Surname	Centre Number	Candidate Number
First name(s)		0

GCSE

C111U30-1

S24-C111U30-1

FRIDAY, 14 JUNE 2024 – MORNING

GEOGRAPHY A – Component 3

Applied Fieldwork Enquiry

1 hour 30 minutes

For Examiner's use only		
	Maximum Mark	**Mark Awarded**
Part A	**18**	
Part B	**18**	
Part C	**36**	
SPaG	**4**	
Total Marks	**76**	

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ADDITIONAL MATERIALS

Resource Folder. You may also require a calculator and a ruler.

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen. Do not use gel pen or correction fluid.

You may use a pencil for graphs and diagrams only.

Write your name, centre number and candidate number in the spaces at the top of this page.

Answer **all** questions.

Write your answers in the spaces provided in this booklet. Additional space is provided for some questions within the booklet (if required). If further space is required for any question, you should use the additional page(s) at the end of this booklet. The question number(s) should be clearly shown.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets at the end of each question or part-question.

You are reminded that assessment will take into account your ability to spell, punctuate and use grammar and specialist terms accurately in your answer to Part C, Question **3**(g).

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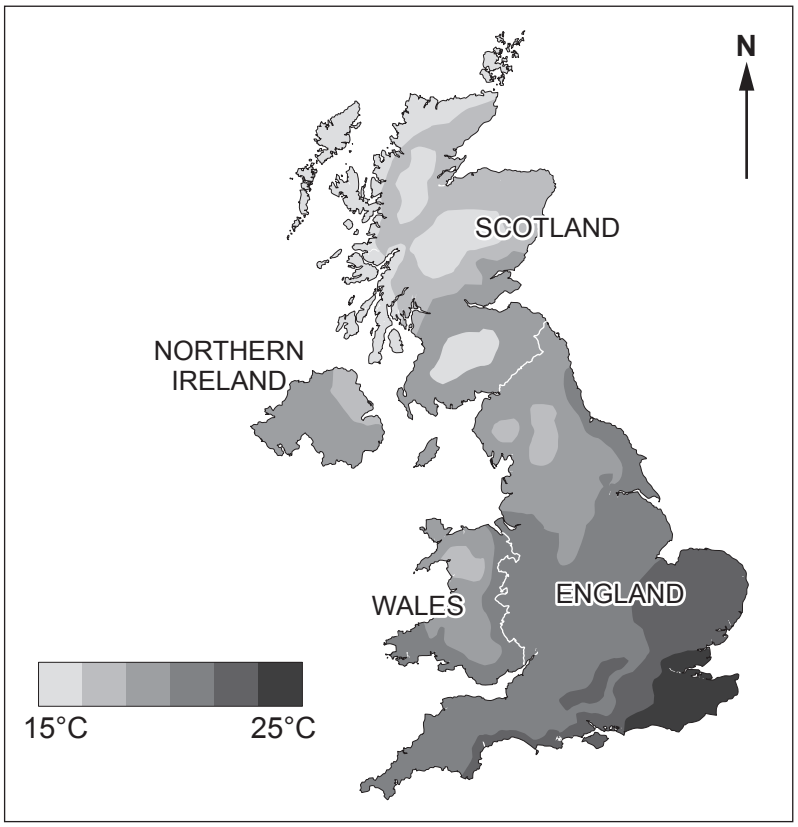
Part A: Investigating change over time in fieldwork

Answer **all** parts of this question.

1. (a) Students decided to investigate if UK weather conditions in summer are changing. Study **Map 1.1**.

Map 1.1: Mean daytime summer temperatures in the UK between 1991 and 2019



Tick (✓) two correct statements in the table below. Use **Map 1.1**. [2]

	Tick (✓) two
Scotland has many of the lowest temperatures.	
The coolest places are all along the coastline.	
The highest temperatures are in Wales.	
The hottest places are inland.	
The south-east of the UK has the highest temperatures.	
The highest temperatures are in the south-west of the UK.	

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(b) Study **Diagram 1.2**.

Diagram 1.2: A recording sheet for temperatures in July 2022

Location: .....

DATE	TEMPERATURE (°C)
1st July 2022	
2nd July 2022	
3rd July 2022	
4th July 2022	
5th July 2022	

Give **two** strengths of this recording sheet. [2]

Strength 1: .....

