



Please write clearly in block capitals.

Centre number

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Candidate number

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Surname _____

Forename(s) _____

Candidate signature _____

I declare this is my own work.

AS GEOGRAPHY

Paper 2 Human geography and geography fieldwork investigation

Wednesday 22 May 2024 Morning Time allowed: 1 hour 30 minutes

Materials

For this paper you must have:

- a pencil
- a rubber
- a ruler.

You may use a calculator.

For Examiner's Use	
Section	Mark
A	
B	
TOTAL	

Instructions

- Use black ink or black ball-point pen.
- Fill in the boxes at the top of this page.
- Answer **all** questions in Section A.
- Answer Question 2 in Section B.
- Answer **either** Question 3 **or** Question 4 in Section B.
- You must answer the questions in the spaces provided. Do **not** write outside the box around each page or on blank pages.
- If you need additional extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- 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 80.

Only **one** answer per question is allowed.

For the multiple-choice questions, completely fill in the circle alongside the appropriate answer.

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. 

Section A

Answer **all** questions in this section.

Question 1 Changing places

0 1 . 1 Which **one** of the following groups will have an ‘outsider’ perspective on the place in which they live? **[1 mark]**

- A** Refugees who have been re-located to a medium-sized town in the UK. 
- B** The organising committee of the village food festival. 
- C** The members of a local on-line community forum. 
- D** The members of the village cricket team. 



0 1 . 2

Which of the following are **both** examples of the impacts of external forces on a place?

[1 mark]

- | | | |
|--|---|--------------------------|
| A Local residents campaigned to make the town centre traffic free at the weekends. | A large new housing estate has led to a significant increase in the population of the village. | ☐ |
| B The town is part of the government's agenda to regenerate small towns in the north of England. | In 2010, a multinational company closed a factory in this town, leading to considerable local job losses. | ☐ |
| C An area has been designated where tax breaks are available to companies which choose to locate here. | A local community group has planted a community garden in the centre of the village. | ☐ |
| D The World Bank has given money for the reconstruction of the town's infrastructure following an earthquake. | The local community worked together to re-build the town's historic temple after the earthquake. | ☐ |

0 1 . 3

Suggest why place is important in human experience.

[3 marks]

Question 1 continues on the next page

Figure 1a shows ethnic groups as a percentage of population in rural and urban areas in England, 2016 and 2020.

Figure 1b shows detail for all minority ethnic group populations in rural and urban areas in England, 2016 and 2020.

Figure 1a

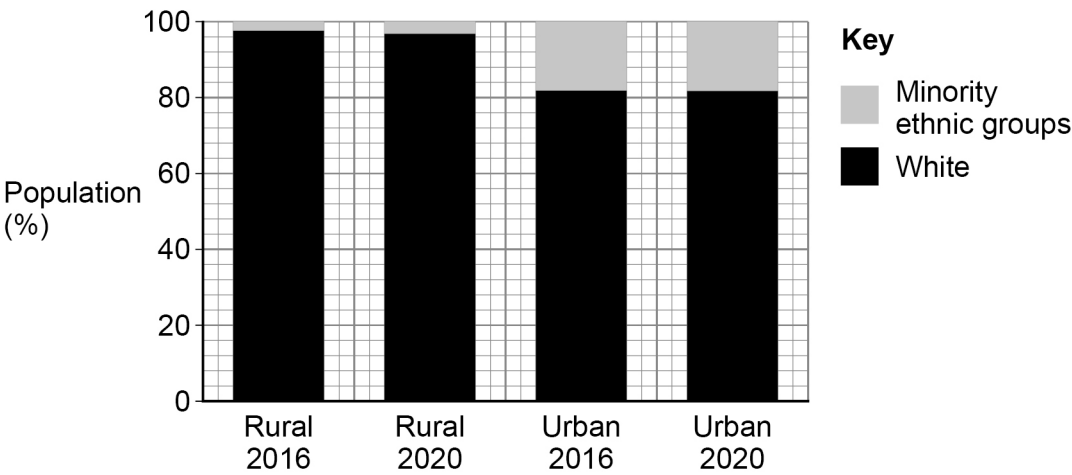
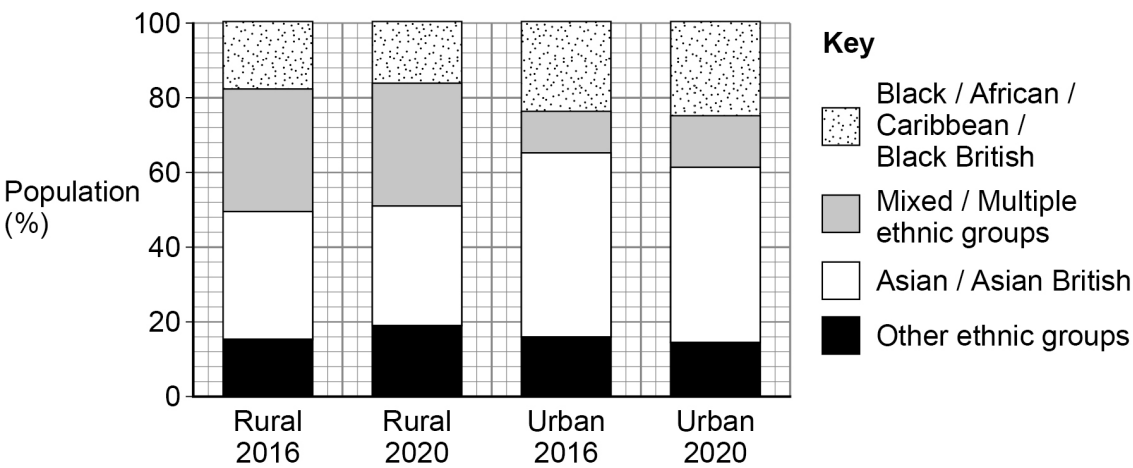


