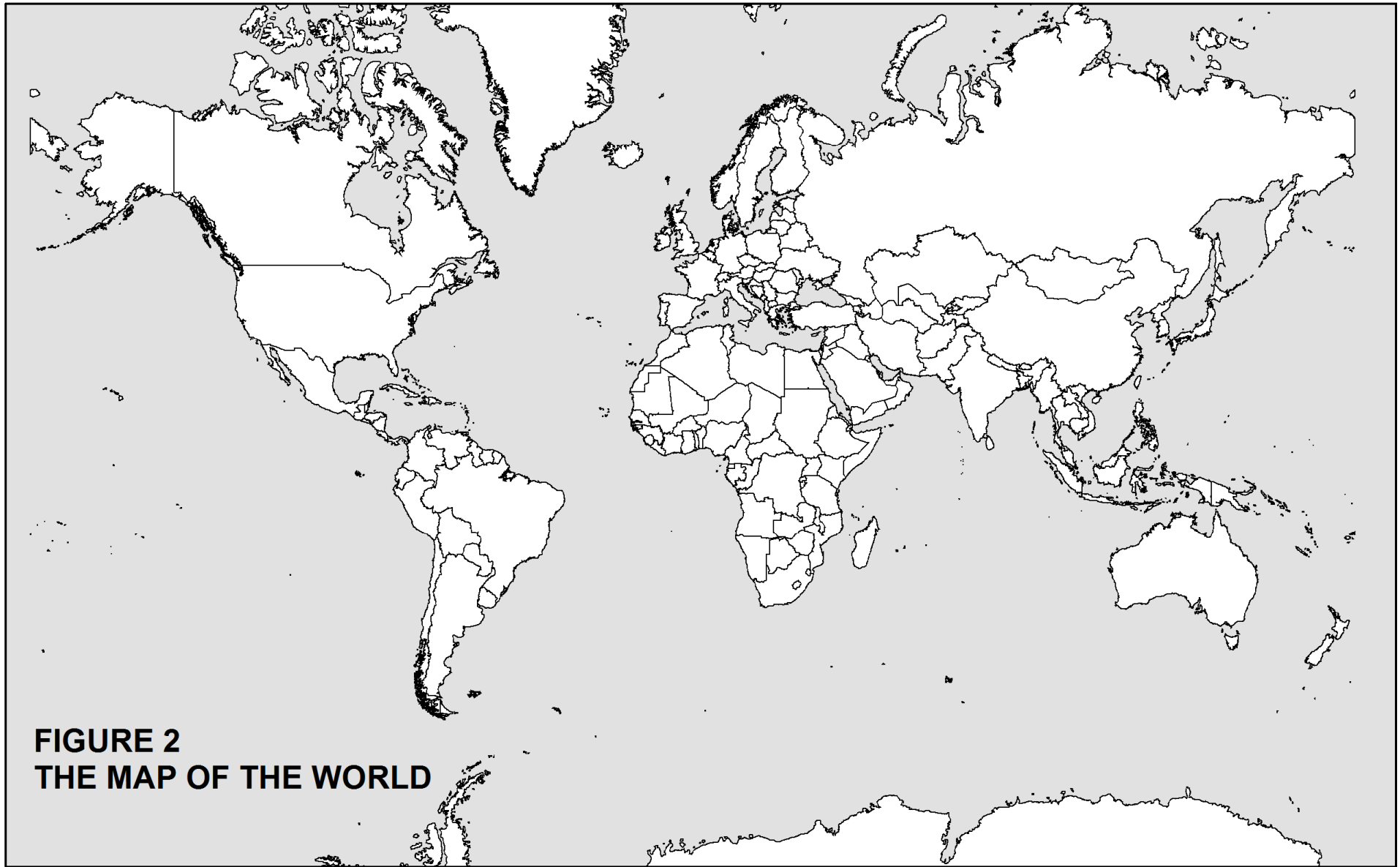
FIGURE 2
THE MAP OF THE WORLD

_____

3. (a) Name **THREE** factors that greatly influence the development of karst landforms.

_____

_____

_____(3 marks)

(b) Briefly explain how joints turn into grykes.

_____

_____(2 marks)

(c) What are the flat-topped blocks between grykes called?

_____

(1 mark)

4. *"Flooding can now strike anywhere, and it needs to be recognised as the No 1 national emergency happening now." (The Guardian, 04/01/2013)*

Figure 3 : Civil protection officers rescuing a family from flooding
during the December 2012 flood in the United Kingdom.

(a) With reference to the above statement, list and explain **THREE** main causes of flooding.

