

Name

School



WINCHESTER
COLLEGE

Entrance Examination

Geography

2022

Total time allowed: 10 minutes to read the paper then 1 hour

Candidates answer on the Question Paper.

Write in dark blue or black pen.

Additional materials: Calculator, Ruler, Protractor, HB pencil.

SECTION A

Candidates should answer all questions in this section.

SECTION B

Candidates must choose **one** of two questions.

Both questions are worth equal marks.

SECTION C

Candidates must choose **one** of two questions.

Both questions are worth equal marks.

SECTION D

Candidates should answer all questions in this section.

SECTION A
THESE QUESTIONS ARE ON UK AND GLOBAL KNOWLEDGE

Answer ALL the questions in this section.

1) Shade and name the following countries on the world map on **page 3**:

- (a) Ghana (b) Israel (c) Papua New Guinea (3)

2) Label the Topic of Capricorn on the world map. (1)

3) Label the Prime Meridian on the world map. (1)

4) Locate and label the following cities on the world map: Riyadh and Port Moresby. (2)

5) Look at the map of the UK on **page 4**.

(a) Locate and label Leeds, Plymouth and Cardiff on the map. (3)

(b) Locate and label the Pennines on the map (1)

(c) What is the six figure grid reference of location A on the map?

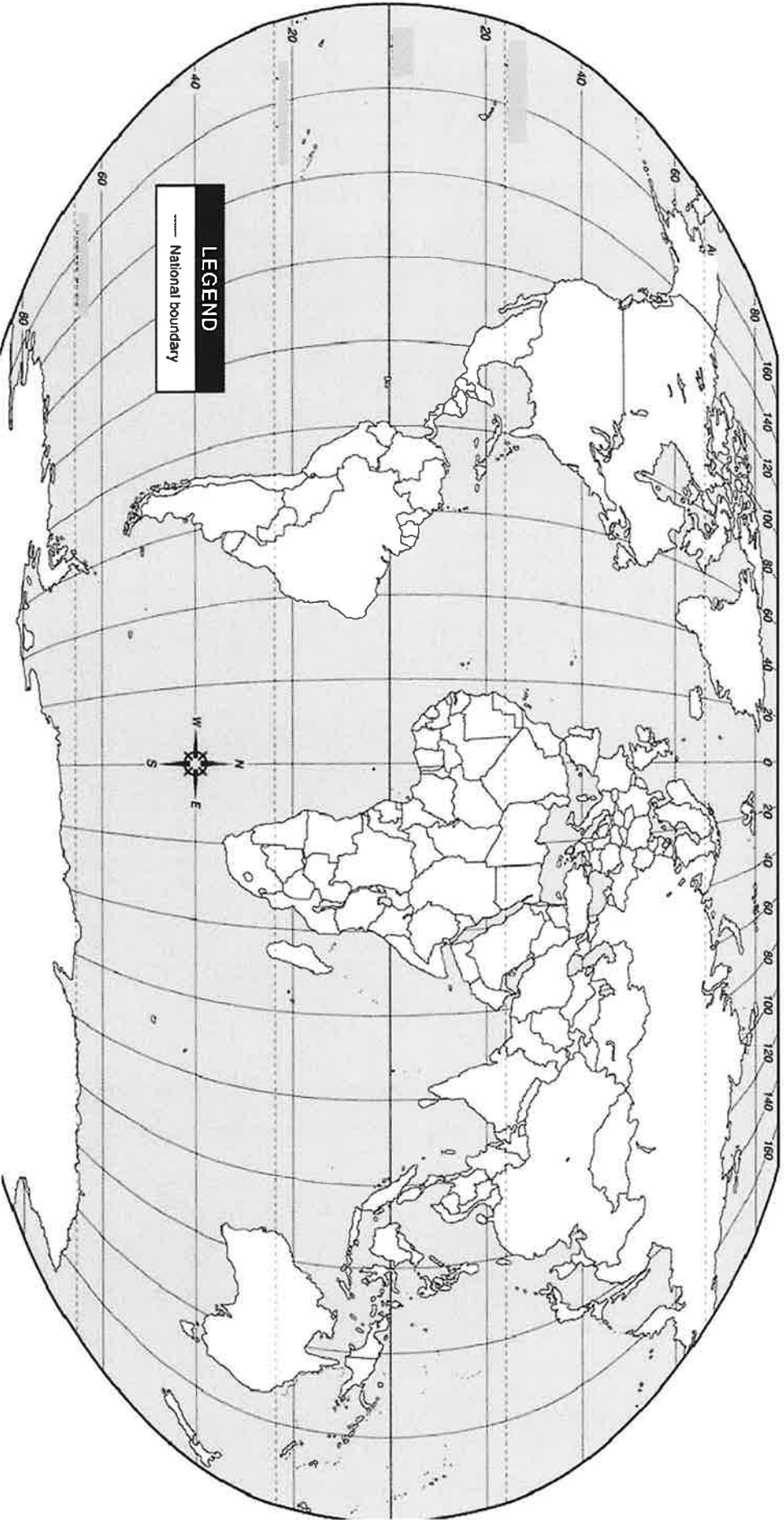
..... (1)

