



# GCSE **GEOGRAPHY**

Paper 2 Challenges in the human environment

Specimen Time allowed: 1 hour 30 minutes

#### **Materials**

For this paper you must have:

- a pencil
- a ruler.

#### Instructions

- Use black ink or black ball-point pen.
- Fill in the boxes at the bottom of this page.
- Answer all questions in Section A and Section B.
- Answer Question 3 and one other question in Section C.
- You must answer the questions on the spaces provided. Do not write outside the box around each page or on blank pages.
- Do all rough work in this book. Cross through any work you do not want to be marked.

#### Information

- The marks for questions are shown in brackets.
- The total number of marks available for this paper is 88.
- Spelling, punctuation, grammar and specialist terminology will be assessed in Question 01.8.

Advice
For the multiple-choice questions, completely fill in the circle alongside the appropriate answer(s).
CORRECT METHOD WRONG METHODS © © ©
If you want to change your answer you must cross out your original answer as shown.
If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown.
Please write clearly, in block capitals, to allow character computer recognition.
Centre number Candidate number Candidate number

Please write clearly, in block capitals, to allow character computer recognition.			
Centre number	Candidate number		
Surname			
Forename(s)			
Candidate signature			

	2
	Section A Urban issues and challenges
	Answer <b>all</b> questions in this section.
Question 1	Urban issues and challenges
	Study <b>Figure 1</b> , a map showing the percentage of the population living in urban settlements in different parts of the world.
	Figure 1
	This source has been removed due to third-party copyright restrictions.
0 1 . 1	Describe <b>two</b> differences in the percentage of population living in urban settlements in Africa and South America.
	[2 marks]
	Difference 1:
	Difference 2:

Difference 2:

Study Figure 2, a graph showing changes in the world's rural and urban population from 1950 to 2050 (predicted). Figure 2 This source has been removed due to third-party copyright restrictions. Using Figure 2, which two of the following statements about the world's rural and urban population are true? Shade two circles only. **A** The rural population grew fastest between 2000 and 2010.  $\bigcirc$ **B** The urban population grew more rapidly than the rural population between 1950 and 2000. **C** The urban population is expected to grow more slowly than the rural population from 2015 onwards. **D** The urban population increased by over 2000 million between 1950 and 2010. **E** The world's total population doubled between 1950 and 1980. [2 marks] Question 1 continues on the next page

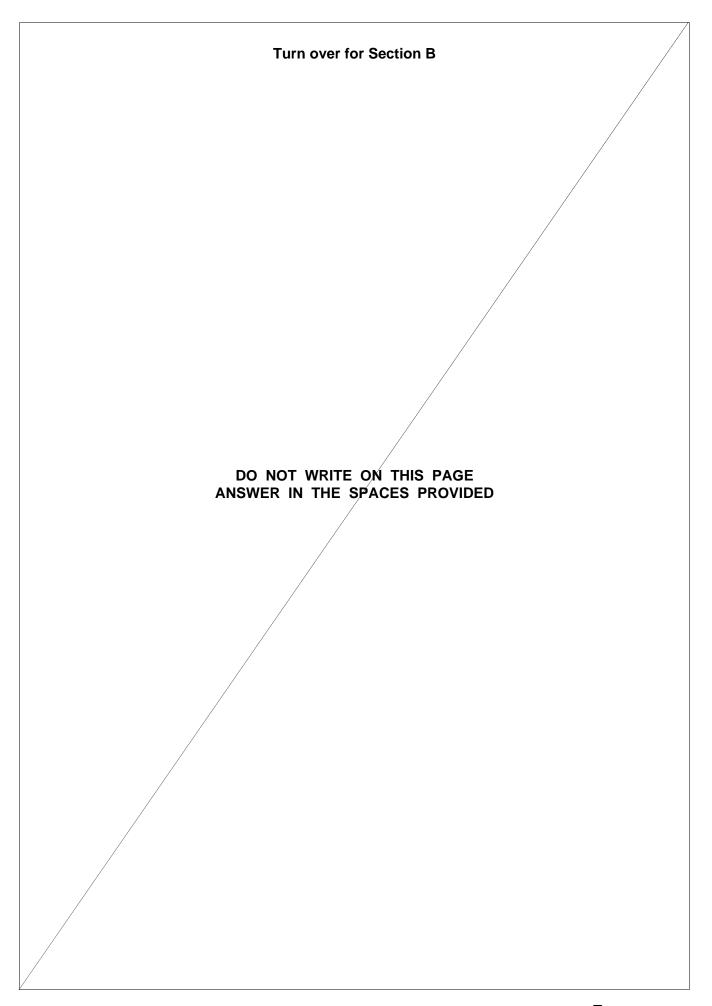
0 1 . 3	Suggest <b>two</b> reasons for the slow rate of urban growth in many higher income countries (HICs).	Э
		[2 marks]
	Reason 1	
	Reason 2	
0 1 . 4	To what extent do urban areas in lower income countries (LICs) or newly eme economies (NEEs) provide social and economic opportunities for people?	erging [6 marks]
	Question 1 continues on page 6	