.....

Strength 2: .....

.....

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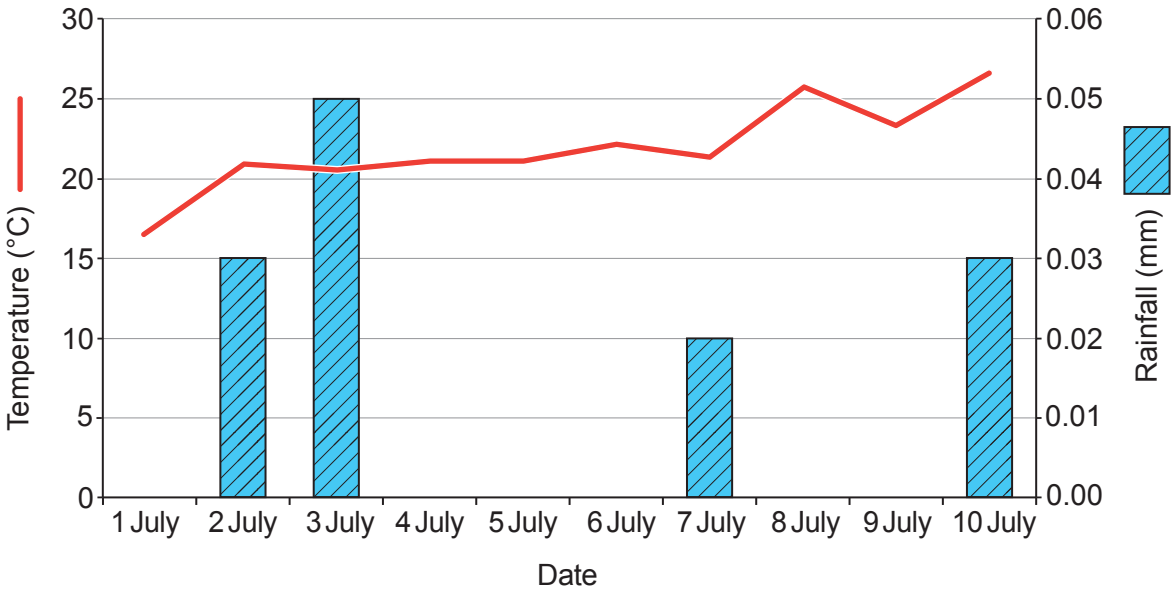
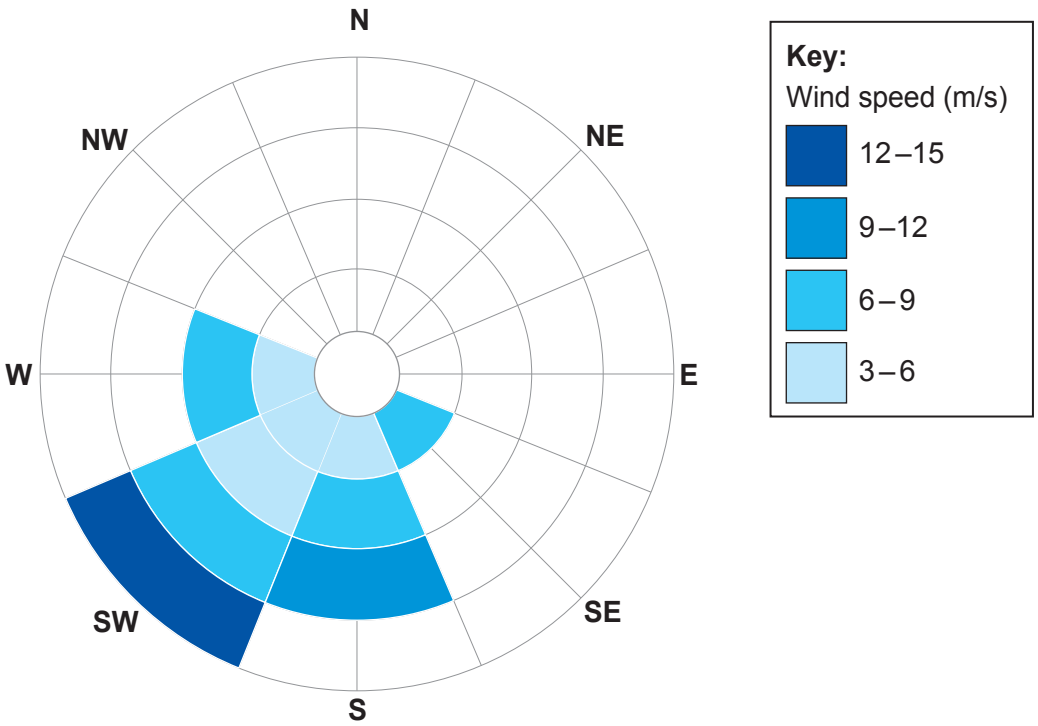
(c) Students collected data at Heathrow, south-east England, in July 2022. The data they collected is shown in **Graphs 1.3** and **1.4**.

