

Write your name here	
Surname	Other names
Pearson Edexcel Certificate Pearson Edexcel International GCSE	Centre Number Candidate Number
Geography Unit: KGE0 4GE0 Paper: 01	
Tuesday 19 May 2015 – Afternoon Time: 3 hours	Paper Reference KGE0/01 4GE0/01
You must have: Ruler, pencil and pen	Total Marks

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 **seven** questions
 - Answer **two** questions in Section A
 - Answer **two** questions in Section B
 - Answer **two** questions in Section C – **either** Question 7 **or** 8 **AND either** Question 9 **or** 10
 - Answer **one** Question in Section D.
- Answer the questions in the spaces provided
– *there may be more space than you need.*

Information

- The total mark for this paper is 180.
- The marks for **each** question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*
- The following abbreviations are used:
 - LIC – Low-income country
 - MIC – Middle-income country
 - HIC – High-income country

Advice

- Write your answers neatly and in good English.
- Check your answers if you have time at the end.

Turn over ►

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PEARSON

SECTION A – THE NATURAL ENVIRONMENT

Answer TWO questions only from this section.

Indicate which question you are answering by marking a cross ☒. If you change your mind, put a line through the box ☒ and then indicate your new question with a cross ☒.

If you answer Question 1 put a cross in the box ☐.

1 River environments

(a) Study Figure 1 which shows a river and its valley.



(Source: © Joan Bryden Photography)

Figure 1

(i) Name the valley landform at X.

Put a cross in the correct box.

(1)

- ☐ **A** delta
- ☐ **B** flood plain
- ☐ **C** interlocking spur
- ☐ **D** oxbow lake



(ii) Describe the shape of the valley shown in Figure 1.

(2)

(iii) The river shown in Figure 1 is in its middle course.

Name **one** feature of the river channel shown.

(1)

(b) (i) What is meant by the term **river erosion**?

(2)



(ii) Describe the process that leads to the formation of an oxbow lake.

Diagrams may help your answer.

(4)

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(c) Explain the impacts of a named water storage project.

(6)

Name of water storage project

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- (d) Discuss whether flooding is more the result of physical factors rather than human factors.

Reference to examples may help your answer.

(9)

(Total for Question 1 = 25 marks)



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QUESTION 2 BEGINS ON THE NEXT PAGE.



If you answer Question 2 put a cross in the box ☐.

2 Coastal environments

(a) Study Figure 2 which shows a stretch of coastline.



Figure 2

(i) Name the coastal landform at X.

Put a cross in the correct box.

(1)

- ☐ **A** bar
- ☐ **B** arch
- ☐ **C** stack
- ☐ **D** spit

(ii) Describe the characteristics of the beach shown in Figure 2.

(2)

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(iii) Figure 2 shows a cliff face.

State **one** feature of the cliff shown that is influenced by its rock type.

(1)

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(b) (i) What is meant by the term **coastal deposition**?

(2)

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(ii) Describe the process that leads to the formation of a spit.

Diagrams may help your answer

(4)

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(c) For a named coastal ecosystem, explain the ways in which it is valuable to people.

(6)

Name of coastal ecosystem

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- (d) Discuss why people hold different views about the management of retreating coastlines.

Reference to examples may help your answer.

(9)

(Total for Question 2 = 25 marks)



If you answer Question 3 put a cross in the box ☐.

3 Hazardous environments

(a) Study Figure 3 which shows a volcanic landscape.



(Source: © Getty Images/Gonzalo Azument)

Figure 3

(i) Identify the landform at X.

Put a cross in the correct box.

(1)

- ☐ **A** tectonic plate
- ☐ **B** crater
- ☐ **C** ash cloud
- ☐ **D** rift valley

(ii) Describe the characteristics of the volcanic landscape shown in Figure 3.

(2)

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(iii) Suggest **one** reason why people live in hazardous environments such as the one shown in Figure 3.

(1)

(b) (i) What is meant by a **hazard risk assessment**?

(2)

(ii) Describe the characteristics of a tropical storm.

Diagrams may help your answer.

(4)



(c) Explain the global distribution of earthquakes.

(6)

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(d) Discuss how the effects of a hazard event can be managed to reduce its impact.

Reference to examples may help your answer.

(9)

(Total for Question 3 = 25 marks)

TOTAL FOR SECTION A = 50 MARKS



P 4 4 3 2 2 R R A 0 1 5 6 8

SECTION B – PEOPLE AND THEIR ENVIRONMENTS

Answer TWO questions only from this section.

If you answer Question 4 put a cross in the box ☐.

4 Economic activity and energy

- (a) Study Figure 4 which shows the contributions of the economic sectors to the Gross Domestic Product (GDP) of India in 1995 and 2010.

