.Name: __________________________  Class: ______________

Instructions to Candidates

Answer all questions in the space provided. Write your answers neatly and in good English. Credit will be given for relevant illustrations. The marks for individual questions are shown in round brackets: e.g. (4). There are 8 questions in all. The total mark for this paper is 90. The use of blank paper, pieces of string and calculators is allowed.

For Examiner’s use only

<table>
<thead>
<tr>
<th>Question No.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>Written Exam</th>
<th>Fieldwork Report</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Mark</td>
<td>12</td>
<td>8</td>
<td>12</td>
<td>8</td>
<td>12</td>
<td>6</td>
<td>14</td>
<td>18</td>
<td>90</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

1. Study Figure 1 Ordnance Survey map Malta West of scale 1:25000 or 4cm : 1km and then answer the following questions:

a. What compass direction from Ras in-Niexfa (401801) is Qammieħ Point (387812)?

b. In which grid square (4-figure reference) is Santa Maria Estate?

c. What is the 6-figure grid reference of Ras il-Qammieħ trigonometrical station?

d. What is the straight line distance in metres or kilometres from Ras il-Griebeġ (441811) to Dahlet ix-Xilep point (438829)?

e. What is the distance in metres or kilometres along the coast between the same two places?

f. Measure the area of Mellieha Bay to the nearest ¼ km². You may either draw a line with pencil and ruler from Dahlet ix-Xilep to Ras il-Griebeġ or may take easting (grid line) 44 as the eastern limit (margin) of the bay.

g. What can be found on the coast between Qammieḥ Point and Ċirkewwa?
h. Historical monuments and places are usually written in Gothic writing or font. Mention one such historical place in grid square 4283. ____________________ (1)

i. The symbol or feature at 417791 is evidence of a particular industry at Mellieha. What is this industry? ____________________ (1)

j. Describe the difference in settlement pattern between the old part of Mellieha (4279) and St Paul’s Bay (4578).

_____________________________________
_______________________________________
_______________________________________________________________________ (1)

k. In the blank space below draw a cross-section along the line from Red Tower (408816) to Biskra (410807). (2)

2. Look at Figure 2 WORLD MAP in page 3 and then name the following:
   a. major biomes – A ____________________ B ____________________
      C ____________________ D ____________________

   b. major ports - 1. ____________________ 2. ____________________
      3. ____________________ 4. ____________________ (8)
Figure 2 for question 2

WORLD MAP
3. Look at Figure 3 – line and bar graphs below showing monthly temperatures and rainfall for Kayes in Senegal (West Africa) which has a tropical continental (savanna) type of climate.

Figure 3 – temperature and rainfall graphs, Kayes, Senegal

Now answer the following questions:

a. Which month is hottest? _______________ (1)
b. Why is it the hottest month
__________________________________________________________________________ (2)
c. Kayes is in the northern hemisphere. Which is the wettest season? _________________ (1)
d. What is the approximate total rainfall in the wettest season? _________________ (1)
e. Why are July, August and September cooler than springtime?
__________________________________________________________________________ (2)
f. Why is there no rainfall from January to April?
__________________________________________________________________________ (2)
g. Mention one country outside Africa with a tropical continental (savanna) type of climate. _________________ (1)
h. Mention **two** characteristics which the vegetation of the savanna has adopted to resist drought.

________________________________________________________________________
________________________________________________________________________

(2)

4. Study Figure 4 Diagram of the Earth with lines of day and night, and then answer the questions.

Figure 4: Diagram of the Earth

a. What are the following important parallels of latitude called?
   i. Q-E _________________________
   ii. R-T _________________________
   iii. D-C _________________________
   iv. G-H _________________________

(4)

b. On which day is the earth in this position in relation to the sun? ______________

(1)

c. When the earth is in this position, are days in Malta longer or shorter than nights?

______________________________________

(1)

d. What is the length of the night in places South (S) of line K-L ? ______________

(1)

e. Why is this so ? ________________________________

(1)
5. Study Figure 5 Landscape erosion by ice – Before and After glaciation and then answer the questions.

![Before glaciation](image1)

![After glaciation](image2)

**Figure 5 – Landscape erosion by ice**

**a.** Mention five (5) effects of the glaciation that you can notice in the ‘after’ (lower) diagram that make it different from the ‘before’ (upper) landscape.

__________________________________________________________

__________________________________________________________

__________________________________________________________

__________________________________________________________

__________________________________________________________

__________________________________________________________

(5)

**b.** Fill in the blanks of the following paragraph about MORAINES:

Valley glaciers undercut the valley sides, and fragments of ____________ fall on the sides of the ____________ to form a ridge of loose material called a ____________ moraine. When two valley glaciers meet, two lateral moraines join to form ____________ moraine. The material carried along underneath the ____________ , together with rock waste that falls through the crevasses, forms the ____________ moraine. At the end of a glacier, the accumulation of eroded material is known as the ____________ moraine.

(7)
6. Define the following terms:

a. deindustrialisation

b. high technology industry

c. science park

7. Study Figure 6 Plan of Cambridge Science Park on page 8 and, using the information given in the figure, answer the questions that follow:

a. Which three main transport links connect Cambridge Science Park to London and other regions?

b. How many companies operate at the Science Park?

c. Are these industries heavy or small? Why?

d. Mention two features that make the environment in the Science Park pleasant.

e. Mention three major products of Cambridge Science Park.
f. Near this Science Park is Cambridge University. Why is the link of a science park to a university important?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

(2)
8a. Define the term ecosystem.
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
(2)

b. Name three important elements of the non-living environment in an ecosystem.
_________________     ___________________     ___________________
(3)

c. Give two examples of meso (middle) level or scale ecosystems.
________________________________________________________________________
________________________________________________________________________
(2)

d. Give two examples of global (biome) level or scale ecosystems.
________________________________________________________________________
________________________________________________________________________
(2)

e. Near each of the following three descriptions, write the name of the element in the nutrient cycle to which it refers.

i. material where roots spread   ___________________

ii. weight of living plants and organisms  ___________________

iii. surface layer of rotting vegetation  ___________________
(3)

f. Why is the nutrient cycle sometimes called ‘a closed system’?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
(2)

g. Give the names of the four (4) main stages in a food chain.
_________________________
_________________________
_________________________
_________________________
(4)