READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name in the spaces provided.

Write in dark blue or black pen.

You may use an HB pencil for any diagrams or graphs.

Do not use staples, paper clips, glue or correction fluid.

DO NOT WRITE IN ANY BARCODES.

Write your answer to each question in the space provided.

If additional space is required, you should use the lined pages at the end of this booklet. The question number(s) must be clearly shown.

Answer THREE questions, ONE from each section.

Insert 1 contains Figs. 1.1 and 1.2 for Question 1, Figs. 2.1 and 2.2 for Question 2, Fig. 3.1 for Question 3, Fig 4.2 for Question 4, and Figs. 5.1, 5.2, 5.3 and 5.4 for Question 5 and Figs. 6.2 and 6.3 for Question 6.

Insert 2 contains Fig 4.1 for Question 4.

The Insert is NOT required by the Examiner.

Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.
At the end of the examination, fasten all your work securely together.

The number of marks is given in brackets [ ] at the end of each question or part question.

**DEFINITIONS**

MEDCs – More Economically Developed Countries

LEDCs – Less Economically Developed Countries
SECTION A

Answer ONE question from this section.

1 (a) Study Fig. 1.1 (Insert 1), which shows information about the population structure of Ethiopia (an LEDC) in 2010 and 2030 (predicted).

(i) What percentage of the population of Ethiopia in 2010 were male aged 0 to 4?

__________________ %  [1]

(ii) Describe how the TOTAL percentage population aged 0 to 4 is expected to change between 2010 and 2030. You should use statistics in your answer.

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________________________________________________________________________ [2]
(iii) Suggest how the population structure of Ethiopia is likely to change after 2030.

Young dependents ____________________________
____________________________________________

Old dependents ______________________________
____________________________________________

Economically active __________________________
____________________________________________[3]

(iv) Suggest reasons for the expected changes in the percentage of young and old dependents in Ethiopia.

Young dependents ____________________________
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____________________________________________
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Old dependents ______________________________
____________________________________________[4]
(b) Study Fig. 1.2 (Insert 1), which predicts how the percentage of different age groups in the European Union (EU) may change between 2010 and 2050.

(i) COMPLETE FIG. 1.2 by plotting the following information for 2040.

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Percentage of population</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 14 years</td>
<td>13</td>
</tr>
<tr>
<td>15 to 64 years</td>
<td>58</td>
</tr>
<tr>
<td>65 to 79 years</td>
<td>19</td>
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<tr>
<td>80 years and above</td>
<td>10</td>
</tr>
</tbody>
</table>
(ii) Describe the challenges faced by MEDCs as the percentage of old dependents in their population increases.

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[5]
(c) For a named country you have studied, describe the impacts of overpopulation.

Name of country ________________________

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2 (a) Study Fig. 2.1 (Insert 1), which shows information about the percentage of the population living in urban areas in 2010 and 2050 (predicted).

(i) What percentage of the population of North America lived in urban areas in 2010?

___________________________ % [1]

(ii) Describe how the percentage of the population of Asia living in urban areas is expected to change between 2010 and 2050. You should use statistics in your answer.

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____________________________________________________________________________________ [2]

(iii) Suggest reasons why a larger percentage of the population lived in urban areas in North America than in Africa in 2010.

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____________________________________________________________________________________ [3]
(iv) Explain why urbanisation is taking place in LEDCs.
(b) Study Fig. 2.2 (Insert 1), which is a photograph which shows the homes of migrants in Mumbai, a city in India (an LEDC).

(i) Using Fig. 2.2, suggest THREE problems likely to be faced by the migrants to Mumbai, who are living in the area shown.

1. ____________________________________________

2. ____________________________________________

3. ____________________________________________ [3]
(ii) Describe the impacts of rural to urban migration on the RURAL AREAS from which people have migrated.

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_______________________________________ [5]
(c) For a named urban area you have studied, describe the strategies which have been used to reduce the problems caused by rural to urban migration.

Name of urban area ______________________________________

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SECTION B

Answer ONE question from this section.

3  (a) Study Fig. 3.1 (Insert 1), which shows the earth’s tectonic plates and their boundaries.

(i) At which type of plate boundary do plates move AWAY FROM each other?

Circle your answer in the list below.

Conservative  Convergent  Divergent  [1]

(ii) Explain why volcanoes form at places where plates move AWAY FROM each other.

_______________________________________

_______________________________________

_______________________________________

_______________________________________ [2]
(iii) Explain why volcanoes form at places where plates move TOWARDS each other.

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(iv) Explain why EARTHQUAKES occur at plate boundaries.

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________________________________________________________________________[4]
(b) Study Fig. 3.2, which is information about a volcanic eruption in Chile (an LEDC in South America).

CHILE VOLCANO VILLARRICA Erupts

More than 3000 people have been evacuated from nearby areas as the Villarrica volcano in southern Chile erupted in the early hours of Tuesday morning. Lava and clouds of ash were ejected from the volcano. The 2840 metre volcano has a lava lake in its crater which is a popular destination for hikers who climb the peak to look inside the crater.