_____

_____

_____

_____

_____

_____(3 marks)

_____

(b) State and briefly define **THREE** possible flood control measures that can be implemented in developed countries in order to minimise the impact of flooding.
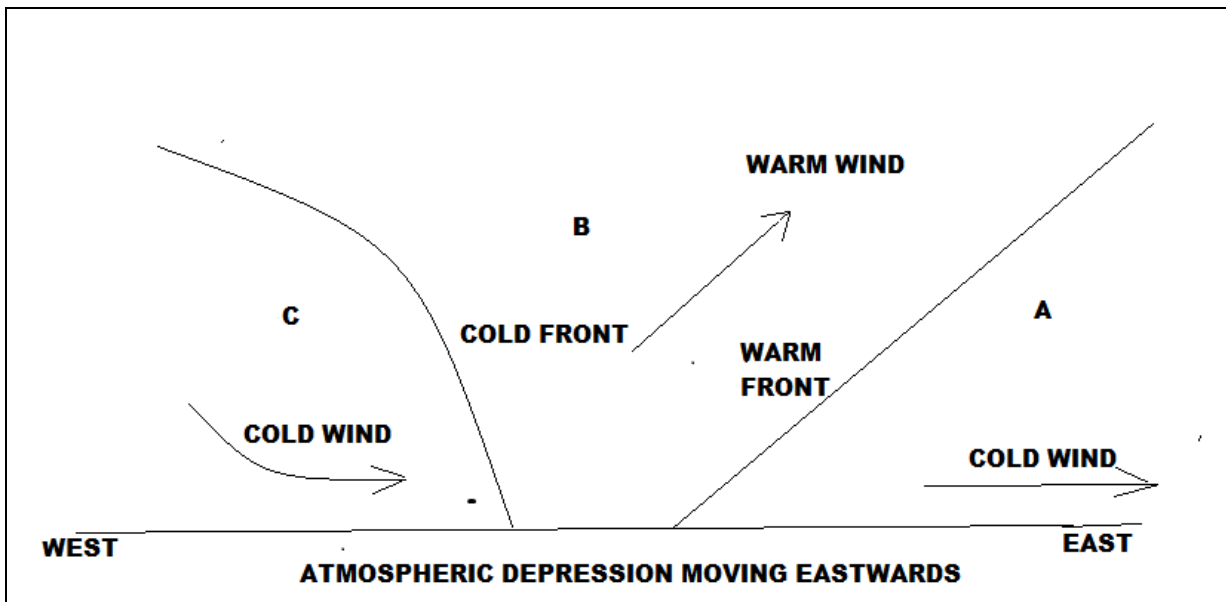
_____

_____

_____

_____

_____

_____(3 marks)

5.

Figure 4

Study the sketch of the atmospheric depression above and then answer these questions:

(a) Describe the weather conditions at point A

_____

_____

_____(2 marks)

(b) Describe the weather conditions at point B

_____

_____

_____(2 marks)

(c) Describe the weather conditions at point C

_____

_____

_____ (2 marks)

6. (a) Define: *settlement site* and *settlement situation*.

_____

_____

_____

_____(2 marks)

(b) List **FOUR** factors affecting location of settlements.
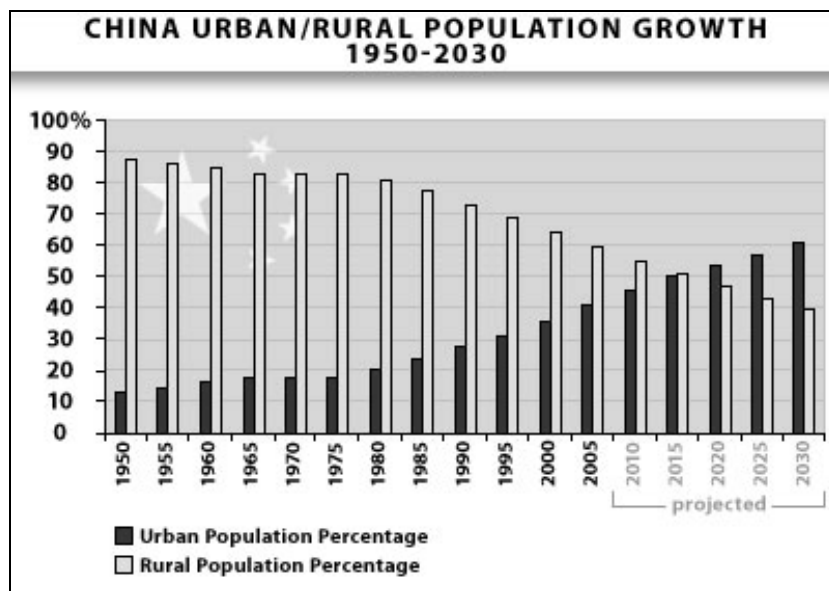
_____

_____

_____

_____(4 marks)

7.

