1. Study carefully the topographical map, Map 1 on page 2.

a. Give the four-figure grid reference for:

| Ras il-Miignaluna | __ __ __ __ |
| Rdum l-Abjad     | __ __ __ __ |

b. What would you actually find at the following map references?
   Tick (✓) the correct answer.

458788

| Tower         |
| Sandy bay     |
| School        |
| Lighthouse    |
c. What would you actually find at the following map references? Tick (✓) the correct answer.

<table>
<thead>
<tr>
<th>Reference</th>
<th>Tower</th>
<th>Catacombs</th>
<th>School</th>
<th>Bus station</th>
</tr>
</thead>
<tbody>
<tr>
<td>485757</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1)

d. Draw the following map symbols at the following locations on Map 1. Choose from the following symbols:

Information centre, Quarry, Lighthouse

(3)

e. Use the linear scale to measure the straight line distance from Qawra Tower to Ras il-Miġnuna.

....................... km. (2)

f. Suppose you are at Ġebel Ghawzara in grid square 4676.

i. What is the compass direction from Ġebel Ghawzara to Pwales Beach (444784).

.................................

(1)

ii. Tick (✓) the correct answer. Ġebel Ghawzara is

<table>
<thead>
<tr>
<th>The top of a hill</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A sandy beach</td>
<td></td>
</tr>
<tr>
<td>A town</td>
<td></td>
</tr>
</tbody>
</table>

(1)
iii. Tick (√) the correct answer. Ğebel Ghawzara is at contour line

<table>
<thead>
<tr>
<th>15 above sea level</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>380 above sea level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>600 above sea level</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1)

2. Study the map of Africa (Map 2 on page 4) and then answer the following questions.

a. Name the lines of latitude marked by the letters A, B and C.

<table>
<thead>
<tr>
<th>Line of Latitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td>C</td>
</tr>
</tbody>
</table>

(3)

b. Name the ocean marked by the letter D.

<table>
<thead>
<tr>
<th>Ocean</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
</tr>
</tbody>
</table>

(1)

c. Name the major seas marked by the letters E and F.

<table>
<thead>
<tr>
<th>Seas</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
</tr>
<tr>
<td>F</td>
</tr>
</tbody>
</table>

(2)
d. Name the capital cities marked by a dot and lettered G and H. Choose from: Tripoli, Algiers, Cairo, Lagos, Freetown, Nairobi, Kinshasa, Khartoum.

<table>
<thead>
<tr>
<th>Capital Cities</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
</tr>
<tr>
<td>H</td>
</tr>
</tbody>
</table>

(2)
3. Look at the box seen in the picture below.

![Stevenson screen](image)

**a.** Say if the following statements are true (√) or false (×) about the box.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>i.</strong></td>
<td>This box is known as the Stevenson screen.</td>
</tr>
<tr>
<td><strong>ii.</strong></td>
<td>It is usually placed inside to measure the rainfall.</td>
</tr>
<tr>
<td><strong>iii.</strong></td>
<td>The sides are louvred to allow free entry of air.</td>
</tr>
<tr>
<td><strong>iv.</strong></td>
<td>One of the weather instruments placed inside the box is the wind vane.</td>
</tr>
<tr>
<td><strong>v.</strong></td>
<td>It is usually painted black to reflect heat.</td>
</tr>
<tr>
<td><strong>vi.</strong></td>
<td>It is placed on a stand, one metre above ground level.</td>
</tr>
</tbody>
</table>

(3)

**b.** Rewrite the false statements from the above exercise correctly in the space provided below.

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(3)
c. Look carefully at the diagram shown below.

(i) Put the following into the correct order to describe how rain is forming in the above diagram.

Precipitation;  Air forced to rise;  Condensation;  Ground warmed by the sun;  Air cools as it rises.

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(5)

(ii) What do we call the type of rainfall shown by the above drawing?

……………………………………………………..
4. Rocks can be classified into 3 main types.
   a. Try to identify the rock type from the following description by writing the name under the heading **Rock type** in the table below.

   b. Place the following examples of rock types to the corresponding rock description in the third column.