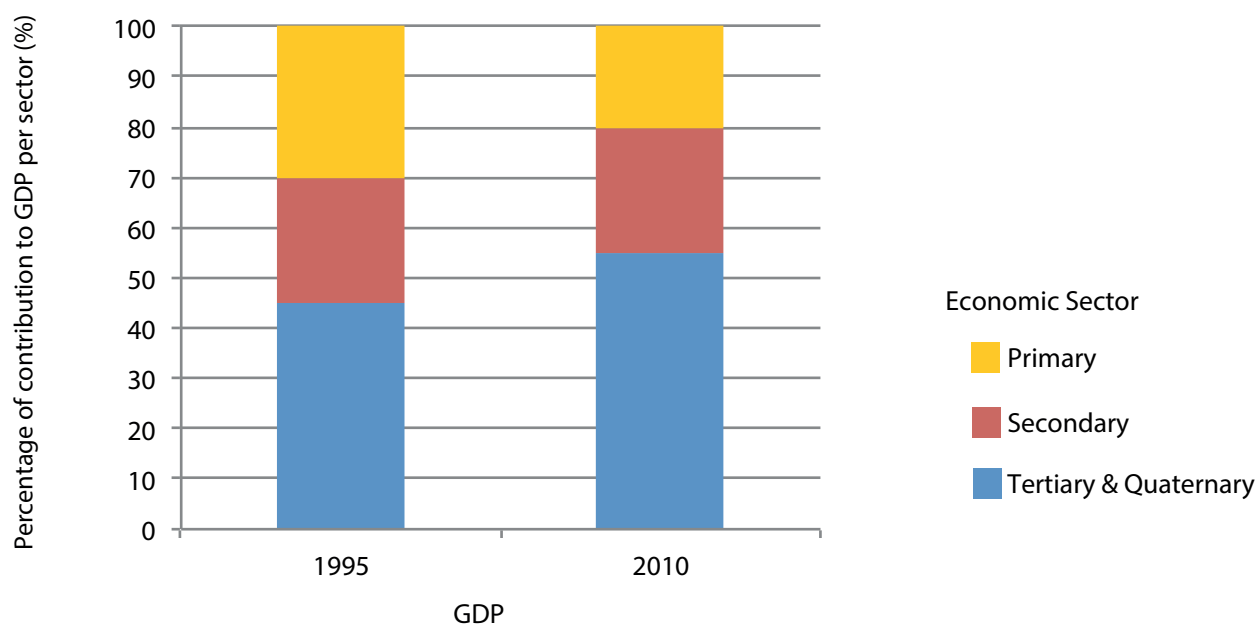


Figure 4

- (i) What was the percentage contribution of the primary sector to GDP in 1995?

Put a cross in the correct box.

(1)

- ☐ **A** 25
- ☐ **B** 30
- ☐ **C** 35
- ☐ **D** 40

- (ii) Which sector made the smallest contribution to GDP in 2010?

(1)



(iii) State **two** ways in which the contributions of the sectors changed between 1995 and 2010.

(2)

1

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(b) (i) What is meant by **informal employment**?

(2)

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(ii) Outline **two** causes of informal employment.

(4)

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(6)

[illegible]

(d) Discuss the reasons for the changing location of tertiary and quaternary activities.

Reference to examples may help your answer.

(9)

(Total for Question 4 = 25 marks)



If you answer Question 5 put a cross in the box ☐.

5 Ecosystems and rural environments

- (a) Study Figure 5 which shows how food shortages in Africa were divided between three types of household in 1995 and 2010.

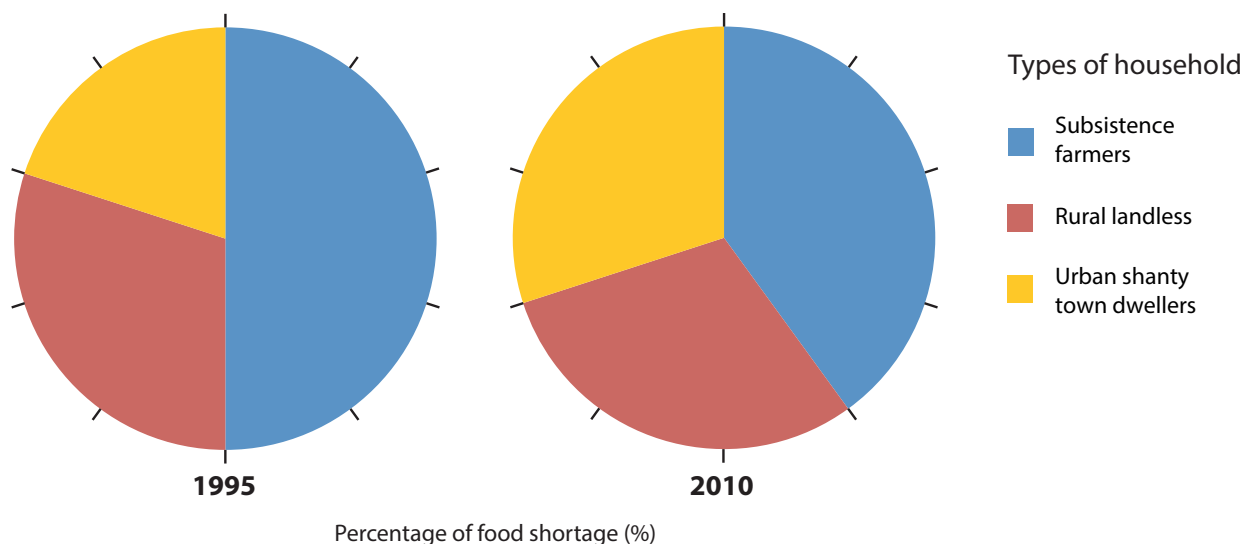


Figure 5

- (i) Which type of household had the largest proportion of the food shortage in 2010?

(1)

- (ii) Which of the following best describes subsistence farming?

Put a cross in the correct box.

(1)

- ☐ **A** All products are sold for cash
- ☐ **B** It uses a lot of capital and technology
- ☐ **C** All products are used to feed the family
- ☐ **D** It produces only one type of food



(iii) State **two** ways in which the division of food shortages changed between 1995 and 2010.

(2)

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(b) (i) What is meant by the term **biome**?

(2)

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(ii) Outline **two** reasons for the global distribution of a named biome.

(4)

Name of biome

1

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(c) Explain the impact of rural-to-urban migration on rural settlements in LICs.

(6)

[illegible]

(d) Discuss how **one** named national park or protected area is being managed to meet the needs of both local people and the environment.

(9)

Name of national park or protected area

(Total for Question 5 = 25 marks)



If you answer Question 6 put a cross in the box ☐.

6 Urban environments

- (a) Study Figure 6 which shows land use, building height and land value along a transect across a city.

