Write your name here

Surname	Other names

Edexcel International GCSE

Centre Number | Candidate Number

Geography

To answer 7 of the 13 questions. About 20 minutes per question with 20 minutes reading time left over for the whole paper.

Sample Assessment Material

Time: 3 hours

Paper Reference **4GE0/01**

You must have:
Calculator

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, **two** questions from Section A, **two** questions from Section B, **two** questions from Section C and **one** question from Section D.
- Answer the questions in the spaces provided – *there may be more space than you need.*

Don't do all 13 questions!

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, HIC – High Income Country, NIC – Newly Industrialised Country and CBD – Central Business District.

About 1 minute a mark!

Definitions applying to the whole paper.

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Remember that clear English and careful presentation of your answers is important.
- Check your answers if you have time at the end.

Turn over ▶

S40994A

S 4 0 9 9 4 A 0 1 6 0

PEARSON

Make sure you only do two questions!

SECTION A: The natural environment

Answer TWO questions from this section

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 ☒.

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

Remember to put a cross in the box if you are doing the question!

1 River environments

(a) Study Figure 1 which shows the distribution of rainfall in Spain and plans to transfer water around the country.

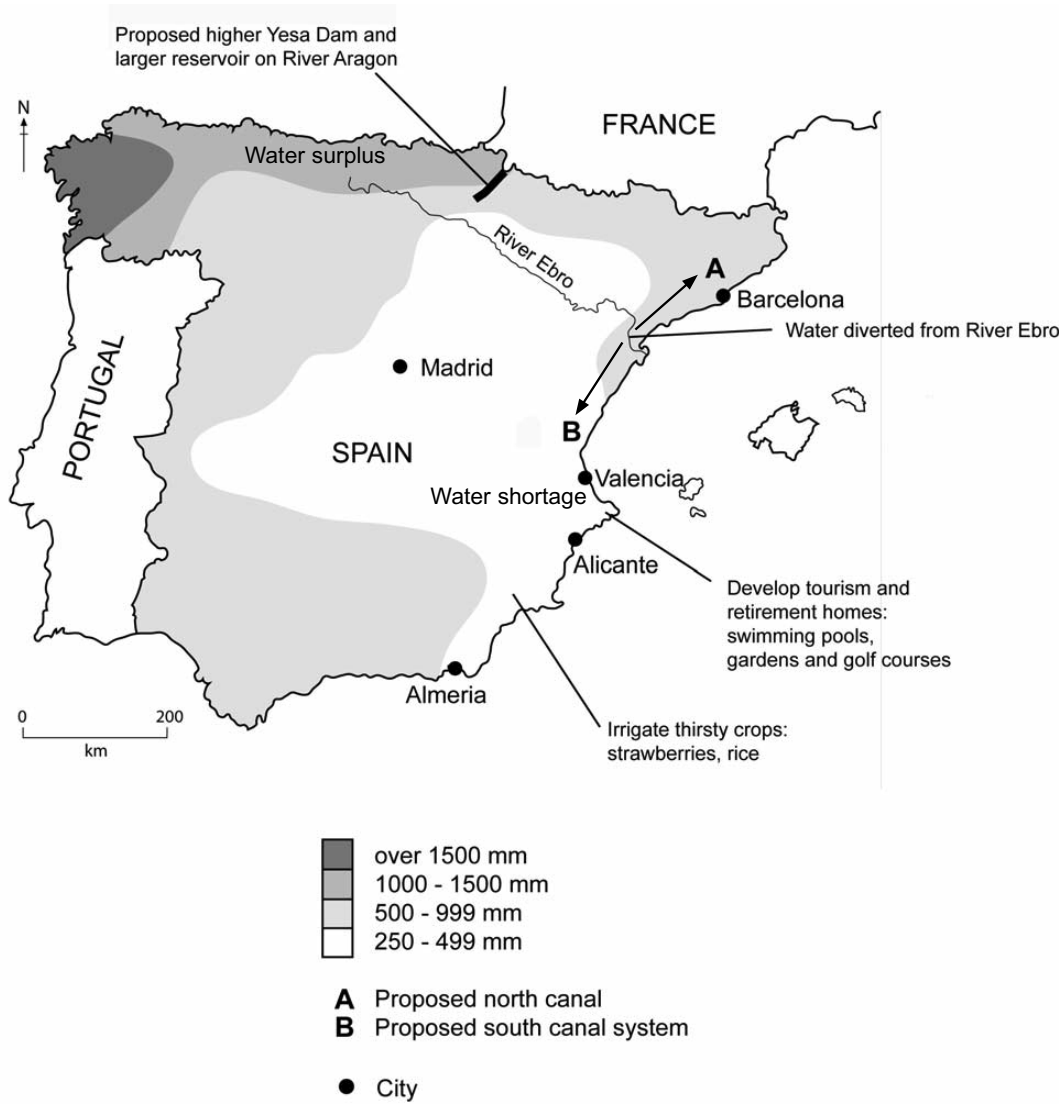

Figure 1

