Instructions

- Use black ink or ball-point pen.
- Fill in the boxes at the top of this page with your name, centre number and candidate number.
- Answer ALL questions in Section A and ONE question in Section B.
- Answer the questions in the spaces provided – there may be more space than you need.

Information

- The total mark for this paper is 90.
- The marks for each question are shown in brackets – use this as a guide as to how much time to spend on each question.
- Questions labelled with an asterisk (*) are ones where the quality of your written communication will be assessed – you should take particular care on these questions with your spelling, punctuation and grammar, as well as the clarity of expression.

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Spend approximately one hour on Section A and 30 minutes on Section B.
- Check your answers if you have time at the end.

Turn over
SECTION A

Answer ALL questions.

You must use the Resource Booklet.
You are advised to spend approximately one hour on Section A.

Some questions must be answered with a cross in a box ✗. If you change your mind about an answer, put a line through the box ✗ and then mark your new answer with a cross ✗.

1 Study Figure 1.
   (a) (i) Name the type of tectonic plate boundary shown on Figure 1.  

   (ii) Describe how plate tectonics cause volcanic activity in the Philippines.
(b) Identify **two geophysical** disasters that have affected the Philippines.

- **A** 60 lives lost to tropical storm Haikui in 2012
- **B** 847 people killed when Mount Pinatubo erupted in 1991
- **C** Hundreds of lives lost to monsoon flooding in 2009
- **D** Many Quezon City homes destroyed after heavy rainfall in 2012
- **E** 268 people killed by an earthquake in Manila in 1968
- **F** 1.5 million tons of rice lost to drought in 2010

(c) Explain why tropical cyclones (typhoons) and flooding **both** occur frequently in the Philippines.

(Total for Question 1 = 11 marks)
2 Study Figure 2.

(a) (i) Identify where the greatest sea level change was recorded between 1920 and 2008.

☐ Aberdeen
☐ Liverpool
☐ North Shields
☐ Newlyn
☐ Sheerness

(ii) Explain two ways in which a warming climate can lead to a rise in global sea level.

1


2
(iii) Suggest one physical reason why the risk of increased coastal flooding is very high for some low-lying coastlines.

(2)

(b) Suggest possible economic impacts of rising sea levels on developing countries, such as those on the African continent.

(4)

(Total for Question 2 = 11 marks)
Study Figure 3.

(a) (i) State what is meant by carbon footprint per person. (1)

(ii) Suggest reasons for the variations in carbon footprint per person shown in Figure 3. (4)

(b) Which of the following could play a role in helping to reduce greenhouse gas emissions? (1)

- Reducing energy prices
- Building new flood defences
- Using nuclear power instead of coal
- Burying plastic waste in landfill sites
- Increased burning of coal
(c) Explain how the planting of new forests (afforestation) could assist with:

climate change mitigation

adapting to climate change

(Total for Question 3 = 10 marks)
4 Study Figure 4.

(a) (i) Identify which country gains the most money from migrant remittance flows (money sent home by migrants).

☐ Mexico
☐ India
☐ China
☐ United States
☐ U.A.E.

(ii) Suggest reasons for the global distribution of remittance flows shown in Figure 4.
(b) (i) Identify **two physical** reasons why some places become more ‘switched-on’ than other places.

1

2

(ii) Using examples, explain how flows of information create global networks.

(Total for Question 4 = 10 marks)
Study Figure 5.

(a) Least Developed Countries (LDCs) and Newly Industrialised Countries (NICs) are two types of global grouping found in Africa.

Match the following characteristics with these two global groupings by putting the letters A to D into the table provided.

A  Their economic growth rate is well above the global average
B  More are found in Africa than in any other continent
C  Agriculture is their main source of national wealth
D  Manufacturing and services are major sources of national wealth

<table>
<thead>
<tr>
<th></th>
<th>LDCs</th>
<th>NICs</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(b) Complete the table below.

<table>
<thead>
<tr>
<th>Main characteristics of member country</th>
<th>Purpose of group</th>
</tr>
</thead>
<tbody>
<tr>
<td>OECD</td>
<td></td>
</tr>
<tr>
<td>OPEC</td>
<td></td>
</tr>
</tbody>
</table>
(c) Explain why countries join trade blocs, such as the EU and NAFTA.

(Total for Question 5 = 11 marks)
6  Study Figure 6.

(a) Complete the table below, which shows projected megacity growth in equatorial Africa.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of megacities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>1 (Lagos)</td>
</tr>
<tr>
<td>2025</td>
<td></td>
</tr>
</tbody>
</table>

(b) (i) Suggest how population growth in developing world megacities is caused by:

- **employment** pull factors in **urban** areas

---

- **social** push factors in **rural** areas

---
(ii) Other than in-migration, identify one further reason for population growth in megacities. (1)

(c) Describe how one named megacity has grown and developed over time. (4)

Named megacity .................................................................
SECTION B

Answer ONE question in this section.

Use the evidence provided in the Resource Booklet and your own ideas.
You are advised to spend approximately 30 minutes on Section B.

*7 Study Figure 7.

(a) Suggest how physical and human factors contribute to the distribution of landslides. (10)

(b) Globally, disasters are affecting more people but causing fewer deaths than in the past. Explain these two trends. (15)

(Total for Question 7 = 25 marks)

*8 Study Figure 8.

(a) Suggest how a warming climate could impact on the ecology of Arctic regions. (10)

(b) Explain why it is difficult for scientists to predict the amount and rate of future global warming. (15)

(Total for Question 8 = 25 marks)

*9 Study Figure 9.

(a) Suggest why glocalisation is an important strategy for TNCs when they are developing new markets in different countries. (10)

(b) Explain how the growth of both TNCs and international organisations has accelerated the process of globalisation. (15)

(Total for Question 9 = 25 marks)

*10 Study Figure 10.