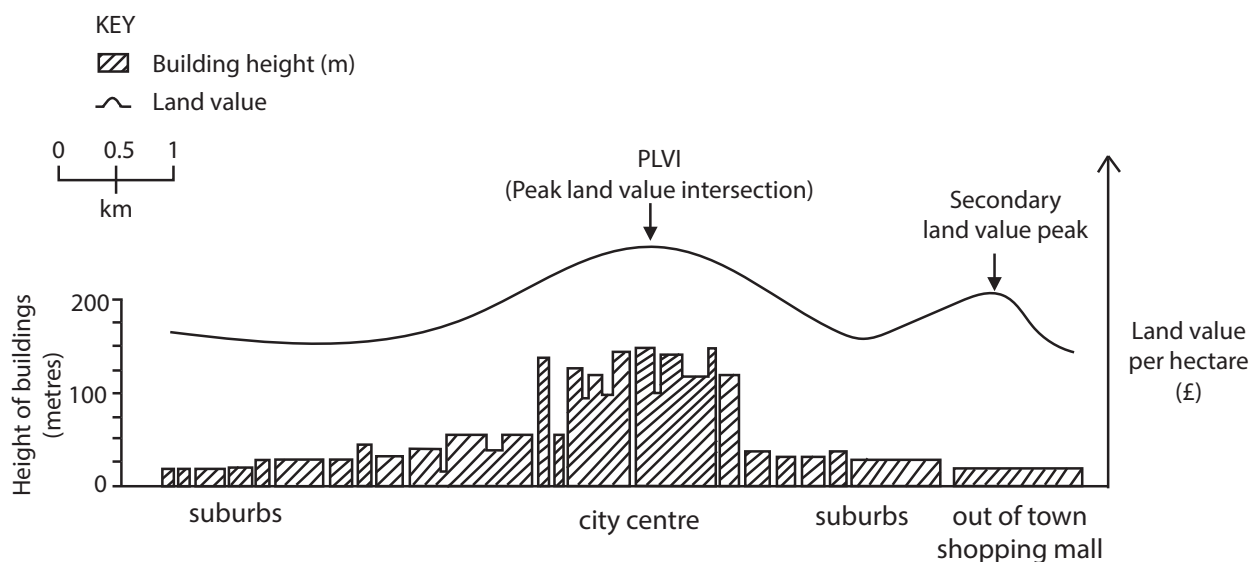


Figure 6

- (i) In which part of the city are the land values highest?

(1)

- (ii) What is the height of the tallest building on the transect?

Put a cross in the correct box

(1)

- ☐ **A** 100m
- ☐ **B** 125m
- ☐ **C** 150m
- ☐ **D** 175m



(iii) State **two** relationships between land use and land value shown in Figure 6.

(2)

1

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2

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(b) (i) What is meant by the term **mega-city**?

(2)

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(ii) Outline **two** factors encouraging the emergence of mega-cities.

(4)

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(6)

[illegible]

(d) Discuss the impact of the management of a shanty town in a named LIC city.

(9)

Name of LIC city

(Total for Question 6 = 25 marks)

TOTAL SECTION B = 50 MARKS



SECTION C – PRACTICAL GEOGRAPHICAL ENQUIRY

Answer TWO questions from this section.

EITHER question 7 or 8 AND EITHER question 9 or 10.

If you answer Question 7 put a cross in the box ☐.

7 Coastal environments fieldwork

- (a) Study Figure 7a which shows a recording sheet used in a fieldwork investigation to collect information on coastal activities.

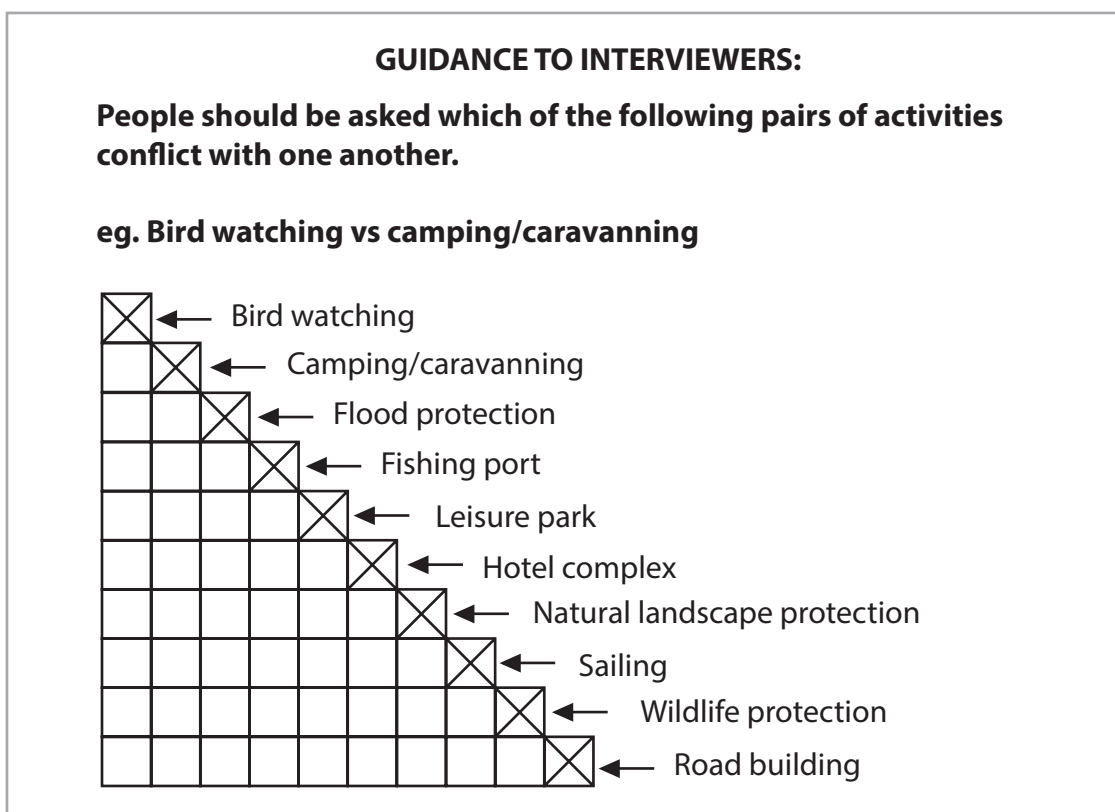


Figure 7a

- (i) Suggest a possible aim of this coastal activities investigation.

(2)

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- (ii) Describe **one** important health and safety risk to be aware of when carrying out fieldwork in a coastal environment.

(2)

- (iii) Other than health and safety, what factors might you consider before carrying out a coastal activities investigation?

(4)



Activity	Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8	Col 9	Col 10
Bird watching	X									
Camping/caravanning	20	X								
Flood protection	0	0	X							
Fishing port	0	0	15	X						
Leisure park	30	12	0	0	X					
Hotel complex	5	10	0	0	0	X				
Natural landscape protection	0	40	30	5	70	82	X			
Sailing	0	0	25	30	34	0	0	X		
Wildlife protection	0	20	6	12	50	36	0	4	X	
Road building	5	10	0	0	0	0	50	0	20	X

↑ 100 = significant conflict
0 = no conflict

(i) Draw a labelled diagram below (Figure 7c) to present the results for bird watching shown in Figure 7b.