For the questions where you have to put a cross in the box, if you change your mind about an answer, put a line through the box and mark your new answer with a cross.

(i) Put a cross ☒ in the box next to the correct answer.

The wettest area of Spain is in the

(1)

☐ **A** centre

☐ **B** east

☐ **C** north west

☐ **D** south east

(ii) In which direction does the River Ebro flow?

(1)

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(iii) What is the purpose of Spain's plan to transfer water around the country?

(2)

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Try to stick to the 20 minutes per question!

(b) (i) What is a flood plain?

(2)

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(ii) Levees occur along some rivers.
Describe how levees are formed. A labelled diagram may help your answer.

(4)

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(c) Explain the steps involved in supplying clean water to users.

(6)

(d) For a named water storage project, discuss the different views that groups of people have about its impacts.

(9)

Named water storage project .....

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(Total for Question 1 = 25 marks)

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

Remember to put a cross in the box if you are doing the question!

2 Coastal environments

(a) Study Figures 2a and 2b which show a cliff coastline undergoing change.

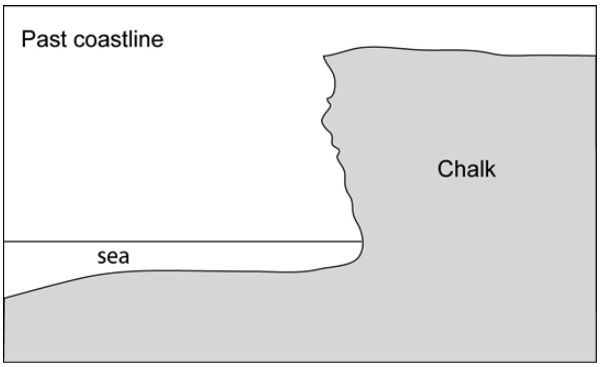

Figure 2a

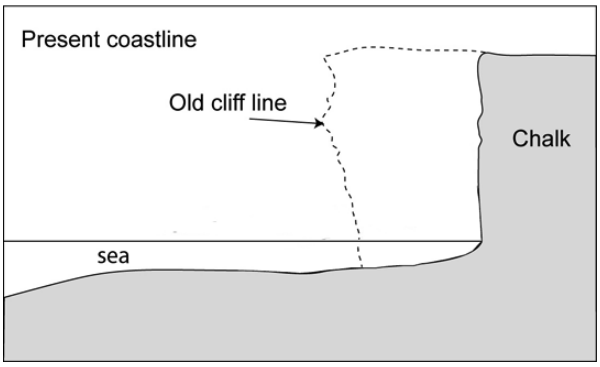

Figure 2b

(i) State **one** way in which the coastline has changed as shown in Figure 2b.