Graph 1.3: Temperature and rainfall at Heathrow, July 2022



Graph 1.4: Wind speed and direction at Heathrow for the same 10 days of July 2022



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Use **Graph 1.3** and **Graph 1.4**. [4]

Circle the correct options in the following statements.

The highest rainfall in one day is (0.05 / 0.03 / 0.02) millimetres and the temperature

(increases / decreases / stays the same) throughout the first 10 days of July.

The (south / north-east / south-west) has the most days of wind.

The wind speed is the fastest from the (south-west / south-east / south).

(d) Study **Table 1.5**.

Table 1.5: Mean temperatures for the UK, in July, over two 10-year periods

Mean July temperature 1911 – 1921	Mean July temperature 2011 – 2021
13°C	15°C

Calculate the percentage increase in mean temperature for the two time periods. Show your working. [2]

Answer ..... %

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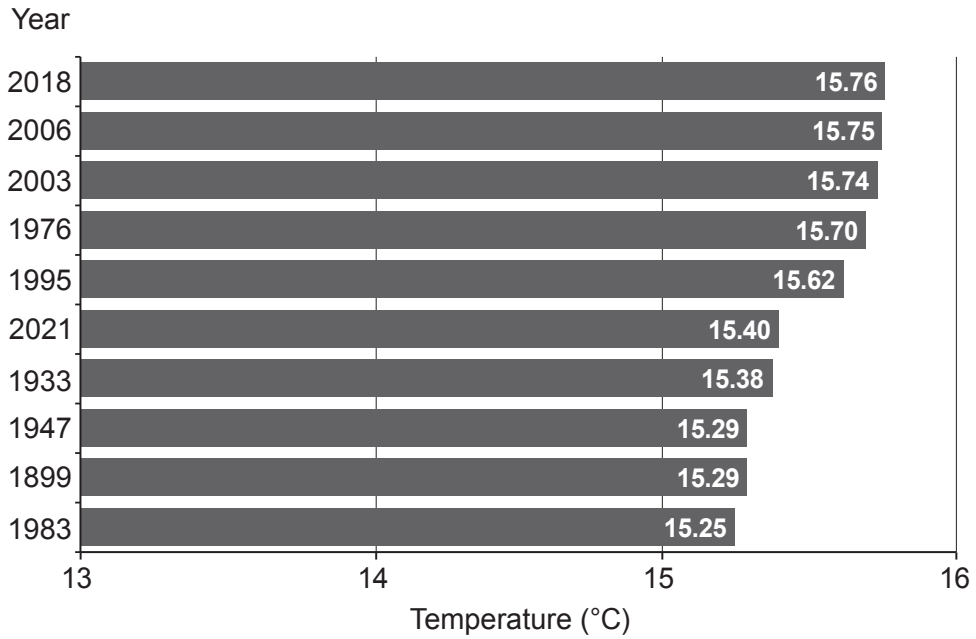
(e) Study **Graph 1.6**.

Graph 1.6: Top ten warmest UK summers by year, excluding 2023



*Temperatures shown are the mean for June to August across the whole UK.

Suggest **one** conclusion about how UK summer temperatures are changing. Use data from **Graph 1.6** in your answer. [2]

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(f) This question is about your own experience of **investigating change over time** in fieldwork.

You should support your answers by referring to actual examples from your own fieldwork.

(i) Give **one** reason why your primary data collection was accurate. [2]

Name of equipment or survey you used to collect your primary data:

.....

Reason why it was accurate: .....

.....

.....

.....

(ii) Explain why secondary data was useful in your investigation. [4]

Secondary data you used in your investigation into change over time:

.....