A full-page image of a blank sheet of graph paper. The grid consists of small squares formed by thin gray lines. There are four horizontal lines that divide the page into five equal rows, and four vertical lines that divide the page into five equal columns. These lines intersect to form a larger grid of 25 squares. Within each of these larger squares, there is a finer grid of 10x10 smaller squares, created by thinner gray lines. This results in a total of 500 small squares across the entire page. The background is white, and the lines are a light gray color.

30



(ii) Describe **one** advantage of using the type of diagram you have drawn in (b)(i).

(2)

(iii) State **one** disadvantage of using the type of diagram you have drawn in (b)(i).

(1)

(iv) What conclusions about conflicting activities can be reached from an analysis of the results shown in Figure 7b?

(6)



(v) What additional information might be collected to improve the investigation? (4)

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(Total for Question 7 = 25 marks)



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QUESTION 8 BEGINS ON THE NEXT PAGE.



If you answer Question 8 put a cross in the box ☒.

8 Hazardous environments fieldwork

(a) Study Figure 8a which shows a recording sheet used in a fieldwork investigation to collect information on the weather.

PLACE:

MONTH:

YEAR:

		TEMPERATURE			WIND				BAROMETER	
DATE	TIME	NOW	MAX	MIN	DIR	SPEED	RAIN	CLOUD	NOW	CHANGES
1										
2										
3										
4										
5										
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9										
10										
11										
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29										
30										
31										
MONTHLY TOTAL										
MONTHLY AVERAGE										

Figure 8a

(i) Suggest a possible aim of this fieldwork investigation.

(2)



- (ii) Describe **one** health and safety risk to be aware of when carrying out this type of fieldwork investigation.

(2)

- (iii) Other than health and safety, what factors might you consider before carrying out an investigation on weather?

(4)



(b) Study Figure 8b which shows some of the results of a fieldwork investigation.

Date	Temperature (max/°C)	Rainfall (mm)	Air Pressure (mbs)	Cloud Cover (oktas)
11 August	27	0	1022	0
12 August	28	0	1026	0
13 August	27	0	1026	0
14 August	26	0	1026	0
15 August	15	14	974	8
16 August	16	13	980	8
17 August	18	3	1006	2

Figure 8b

(i) Draw a labelled diagram below (Figure 8c) to present the results for temperature shown in Figure 8b.

(4)

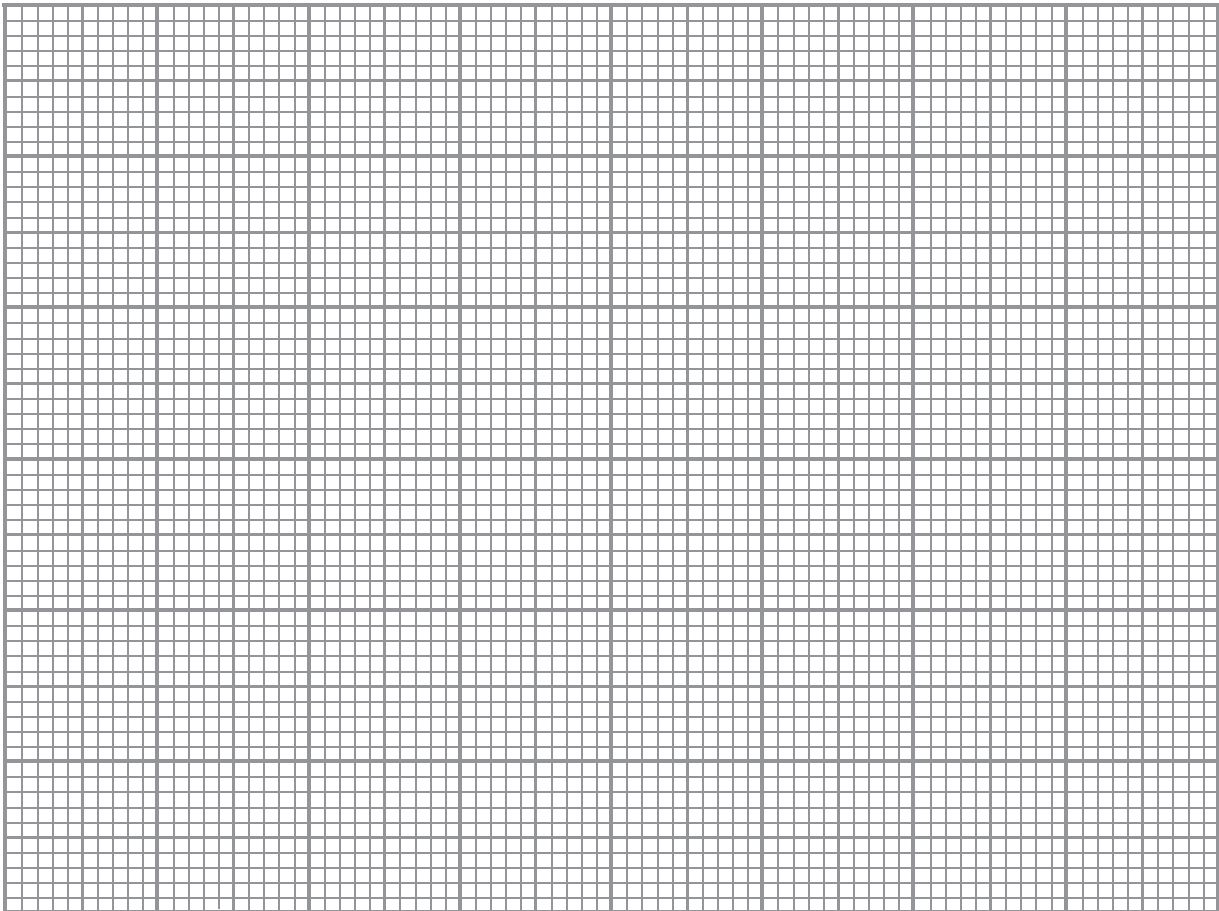


Figure 8c



(ii) Describe **one** advantage of using the type of diagram you have drawn in (b)(i).