Study Figure 3, a 1:50 000 map of Dundee, a city in Scotland. Figure 3 This source has been removed due to third-party copyright restrictions.

0 1 . 5	Which grid square shows part of the rural-urban fringe of Dundee	?	
	Shade <b>one</b> circle only.		
	<b>A</b> 3630		
	<b>B</b> 3833		
	<b>C</b> 3930		
	<b>D</b> 3934		[1 mark]
			[i illark]
0 1 . 6	Discuss the effects of urban sprawl on people and the environmen	ıt.	
	Use Figure 3 and a case study of a major city in the UK.		[6 marks]
			[6 marks]
			_
	Question 1 continues on the next page		

0 1 . 7	Explain <b>one</b> economic problem caused by traffic congestion.  [2 marks]
0 1 . 8	Evaluate the effectiveness of an urban transport scheme(s) you have studied.  [9 marks]  [+ 3 SPaG marks]
	END OF SECTION A



### Section B The changing economic world

Answer **all** questions in this section.

## Question 2 The changing economic world

Study **Figure 4**, a world map showing the global distribution of Human Development Index (HDI) values.

HDI combines data on life expectancy, educational levels and income, with values ranging from 0 (worst) to 1 (best).

## Figure 4

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0	2 . 1	Using <b>Figure 4</b> , compare HDI values in Africa and South America.	[2 marks]

0 2 . 2	Outline <b>one</b> disadvantage of using a single measure of development such as income.  [2 marks]
	Study <b>Figure 5</b> , a table showing indicators of development for three countries.
	Figure 5
	This source has been removed due to third-party copyright restrictions.
0 2 . 3	Explain how <b>one</b> of the indicators of development in <b>Figure 5</b> shows the differences in the quality of life between the three countries.
	[4 marks]
	Question 2 continues on the next page

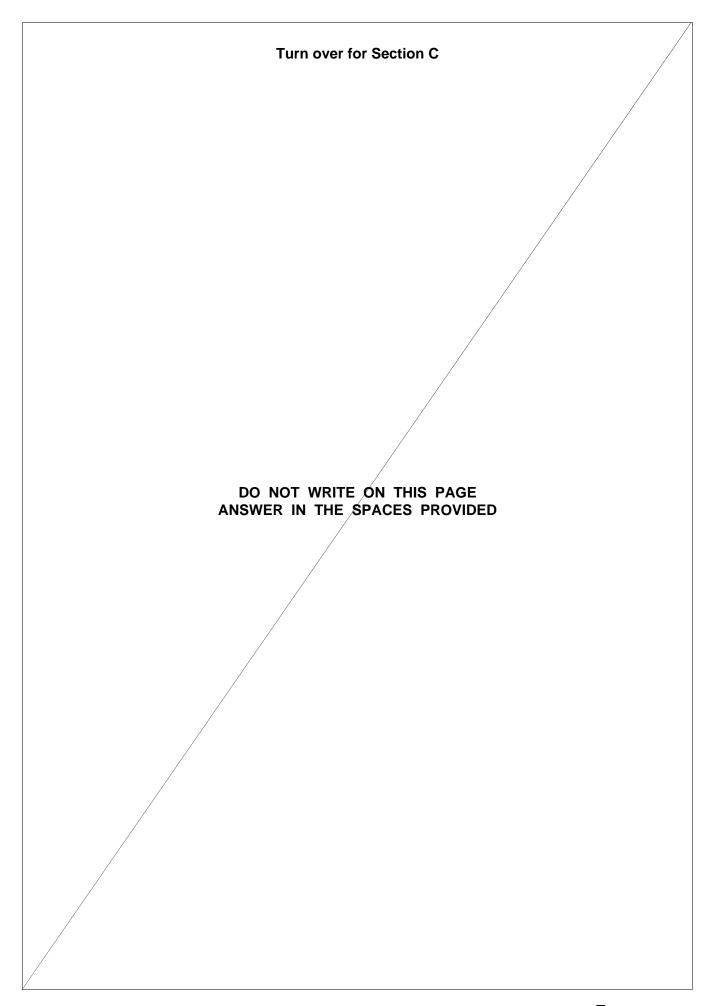
;	Study <b>Figure 6</b> , maps showing the location of the Cambridge Science Park in the UK.
	Figure 6
	This source has been removed due to third-party copyright restrictions.
0 2 . 4	Using <b>Figure 6</b> , measure the direct distance between the Cambridge Science Park
	and junction 14 of the M11.  [1 mark]
	km
0 2 . 5	Using <b>Figure 6</b> , explain the advantages of this location for the Cambridge Science Park.  [4 marks]
	[·········