Why it was useful: .....

.....

.....

.....

.....

.....

.....

END OF PART A

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Part B: Investigating Mitigating Risk

Answer **all** parts of this question.

2. (a) Study **Photograph 2.1**.

Photograph 2.1: Great Yarmouth, Norfolk, east England

Tick (✓) **three** enquiry questions that could be chosen in an investigation of mitigating risk in Great Yarmouth. [3]

Enquiry Question	Tick (✓) three
Have retail opportunities in Great Yarmouth changed in recent years?	
To what extent are the coastal erosion management strategies effective?	
Is counter-urbanisation occurring in Great Yarmouth?	
Is Great Yarmouth a safe place to install a new wind farm?	
How do the house prices vary between north and south Great Yarmouth?	
How are residents in Great Yarmouth being affected by climate change?	

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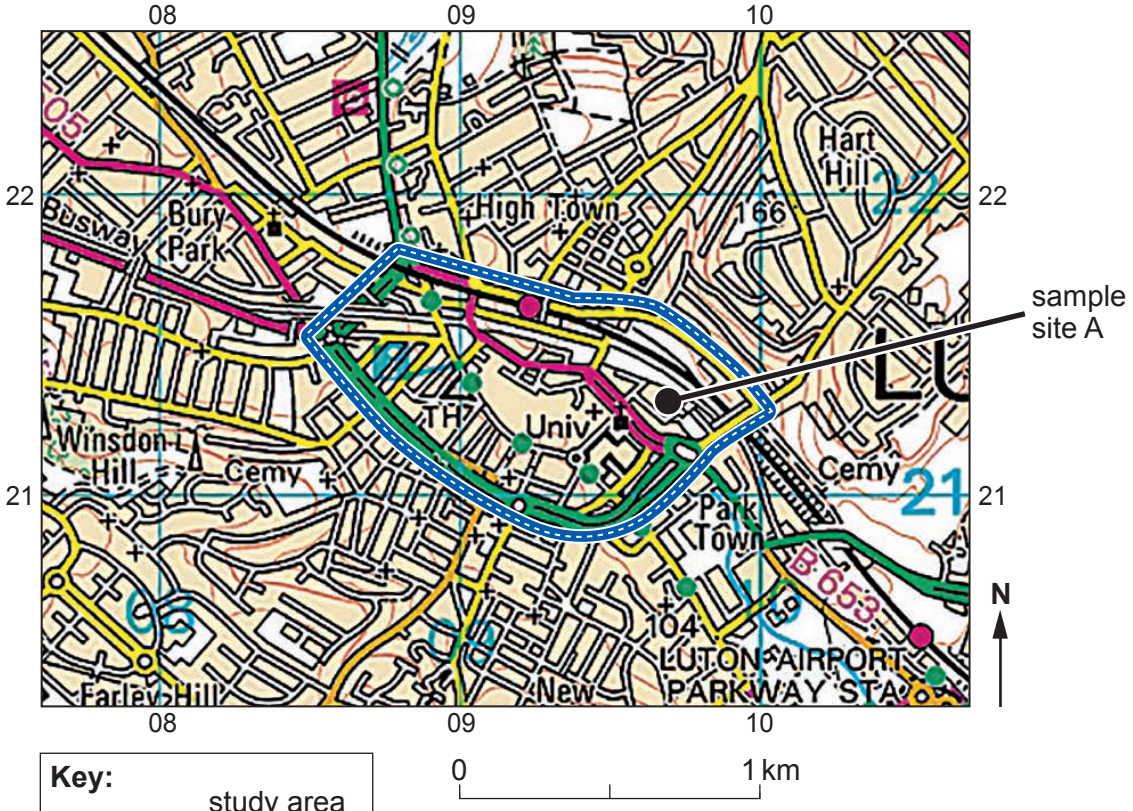
(b) Students investigated air pollution in Luton, Bedfordshire, England.

Study **Map 2.2**.

Map 2.2: An Ordnance Survey map of central Luton



(i) Estimate the size of the study area. Tick (✓) **one** box. [1]

	Tick (✓) one
10 m^2	
100 m^2	
1 km^2	
10 km^2	

(ii) Give a 6-figure grid reference for sample site A. [1]

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(c) Draw **one** line from each sampling technique to a strength of that technique. [3]

Sampling technique	**Strength of sampling technique**
Systematic	Everything has an equal chance of being measured within the study area.
Stratified	Measures everything in Luton.
Random	Useful for measuring features that change within an area or along a road.
	Takes account of different land uses and traffic within the study area.