(2)

(iii) State **one** disadvantage of using the type of diagram you have drawn in (b)(i).

(1)

(iv) What conclusions about changes in the weather can be reached from an analysis of the results shown in Figure 8b?

(6)



(v) What additional information might be collected to improve the investigation?

(4)

(Total for Question 8 = 25 marks)



If you answer Question 9 put a cross in the box ☐ .

9 Practical geographical enquiry and economic activity and energy fieldwork

(a) Study Figure 9a which shows the stages in a practical geographical investigation on an industrial estate.

Stage 1 : Identifying an appropriate question or issue
Stage 2 : Researching and setting up the fieldwork context
Stage 3 :
Stage 4 : Preparing the fieldwork equipment
Stage 5 :
Stage 6 :
Stage 7 : Evaluating the fieldwork process and conclusions

Figure 9a

Complete the table (Figure 9a) using the three correct headings from the list below.

(3)

- A Primary field skills
- B Analysis and conclusions from data
- C Designing the actual fieldwork event
- D Secondary sources
- E Collecting and presenting the fieldwork data
- F Pre-fieldwork planning



- (b) Study Figure 9b which is a photograph of services and factories on an industrial estate.



(Source: © Airfotos Newcastle)

Figure 9b

- (i) Suggest **two** possible geographical aims for an investigation of this industrial estate.

(2)

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- (ii) Suggest the type of information that you would need to collect for the aims you have outlined in (b)(i) to be investigated.

(4)

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- (iii) State **three** health and safety risks that should be assessed before collecting fieldwork data on an industrial estate.

(3)

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(iv) Describe the equipment and field techniques you might use when collecting information for this investigation.

(8)

Equipment

Field techniques



(5)

(Total for Question 9 = 25 marks)



If you answer Question 10 put a cross in the box ☒ .

10 Practical geographical enquiry and ecosystems and rural environments fieldwork

(a) Study Figure 10a which shows the stages in a practical geographical investigation on a farm.

Stage 1: Identifying an appropriate question or issue
Stage 2: Researching and setting up the fieldwork context
Stage 3:
Stage 4: Preparing the fieldwork equipment
Stage 5:
Stage 6:
Stage 7: Evaluating the fieldwork process and conclusions

Figure 10a

Complete the table (Figure 10a) using the three correct headings from the list below.

(3)

- A** Primary field skills
- B** Analysis and conclusions from data
- C** Designing the actual fieldwork event
- D** Secondary sources
- E** Collecting and presenting the fieldwork data
- F** Pre-fieldwork planning



(b) Study Figure 10b which is a map extract of a farm.

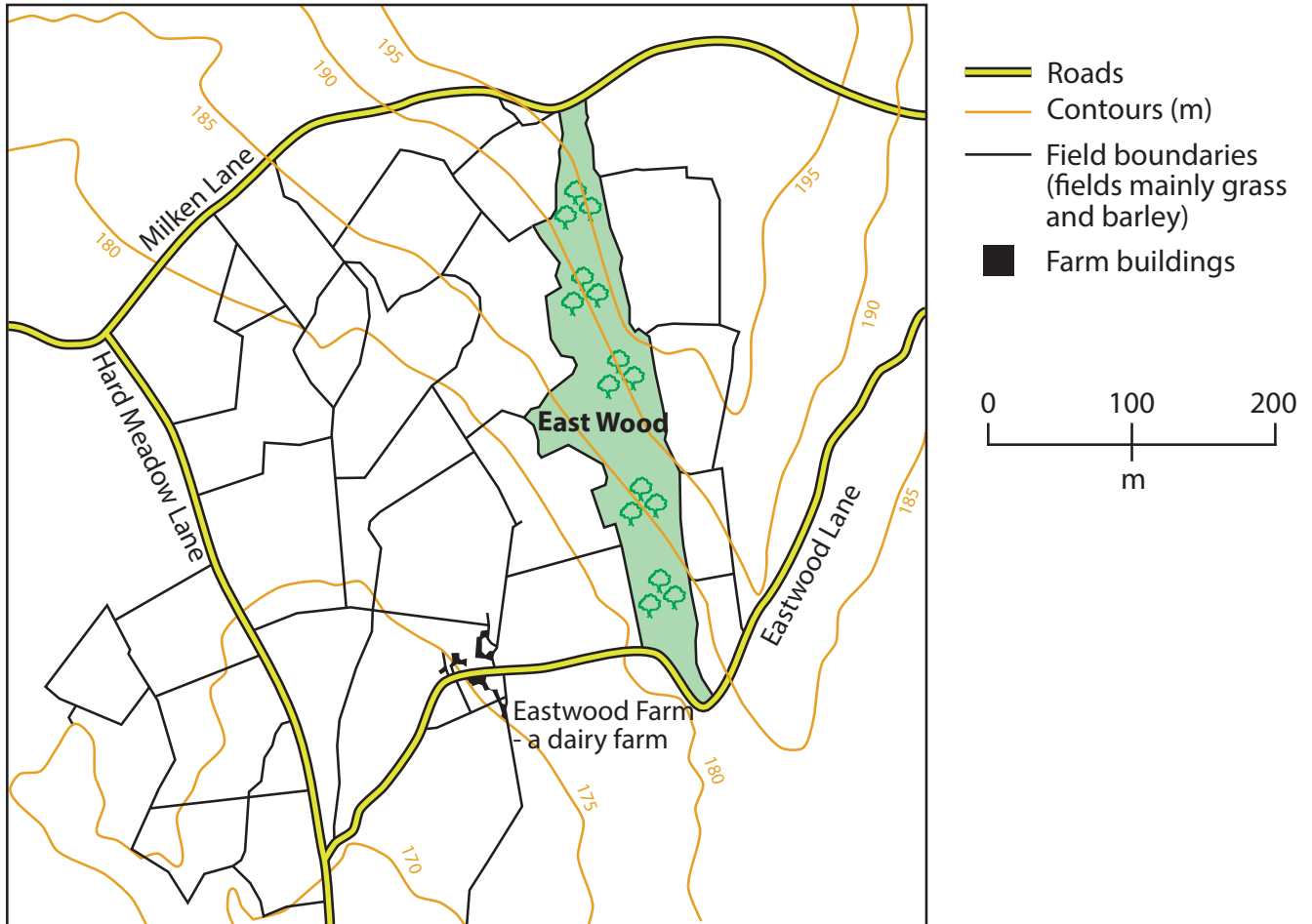


Figure 10b

(i) Suggest **two** possible geographical aims for an investigation of this farm.