(d) Label the city at location A on the map (1)

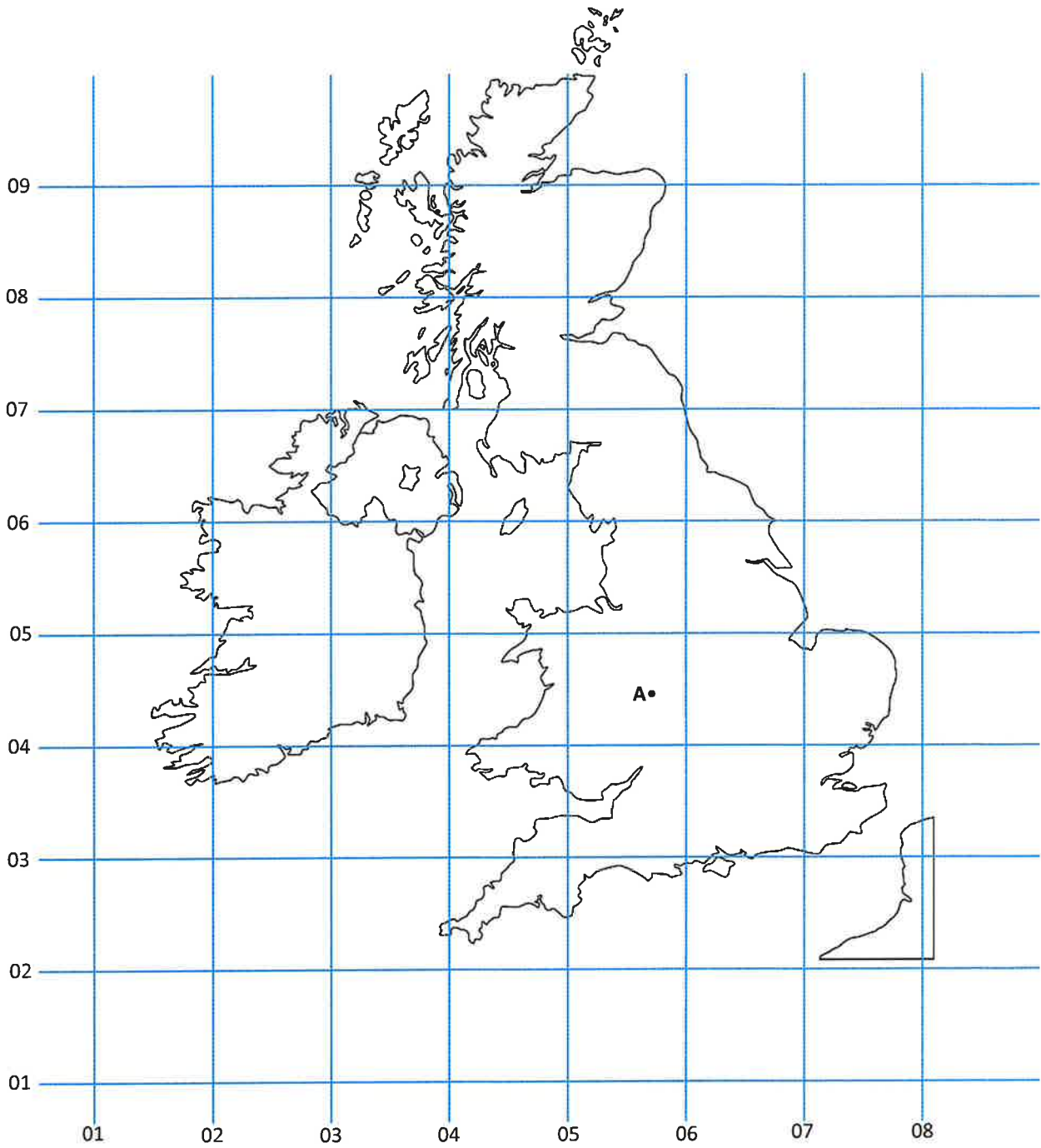
(e) Locate and label the River Shannon on the map. (1)