The last major eruption was in 1985 and there have been smaller eruptions since then. More than 100 people are thought to have died in mudflows and from breathing poisonous fumes from the volcano during the 20th Century.

Fig. 3.2
(i) Using information from Fig. 3.2 ONLY, identify THREE hazards caused by the eruption of the Villarrica volcano.

1  ______________________________________

2  ______________________________________

3  ____________________________________ [3]

(ii) Explain what can be done to reduce the impacts of volcanoes.

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________________________________________________________________________ [5]
(c) Explain why people live close to a named volcano you have studied.

Name of volcano ________________________
4 (a) Study Fig. 4.1 (Insert 2), which shows the drainage basin of the River Tillingbourne in the UK (an MEDC).

(i) What is the general direction in which the River Tillingbourne is flowing? 

________________ [1]

(ii) On Fig. 4.1, MARK AND LABEL the following:

– the confluence of the River Tillingbourne and Law Brook (label with an X).

– the source of Law Brook (label with an S). [2]

(iii) Suggest THREE reasons why the River Tillingbourne is more likely to flood than Law Brook.

1 ________________________________

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2 ________________________________

______________________________

3 ________________________________ [3]

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(iv) Shalford is a large village with a population of 4100. Describe the problems which flooding may cause in Shalford.

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____________________________________________________________________ [4]
(b) Study Fig. 4.2 (Insert 1), which shows the flow of the River Tillingbourne during one year.

(i) Describe how the flow of the River Tillingbourne in March differs from the flow in September. You should use statistics in your answer.

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(ii) Suggest reasons why the flow of the River Tillingbourne varies during the year.

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(c) For a named river you have studied, describe how it is managed to reduce the risk of flooding.

Name of river ________________________

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Answer ONE question from this section.

5  (a) Study Figs. 5.1 and 5.2 (Insert 1), which show information about the manufacture of linen in Belfast, Northern Ireland (UK, an MEDC) in 1900 and the present day.
Linen is a cloth made from a plant called ‘flax’.

(i) What is meant by *manufacturing industry*?

__________________________________________________________

__________________________________________________________ [1]

(ii) Using Fig. 5.1 ONLY, identify:

– the main source of labour in 1900

__________________________________________________________

– the main market for linen in 1900.

__________________________________________________________ [2]
(iii) Using Figs. 5.1 and 5.2, describe THREE ways in which the linen industry in Northern Ireland has changed between 1900 and the present day.

1

2

3  ______________________________________
    ____________________________________
    ____________________________________

(iv) Explain why manufacturing industries remain important in some areas even though the original advantages of those locations no longer exist.

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_______________________________________ [4]
(b) Study Figs. 5.3 and 5.4 (Insert 1), which are photographs showing a manufacturing industry in Corfu, Greece (an MEDC).

(i) Describe the processes shown in Figs. 5.3 and 5.4.

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____________________________________________________________________________________[3]

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(ii) Explain why the percentage of the population employed in manufacturing industry changes as a country develops.

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[5]
(c) Describe the positive impacts of a named transnational corporation (TNC) at a local and at a national scale.

Name of transnational corporation (TNC)

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(a) Study Fig. 6.1 on page 35, which shows a map of the location of reservoirs near Sheffield, UK (an MEDC), along with Figs. 6.2 and 6.3 (Insert 1) which are photographs which show two of the reservoirs. Fig. 6.2 shows Agden Reservoir. Fig. 6.3 shows Dale Dyke Reservoir.

(i) What is meant by a *reservoir*?

...........................................................................................................................................
...............................................................................................................................................[1]

(ii) Using Fig. 6.1, describe ONE similarity and ONE difference between Agden and Dale Dyke reservoirs.

Similarity ................................................................................................................................
........................................................................................................................................................

Difference ..................................................................................................................................
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(iii) Suggest reasons for the location of the reservoirs shown in Figs. 6.2 and 6.3.
(b) Study Fig. 6.4, which is a news article about a reservoir near Solapur in India (an LEDC).

The State government was asked to release water from upstream reservoirs to the Ujani reservoir which was empty.

Householders and farmers in the area have been asking for the release of 85 million cubic metres of water into the Ujani reservoir. Water is also needed for a sugar factory and a soft drinks factory in Solapur.

Even though the government has agreed to release water from upstream the worry is that not much water will actually reach the drought-affected people. Water will have to travel 250 km and a large amount will be lost by evaporation before reaching the Ujani reservoir.

Fig. 6.4
(i) Identify from Fig. 6.4 THREE different uses of water from the Ujani Reservoir.

1  ______________________________________

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2  ______________________________________

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3  ______________________________________

_______________________________________ [3]

(ii) Explain why water shortages cause more problems in LEDCs, such as India, than in MEDCs.

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_______________________________________ [4]
(iii) Describe methods other than reservoirs which can be used to supply people with enough safe water.
(c) Describe the environmental risks of an economic activity which takes place in a named area you have studied.

Name of area ______________________________

Economic activity ____________________________

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