(1)

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(ii) Label the following features on Figure 2b:
1. cliff face
2. wave-cut platform

(2)

(iii) Name **one** process that causes cliffs to change.

(1)

.....

(b) (i) What is a beach?

(2)

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(ii) Spits are formed along some coastlines.

Describe how spits are formed. A labelled diagram may help your answer.

(4)

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(c) Explain why people hold different views about the use of hard engineering for coastal protection.

(6)

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(d) Discuss ways in which the threats to a named coastal eco-system are being managed.

(9)

Be clear and concise. Don't waffle. There are enough lines for 9 marks!

Named coastal ecosystem .....

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(Total for Question 2 = 25 marks)

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

Remember to put a cross in the box if you are doing the question!

3 Hazardous environments

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

Figure 3

(i) Give one piece of evidence the volcano is active.

(1)

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(ii) Give **three** reasons why some people choose to live close to volcanoes.

(3)

1 .....

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2 .....

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3 .....

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(b) (i) What is a tectonic plate?

(2)

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(ii) Volcanoes are formed at plate boundaries.
Describe how volcanoes are formed at constructive plate boundaries.
A labelled diagram may help your answer.

(4)

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(c) Explain the causes and characteristics of tropical storms.

(6)

(d) Discuss the reasons why the impacts of tropical storms are normally more severe in LICs.

Examples will help your answer.

(9)

(Total for Question 3 = 25 marks)

TOTAL FOR SECTION A = 50 MARKS

Remember to answer only two questions here!

SECTION B: People and their environments

Answer TWO questions from this section

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

Remember to put a cross in the box if you are doing the question!

4 Economic activity and energy

(a) Study Figure 4 which shows a new manufacturing area.

Figure 4

(i) To which economic sector do the activities in Figure 4 belong? Put a cross in the box next to the correct answer.

(1)

☒ **A** primary

☒ **B** secondary

☒ **C** tertiary

☒ **D** quaternary

(ii) Give **three** factors that make the location, shown in figure 4, ideal for manufacturing industry.

(3)

1 .....

2 .....

3 .....

(b) (i) Define the term 'hi-tech industry'.

(2)

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

(4)

1 .....

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2 .....

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(c) Explain the advantages and disadvantages of renewable sources of energy.

(6)

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(d) Discuss the consequences of de-industrialisation in one named area of a HIC.

(9)

Named area .....

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(Total for Question 4 = 25 marks)

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

Remember to put a cross in the box if you are doing the question!

5 Ecosystems and rural environments

(a) Study Figure 5 which shows an incomplete diagram of a farm system.

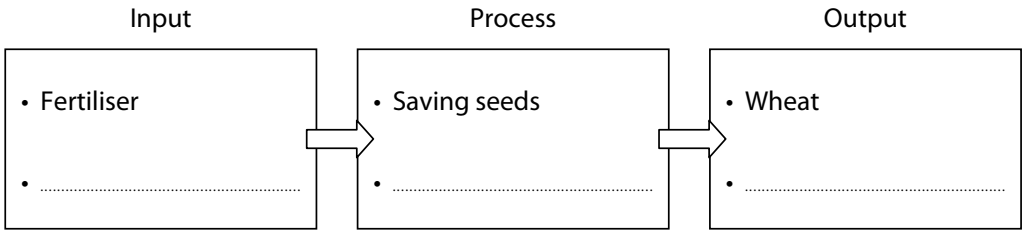

Figure 5

(i) What type of farming is shown in Figure 5? **(1)**

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(ii) Complete Figure 5 by adding another example to **each** of the three boxes. **(3)**

(b) (i) What is 'subsistence' farming? **(2)**

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(ii) Outline **two** reasons why food shortages exist in some LICs. **(4)**

1 .....

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2 .....

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(c) Explain some changes taking place in HIC rural settlements.

(6)

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(d) For **one** named protected area, such as a national park, discuss the reasons why it is being conserved.

(9)

Named area .....