(2)

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- (ii) Suggest the type of information that you would need to collect for the aims you have outlined in (b)(i) to be investigated.

(4)

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- (iii) State **three** health and safety risks that should be assessed before collecting fieldwork data on a farm.

(3)

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(iv) Describe the equipment and field techniques you might use when collecting information for this investigation.

(8)

Equipment

Field techniques



(c) Outline what you need to consider when evaluating the fieldwork process and conclusions of a geographical investigation (Stage 7 Figure 10a).

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(Total for Question 10 = 25 marks)

TOTAL FOR SECTION C = 50 MARKS



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QUESTION 11 BEGINS ON THE NEXT PAGE.



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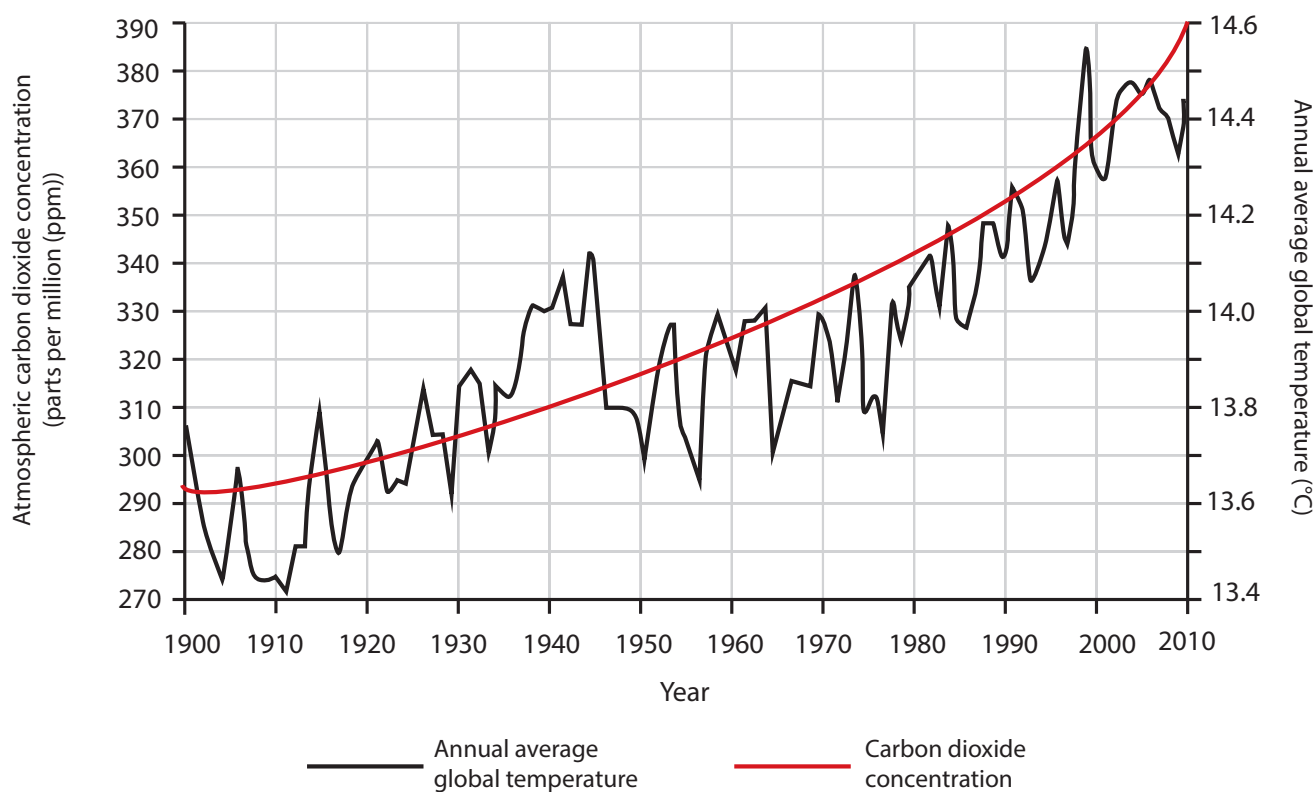
SECTION D – GLOBAL ISSUES

Answer ONE question only from this section.

If you answer Question 11 put a cross in the box ☐.

11 Fragile environments

- (a) Study Figure 11a which shows how annual average global temperatures and atmospheric carbon dioxide concentrations have varied since 1900.



(Source: © Hanno Sandvik/Met Office Hadley Centre for Climate Change)

Figure 11a

- (i) What was the increase in average global temperature between 1900 and 2000?

Put a cross in the correct box.

(1)

- ☐ **A** 0.25 °C
- ☐ **B** 0.5 °C
- ☐ **C** 0.75 °C
- ☐ **D** 1.0 °C



(ii) What was the trend in global temperatures from:

(2)

1. 1980 to 2000

2. 2000 onwards

(iii) Describe the relationship between average global temperatures and carbon dioxide concentrations shown in Figure 11a.

(2)

(b) (i) What is meant by the term **climate change**?

(2)



(ii) Describe **two** consequences of climate change.

(4)

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(iii) Outline **two** ways in which people might adapt to the consequences of climate change.

(4)

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(c) Study Figure 11b which shows areas of Australia that are existing desert and areas that are at risk of desertification.