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(d) Study **Table 2.3**.

Table 2.3: Air pollution data for two sample sites in Luton

Sample site A	Sample site B
2.3	3.4
3.4	6.0
3.5	6.4
4.5	6.6
6.7	6.8
6.7	7.2
8.5	7.7
9.5	8.1
14.5	8.5

Scale used

0 = no air pollution
20 = high air pollution

(i) Complete the table below for sample site B. Use **Table 2.3**. [2]

	Site A	Site B
Median	6.7	
Range	12.2	

(ii) Which graph would be suitable to present the data in **Table 2.3**? Tick (✓) **one**. [1]

	Tick (✓) one
Dispersion graph	
Pie chart	
Line graph	

(iii) Give **one** reason why the graph you have chosen is suitable to present this data. [1]

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(e) This question is about your own experience of **investigating mitigating risk** in fieldwork.

You should support your answers by referring to actual examples from your own fieldwork.

(i) Suggest **one** strength of your enquiry question. [2]

Your enquiry question: .....

.....

Strength: .....

.....

.....

.....

(ii) Evaluate **one** strength and **one** weakness of your conclusions. [4]

Strength: .....

.....

.....

.....

Weakness: .....

.....

.....

.....

END OF PART B

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Part C: The wider UK dimension

Answer **all** parts of this question.

You should use your understanding of UK geography to support your answers.

3. (a) Study the graph on **page 2** of the **Resource Folder**.

Tick (✓) **two** correct statements in the table below. Use the graph on **page 2** of the **Resource Folder**. [2]

	Tick (✓) two
The four years with the highest rainfall amounts occurred before 1940.	
The highest amount of rainfall fell in 2000.	
The amount of rainfall decreased from 1860 until 2000.	
The highest amount of rainfall was 1430 mm.	
The rainfall trend has increased from 1980 to 2020.	

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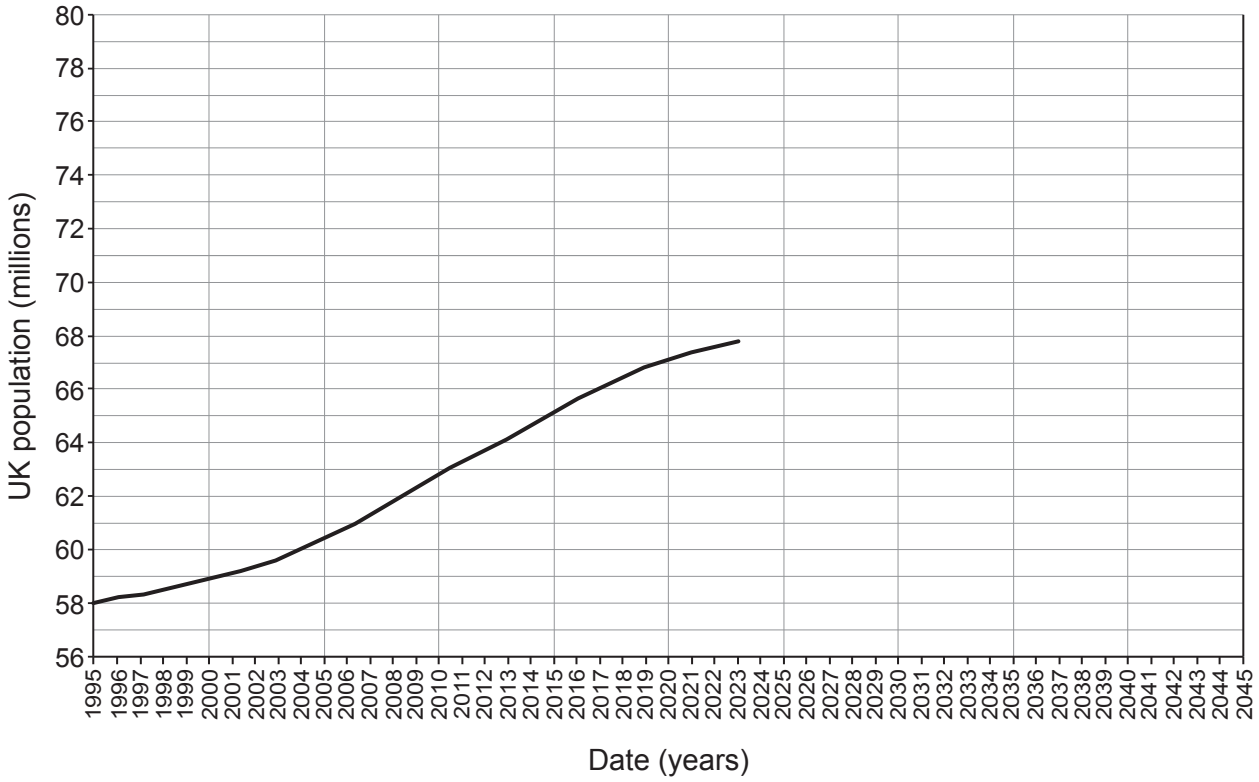
(b) Study **Graph 3.1**.