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(Total for Question 5 = 25 marks)

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

Remember to put a cross in the box if you are doing the question!

6 Urban environments

(a) Study Figure 6 which shows the distribution of shanty towns in São Paulo.

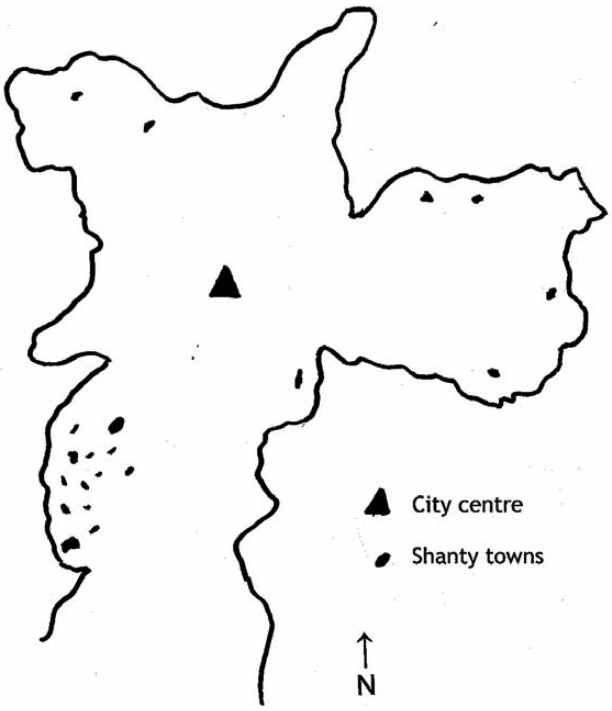

Figure 6

(i) In which direction from the city centre is the largest concentration of shanty towns? Put a cross ☒ in the box next to the correct answer.

(1)

☐ **A** north east

☐ **B** north west

☐ **C** south

☐ **D** south west

(ii) Suggest **three** reasons why the shanty towns are mainly found towards the edge of the city.

(3)

1 .....

2 .....

3 .....

(b) (i) What is a mega-city?

(2)

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(ii) Outline **two** reasons why similar types of land use tend to concentrate in particular parts of an urban area.

(4)

1 .....

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2 .....

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(c) Explain why groups of people have different views on the development of greenfield sites.

(6)

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(d) With reference to a named city, discuss the ways in which shanty towns are being improved.

(9)

Named city .....

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(Total for Question 6 = 25 marks)

TOTAL FOR SECTION B = 50 MARKS

SECTION C: Practical geographical enquiry

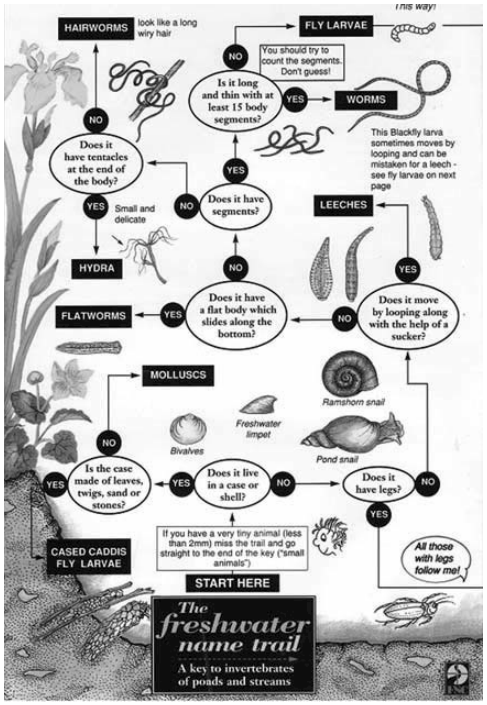
Answer TWO questions from this section. EITHER question 7 or 8 AND EITHER question 9 OR 10.

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

Remember to put a cross in the box if you are doing the question!