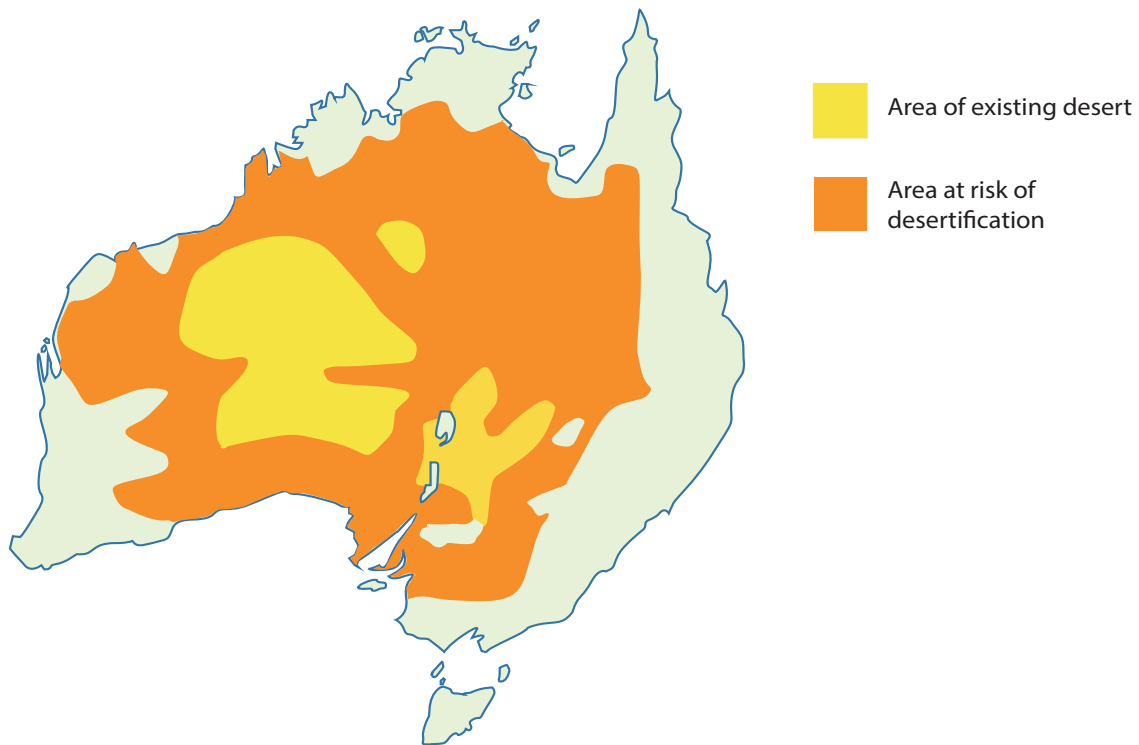


Figure 11b

Explain why some areas of the world are at risk of desertification.

(6)

[illegible]

(d) Discuss how a named area of threatened tropical rainforest is being managed sustainably.

(9)

Named area of threatened tropical rainforest

(Total for Question 11 = 30 marks)



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QUESTION 12 BEGINS ON THE NEXT PAGE.



P 4 4 3 2 2 R R A 0 5 5 6 8

If you answer Question 12 put a cross in the box ☐.

12 Globalisation and migration

- (a) Study Figure 12a which shows net migration and the level of economic development in two groups of countries between 2008 and 2012.

Group A		
Country	Positive net migration	Level of economic development
USA	4 950 000	HIC
UAE	3 080 000	MIC
Australia	1 130 000	HIC
UK	1 020 000	HIC
Singapore	720 000	HIC
Group B		
Country	Negative net migration	Level of economic development
Mexico	1 800 000	MIC
Indonesia	1 300 000	LIC
Vietnam	430 000	LIC
Afghanistan	380 000	LIC
Sri Lanka	250 000	LIC

Figure 12a

- (i) What term describes the difference between immigration and emigration?

Put a cross in the correct box.

(1)

- ☐ **A** positive net migration
- ☐ **B** negative net migration
- ☐ **C** net migration
- ☐ **D** voluntary migration



(ii) What is the relationship between a country's net migration and its level of economic development shown in Figure 12a?

(2)

(iii) There is a land border between USA and Mexico.

What does Figure 12a suggest about movement across this border?

(2)

(b) (i) What is meant by the term **forced migration**?

(2)



(ii) Describe the push-pull model of migration.

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(iii) Outline **two** reasons for controlling international migration flows.

(4)

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(c) Study Figure 12b which shows the world's top tourist destination countries in 2010.

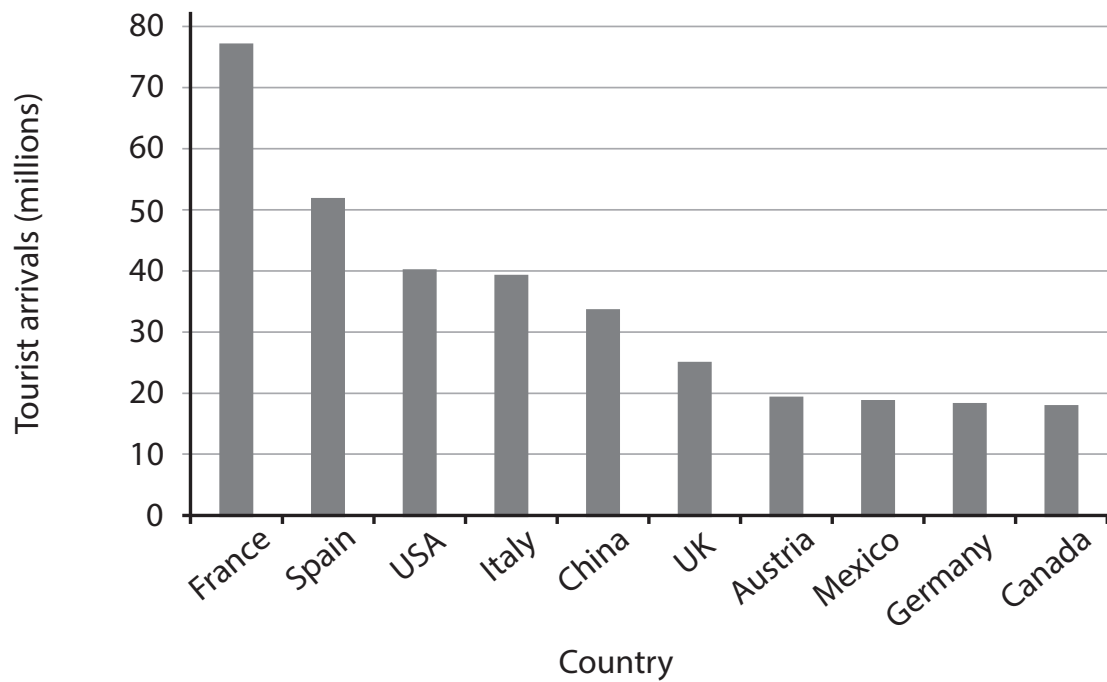


Figure 12b

Explain the growth of global tourism.