Figure 1b



01.4

Analyse the data shown in **Figure 1a** and **Figure 1b**.

[6 marks]

Question 1 continues on the next page

[9 marks]

[20 marks]

[illegible]

End of Section A
Turn over for Section B

Section B

Geography fieldwork investigation and geographical skills

Answer Question 2 and **either** Question 3 **or** Question 4.

Question 2

0 2 . 1

Outline **one** ethical issue that must be considered when collecting data from an interview.

[2 marks]

Figure 2 is a transcript of a recent on-line interview between a Geography student and a resident of Forest Gate, East London.

Figure 2

My family migrated from Kenya to this area of East London in the early 1990s when I was a young child. Back then there was plenty of cheap housing. It was a vibrant and diverse place with people from all over the world living here. There were small shops which sold the food we liked and cafes for us to meet up with friends and family. I went to school here and have brought my own family up here. There has always been a great community feel to this place.

But in the last five years there has been a lot of re-development. In one way this is good as new businesses have moved in and there is more green space and better transport links to central London. Now there are new coffee chains and expensive restaurants. New people have moved into the area to live in the luxury apartments they have built. The older houses have been renovated and the house prices have gone up. My children will probably not be able to afford to stay living in this area even though they want to. I'm not sure all of these changes have benefited the people who have been living here for a long time.

0 2 . 2 Using **Figure 2**, suggest how **one** type of map could be used to prepare for a geographical investigation in this place. **[2 marks]**

0 2 . 3 With reference to **Figure 2**, suggest **one** aim for a geographical fieldwork investigation and outline **one** method of primary data collection. **[4 marks]**

Aim

Primary data collection method

0	2	.	5
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Assess how useful the data presentation method(s) you used in your investigation were for data analysis.

[6 marks]

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

End of Question 2

There are no questions printed on this page

**DO NOT WRITE ON THIS PAGE
ANSWER IN THE SPACES PROVIDED**

Answer **either** Question 3 **or** Question 4.

Question 3 (If you answer this question do not answer Question 4)

0 3

A student was planning fieldwork to investigate if there were significant differences in the social and economic characteristics of two similar sized towns in the region of North East England where they lived.

Figure 3 outlines the background to the investigation, relevant theory and secondary data collection.

Figure 3

Background

The student's idea was that there would be a different social and economic character in the two post-industrial towns as one had experienced an increase in the number of commuters due to its closer proximity to a large city.

Theory

The character of a place refers to the physical and human features of a place that help to distinguish it from another place. Many factors can affect the character of a place such as physical geography, location, the built-environment, infrastructure and also demographic, economic and cultural characteristics of the area and the population. Place character may also be influenced by links to other places.

Secondary data collection

As a starting point, the student decided to focus on differences in house ownership. They thought that the percentage of housing in owner-occupation would give an indication of the economic and social character of each place.

The student tested the hypothesis:

'Town A has a higher percentage of owner-occupied housing than Town B.'

The student used the 2011 census data to collect secondary data. Each town had 12 electoral wards. For each electoral ward they recorded the percentage of owner-occupied housing. The results are recorded in **Figure 4**.

Question 3 continues on the next page

Figure 4 shows the percentage of owner-occupied housing in each electoral ward.