Figure 5

Figure 5 shows the urban and rural population growth rates in China from 1950 to 2005 and how they are projected to grow by 2030.

_____

(a) With reference to the data displayed in the graph, name and define the phenomenon that has led to such population growth and decline rates.

_____

_____

_____

_____

_____(3 marks)

(b) Describe **THREE** main causes that are responsible for this phenomenon, especially in many developing countries.

_____

_____

_____

_____

_____

_____ (3 marks)

8. (a) Define what a multinational or transnational corporation is.

_____

_____

_____ (2 marks)

(b) Give **TWO** advantages and **TWO** disadvantages of a multinational or transnational corporation.

_____

_____

_____

_____

_____

_____ (4 marks)

Please turn the page.
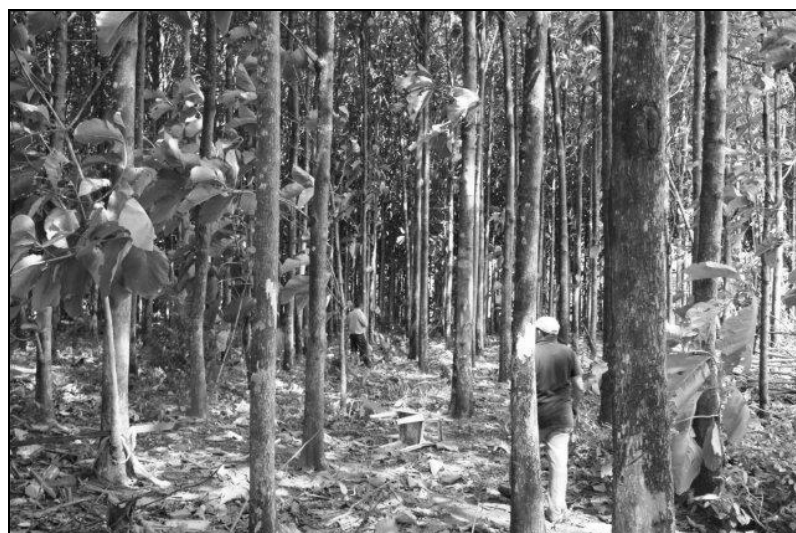
9.

Figure 6 – Farming system, Type A

Figure 7 – Farming system, Type B

Figure 6 and 7 display two types of farming practised in Brazil.

(a) Name the **TWO** types of farming displayed in the photos.

_____

_____ (2 marks)

(b) Choose **ONE** of these types of farming and describe its main characteristics.

_____

_____(2 marks)

(c) Which of the above type of farming would you consider more sustainable? Give reasons for your answer.

_____

_____

_____

_____

_____ (2 marks)

10. (a) What is biomass fuel (called also biogas)?

_____

_____ (2 marks)

(b) Describe **TWO** advantages of using biomass/biogas fuel.

(i) _____

(ii) _____ (2 marks)

(c) Mention **TWO** negative impacts that result from the use of biomass/biogas fuel.

(i) _____

(ii) _____(2 marks)

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SECONDARY EDUCATION CERTIFICATE LEVEL

MAY 2013 SESSION

SUBJECT:	**Geography**
PAPER NUMBER:	IIA
DATE:	2nd May 2013
TIME:	9:00 a.m. to 11:00 a.m.

Answer any two (2) Questions from Section A and any other two (2) questions from Section B.

ANSWER FOUR QUESTIONS IN ALL

Answers are to be written on the booklet provided.

Each question carries a total of 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 (2) questions from this Section.

1.

| Surface Layer |
|---|
| Horizon A1 |
| Horizon A 2 |
| Horizon B |
| Horizon C |
| Parent rock |

Figure 1 : Soil profile model

(a) Describe the layers and the horizons commonly found in a soil profile, by referring also to the sketch in figure 1.   (10 marks)
(b) Explain how the following factors affect the formation of soils:
    i. parent rock or geology   ii. topography or relief   iii. fauna and flora
   iv. climate   v. time   (5 x 3= 15 marks)

2. (a) With the help of a labelled diagram, name and explain the movement of the Earth around the sun. (12 marks)

(b) Explain how this movement causes a change in the seasons. Give examples to support your explanation. (13 marks)

3. (a) Describe the **FOUR** main erosion processes that operate on the coastal zone. (10 marks)

(b) Explain how the following coastal conditions may determine the rate of coastal erosion:
  i. a headland facing strong prevailing winds.
  ii. a coastal cliff with a wide wave-cut platform
  iii. a sandy beach in a sheltered bay. (5 x 3 = 15 marks)

4. *Besides wind, WATER is an agent in the formation of hot desert scenery.*

(a) Discuss this statement by explaining the weathering process which leads to the formation of specific physical features in hot deserts by the force of water. (10 marks)

(b) Mention **THREE** hot desert features formed by wind and/or water. Draw a sketch for each and describe them. (15 marks)

SECTION B: Answer two (2) questions from this Section.

