GCSE
4232/02
GEOGRAPHY
(Specification A)
HIGHER TIER
UNIT 2: Options Geography

A.M. THURSDAY, 22 May 2014
1 hour 15 minutes

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen.
Write your name, centre number and candidate number in the spaces at the top of this page.
Answer one question from Section A, one from Section B and one other.
Answer no more than three questions.
Write your answers in the spaces provided in this booklet. Where the space is not sufficient for your answer, continue the answer at the back of the book, taking care to number the continuation correctly.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets at the end of each question or part-question.
You are reminded that assessment will take into account the quality of written communication used in your answers that involve extended writing.
In addition, your ability to spell, punctuate and use grammar accurately will be assessed in your answer to the last sub-question of each theme.
SECTION A - PHYSICAL OPTIONS

Answer at least one question from this section, but no more than two.

Theme 7 – Our Changing Coastline

1. (a) Study the map below which shows coastal areas at risk of a 2 metre rise in sea level.

Coastal areas of Wales and England at risk of a 2 metre rise in sea levels

(i) Describe the locations of the coastal areas most at risk in England and Wales. [2]
(ii) Study the pair of photographs below. They show the coastline at Happisburgh, Norfolk, a coastline that is eroding rapidly.

The coastline at Happisburgh, Norfolk in 1988

The coastline at Happisburgh, Norfolk in 2009

Use the photographic evidence to compare the coastline in 2009 with that in 1988. [4]
(b) Describe how landforms affect the lives of people living along the coast. Use examples at named place(s) to support your answer.
(c) Explain why named processes lead to the formation of coastal spits. \[8 + 4\]

Marks for spelling, punctuation and the accurate use of grammar are allocated to this question.
2. (a) The map shows the likely occurrence of forest fires as a natural hazard in Europe.

(i) Describe the distribution of areas of Europe that have a high risk of forest fires. [2]
(ii) The weather map shows different air pressure systems over Europe in summer 2012.

Annotate the map to explain how different pressure systems can lead to differences in the amount of forest fires between the UK and other parts of Europe. [4]
(b) The table below shows the estimated cost in US$ of a tropical storm hitting New York in the United States.

<table>
<thead>
<tr>
<th>Storm Type</th>
<th>Wind Speed (km/h)</th>
<th>Storm Centre over City</th>
<th>Storm Centre 50 miles away</th>
<th>Storm Centre 100 miles away</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tropical Storm</td>
<td>61 – 118</td>
<td>Up to 2 billion $</td>
<td>575 million $</td>
<td>130 million $</td>
</tr>
<tr>
<td>Category 1 Hurricane</td>
<td>119 – 153</td>
<td>Up to 23 billion $</td>
<td>6 billion $</td>
<td>1 billion $</td>
</tr>
<tr>
<td>Category 2 Hurricane</td>
<td>154 – 177</td>
<td>Up to 93 billion $</td>
<td>25 billion $</td>
<td>5 billion $</td>
</tr>
<tr>
<td>Category 3 Hurricane</td>
<td>178 – 208</td>
<td>Up to 600 billion $</td>
<td>160 billion $</td>
<td>35 billion $</td>
</tr>
</tbody>
</table>

Use the information and your own knowledge to describe how tropical storms can affect the people and economy in any country you have studied. [6]
A number of factors affect the weather and climate of the UK. One example is altitude. Explain why different factors create the variations in weather and climate experienced within and around the British Isles.

Marks for spelling, punctuation and the accurate use of grammar are allocated to this question.
Theme 9 – Living Things

3. (a) Study the graph below which shows the rate of deforestation in the Brazilian Amazon tropical rainforest between 1988 and 2011.

Deforestation in the Brazilian Amazon, 1988-2011 (km²)

(i) Use the information from the graph to describe the trend in deforestation between 1997 and 2011. [2]
(ii) Annotate the satellite image below. Give two ways that people are using this ecosystem. Suggest how these uses may affect the ecosystem. [4]

The dark green shows areas of undamaged tropical rainforest.
Describe the **local** consequences of the unsustainable use of an ecosystem on people and the environment. You may refer to any ecosystem you have studied. [6]
(c) Study the map below which shows the global distribution of different ecosystems.

Global distribution of different ecosystems

Describe how the physical environment interacts with living things to produce different ecosystems.\[8\] + \[4\] Marks for spelling, punctuation and the accurate use of grammar are allocated to this question.
4. (a) Study the graph below.

The number of tourists visiting different parts of the world (millions)

(i) Describe how the overall trend in tourist arrivals is changing over time. [2]
(ii) In 2010, 10% of visitors to Kenya came from the USA. Add an arrow to the map to show visitors from the USA. Describe the pattern shown on your completed map. [4]
(b) Explain why attracting large numbers of tourists to sporting events like the Olympic Games or the Football World Cup can have a positive impact on the host country.
(c) Describe how different physical and human factors lead to different forms of tourist development. Use named places to help your answer. [8 + 4]

Marks for spelling, punctuation and the accurate use of grammar are allocated to this question.
5. (a) Study the graph below.

(i) Describe the trend in the export of flowers from Kenya between 2006 and 2012. [2]
(ii) Kenya, an economically developing country, supplies flowers for retail in the UK. Annotate the photographs below to show the impacts on people in Kenya. [4]
(b) Study the information below.

Maps showing how the population of a city changes by day and night.

Daytime Population  Night time Population

Use the information and your own knowledge to describe how daily changes in population can have advantages and disadvantages for people who live or work in a city.  [6]
(c) Retailing is changing fast and UK consumers now have a lot of choice. For example, consumers can buy fresh vegetables that have been grown all over the world. Explain why these changes are having an impact on the environment. Use one or more examples to support your answer. [8 + 4]

Marks for spelling, punctuation and the accurate use of grammar are allocated to this question.
Theme 12 – Economic Change and Wales

6. (a) Study the table below.

Coal output in England and Wales

<table>
<thead>
<tr>
<th></th>
<th>Million tonnes</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009</td>
<td>2010</td>
<td>2011</td>
</tr>
<tr>
<td><strong>Deep mined</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>England</td>
<td>7.4</td>
<td>7.3</td>
<td>7.2</td>
</tr>
<tr>
<td>Wales</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Surface mining</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>England</td>
<td>2.1</td>
<td>2.7</td>
<td>2.9</td>
</tr>
<tr>
<td>Wales</td>
<td>1.6</td>
<td>1.7</td>
<td>2.1</td>
</tr>
</tbody>
</table>

(i) Describe the trend in coal output between 2009 and 2011. [2]
(ii) Annotate the photograph to describe the possible social and environmental impacts of surface coal mining in Wales.
(b) Study the photograph and text below.

£20,000 grants for farm diversification projects in Powys

A dairy farmer has used a grant to produce ice-cream

Describe how traditional patterns of work are changing for many farmers in Wales.  [6]
(c) Explain why secondary employment is mostly located in North East Wales and along the M4 corridor in South Wales. Use one or more examples to support your answer. [8 + 4]

Marks for spelling, punctuation and the accurate use of grammar are allocated to this question.