Figure 4

Town A		Town B	
Electoral Ward	% Owner-occupied housing	Electoral Ward	% Owner-occupied housing
1	76.4	1	67.3
2	88.6	2	82.6
3	82.6	3	83.4
4	51.7	4	69.1
5	73.0	5	78.7
6	55.7	6	79.3
7	65.4	7	78.1
8	72.8	8	79.2
9	59.3	9	78.1
10	60.5	10	67.4
11	88.2	11	64.1
12	81.4	12	69.8

0 3 . 1 Calculate the median value for **Town A**.

[2 marks]

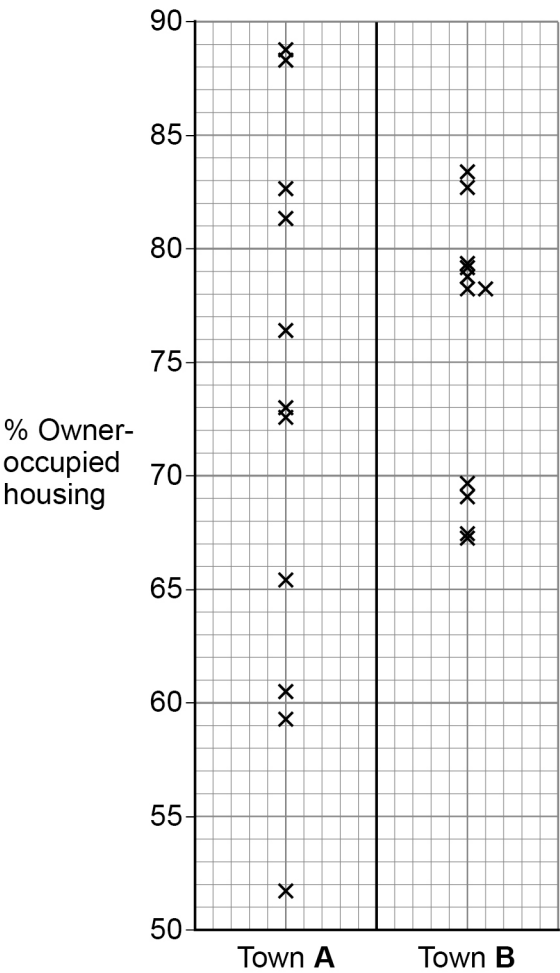
Space for working

Median value =

The student decided to present the data on a dispersion diagram to show the spread of data for each town.

This is shown in **Figure 5**.

Figure 5



0 3 . 2 Two values are missing on the dispersion diagram in **Figure 5**.

Plot the values from the table below onto **Figure 5**.

[2 marks]

	% Owner-occupied housing
Town A	55.7
Town B	64.1

Question 3 continues on the next page

To analyse the data the student calculated the mean values for Town A and Town B.

The student then calculated the standard deviation for Town A.

Figure 6 shows how they set out the data and started their calculations.

Figure 6

Town A % Owner-occupied housing	$x - \bar{x}$	$(x - \bar{x})^2$
76.4	5.1	26.01
88.6	17.3	299.29
82.6	11.3	127.69
51.7	-19.6	384.16
73.0	1.7	2.89
55.7		
65.4	-5.9	34.81
72.8	1.5	2.25
59.3	-12.0	144.00
60.5	-10.8	116.64
88.2	16.9	285.61
81.4	10.1	102.01
$\sum x = 855.6$		$\sum (x - \bar{x})^2 = 1768.72$
$\bar{x} = 71.3$		

Space for working

$\sigma =$

Key

x = individual value

$\bar{x}$ = mean

$\sum$ = sum of

σ = standard deviation

n = number in sample

Standard deviation formula

$$\sigma = \sqrt{\frac{\sum (x - \bar{x})^2}{n}}$$

03.3

Complete **Figure 6** and calculate the standard deviation to **two** decimal places.

Show your working in the space provided in **Figure 6**.

[4 marks]

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ANSWER IN THE SPACES PROVIDED**

Question 4 (If you answer this question do not answer Question 3)

0 4

A student was planning fieldwork to investigate if there were significant differences in the depth of peat in two areas of moorland in the region of North East England where they lived.

Figure 7 outlines the background to the investigation, relevant theory and primary data collection.

Figure 7

Background

The student's idea was that one of the moorland areas is largely unaffected by human activity (Area A) whereas in the other area drainage ditches have been dug to make it suitable for farming (Area B). As a consequence, the peat surface is likely to have dried out leading to decomposition and a possible reduction in the depth of the peat.

Theory

Where a soil is too wet for organisms to break down vegetation, layers of peat accumulate. The conditions mean that litter input is greater than the rate of decomposition by organisms whose activity rate is slowed down by the anaerobic conditions. Peat is therefore an important carbon store. Once exposed to air, the peat begins to decay and carbon dioxide is released.