0 2 . 6	Give <b>two</b> reasons why there has been a growth in the number of science park in the UK.	s 2 marks]
	Reason 1:	
	Reason 2:	
	Question 2 continues on the next page	

Study Figure 7, information about Fairtrade bananas.	
Figure 7	
This source has been removed due to third-party copyright restrictions.	

0 2 . 7	Using <b>Figure 7</b>	[2 marks]
		[2 marks]
	Compare the percentage of the price received by the Fairtrade banana pwith that of a non-Fairtrade banana producer.	oroducer
	Calculate the increase in retail sales value of Fairtrade bananas between 2000 and 2012.	n 
0 2 . 8	Outline <b>one</b> way that Fairtrade helps to deal with the problems of unequal development.	[2 marks]
0 2 . 9	Suggest <b>one</b> reason why Fairtrade schemes are not always successful.	[2 marks]
	Question 2 continues on the next page	

0 2 . 10	'Transnational corporations (TNCs) only bring advantages to the host country.'
	Do you agree with this statement?
	Yes No
	Justify your decision.  [9 marks]
	[5 marks]
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	END OF SECTION B



#### Section C The challenge of resource management

Answer Question 3 and either Question 4 or Question 5 or Question 6.

#### Question 3 The challenge of resource management

Study Figures 8 and 9, information about fracking for gas in the UK.

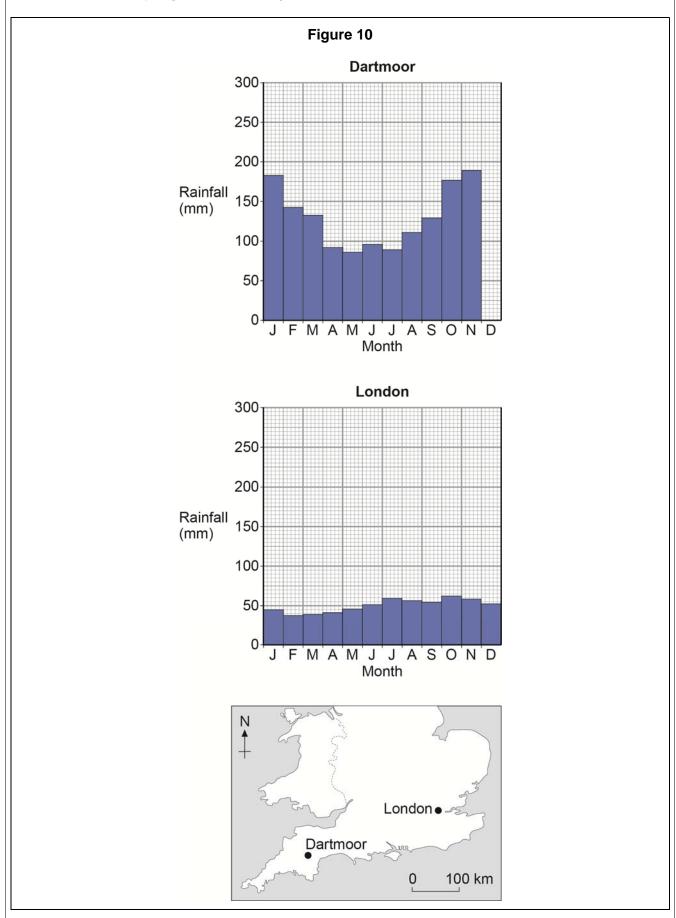
## Figure 8 Figure 9

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0 3 . 1	Suggest <b>one</b> reason for the development of fracking in the UK.  [1 mark]
0 3 . 2	Using <b>Figure 9</b> , describe the distribution of areas with existing licences for fracking in the UK.  [2 marks]
0 3 . 3	With the help of <b>Figures 8</b> and <b>9</b> , explain why the process of fracking for gas causes conflict between different groups of people.  [6 marks]
	Question 3 continues on the next page

Study Figure 10, rainfall graphs for Dartmoor and London in the UK.



