Entrance Examination

Geography

Wednesday 8th May 2019
Total time allowed: 1 hour

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

Additional materials: Calculator, Ruler.

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) Nigeria          (b) Norway          (c) Colombia          (3)

2) Label the Topic of Capricorn on the world map.          (1)

3) Label the Antarctic Circle on the world map.          (1)

4) Locate and label the following cities on the world map: Tehran and Vancouver.          (2)

5) Look at the map of the UK on the opposite side of the resource sheet.
   (a) Locate and label Bristol, Dublin and Edinburgh on the map.          (3)
   (b) What is the name of the upland area in grid square 0408?          (1)
   (c) What is the grid square due east of grid square 0408?          (1)
   (d) What is the six figure grid reference of location A on the map?          (1)
   (e) What is the name of the city at location A?          (1)
   (f) What is the name of the river that flows through the city at location A?          (1)

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

QUESTION 1: RIVERS

Fig. 1: a flow diagram showing information about water flows and stores in a drainage basin.

a) What is a drainage basin? (2)
b) Name the processes/flows which take place at A and B on Fig. 1. (2)
c) Explain why the amount of surface run-off varies in a drainage basin from season to season. (3)
d) Describe how rivers transport their load. (4)
e) For a named river you have studied, explain the causes of flooding and describe how the river has been managed to reduce flooding. (9)

(Total = 20 marks)
QUESTION 2: WEATHER AND CLIMATE

Fig 2: Two instruments used at a school weather station

a) What is the name of instrument A and what does it measure? (2)
b) What is the name of instrument B and what does it measure? (2)
c) Explain why instrument B is sited on the roof of the school. (3)
d) Describe and explain the mechanics of relief rainfall. Use a diagram if you wish. (4)
e) Look at Fig 3 and table 1 (on the next page). Explain why there is a difference in average temperatures in London and Astana. (9)

(Total = 20 marks)
Fig 3: A map showing London and Astana (the capital city of Kazakhstan)

**Table 1: Average temperature data for London and Astana**

<table>
<thead>
<tr>
<th></th>
<th>Latitude</th>
<th>Average temperature in January</th>
<th>Average temperature in July</th>
</tr>
</thead>
<tbody>
<tr>
<td>Astana</td>
<td>51°N</td>
<td>-16°C</td>
<td>21°C</td>
</tr>
<tr>
<td>London</td>
<td>51°N</td>
<td>6°C</td>
<td>19°C</td>
</tr>
</tbody>
</table>
QUESTION 3: POPULATION AND SETTLEMENT

Fig 4: Map of population density in Wales

FACTFILE
Total Population
= 3,110,000
Total land area
= 20,779 km²

By Skate Tier https://commons.wikimedia.org/

a) What is meant by ‘densely populated’? (2)
b) Using Fig 4, calculate the population density of Wales. You should show your calculations. Give your answer to 2 decimal places. (2)
c) Describe the distribution of population in Wales. (3)
d) Suggest two reasons why many people live in Cardiff, the capital city of Wales. (2)
e) State two different physical factors and for each one explain how it may influence the distribution of population in a country. (4)
f) Using a named example, describe how an urban development project has been designed and managed in an environmentally sensitive way. (7)

(Total = 20 marks)
**QUESTION 4: TRANSPORT AND INDUSTRY**

**Table 2:** Information about the employment structure of Myanmar (an LEDC) and Sweden (an MEDC).

<table>
<thead>
<tr>
<th></th>
<th>Primary</th>
<th>Secondary</th>
<th>Tertiary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Myanmar</td>
<td>70%</td>
<td>8%</td>
<td>22%</td>
</tr>
<tr>
<td>Sweden</td>
<td>2%</td>
<td>23%</td>
<td>75%</td>
</tr>
</tbody>
</table>

a) Give one example of primary employment. (1)
b) Give one example of tertiary employment. (1)
c) Using information from Table 2 only, compare the employment structure of Sweden and Myanmar. (3)
d) Suggest reasons for the difference in employment structure between Sweden and Myanmar. (4)
e) Explain how the location of industry can be influenced by transport. (4)
f) Using a named example, evaluate whether the benefits outweigh the costs of a planned or completed transport project. You should include both economic and environmental considerations in your answer. (7)

(Total = 20 marks)