7 River Environments Fieldwork

Figure 7a shows two pieces of fieldwork equipment used in the investigation of river water quality.



(Source: Field Studies Council (c))

(Source: Field Studies Council – Nettlecombe Court)

Figure 7a

(a) (i) Identify the two pieces of field equipment shown.

(2)

1 .....

2 .....

(ii) For **one** of the pieces of equipment shown, briefly describe how it could be used to collect data on water quality.

(3)

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(iii) What factors should be considered when choosing sites at which to use this equipment?

(3)

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(b) Figure 7b shows some freshwater invertebrate data recorded at five different sites along a river.

Site	Species of Freshwater Invertebrate								
	Stonefly	Flattened Mayfly	Swimming Mayfly	Burrowing Mayfly	Cased Caddis	Non-biting midge	Freshwater Shrimp	Hoglouse	Rat-tailed maggot
1	7	10	0	0	4	20	0	0	0
2	0	3	15	0	0	15	5	0	0
3	0	0	5	5	0	10	0	10	0
4	0	0	0	0	0	15	0	0	5
5	0	0	0	1	0	15	0	5	0

Figure 7b

(i) In the space below, draw a simple sketch to present and compare the results from **Site 1** and **Site 5**.

(4)

(ii) Justify your choice of data presentation technique in (b)(i).

(3)

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(iii) What conclusions can be drawn about the trends in water quality along the river, based on the data in Figure 7b. You may support your answer using simple statistics.

(6)

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(iv) Comment on the validity of using indicator species as a way of finding out about river water quality.

(4)

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(Total for Question 7 = 25 marks)

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

Remember to put a cross in the box if you are doing the question!

8 Hazardous Environments Fieldwork

Figure 8a shows two pieces of fieldwork equipment used to measure local weather.

(Source: David Holmes / GeographySouthWest)

Figure 8a

(a) (i) Identify the two pieces of field equipment shown.

(2)

1 .....

2 .....

(ii) For **one** of the pieces of equipment shown, briefly describe how it could be used to measure local weather.

(3)

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(iii) What factors should be considered when choosing sites at which to use this equipment?

(3)

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(b) Figure 8b shows some data recorded at a school weather station (9.00 am) over a six-day period.

		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
	Units						
Cloud cover	*Oktas*	2	8	7	5	3	2
Pressure	*millibars*	996	992	988	1000	1004	1003
Temperature	*°C*	3	7	8	4	5	6
Rainfall (over 24hrs)	*mm*	0	5	7	0	0	0

Figure 8b

(i) In the space below, draw a simple sketch to show how you could present and compare the results from **temperature** and **rainfall**.

(4)

(ii) Justify your choice of data presentation technique in (b)(i).

(3)

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(iii) What conclusions can be drawn about the trends in weather data, based on the information in Figure 8b? You may support your answer using simple statistics.

(6)

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(iv) Comment on the validity of the measurements in Figure 8b as a way of recording the changes in weather over one week.

(4)

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(Total for Question 8 = 25 marks)

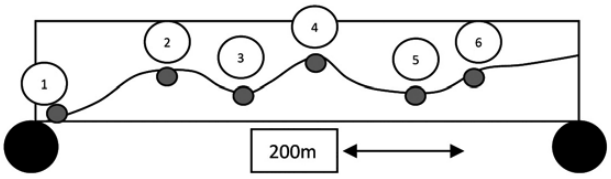
If you answer Question 9 put a cross in the box ☒.

Remember to put a cross in the box if you are doing the question!

9 Ecosystems and Rural Environments Fieldwork

A group of students investigated the characteristics of sand dune ecosystem along a transect. Figure 9a shows the locations of where the data was collected.

GIS map of a sand dune ecosystem



A transect profile (A-B) and six sampling points

Figure 9a

(a) (i) Suggest **one** possible aim of this investigation.

(1)

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(ii) Identify **two** possible risks associated with fieldwork in this type of location.

