COMMON ENTRANCE EXAMINATION AT 13+

GEOGRAPHY

Wednesday 7 November 2012

Please read this information before the examination starts.

- This examination is 60 minutes long.
- There are three sections: Section A, Section B and Section C.
- Answer all questions in each section.
- Handwriting and presentation are important.

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>MAXIMUM MARKS</th>
<th>MARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Location</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>OS Mapwork</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Rivers and Coasts</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Earthquakes and Volcanoes</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Weather and Climate</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Economic Activity</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Environmental Issues</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Fieldwork</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
</tbody>
</table>

© Independent Schools Examinations Board
Answer ALL the questions.

SECTION A: GLOBAL LOCATION

Look at the world map opposite.

1. On the map, mark and name the following countries:
   (a) Brazil   (b) Mexico   (c) Egypt   (d) Nigeria   (4)

2. (a) Name the river marked E on the world map.

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

(b) Name the country in which E is found.

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

(c) Which ocean is located to the east of this continent?

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

3. (a) In which continent is Kenya located?

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

(b) Which major line of latitude passes through Kenya?

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

4. Complete the table below by naming the cities marked F and G on the world map. (2)

<table>
<thead>
<tr>
<th>city</th>
<th>city name</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td></td>
</tr>
</tbody>
</table>

5. Over which major mountain range would you fly travelling from F to G? (1)

   .....................................................................................................................
SECTION B: ORDNANCE SURVEY MAPWORK

Study the 1:50 000 Ordnance Survey map of Bath.

1. What is the number of the A road which runs through grid square 75 63?  

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

2. What would you find at the following grid references?
   
   (a)  769 655  
   .................................................................................................................. (1)

   (b)  760 623  
   .................................................................................................................. (1)

3. What is the distance in kilometres along the railway line between the station at 736 645 and the station at 753 644?  

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

4. In which direction is Englishcombe (71 62) from the Royal Crescent (74 65)?  

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

5. Using evidence from the map, give two advantages which the original site of Bath (75 64) would have offered to early settlers.
   
   1: .................................................................................................................. (2)

   2: .................................................................................................................. (2)

6. Give TWO pieces of map evidence (including a six-figure grid reference) to suggest that Bath is popular with tourists.  

<table>
<thead>
<tr>
<th>tourist attraction/facility</th>
<th>6-figure grid reference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

S.A. 28312133
**SECTION C: THEMATIC STUDIES**

1. **Rivers and Coasts**
   
   (a) Tick the correct statement.
   
   **Weathering is:**
   
<table>
<thead>
<tr>
<th>the movement of rocks</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>the break-up of rocks in situ</td>
<td></td>
</tr>
<tr>
<td>the movement of rocks by rivers and waves</td>
<td></td>
</tr>
</tbody>
</table>

   (1)

   (b) Match the weathering process below with its correct description.

   *(One has been done for you.)*

<table>
<thead>
<tr>
<th>freeze-thaw/frost shattering</th>
<th>Rock surfaces are weakened and crack as they expand and contract when heated by the sun.</th>
</tr>
</thead>
<tbody>
<tr>
<td>biological</td>
<td>Water enters cracks and joints in rock. When the water freezes, the ice expands and puts pressure on the surrounding rock. When the ice melts, the pressure is released, allowing pieces of rock to break free.</td>
</tr>
<tr>
<td>exfoliation/onion skin</td>
<td>Rain absorbs carbon dioxide from the atmosphere forming a weak acid. This is able to dissolve limestone rocks, widening joints and cracks.</td>
</tr>
<tr>
<td>chemical</td>
<td>The effect of plants and animals on rocks.</td>
</tr>
</tbody>
</table>
(c) Study the diagram below which shows the cross section of a river channel.

velocity (flow), in metres per second

(i) Will the greatest erosion take place at X or Y?

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

(ii) Why will there be greatest erosion at this point?

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

(d) Rivers can transport heavier sediment (load) in a number of ways.

Name ONE of these processes.

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

(e) Study the photograph below of High Force Waterfall on the River Tees and then draw an annotated diagram (or diagrams) opposite to show the formation of a waterfall.
2. Earthquakes and Volcanoes

(a) Study maps A and B below.

(i) Describe the pattern of earthquakes in map A.

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

(ii) How is the distribution of earthquakes linked to map B?

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

(iii) The Pacific Plate boundary is also known as the 'Ring of Fire'.

Using the maps, give a reason for this.

........................................................................................................................................ (1)
(b) Name two hazardous products created by volcanoes when they erupt.

1: .........................................................................................................................