0 3 . 4 Using Figure 10,	complete the graph for	Dartmoor using the following data	for rainfall.
	December rainfall	210 mm	[1 mark]
0 3 . 5 State the different	ce in rainfall between Da	artmoor and London in January.	
Shade <b>one</b> circle	only.		
<b>A</b> 140 mm			
<b>B</b> 160 mm			
<b>C</b> 180 mm			
<b>D</b> 200 mm			[1 mark]
Q	uestion 3 continues or	n the next page	

Study Figure 11, a map showing average annual rainfall in the UK.
Figure 11
This source has been removed due to third-party copyright restrictions.

Study Figure 12, a map showing population density in the UK. Figure 12 This source has been removed due to third-party copyright restrictions. 0 3 . 6 Using Figures 11 and 12, suggest why there might be a need for water transfer from one part of the UK to another. [3 marks]

Ar	nswer <b>either</b> Question 4 (Food) <b>or</b> Question 5 (Water) <b>or</b> Question 6	6 (Energy).
Shade the	circle below to indicate which optional question you will answer.	
Question[	0 4  Question 0 5    Question 0 6	
CORRECT ME	THOD WRONG METHODS   WORD METHODS	
Question 4	Food	
	Study <b>Figure 13</b> , a map showing the percentage of population that undernourished in Africa in 2014.	it was
	Figure 13	
	This source has been removed due to third-party copyright restrict	ions.
0 4 . 1	What percentage of the population in Chad was undernourished in circle only.	n 2014? Shade <b>one</b>
	<b>A</b> 5–14.9%	0
	<b>B</b> 15–24.9%	0
	<b>C</b> 25–35%	0
	<b>D</b> More than 35%	
		[1 mark]

0 4 . 2	Using <b>Figure 13</b> , describe the distribution of countries in Africa where there and very high levels of undernourishment.	are high [2 marks]
0 4 . 3		[2 marks]
	Cause 1:	
	Cause 2:	
0 4 . 4	Explain how food security can be improved.	[6 marks]

Question 5	Water	
	Study <b>Figure 14</b> , a map showing the total amount of water available per person Africa in 2010.	n in
	Figure 14	
	This source has been removed due to third-party copyright restrictions.	
0 5 . 1	What was the total amount of water per person in Ethiopia in 2010?	
	Shade <b>one</b> circle only.	
	A Less than 1000 cubic metres per person per year	
	B 1000–2500 cubic metres per person per year	
	C 2501–10 000 cubic metres per person per year  D 10 001–25 000 cubic metres per person per year	
		mark]

0 5 . 2	Using <b>Figure 14</b> , describe the distribution of countries in Africa where there than 1000 cubic metres of water per person per year in 2010.	was less [2 marks]
		[2 mamo]
0 5 . 3	Give <b>two</b> causes of water insecurity.	[2 marks]
	Cause 1:	
	Cause 2:	
0 5 . 4	Explain how water security can be improved.	[6 marks]

Question 6	Energy		
	Study <b>Figure 15</b> , a map showing the percentage of electricity from power in Africa.	n hydroelectr	ric
	Figure 15		
	This source has been removed due to third-party copyright restrict	ions.	
0 6 . 1	What is the percentage of electricity from hydroelectric power in Ma	auritania?	
	Shade <b>one</b> circle only.		
	<b>A</b> 30–49%	0	
	<b>B</b> 50–69%	0	
	<b>C</b> 70–84%		
	<b>D</b> 85–100%		1 mark]

0 6 . 2	Using <b>Figure 15</b> , describe the distribution of countries in Africa where the per of electricity from hydroelectric power is 85% or more.	ercentage [2 marks]
		[2 marko]
		_
0 6 . 3	Give <b>two</b> causes of energy insecurity.	[2 marks]
	Cause 1:	
	Cause 2:	
0 6 . 4	Explain how energy security can be improved.	[6 marks]
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Version 1.1

