Entrance Examination
Geography

Wednesday 2nd May 2018
Total time allowed: 1 hour

Candidates are allowed an extra ten minutes at the start of the examination to read the paper.

SECTION A
All candidates MUST answer this section
Candidates should answer all the questions in this section on the separate resource sheet.

SECTION B
Candidates must choose three of the four questions.
All questions are worth equal marks.
Please start each question on a new sheet of paper.
Credit will be given for relevant diagrams used in the answers.
SECTION A
THESE QUESTIONS ARE ON UK AND GLOBAL KNOWLEDGE

You must do this section.

Answer ALL the questions on the separate resource sheet.

1) Shade and name the following countries on the world map:

   (a) Poland          (b) Ethiopia          (c) Peru          (3)

2) Shade and name the Himalayas on the world map.          (1)

3) Draw in and label the Mississippi River on the world map (1)

4) Name the cities labelled A and B on the world map.      (2)

5) Look at the map of the UK on the opposite side of the resource sheet.

   (a) Place Plymouth, Southampton and Leeds on the map.   (3)
   (b) In which grid square is the Isle of Wight?          (1)
   (c) Write the six figure grid reference of location A on the map. (1)
   (d) What is the name of the river that flows into the North Sea at location A? (1)
   (e) Which northing runs through Northern Ireland          (1)
   (f) Label the Irish Sea on the map                        (1)

(Total = 15 Marks)
SECTION B
Answer three questions from this section.

QUESTION 1: TECTONIC PROCESSES

Fig 1: A diagram showing the structure of the Earth.

Fig 2: A diagram showing the distribution of volcanoes in Iceland

a) Name the layers of the Earth A, B and C shown in Fig 1.  
   (3)

b) What type of plate boundary is shown in Fig 2?  
   (1)

c) Explain why there are active volcanoes in Iceland  
   (3)

d) Describe the distribution of volcanoes in the world  
   (4)

e) Describe the primary hazards and secondary impacts of a volcano you have studied  
   (9)

(Total = 20 marks)
QUESTION 2: COASTS

Fig 3: Sea-level rise since 1880

![Graph showing sea-level rise since 1880.]

Fig 4: Some scientific agencies’ predictions for sea-level rise over the next 90 years.

![Graph showing predictions for sea-level rise.]

a) Describe the trend shown in Fig 3. (2)
b) What do you think is causing the trend shown in Figs 3 and 4? (1)
c) How do you think the trend shown in Fig 3 and 4 will affect coastal environments? (2)
d) What can be done to reduce the impacts of sea level rise along a coastline? (4)
e) What is meant by marine erosion? (2)
f) Explain what is meant by the term attrition. (2)
g) Explain how different erosional processes shape cliffs and develop landforms. You may use diagrams with your answer. (7)

(Total = 20 marks)
QUESTION 3: POPULATION AND SETTLEMENT

Fig 5: Population changes in three countries.

<table>
<thead>
<tr>
<th>Country</th>
<th>Birth Rate</th>
<th>Death Rate</th>
<th>Natural Population Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>7.7</td>
<td>9.8</td>
<td>-2.1</td>
</tr>
<tr>
<td>Kenya</td>
<td>31.8</td>
<td>6.7</td>
<td>25.1</td>
</tr>
<tr>
<td>Sweden</td>
<td>12.1</td>
<td>9.4</td>
<td></td>
</tr>
</tbody>
</table>

Study Fig. 5, which shows information about population changes in three countries.

a) Explain the meaning of birth rate. (2)

b) What is meant by natural population growth? (2)

c) Calculate the natural population growth of Sweden. You should show your calculations with your answer. (2)

d) To work out population change in Sweden over a year, what extra information would you need other than that shown in Fig 5? (2)

e) Suggest the likely difficulties which planners and city authorities face in urban areas with very high population densities. (5)

f) Describe and explain some of the factors which early settlers considered when choosing sites for new settlements. (7)

(Total = 20 marks)
QUESTION 4: Transport and Industry

Fig 6 Nestle coffee factory in the village of Hatton, UK.

Fig 7 Coal mining, Kalgoorlie, Australia
Study Fig 6 and Fig 7 on page 6.

a) Which sector of the economy is shown in Fig 6? (1)
b) Which sector of the economy is shown in Fig 7? (1)
c) Describe two benefits of the economic activity shown in Fig 6 for local people. (2)
d) Suggest how the economic activity shown in Fig 7 could damage the natural environment. (3)
e) How might the raw materials used in the factory shown in Fig 6 be transported? (1)
f) Explain how the cost of transport influences the location of different types of industry. (4)
g) Explain the reasons for the location of a multi-national company or an economic activity you have studied. (8)

(Total = 20 marks)