5. (a) Define *overpopulation,* with specific reference to the world human population. (5 marks)

(b) Identify **FOUR** challenges posed by the changing population structures around the world. (12 marks)

(c) Mention and describe **FOUR** measures adopted by China to control population growth. (8 marks)

6. Figure 2 shows the Burgess (1925) and Hoyt (1939) models of land use zones in cities.
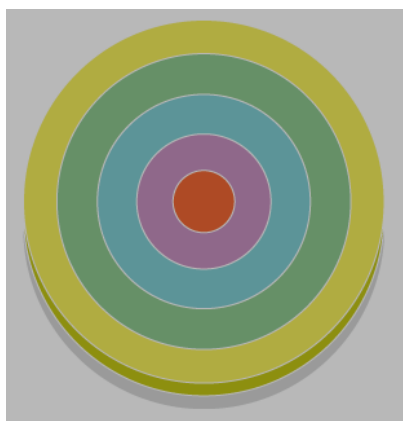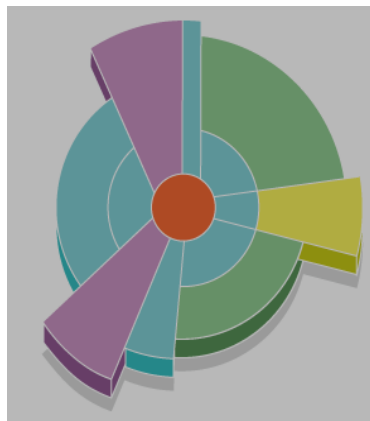
BURGESS MODEL (1925)   **HOYT MODEL (1939)**

(a) Study **Figure 2** and describe the **FIVE** zones identified in the Burgess and Hoyt models. (10 marks)

(b) Each zone within the two models shown in **Figure 2** has different functions and a different type of land use. Describe **FIVE** factors which explain these differences. (10 marks)

(c) List **FIVE** problems encountered by cities in the developed world. (5 marks)

7. (a) Give **FOUR** reasons why the Newly Industrialised Countries (NICs) were so successful in establishing strong economies. (8 marks)

    (b) Name **FIVE** countries that can be considered as NICs located on the Pacific Rim.

        (5 marks)

    (c) China, Malaysia and Thailand are also considered to have performed economic miracles over the last forty years. Give **THREE** reasons how this happened. (6 marks)

    (d) Give **THREE** reasons why European countries are now finding it difficult to keep up the economic progress registered up to ten years ago. (6 marks)

8. (a) What does a *trading bloc* mean? (8 marks)

    (b) State and briefly explain **TWO** benefits and **TWO** problems derived from the further enlargement of Trading Blocs such as the European Union. (8 marks)

    (c) Describe **THREE** instances where the Southern European countries and those of North Africa can be of benefit to one another. (9 marks)

SECONDARY EDUCATION CERTIFICATE LEVEL

MAY 2013 SESSION

SUBJECT:	**Geography**
PAPER NUMBER:	IIB
DATE:	2nd May 2013
TIME:	9:00 a.m. to 11:00 a.m.

Answer any two (2) Questions from Section A and any other two (2) questions from Section B.

ANSWER FOUR QUESTIONS IN ALL

Answers are to be written on the booklet provided.

Each question carries a total of 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.

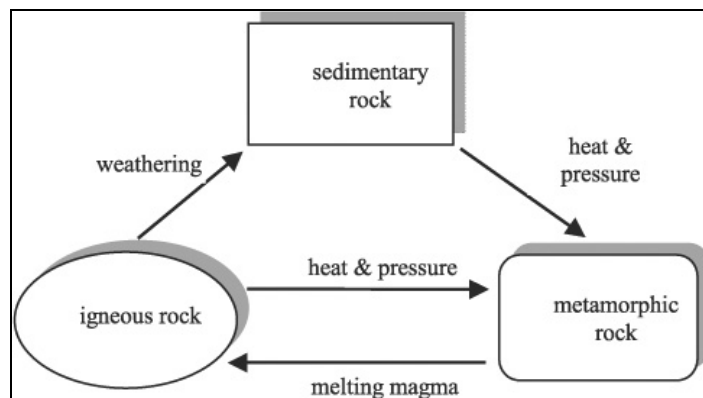**SECTION A: Answer two (2) questions from this Section.**

1.