   **marble; granite; slate; limestone; basalt; clay**

<table>
<thead>
<tr>
<th><strong>Rock Description</strong></th>
<th><strong>Rock Type</strong></th>
<th><strong>Rock Examples</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>These rocks are made of fine materials deposited in lakes and seas.</td>
<td>..................</td>
<td>..................</td>
</tr>
<tr>
<td>These rocks are formed when molten magma cools.</td>
<td>..................</td>
<td>..................</td>
</tr>
<tr>
<td>These rocks have been changed by great heat or pressure.</td>
<td>..................</td>
<td>..................</td>
</tr>
</tbody>
</table>

   c. In which type of rock do we find landform features such as stalactites, stalagmites and swallow holes?

       .................. ..................................................

   (1)

5. Look carefully at the photo seen below.
a. Name and describe the type of weathering taking place in the photo on page 8.

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(4)

b. The diagrams below show how freeze-thaw weathering can break up rocks. Write briefly what is happening in each diagram.

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(6)
6. Look carefully at the graph showing world population growth.

[Graph of World Population Growth]

a. Now say if the following statements on the world population growth are true (✓) or false (✗).

<table>
<thead>
<tr>
<th>i.</th>
<th>The graph shows that the world population was increasing slowly till the year 1800.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ii.</td>
<td>The world population reached its first billion only in about 1800.</td>
</tr>
<tr>
<td>iii.</td>
<td>In 1950 the world population was over 6 billion people.</td>
</tr>
<tr>
<td>iv.</td>
<td>From 1900 onwards the world population has grown at a fast rate and this increase is known as a population explosion.</td>
</tr>
<tr>
<td>v.</td>
<td>Population is growing faster in the richer European countries.</td>
</tr>
</tbody>
</table>
b. Define the terms:

i. **Birth rate**: ..............................................................................................................................

...........................................................................................................................................................

ii. **Death rate**: ..................................................................................................................................

...............................................................................................................................................................

iii. **Natural Population Increase**: ........................................................................................................

..............................................................................................................................................................

(6)

c. Apart from birth rates and death rates, name another aspect of population which might affect population change in a country?

..............................................................................................................................................................

(1)

7. Study carefully the photographs seen below.

[Images of wooden shacks in Mexico City and The Central Business District of Los Angeles (California)]

- Wooden shacks in Mexico City

- The Central Business District of Los Angeles (California)
a. On the map of North America shown below, name and shade the USA and Mexico.

b. Draw an arrow to indicate the movement of migration between the two countries.

c. Referring to the photographs on page 11, list two push and two pull factors that drive Mexicans to migrate to the USA. Then explain each factor.

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d. Explain why the USA tries to stop Mexicans entering illegally.

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(2)

(1)

(6)

(1)
8. Read carefully the following newspaper article about acid rain in China.

**Third of China 'hit by acid rain'**

*One third of China is suffering from acid rain caused by rapid industrial growth, an official report quoted by the state media says.*

Pollution levels have risen and air quality has deteriorated, the report found. This comes despite a pledge by the authorities to clean up the air. China has some of the world's most polluted cities and rivers. A report published recently stated that more than 25.5 million tonnes of sulphur dioxide were spewed out, mainly from the country's coal-burning factories last year - up 27% from 2000. Emissions of sulphur dioxide - the chemical that causes acid rain - were double the safe level, the report said. In some areas, rainfall was 100% acid rain, it added.

Increased sulphur dioxide emissions meant that one-third of China's territory was affected by acid rain, posing a major threat to soil and food safety.

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**a.** According to the report, what chemical is causing acid rain in most Chinese cities?

…………………………………………………………………………………………………………………………………………………………………….. (1)

**b.** What is the main source of this chemical in China?

…………………………………………………………………………………………………………………………………………………………………….. (1)

**c.** Name another chemical not mentioned in the report that can also cause acid rain.

…………………………………………………………………………………………………………………………………………………………………….. (1)

**d.** What are the likely effects of acid rain in China?

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…………………………………………………………………………………………………………………………………………………………………….. (3)
e. What can be done by the Chinese government to reduce the effects of acid rain?

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………………………………………………………………………………………………
………………………………………………………………………………………………

(3)

9. Study carefully the photograph seen below.

a. What do we call the type of energy generated from water seen in the picture?

…………………………………………………………

(1)
b. Briefly explain how such energy is produced.

………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………

(2)

c. Explain two advantages and two disadvantages of this source of energy.

………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………

(4)

d. Name another renewable source of energy that uses water to generate electricity.

……………………………………………………

(2)