(Total = 14 Marks)

WORLD MAP



MAP OF THE UK

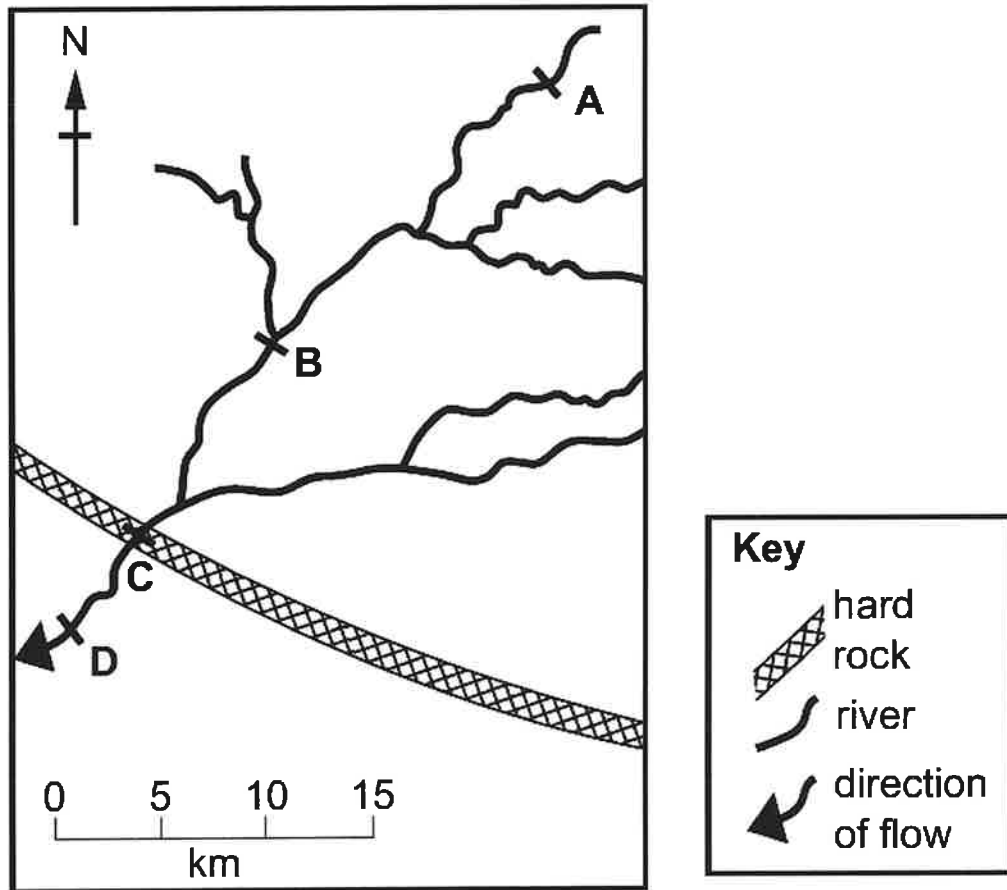


SECTION B

Answer one questions from this section, either question one or question two.

QUESTION 1: RIVERS

Consider Fig. 1.1 a map of an upland area, and Fig. 1.2 (overleaf) a photograph of a waterfall.



a) Which location (A, B, C or D) on Fig. 1.1 is the most likely position of the waterfall shown in Fig 1.2?

.....

[1]

b) What are features X and Y and Z in Fig. 1.2?

.....

..... [3]

Fig. 1.2, a photograph of a waterfall.



Consider Fig. 1.3 a map of an area where river flooding occurred (overleaf).

c) Describe the location of the areas shown in Fig. 1.3 where river flooding occurred.

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..... [3]

d) Suggest reasons why rivers flooding in the areas shown.