(2)

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(iii) Briefly describe the some of the equipment you might use to collect data about characteristics of the sand dune ecosystem.

(3)

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(iv) Why do you think the points in Figure 9a are spaced at **unequal** distances from each other?

(2)

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(b) Study Figure 9b which shows some of results from the students' fieldwork transect.

	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6
Distance from start of transect (m)	10	190	340	440	620	720
Number of species	0	1	4	7	12	8
Marram grass (% frequency)	0	20	55	10	0	0
Soil pH	7.5	7.5	7.0	6.5	6.0	5.5

Figure 9b

(i) In the space below, draw a simple sketch to show how you could best present these results.

(4)

(ii) Justify your choice of data presentation technique in (b)(i).

(3)

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(iii) What conclusions can be drawn about the trends in soil and vegetation along the transect? You may support your answer using simple statistics.

(6)

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(iv) Comment on the accuracy and reliability of the data in Figure 9b.

(4)

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(Total for Question 9 = 25 marks)

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

Remember to put a cross in the box if you are doing the question!

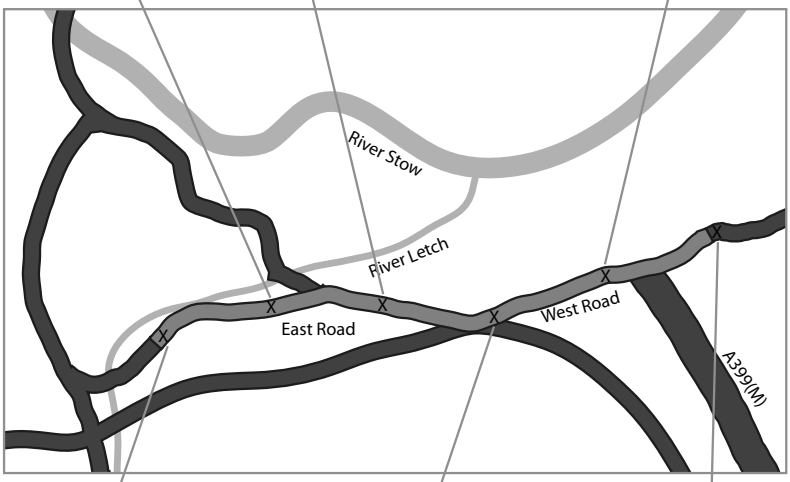
10 Urban Environments Fieldwork

A group of students investigated environmental quality at six points along an urban road. Figure 10a shows the locations of where the data was collected.

Site 2 (CBD)

Site 3 (Outer CBD)

Site 5 (Redevelopment)



Site 1 (CBD)

Site 4 (Inner city)

Site 6 (Inner suburbs)

Scale
0 500
metres

N

Key
Route taken by student
X Data collection sites
Main roads

Figure 10a

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

(1)

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(ii) Identify **two** possible risks associated with fieldwork in this type of location.

(2)

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(iii) Briefly describe some of the equipment (including recording sheets) you might use to collect data about urban environmental quality.

(3)

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(iv) Why do you think the points in Figure 7a are spaced at **equal** distances from each other?

(2)

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(b) Study Figure 10b which shows the results from the students' environmental quality survey.

	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6
Street cleanliness	9	7	2	5	10	6
Exterior appearance of shops and buildings	7	5	–5	2	10	9
Litter and vandalism	10	6	6	–6	10	–2
TOTALS	27	18	3	1	30	13

Note all categories have a maximum and score of +10 (very good) and a minimum of –10 (very bad)

Figure 10b

(i) In the space below, draw a simple sketch to show how you could best present these results.

(4)

(ii) Justify your choice of data presentation technique in (b)(i).

(3)

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(iii) What conclusions can be drawn about the trends in environmental quality along the road? You may support your answer using simple statistics.

(6)

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(iv) Comment on the accuracy and reliability of the data in Figure 10b.

