GCSE
4231/01
GEOGRAPHY
(Specification A)
FOUNDATION TIER
UNIT 1: Core Geography

P.M. TUESDAY, 24 May 2016
1 hour 45 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 all 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.
Answer all questions.

Theme 1 – Water

1. (a) Study the map below. It shows an extract from an OS map at a scale of 1:50,000. A full key appears on page 24.

(i) Complete the following paragraph by choosing your answers from the box below. [4]

<table>
<thead>
<tr>
<th>steeper</th>
<th>westerly</th>
<th>lower</th>
<th>417</th>
<th>203812</th>
<th>286</th>
</tr>
</thead>
<tbody>
<tr>
<td>197809</td>
<td>easterly</td>
<td>flatter</td>
<td>336</td>
<td>809197</td>
<td>southerly</td>
</tr>
</tbody>
</table>

The contour lines in square 1981 in the south of the map show that the relief is ................................................................ than in the north in square 1983. The highest point is ................................................................ metres above sea level in grid square 1980. The River Siney Sitch flows in a generally ................................................................ direction and its source is at grid reference ................................. .
(ii) Suggest why the A6187 main road may be at risk from flooding. Use map evidence only.  


(b) Study the photograph below.

Describe how the process of abrasion (corrasion) will affect the river cliff shown at X. [3]
(c) Describe how different strategies have helped to reduce river flooding.

*Use one or more examples to help your answer.*
2. (a) Many scientists believe that the Earth’s climate is changing rapidly. Study the information below.

**Effects of Climate Change**

- Intensity and frequency of storms
- Air temperatures
- Sea surface temperatures
- Sea levels
- Ocean heat content
- Ocean acidification
- Arctic sea ice
- Glaciers and ice sheets
- Intensity and frequency of extreme weather events (e.g. fires, floods)

**Key**

- **↑** Increasing
- **↓** Decreasing

(i) Use the diagram to identify two effects of climate change. [2]

1. .......................................................... ..........................................................

2. .......................................................... ..........................................................

(ii) Complete the diagram to show that sea surface temperatures are increasing. [1]

(iii) Choose one effect shown on the diagram and explain why it might cause problems for people. [3]
(b) Study the graph below.

![Carbon Dioxide Emissions Graph]

(i) Describe how the emission of carbon dioxide differs between Europe and China. [2]

(ii) Explain why rapid growth of industry in some countries may add to climate change. [2]
(c) Describe how technologies can be used to reduce the impact of climate change in the future. [5]

*Use one or more examples to help your answer.*
3. (a) Study the information below.

Mount Kelud, a volcano in Indonesia, erupted in 2014. It threw huge amounts of ash over a large area, including the city of Surabaya.

(i) On which island is Mount Kelud? [1]

(ii) Give the compass direction from Mount Kelud to the city of Surabaya. [1]

(iii) Give the distance in kilometres from Mount Kelud to the capital city, Jakarta. Underline the correct answer below. [1]

450 km 550 km 650 km 750 km

(iv) Complete the box below to give the latitude and longitude of Mount Kelud. [1]

<table>
<thead>
<tr>
<th></th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mount Kelud</td>
<td></td>
<td>113° East</td>
</tr>
</tbody>
</table>
(b) Suggest how the ash from this eruption caused a hazard for people in Surabaya. [2]

(c) Describe two ways scientists can monitor the activity of a volcano. [4]

Way 1 .................................................................................................................................

Description ...........................................................................................................................

Way 2 .................................................................................................................................

Description ...........................................................................................................................

(d) Describe ways in which the effects of earthquakes can be reduced. [5]

Use one or more examples to help your answer.
4. (a) Study the graph below.