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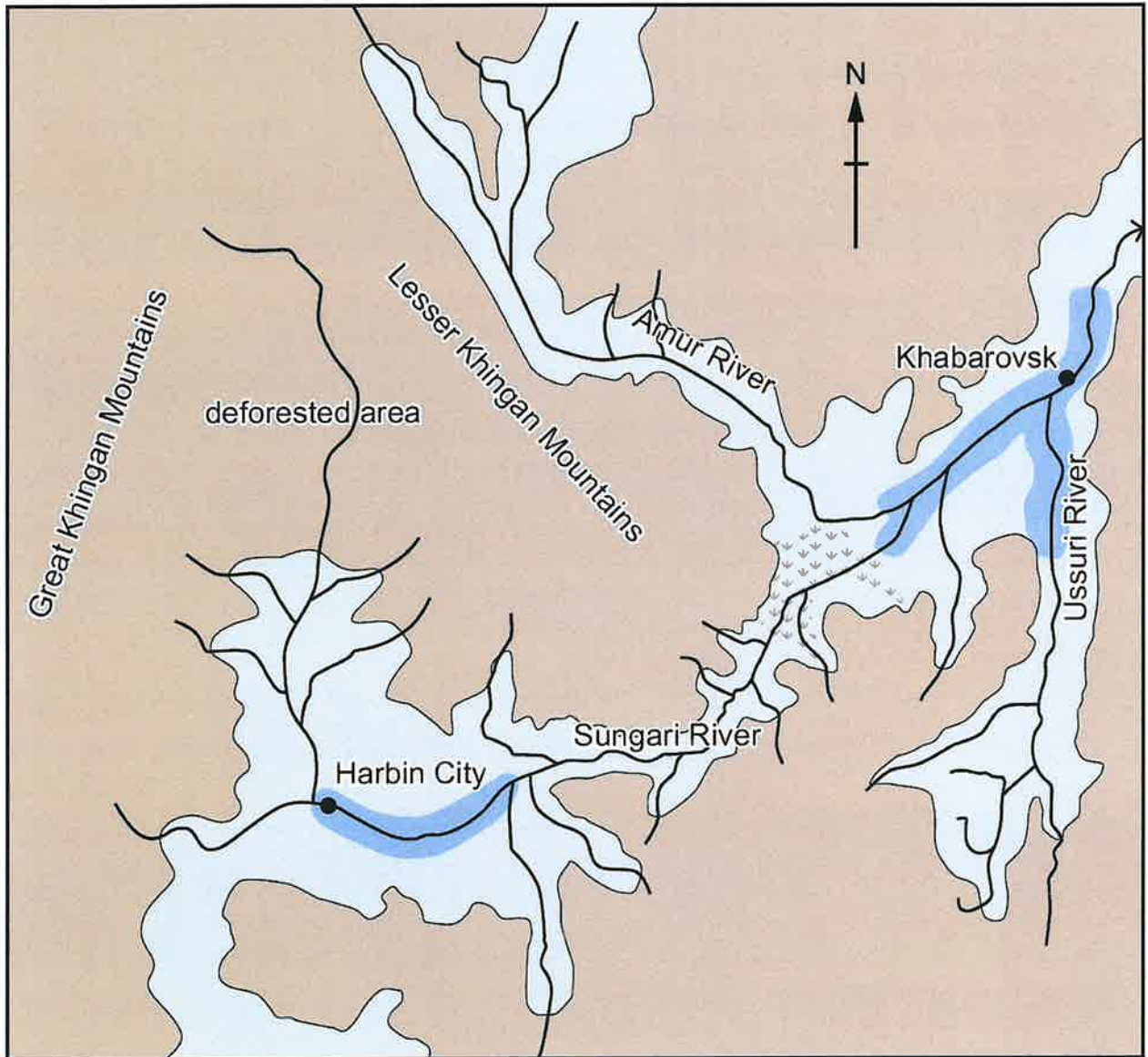
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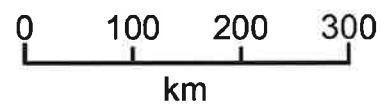
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Fig. 1.3 a map of an area where river flooding occurred.



Key

- | | |
|---|--|
|  land over 200 metres |  marshland |
|  land below 200 metres |  flooded land |



QUESTION 2: COASTS

Study Fig. 2 (overleaf) that shows an area of coastline

a) Identify the coastal landform shown in Fig 2.

..... [1]

b) Using **only** evidence from Fig. 2 describe two features of this coastal landform

.....
.....
..... [2]

c) Explain how the processes of erosion named below affect coastlines like the one shown in Fig. 2.

Hydraulic action:

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Corrasion:

.....

Corrosion:

.....