(4)

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(Total for Question 10 = 25 marks)

TOTAL FOR SECTION C = 50 MARKS

SECTION D: Global issues

Answer ONE question from this section

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

Remember to put a cross in the box if you are doing the question!

11 Fragile environments

(a) Study Figure 11 which shows how the average annual global temperature varied between 1860 and 2005.

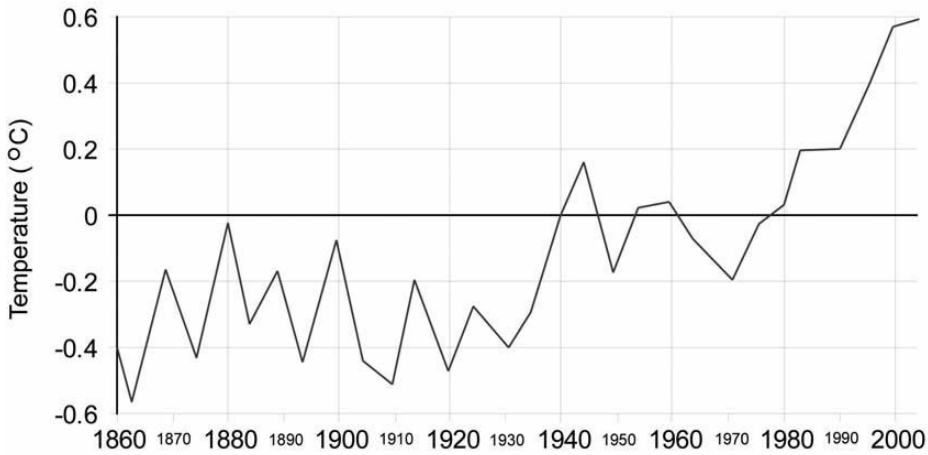

Figure 11

(i) Which of the following was the warmest decade (10-year period)?
Put a cross in the box next to the correct answer.

(1)

☒ **A** 1880–1890

☒ **B** 1940–1950

☒ **C** 1950–1960

☒ **D** 1990–2000

(ii) Describe the trend from 1980 to 2000.

(2)

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(iii) Name **two** human activities that cause atmospheric pollution which may result in global warming.

(2)

1 .....

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2 .....

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(b) (i) Suggest the likely impact that climate change might have on:

(4)

1. ecosystems

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2. food supply

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(ii) Outline one way climate change could be addressed through an international agreement.

(2)

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(iii) Describe the successes and failures of an international agreement to tackle climate change.

(4)

Successes:

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Failures:

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(c) Explain the methods used to reduce soil erosion in a named area affected by desertification.

(6)

Named area .....

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(d) Discuss how a named threatened tropical rainforest might be managed in a sustainable way.

(9)

Name of threatened tropical rainforest .....

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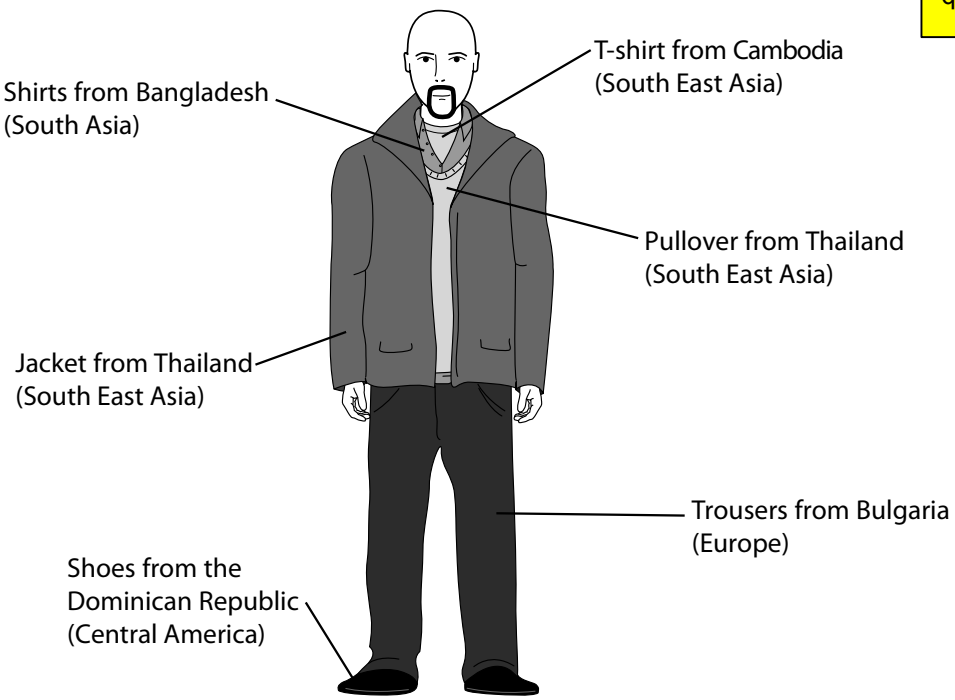
(Total for Question 11 = 30 marks)