Figure 1

Figure 1 displays the rock cycle and how the formation of rocks is affected by environmental conditions of heat, pressure, and weathering.

  (a) Define the following terms:
      i.   igneous rocks
      ii.   sedimentary rocks
      iii. metamorphic rocks   (15 marks)
  (b) With reference to figure 1, explain the following processes:
      i.   how sedimentary rock may change into metamorphic rocks
      ii.   how igneous rocks may lead to the formation of sedimentary rocks.   (10 marks)

2. (a) Explain the term *coastal erosion* and give an example of an eroding coastal area.

(5 marks)

(b) Choose **TWO** of the following sets of landforms and with the help of a labelled diagram, explain how each of these landforms are the result of coastal erosion:
   i.   Cliffs and wave-cut platforms
   ii.   Headlands and bays
   iii. Caves, sea arches and stacks   (10 x 2 = 20 marks)

3.

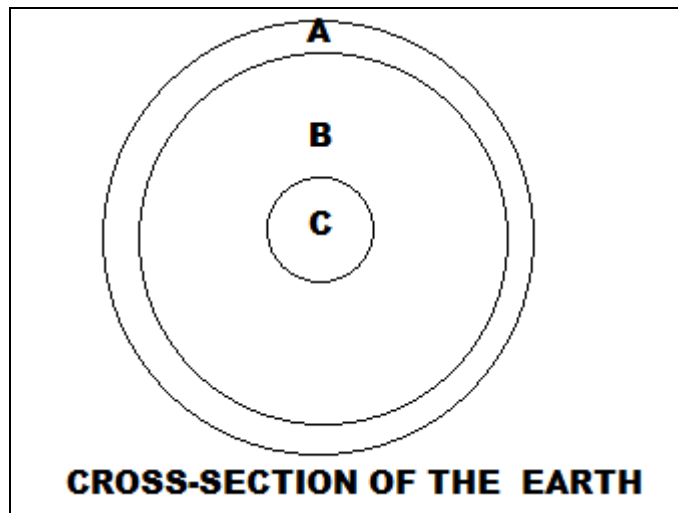
Figure 2

(a) The sketch in figure 2 represents a simple cross-section of the Earth.
     Study this sketch and then name and describe the **THREE** marked sections.   (9 marks)
(b) Define the term *plate tectonics* in relation to the Earth's sections as shown in figure 2.

(6 marks)

(c) Mention and briefly describe **FIVE** effects of Plate tectonics.   (10 marks)

4. *The force of the wind forms different physical features in hot deserts.*
(a) With reference to the above statement, briefly explain how this force breaks up, erodes and weathers desert rocks.   (8 marks)
(b) Briefly explain how this force forms features by deposition.   (8 marks)
(c) Mention and use sketches to describe **THREE** physical features found in hot deserts and formed by the strength of the wind.   (9 marks)

SECTION B: Answer two (2) questions from this Section.

5. (a) Explain the difference between forced and voluntary migration. (5 marks)
  (b) Give **FIVE** reasons for voluntary migration and **FIVE** reasons for forced migration.
  (10 marks)
  (c) Give **ONE** example of forced migration within the Mediterranean and explain **FOUR** factors affecting that migration. (10 marks)

6. (a) Define **dispersed**, **nucleated**, and **linear** settlements. (6 marks)
  (b) Give **ONE** example of a nucleated settlement and **ONE** example of a linear settlement in Malta. Explain your choice of settlement. (9 marks)
  (c) Explain **TWO** challenges associated with linear settlements and **TWO** challenges associated with nucleated settlements. (10 marks)

7. (a) Economic activities can be classified into **FOUR** sectors. Name each sector and give **ONE** example for each. (8 marks)
  (b) Give **FOUR** reasons why the iron and steel industries in **EITHER** the Ruhr region **OR** in South Wales were successful in the 19th century. (8 marks)
  (c) Give **THREE** reasons why countries are deindustrialising and developing alternative modes for their economies. (9 marks)

8. *Aid can be defined as the giving of resources by one country or organisation to another country.*

  (a) Give **THREE** reasons why some developing countries need aid. (9 marks)
  (b) Describe **FOUR** types of emergency aid which is normally given to countries or regions that need it. (8 marks)
  (c) *Long-term aid is also beneficial.* Discuss **TWO** types of long-term aid given to those countries that require it. (8 marks)