Attrition:

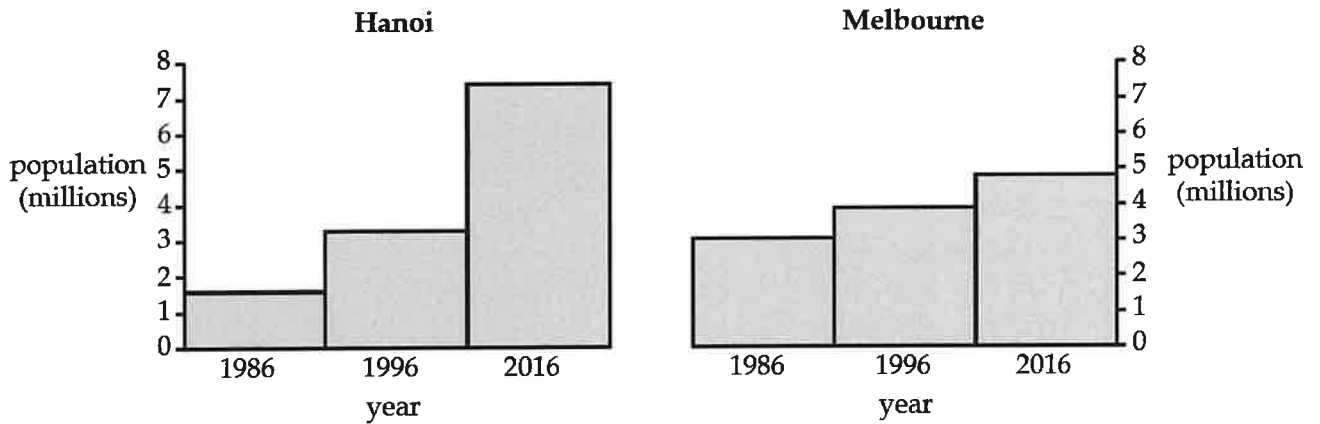
..... [4]

SECTION C

Answer one questions from this section, either question three or question four.

QUESTION 3: POPULATION AND SETTLEMENT

Fig. 3: population statistics for Hanoi and Melbourne.



a) Using Figure 3 only, compare the population growth of Hanoi and Melbourne between 1986 and 2016.

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..... [3]

b) Describe and explain the age and sex structure of migrants moving to cities in LEDCS

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..... [4]

c) Explain how the rapid growth of urban populations causes problems for city administrators

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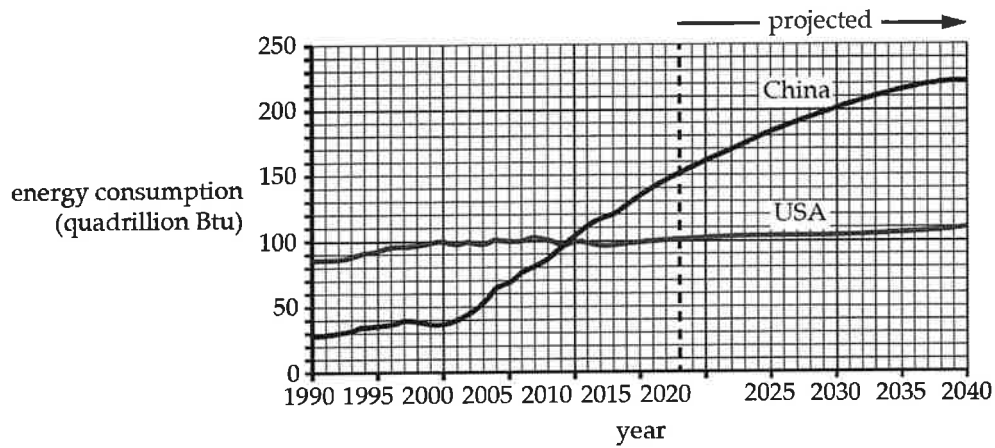
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..... [4]

QUESTION 4: TRANSPORT AND INDUSTRY

Fig. 4: The use of energy in China and the USA between 1990 and 2040 (projected)



a) Using information from Fig. 4 only, compare the increases in the use of energy in China and the USA which are predicted to occur between 2022 and 2040.

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..... [3]

b) Suggest reasons why the amount of energy being used in China and the USA is increasing

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..... [4]

c) Explain how a variety of factors influence the location of manufacturing industries

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..... [4]

SECTION D

Answer all questions in this section.