(a) Suggest reasons why London has become a global hub for international migration. (10)

(b) Explain how the UK’s population structure has changed since 1900 as a result of social changes. (15)

(Total for Question 10 = 25 marks)
Indicate which question you are answering by marking a cross in the box  *. If you change your mind, put a line through the box * and then indicate your new question with a cross *.

Chosen Question Number:

- Question 7
- Question 8
- Question 9
- Question 10
SECTION A

The following resources relate to Questions 1–6.

Figure 1

A simplified illustration of tectonic plate movements in the northern Philippines region

(Source: © 2008 The Trustees of Indiana University)
Figure 2

Sea level changes between 1920 and 2008 recorded at five UK sites

(Source: © Crown copyright 2009)
Figure 3
Variations in carbon footprint per person for some rural and urban local authority areas in Scotland, 2007

(Source: © Crown copyright 2009)
Figure 4

‘Top ten’ global remittance flows (money sent home by migrants) in 2010 (valued in $US billions)

(Source: © The Economist Newspaper Limited 2010)
<table>
<thead>
<tr>
<th>Global grouping</th>
<th>Number of African countries</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDC</td>
<td>34</td>
<td>Chad, Ethiopia, Zambia</td>
</tr>
<tr>
<td>NIC</td>
<td>3</td>
<td>South Africa, Tunisia</td>
</tr>
<tr>
<td>OPEC</td>
<td>3</td>
<td>Angola, Nigeria</td>
</tr>
<tr>
<td>OECD</td>
<td>0</td>
<td>(None)</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>Morocco, Algeria, Kenya</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>54</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 5**

A categorisation of African nations using different ‘global groupings’ 2011
2010  2025 projection
number of people (millions)

Nairobi, Kenya: 6.1
Abidjan, Ivory Coast: 7.0
Dar es Salaam, Tanzania: 7.3
Luanda, Angola: 8.9
Kinshasa, Democratic Republic of Congo: 14.5
Lagos, Nigeria: 18.9

(Source: © Financial Times)

Figure 6
The population of 6 equatorial African cities in 2010 and projected growth to 2025
SECTION B

The following resources relate to Questions 7–10.

Deforested slopes, Rio de Janeiro, Brazil

![Deforested slopes, Rio de Janeiro, Brazil](image)

(Source: © 2013 NY Times Co)

Devon coastline, UK

![Devon coastline, UK](image)

(Source: © 2011 MCA)

Los Angeles County, California, close to the San Andreas Fault

![Los Angeles County, California, close to the San Andreas Fault](image)

(Source: © 2006 USGS)

**Figure 7**

Landslides photographed at selected worldwide locations
### Average July Temperature and Vegetation Characteristics

<table>
<thead>
<tr>
<th>Region</th>
<th>Average July Temperature</th>
<th>Vegetation Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent ice cover</td>
<td>Below zero</td>
<td>None</td>
</tr>
<tr>
<td>Polar desert</td>
<td>1°C</td>
<td>Frozen ground all year. Mostly barren ground (some lichen)</td>
</tr>
<tr>
<td>Tundra</td>
<td>7°C</td>
<td>Thicker mosses and some shrubs</td>
</tr>
<tr>
<td>Forest border</td>
<td>10°C</td>
<td>Grasses and shrubs, with some trees starting to appear</td>
</tr>
</tbody>
</table>

(Source: © University of Alaska and © National Snow and Ice Data Center)

**Figure 8**

Arctic regions and ecosystems
<table>
<thead>
<tr>
<th>Media and services</th>
<th>Manufacturing, commodities and retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Mickey Mouse is dressed in traditional Hong Kong clothes in the Disney theme park located there</td>
<td>• Unilever has designed a range of Wall’s ice creams for Indonesia that use more coconut</td>
</tr>
<tr>
<td>• MTV has created a range of music internet stations for different countries all over the world</td>
<td>• McDonald’s opened a 100% vegetarian restaurant in Amritsar, India, home of a sacred Sikh temple</td>
</tr>
</tbody>
</table>

**Figure 9**

Examples of how TNCs use glocalisation to build global market share

Parent company Unilever has glocalised a range of its products for Indonesian markets

(Source: © Unilever Indonesia)
- 6% of Chelsea residents were born in the USA
- 300,000 French citizens live in London
- 30,000 Russians live in London
- 150,000 Poles live in and around London

Figure 10
Areas of Central London where large numbers of international migrants live and own property

(Source: © Guardian, 02 June 2012)
Edexcel a product of Pearson Education Ltd. gratefully acknowledges the following sources:

Adapted from a tectonic model of the northern Philippine island, Michael W. Hamburger, Indiana University
Sea level rise at selected sites, 1850 to 2008, Proudman Oceanographic Laboratory, DEFRA, 2009
New rivers of gold, The Economist, 28 April 2012
Megacities multiply, Financial Times, 2012
Landslides in Brazil, Boston.com, January 21, 2011
Landslide, Dorset Geologists’ Association, 2011
Los Angeles County, California, landslides, U.S. Geological Survey Photographic Library, 2006
Circumpolar Arctic Vegetation Map, Alaska Geobotany Center, 2010
Circumpolar Arctic Bioclimatic Subzones, Arcticatlas, University of Alaska
The Antarctic Ice Sheet, National Snow and Ice Data Center, 2013
2011 Annual Report, Brand and Innovation, Unilever Indonesia Tbk, 2011

Every effort has been made to contact copyright holders to obtain their permission for the use of copyright material. Edexcel, a product of Pearson Education Ltd. will, if notified, be happy to rectify any errors or omissions and include any such rectifications in future editions.