Number of Births in the UK (1950 - 2012)

(i) Choose from the words below to describe the trend in the UK’s birth rate from 1950 to 2012. Underline the correct answer. 

increasing              stable              decreasing              fluctuating

(ii) Tick (✓) the three statements about the number of births in the UK that are true.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>The number of births in 2012 was similar to 1950.</td>
</tr>
<tr>
<td>B</td>
<td>The number of births in the UK doubled from 1977 to 2012.</td>
</tr>
<tr>
<td>C</td>
<td>The UK birth rate was much lower in 2012 than in 1950.</td>
</tr>
<tr>
<td>D</td>
<td>The number of births reached a peak of one million in 1964.</td>
</tr>
<tr>
<td>E</td>
<td>The biggest decrease in UK births came between 1964 and 1977.</td>
</tr>
</tbody>
</table>
(iii) Suggest why the UK birth rate fell between 1964 and 1977. [2]

(b) Study the graph below.

The population structure of Kenya (2015)

(i) Describe the shape of the graph. [2]

(ii) What does this tell you about the structure of Kenya’s population? [2]
(c) Explain why large numbers of people migrate from rural to urban areas. [5]

Use one or more examples to help your answer.
5. (a) Study the maps below.

Map A: Countries resized according to their total population

Map B: Countries resized according to the number of each country’s athletes who compete in an Olympic Games
(i) Complete the sentence below by underlining one correct word.

The Olympic Games is an example of urbanisation / industrialisation / globalisation of sport.

(ii) Use the maps to complete the following sentences. Underline the correct answer.

Map B shows that the continent with the greatest number of athletes in an Olympic Games is Europe / Africa / Asia.

The continent which has the fewest Olympic athletes compared to its population is Africa / Asia / North America.

Australia has very few / very many / about the same number of athletes in an Olympic Games when compared to its total population.

(iii) Describe the relationship between population size of the UK and the number of athletes in an Olympic Games who compete for the UK.

(iv) Give one problem with using maps like Map B.
(b) In June 2016, the Olympic Games will be held in the city of Rio de Janeiro in Brazil.

Suggest how the 2016 Olympic Games may bring **one benefit and one problem** to Brazil. [4]

**Benefit**

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**Problem**

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(c) Describe the positive and negative impacts of the increase in the number of countries which have become members of the European Union (EU). [5]

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6. (a) Study the graph below.

Development aid is given by rich countries to poorer countries to help them develop.

Development aid as a percentage of each country’s Gross National Product (GNP)

(i) Complete the sentence underneath by choosing the correct word from the list below.

population health literacy wealth

GNP is a measure of a country’s ..........................................

(ii) What is the percentage of GNP given as development aid by Sweden?

................................... %

(iii) The UK gives 0.37% of its GNP as development aid. Between which two countries would the UK be placed on the graph?

Country 1 .......................................................... Country 2 ..........................................................
(iv) Suggest **one** way in which governments in poorer countries can use development aid to improve the lives of their people. [2]

(b) Study the data below.

**Selected Development Indicators**

<table>
<thead>
<tr>
<th>Country</th>
<th>GNP per person ($US)</th>
<th>% Adult Literacy</th>
<th>Life expectancy in years</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>36 197</td>
<td>99</td>
<td>81</td>
</tr>
<tr>
<td>Poland</td>
<td>23 275</td>
<td>99</td>
<td>77</td>
</tr>
<tr>
<td>Egypt</td>
<td>11 085</td>
<td>74</td>
<td>73</td>
</tr>
<tr>
<td>Indonesia</td>
<td>9 559</td>
<td>92</td>
<td>72</td>
</tr>
<tr>
<td>Tanzania</td>
<td>1 775</td>
<td>74</td>
<td>59</td>
</tr>
<tr>
<td>Malawi</td>
<td>780</td>
<td>69</td>
<td>58</td>
</tr>
</tbody>
</table>

(i) Describe the relationship between a country’s GNP and its adult literacy and life expectancy. [3]

(ii) Describe how improvements in health care help a country’s development. [2]
In 2000, the United Nations set eight development targets known as the Millennium Development Goals. The challenge was to meet the goals by 2015. The goals are shown below.

1. Eradicate extreme poverty and hunger
2. Achieve universal primary education
3. Promote gender equality and empower women
4. Reduce child mortality
5. Improve maternal health
6. Combat HIV/AIDS, malaria and other diseases
7. Ensure environmental sustainability
8. Develop a global partnership for development

Describe the progress made by sub-Saharan African countries towards meeting one or more of the goals you have studied.

Use one or more examples to help your answer.