Graph 3.1: UK population change: 1995 to 2045 (estimated)



(i) Tick (✓) the correct description of the trend shown in **Graph 3.1**. [1]

	Tick (✓) one
The UK population is fluctuating between 1995 and 2023.	
The UK population is decreasing between 1995 and 2023.	
The UK population was increasing the quickest between 1995 and 2000.	
The UK population is generally increasing between 1995 and 2023.	

The UK population is projected to change at the same rate in the future.

(ii) Draw a line on **Graph 3.1** to estimate the projected population growth in the UK from 2023 to 2045. [2]

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(c) More land is being used for towns and cities in the UK.

Explain why using more land for towns and cities might increase the risk of river flooding in the UK. [6]

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(d) Hard engineering is one option that is used to manage river flooding.

Explain why hard engineering methods might have limitations when managing flood risk from rivers in the UK. [6]

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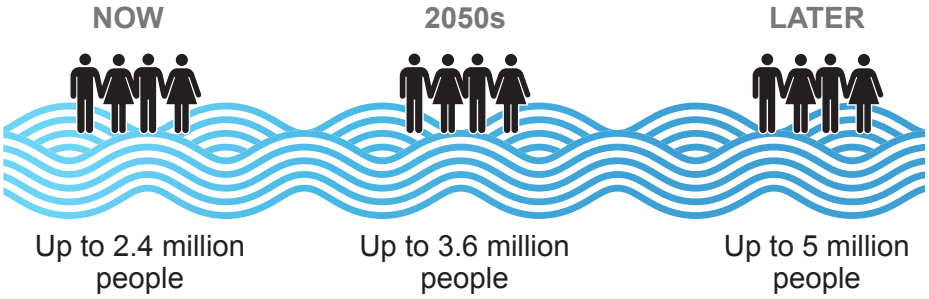
(e) Study **Diagram 3.2**. It shows people at risk from flooding in the UK.



(i) Give **two** improvements to **Diagram 3.2** that would show the data more clearly. [2]

Improvement 1: .....

Improvement 2: .....

(ii) Give **two** additional pieces of data that could be included in **Diagram 3.2** to help show which people are most at risk from flooding. [2]

Additional data 1: .....

Additional data 2: .....

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(f) Study the map on **page 3** of the **Resource Folder**.

Tick (✓) **three** statements that correctly describe the map. [3]

	Tick (✓) three
Most of the residential land use in Marlow is out of the flood risk area.	
The limit of the flood area is 5 km from the river.	
Globeside Business Park is at risk of flooding.	
All of the A404 main road is safe from flooding.	
The schools are outside the flood risk area.	
The greatest number of people at risk of flooding are within 100 m of the River Thames.	

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(g) Study **page 4** of the **Resource Folder**. It shows information about how land use zoning can protect people and property against flood risk.

Land use zoning is the best way to sustainably manage river flood risk in the UK.
To what extent do you agree with this statement? [12]

Use the information in the exam paper, **Resource Folder** and your wider geographical understanding of the UK to support your answer.

Your ability to spell, punctuate and use grammar and specialist terms accurately will be assessed in your answer to this question. [4]

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END OF PART C

END OF PAPER

Question number	Additional page, if required. Write the question number(s) in the left-hand margin.

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Question number	Additional page, if required. Write the question number(s) in the left-hand margin.

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