GCSE
4231/02
GEOGRAPHY
(Specification A)
HIGHER TIER
UNIT 1: Core Geography

P.M. TUESDAY, 13 May 2014
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 OS map extract and photograph below. A key for the OS map appears on page 24.

An OS map extract of Elan Valley at a scale of 1:25000.

The photograph below was taken from this point on the map.
(i) Give a six figure grid reference of the source of the Nant yr Ych in the north east corner of the map. [1]

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(ii) Calculate the length of the Nant yr Ych from the source to its confluence with the Afon (River) Elan. Circle the correct answer: [1]

0.7 km / 1.7 km / 2.7 km

(iii) In what general direction does the Afon (River) Elan flow? [1]

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(iv) Name two river landforms shown in the photograph. [2]

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

2. ...........................................................................................................................................................................................
(b) Annotate the cross section below to show how different river processes operate in a meander.

Cross Section through a Meander
(c) How successful have hard engineering approaches been in providing protection from river flooding?

Use one or more examples of hard engineering approaches to flood management to illustrate your answer.
2. (a) Study the graph below.

(i) Give the amount of oil consumed in 2010. [1]

(ii) Describe how consumption of fossil and non-fossil fuel changed between 1970 and 2010. [3]

(iii) How can people change their lifestyles to reduce energy consumption and therefore reduce some causes of climate change? [3]
Study the map below. It shows the Netherlands which is a wealthy country in Europe.

Relief map of the Netherlands

(i) Describe the relief of the Netherlands.

[2]
(ii) Describe the possible effects of climate change on the Netherlands and on one other country at a different level of development.
Theme 3 – Living in an Active Zone

3. (a) Study the map below.

(i) Label in the correct boxes a constructive and a destructive plate margin. [1]

(ii) In the space below, draw an annotated diagram to explain the formation of any one landform at a destructive plate margin. [4]
Earthquakes occur on destructive plate margins. Study the graph below.

Predicted hospital admissions following an earthquake

(i) Describe how the percentage of admissions to hospital changes during the eight hours after the earthquake. [2]

(ii) Suggest two reasons to explain why hospital admissions continue many hours after the earthquake event. [2]

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

2. ...........................................................................................................................................................................................
(c) Explain why the effects of earthquakes may vary in countries at different levels of development. 

*Use examples to illustrate your answer.*
4. (a) Study the map below.

**Africa's Population Growth 2005-2010**

(i) What was the population growth rate in Tanzania between 2005 and 2010? [1]

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(ii) Complete the graph showing the total population of Niger of 16 million people. [1]

(iii) Describe the distribution of countries whose population growth between 2005 and 2010 was more than 3%. [3]
(iv) Explain why the population growth rate of countries in sub-Saharan Africa is high. [4]

(b) Explain how different factors have encouraged migration to cities within countries at different levels of development. [6]

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

(i) Give the increase in the number of foreign tourists going on holiday to India between 2000 and 2010. .................................................. millions

(ii) Describe the trend in the number of Indian citizens going on holiday abroad since 1997. ..........................................................................................................................

(iii) Describe factors that enable an increase in global tourism. .........................................................................................................................
(b) Study the map below.

The world's top 20 destinations for Indian migrants

Key:

- 2.0 (million)
- 1.0
- 0.5
- 0

Indians living outside India (millions)

Describe the distribution of the top destinations for Indian migrants. [3]
(c) Describe the benefits of globalisation to the lives of people who live in Newly Industrialised Countries (NICs) such as India and China. 

Use one or more examples to illustrate your answer.
6. (a) Study the map below.

The infant mortality rate is the number of deaths of infants under one year old in a year per 1,000 live births in the same year.

Infant Mortality Rates

(i) Give the infant mortality rate for Afghanistan. \[1\]
............................................................................ per 1000 live births.

(ii) Complete the map to show that China has an infant mortality rate of 16 deaths per 1000 live births. \[1\]

(iii) How does the infant mortality rate in India compare to the rate in the UK? \[1\]

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(iv) Explain one reason why the infant mortality rate is higher in some countries than others. \[2\]

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(b) Study the graph below.

Changing Infant Mortality Rates

Infant mortality rate (per 1,000 live births)

Sub-Saharan Africa
South Asia
All developing regions
Developed regions

Year


(i) By how much has the infant mortality rate fallen in South Asia between 1990 and 2010? [1]

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(ii) Suggest one way in which governments or Non-Governmental Organisations (NGOs) may reduce infant mortality. [3]

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(c) Describe how regional patterns of development differ within one country that you have studied. You must draw a labelled map to help your answer.

Country: .................................................................
For continuation only.