2: ......................................................................................................................... (2)

(c) Study the resource below.

Haiti is an LEDC located in the Caribbean. In 2010 an earthquake (7.0 on the Richter Scale) struck its capital Port-au-Prince at 4.53 pm. Large areas of the city were destroyed (see photograph below). An estimated 316,000 people died and 1,000,000 were made homeless.

Give TWO reasons why this earthquake proved to be so destructive.

1: .........................................................................................................................

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

2: ......................................................................................................................... (2)
3. **Weather and Climate**

(a) Study the map and climate graphs below and answer the questions opposite.

![Map of UK with locations marked](image)

- at Ysbyty-Ifan
  - (392 metres above sea level)
- at Terrington St Clement
  - (2 metres above sea level)
(i) How are the monthly rainfall figures for Ysbyty-Ifan and Terrington St Clement different?

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

(ii) Explain the difference in rainfall between these two places.

..........................................................................................................................
..........................................................................................................................
..........................................................................................................................
....................................................................................................................... (3)

(b) Temperature can be affected on a local scale (microclimate) by a number of factors.
Give an example of a factor and explain how it can affect temperature.

..........................................................................................................................
..........................................................................................................................
....................................................................................................................... (2)
(c) Study the average temperature maps for Britain in January and July.

January temperatures, in °C

July temperatures, in °C

(i) Describe the pattern of January temperatures for the UK.

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

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

(ii) Give a reason for the January temperature pattern.

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

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

(iii) Describe the pattern of July temperatures for the UK.

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

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

(iv) Give a reason for the July temperature pattern.

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

................................................................................................................. (1)
4. **Economic Activity**

Look again at the O.S. map extract of Bath.

(a) Using the 6-figure grid references below, locate the economic activity and, in the table, circle whether it is a primary, secondary, tertiary or quaternary activity.

<table>
<thead>
<tr>
<th>grid reference</th>
<th>type of economic activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>724 605</td>
<td>primary secondary</td>
</tr>
<tr>
<td></td>
<td>tertiary quaternary</td>
</tr>
<tr>
<td>785 641</td>
<td>primary secondary</td>
</tr>
<tr>
<td></td>
<td>tertiary quaternary</td>
</tr>
</tbody>
</table>

(b) Study the pie charts below.

![Employment Structure for Ghana](image1)

![Employment Structure for the UK](image2)

(i) What are the major differences between the employment structures of Ghana and the UK?

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

(ii) Give a reason for these differences.

...................................................................................................................................................
...................................................................................................................................................
...................................................................................................................................................
...................................................................................................................................................
................................................................................................................................................... (2)
(c) Study the photographs and map below which show economic activity in Brazil's Amazon Rainforest.

Economic activities such as these can bring many advantages and disadvantages to LEDCs.

(i) Suggest two advantages.

1: ........................................................................................................................................

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

2: ........................................................................................................................................

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

(ii) Suggest two disadvantages.

1: ........................................................................................................................................

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

2: ........................................................................................................................................

........................................................................................................................................ (2)
5. Environmental Issues

(a) Study the table below.

<table>
<thead>
<tr>
<th>UK national park</th>
<th>year of designation</th>
<th>population</th>
<th>conservation areas</th>
<th>visitors a year, in millions</th>
<th>visitor spend a year, in millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake District</td>
<td>1951</td>
<td>42,200</td>
<td>21</td>
<td>10.1</td>
<td>£97</td>
</tr>
<tr>
<td>Pembrokeshire Coast</td>
<td>1952</td>
<td>22,800</td>
<td>13</td>
<td>4.2</td>
<td>£500</td>
</tr>
<tr>
<td>Peak District</td>
<td>1951</td>
<td>38,000</td>
<td>109</td>
<td>8.3</td>
<td>£659</td>
</tr>
<tr>
<td>Snowdonia</td>
<td>1951</td>
<td>25,482</td>
<td>14</td>
<td>4.27</td>
<td>£396</td>
</tr>
</tbody>
</table>

(i) Which national park has the lowest number of visitors a year?

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

(ii) Which national park has the highest visitor spend a year?

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

(iii) Identify TWO problems which human activities can bring to managed environments, such as national parks.

1: ........................................................................................................................................

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

2: ........................................................................................................................................

........................................................................................................................................ (2)
(b) Name a managed environment you have studied.

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

(i) Explain why there is a need to manage this environment.

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

(ii) Give TWO examples of how it is being managed in a sustainable way.

1: .................................................................................................................................
.................................................................................................................................

2: ................................................................................................................................. (4)
.................................................................................................................................