QUESTION 5

A group of pupils took part in a project to test if the local river was becoming less polluted. To investigate this they did fieldwork on the River Test. Before they started their fieldwork, their teacher warned them about the dangers of working in the river.

a) Suggest different precautions that the students might take to protect themselves from the following dangers while doing tests in the water:

Infection from the water

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Insects or animals in the river

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Sharp stones on the river bed

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Danger of drowning

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[4]

The pupils investigated a hypothesis '*The oxygen level in the river was higher in 2022 than 2019*'. Oxygen is essential for animals to live in rivers. The oxygen level of water increases as it becomes less polluted.

The pupils used a digital meter to measure the oxygen level of the water.

b) Describe **three** ways that the pupils could ensure that their measurements were reliable.

..... [1]

..... [1]

..... [1]

c) Before the pupils began working at the fieldwork sites they did a pilot study on the river near their school. Explain what a pilot study is and give **two** reasons for doing one.

..... [3]

The pupils measured the oxygen level of the water at five sites along the River Test. These sites had previously been measured by community volunteers in 2019. The results of measurements taken in 2019 and 2022 are shown in the table below.

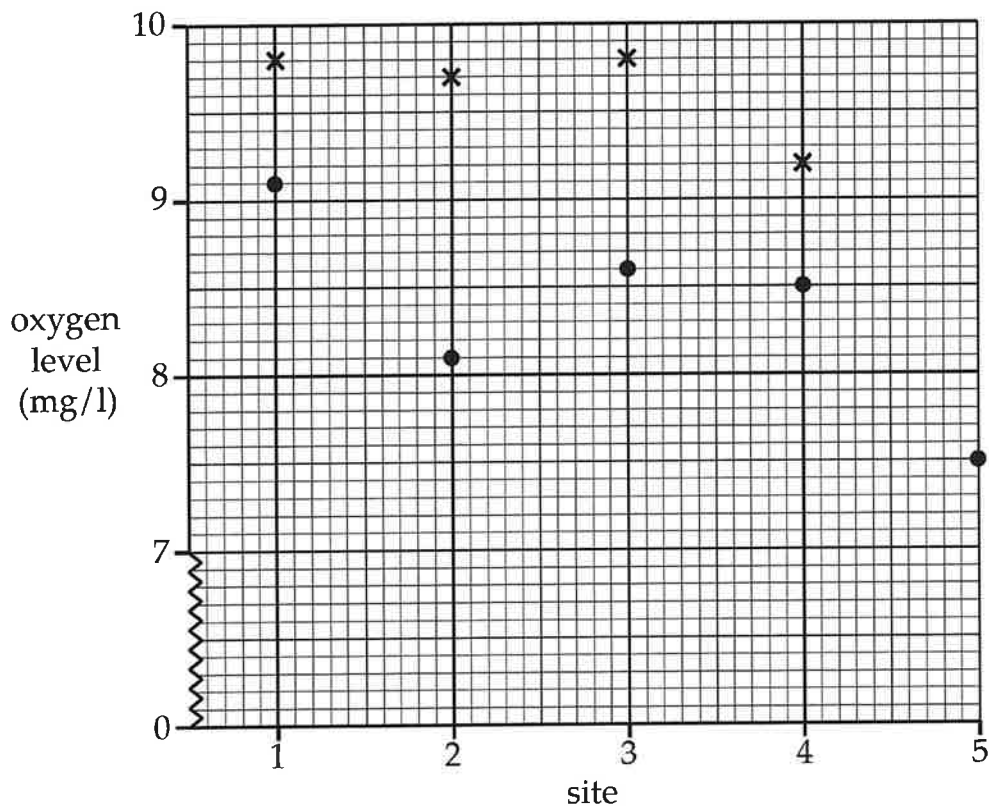
Results of oxygen level measurements

site	oxygen level (mg/l)	
	2019	2022
1	9.1	9.8
2	8.1	9.7
3	8.6	9.8
4	8.5	9.2
5	7.5	9.3

mg / l = milligrams of oxygen per litre of water

d) Plot the oxygen level at site 5 in 2022 on the figure below. [1]

Results of oxygen level measurements



Key

- oxygen level results in 2019
- × oxygen level results in 2022

e) What conclusion would the pupils make about their hypothesis ('The oxygen in the river was higher in 2022 than 2019')? Use evidence from the figure and table to support your decision.

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..... [3]

f) Suggest another hypothesis that students might investigate through fieldwork in a river. Do **not** refer to water pollution. Describe a fieldwork method to test this hypothesis.

Hypothesis

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..... [1]

Fieldwork method

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..... [5]