If you answer Question 12 put a cross in the box ☒

Remember to put a cross in the box if you are doing the question!

12 Globalisation and migration



Products retailed in 30 countries, mainly in North America, Europe and Asia

US company employing 5550 retail staff and having a revenue of £1 billion a year

Figure 12

(a) (i) Name **one** piece of clothing, worn by the man in Figure 12, that is **not** manufactured in South East Asia.

(1)

.....

(ii) Which global region contributed the most items to clothe the man in Figure 12?

(1)

.....

.....

(iii) What is a TNC?

(1)

.....

.....

(iv) Give **two** disadvantages for the host country of the establishment of TNCs.

(2)

1 .....

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2 .....

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(b) (i) Define the term mass tourism.

(2)

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.....

(ii) Outline **two** impacts of mass tourism.

(4)

1 .....

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2 .....

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(iii) Describe how tourism could be made more sustainable.

(4)

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(c) Describe the main advantages and disadvantages of globalisation.

(6)

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(d) Discuss the reasons for **one** international migration.

(9)

Named international migration .....

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(Total for Question 12 = 30 marks)

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

Remember to put a cross in the box if you are doing the question!

13 Development and human welfare

(a) Study Figure 13 which shows some development indicators for Sri Lanka and the United Kingdom (UK).

Indicator	Sri Lanka	United Kingdom
Urban Population (% of total population)	23	92
Infant Mortality Rate (per 1000 people)	17	6
Gross National Product (GNP) (US$ per person per year)	800	20 800
TVs (per 1000 people)	82	612
Doctors (per 1000 people)	23	164
Literacy Rate (% of total population)	91	99

Figure 13

(i) In the UK, GNP is higher than in Sri Lanka, by how many dollars per person? **(1)**

☒ **A** 200

☒ **B** 2 000

☒ **C** 20 000

☒ **D** 200 000

(ii) When compared to Sri Lanka, the UK has a lower **(1)**

☒ **A** infant mortality rate

☒ **B** literacy rate

☒ **C** number of doctors

☒ **D** number of TVs

(iii) Which of these countries is an LIC?

(1)

.....

(iv) Define the term 'infant mortality'?

(2)

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(b) (i) What are emerging economies?

(2)

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.....

(ii) For one emerging economy, outline **two** reasons for its development.

(4)

1 .....

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2 .....

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(iii) The global development gap has created a North – South divide. Outline **two** characteristics of countries in the 'North' of the divide.

(4)

1 .....

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(c) Explain why there are regional differences within a country.

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(d) Discuss the successes and failures of a non-governmental agency project in an LIC.

(9)

Named project/country .....

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(Total for Question 13 = 30 marks)

TOTAL FOR SECTION D = 30 MARKS
TOTAL FOR PAPER = 180 MARKS