(6)



(9)

(Total for Question 12 = 30 marks)

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QUESTION 13 BEGINS ON THE NEXT PAGE.



If you answer Question 13 put a cross in the box ☐.

13 Development and human welfare

- (a) Study Figure 13a which shows the unemployment rate for regions in the UK in 2007 and 2013.

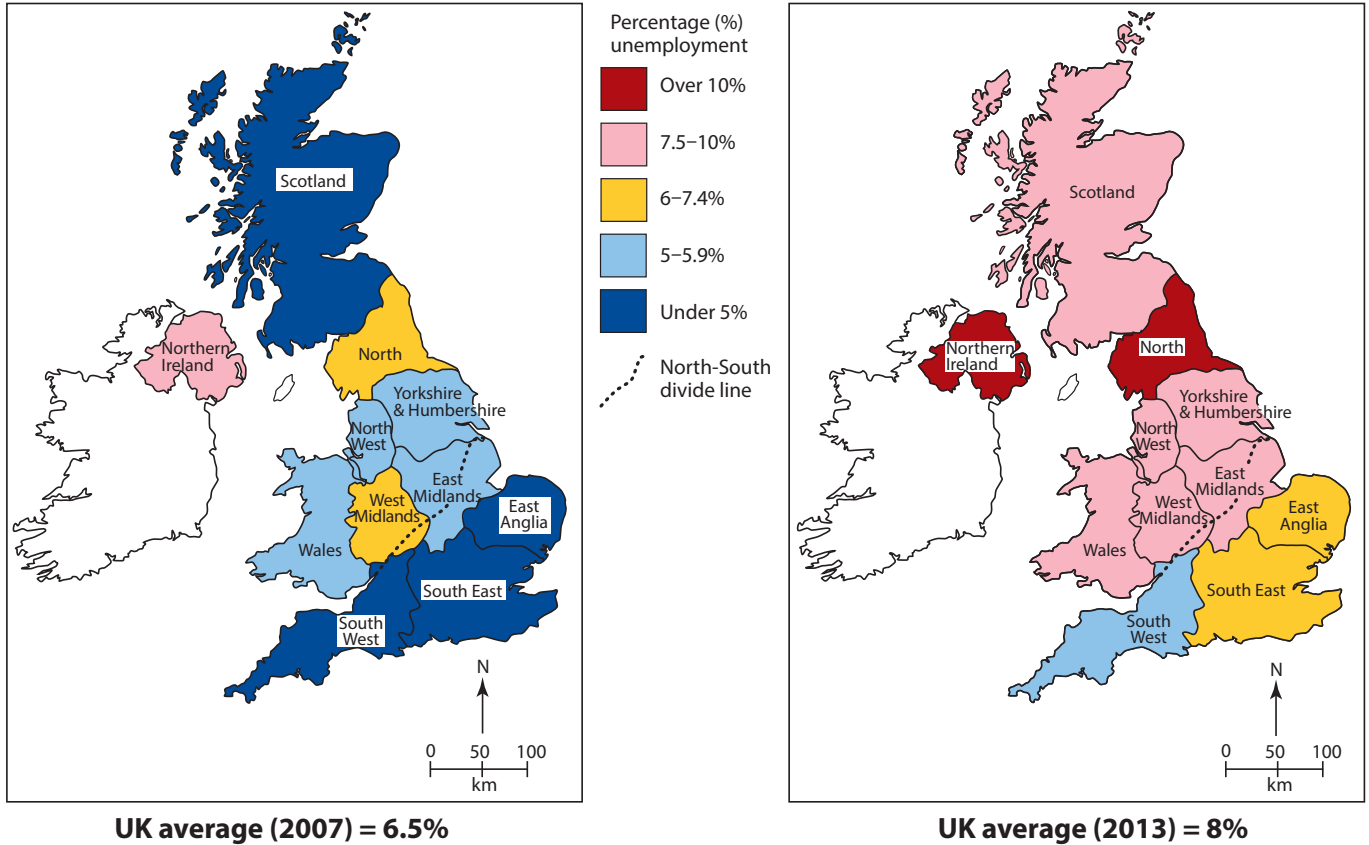


Figure 13a

- (i) Which region in Figure 13a had an above average unemployment rate in both 2007 and 2013?

Put a cross in the correct box.

(1)

- ☐ **A** East Anglia
- ☐ **B** South East
- ☐ **C** South West
- ☐ **D** Northern Ireland



- (ii) Give **one** piece of evidence from Figure 13a that the UK is divided into a rich South and a poor North.

(2)

- (iii) In what way does Figure 13a suggest that the North-South divide has widened since 2007?

(2)

- (b) (i) What is meant by the term **emerging economy**?

(2)

- (ii) Describe **two** changes to the pattern of global development.

(4)

1

2



(iii) Outline **two** causes of the global development gap.

(4)

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(c) Study Figure 13b which gives information about two major international aid agencies.

NGO Aid Agency	UN Aid Agency
The Bill & Melinda Gates Foundation	United Nations High Commission for Refugees (UNHCR)
Founded in 1997 to improve health and reduce hunger and poverty in 100 countries, mainly LICs.	Founded in 1950 to assist forcibly displaced people.
Total grants payment of £26.1 billion 1997–2012.	Helped 10.5 million refugees in 2012.

Figure 13b

Explain how the actions of **one** named aid agency project have affected the quality of life in a LIC.

(6)

Named aid agency project

This image shows a full page of white paper with horizontal dashed lines, typical of primary-ruled notebook paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings present.

(d) Discuss why different indicators are used to measure a country's level of development.

(9)

(Total for Question 13 = 30 marks)

TOTAL FOR SECTION D = 30 MARKS

TOTAL FOR PAPER = 180 MARKS



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Figure 11a: Graph drawn by Hanno Sandvik, using data published by the Met Office Hadley Centre for Climate Change, U.K.

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