FORM 3 GEOGRAPHY (Option) TIME: 1h 30min

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 9 questions in all. The total mark for this paper is 90.

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>9</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>10</td>
<td>10</td>
<td>12</td>
<td>8</td>
<td>13</td>
<td>5</td>
<td>90</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

   a. Measure the distance by road from point A to point B. Give your answer in kilometres.

       ............... km  

       (2)

   b. Draw and place the following features on the map using the exact location provided.

       parking area 339125  
       camp site 365134  
       church with tower 334143  
       view point 350165  

       (4)

   c. Draw a spot height of 65 metres above sea level at grid reference 365127.  

       (1)
d. With a light colour, shade the land lower than 30 metres.  

(1)

e. With a dark colour, shade the land above the 100 metre contour line.  

(1)

f. In the two boxes provided on the map, draw arrow heads (>) along the road to mark the upward slope.  

(2)

g. Indicate by the letter X an area on the map which is very steep.  

(1)
2. Study the **world map** (Map 2 on page 4) and then answer the following questions.

a. Name the four countries that are shaded and numbered 1 to 4 on the world map. Name each country in the table below. Next to each country in the third column, write down the name of the capital city of each respective country.

<table>
<thead>
<tr>
<th>Country</th>
<th>Capital City</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

(4)

b. Name the lines of latitude marked by the numbers 5 and 6.

<table>
<thead>
<tr>
<th>Line of Latitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
</tbody>
</table>

(1)

c. Name the following major seas numbered 7 and 8 on the map. Name also the ocean in which each sea is found.

<table>
<thead>
<tr>
<th>Sea</th>
<th>Ocean</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

(2)

d. Draw an arrow on the map to indicate the direction of the Benguela Current.

(1)
3 a. Briefly explain how **altitude** and **ocean currents** affect the temperature of a place.

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

b. Look at the table and map below.

<table>
<thead>
<tr>
<th></th>
<th>Glasgow</th>
<th>Moscow</th>
</tr>
</thead>
<tbody>
<tr>
<td>January temperature</td>
<td>4 °C</td>
<td>-15 °C</td>
</tr>
<tr>
<td>July temperature</td>
<td>15 °C</td>
<td>20 °C</td>
</tr>
<tr>
<td>Total rainfall</td>
<td>1560 mm</td>
<td>630 mm</td>
</tr>
</tbody>
</table>

i. Why is Moscow warmer in summer and colder in winter than Glasgow?

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

ii. Suggest why Glasgow has more rainfall than Moscow?

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

(2)

(4)

c. Why are places on the Equator hotter than those on the poles?

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

(2)

(4)
4. Study carefully the photograph shown below.

![Photograph of a rock formation]

a. What type of rock is shown in the photo? Choose from: Igneous, Sedimentary or Metamorphic Rock. What evidence in the photograph suggests this?

**Type of Rock**

**Evidence**

b. Are the rocks shown in the photo permeable or impermeable? What is the difference between a permeable and an impermeable rock?

(2)

b. Are the rocks shown in the photo permeable or impermeable? What is the difference between a permeable and an impermeable rock?

(2)

(3)

c. Rocks such as those seen in the photo have two main areas of weakness through which water can flow. Name these areas of weakness.

(3)

d. Briefly explain how sedimentary rocks are formed.
5. Study carefully the diagram showing how waves erode the coast. Now answer the following questions.

a. Explain what will happen to the part of the cliff marked by the letter a.

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

b. What do we call the feature marked by the letter b on the diagram?

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

......

(1)

(1)

c. Describe the processes of abrasion and attrition taking place at point c on the diagram.

..........................................................................................................................
..........................................................................................................................
d. Draw and label the same coastline as it might look after thousands of years of wave erosion.


a. Name the settlement pattern shown in:
   A ........................................
   B ........................................
   C ........................................
b. Write a definition for each type of settlement.

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

(3)

c. What type of settlement pattern do you think each of these conditions would encourage and why?

i. a railway passing through a narrow valley

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

ii. the need for defence

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

iii. few sources of water

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

(6)

7. a. List two main reasons that explain why the tourist industry is increasing worldwide at a fast rate.

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

(2)
b. Explain in some detail three of the reasons that led to this rapid increase in tourism.

………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
(6)

8. Answer the following questions about global warming.

a. What is global warming?

………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
(2)

b. What is causing global warming?

………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
(2)
c. With the help of a diagram explain why global temperatures are rising.

\[
\begin{array}{c}
\text{(6)}
\end{array}
\]

d. What measures can be taken to reduce the effects of global warming?

\[
\begin{array}{c}
\text{………………………………………………………………………………………………}
\end{array}
\]

\[
\begin{array}{c}
\text{………………………………………………………………………………………………}
\end{array}
\]

\[
\begin{array}{c}
\text{………………………………………………………………………………………………}
\end{array}
\]

\[
\begin{array}{c}
\text{………………………………………………………………………………………………}
\end{array}
\]

\[
\begin{array}{c}
\text{(3)}
\end{array}
\]

9. The photo below shows a limestone quarry in Malta.
a. List **two** benefits of this industry to the local economy.

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

(2)

b. Write about the negative impacts of quarrying on **people**, the **natural environment** and **wildlife**.

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

(3)