Primary data collection

The student measured peat depth using a narrow rod pushed into the peat. They recorded the depth to which the rod sunk. They felt that the depth of peat would indicate the level of carbon stored in the peat.

The student tested the hypothesis:

'Area A will have a greater depth of peat than Area B.'

The student used a random sampling strategy. They measured the depth of peat at twelve points within a 1000 m² section of each moorland area.

The results are recorded in **Figure 8**.

Question 4 continues on the next page

Figure 8 shows the peat depth measurements for each area sampling point.

Figure 8

Area A		Area B	
Site	Depth (cm)	Site	Depth (cm)
1	26.4	1	27.3
2	38.2	2	32.6
3	32.6	3	33.4
4	11.7	4	19.1
5	23.0	5	28.7
6	15.7	6	29.3
7	15.4	7	28.1
8	22.8	8	29.3
9	19.3	9	28.2
10	20.5	10	17.4
11	38.2	11	14.1
12	31.4	12	19.8

04.1

Calculate the median value for **Area A**.

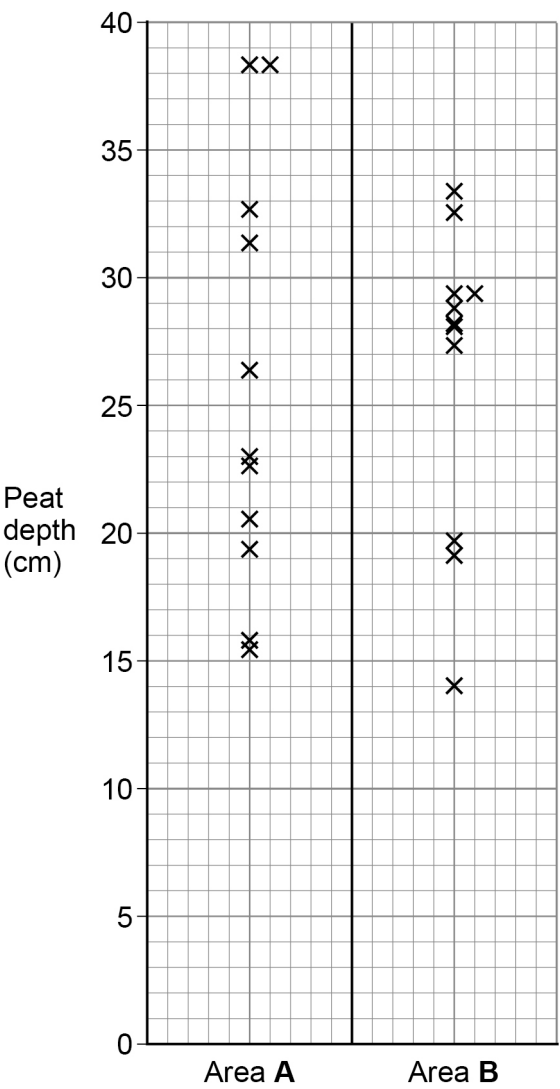
[2 marks]

Space for working

Median value =

The student decided to present the data on a dispersion diagram to show the spread of data for each area. This is shown in **Figure 9**.

Figure 9



0 4 . 2 Two values are missing from the dispersion diagram in **Figure 9**.

Plot the values from the table below onto **Figure 9**.

[2 marks]

	Peat depth (cm)
Area A	11.7
Area B	17.4

Question 4 continues on the next page

To analyse the data the student calculated the mean values for Area A and Area B.

The student then calculated the standard deviation for Area A.

Figure 10 shows how they set out the data and started their calculations.

Figure 10

Area A peat depth (cm)	$x - \bar{x}$	$(x - \bar{x})^2$
26.4	1.8	3.24
38.2	13.6	184.96
32.6	8.0	64.00
11.7	-12.9	166.41
23.0	-1.6	2.56
15.7		
15.4	-9.2	84.64
22.8	-1.8	3.24
19.3	-5.3	28.09
20.5	-4.1	16.81
38.2	13.6	184.96
31.4	6.8	46.24
$\sum x = 295.2$		$\sum (x - \bar{x})^2 = 864.36$
$\bar{x} = 24.6$		

Space for working

$\sigma =$

Key

x = individual value

$\bar{x}$ = mean

$\sum$ = sum of

σ = standard deviation

n = number in sample

Standard deviation formula

$$\sigma = \sqrt{\frac{\sum (x - \bar{x})^2}{n}}$$

04.3

Complete **Figure 10** and calculate the standard deviation to **two** decimal places.

Show your working in the space provided in **Figure 10**.

[4 marks]

There are no questions printed on this page

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ANSWER IN THE SPACES PROVIDED**

