SPECIMEN ASSESSMENT MATERIAL

# AS GEOGRAPHY

## Paper 2 Human geography and geography fieldwork investigation

Specimen Question Paper

Time allowed: 1 hour 30 minutes

**Materials**

For this paper you must have:

- a pencil
- a rubber
- a ruler.

You may use a calculator.

**Instructions**

- Answer **all** Questions in Section A.
- Answer Question 2 in Section B.
- Answer Question 3 **or** Question 4 in Section B.

**Information**

- The total number of marks available for this paper is 80.

**Advice**

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. 

Please write clearly, in block capitals, to allow character computer recognition.

Centre number ☐☐☐☐☐ Candidate number ☐☐☐☐

Surname ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

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Candidate signature _____

## Section A

Answer **all** questions.

### Question 1 Changing places

**0 1 . 1** Geographers talk about 'experienced places' and 'media places'. Which of the following statements about those places is true?

**[1 mark]**

**A** Experienced places are old and well-established but media places have only recently been developed. ⬭

**B** Experienced places are places that are close to peoples' homes but a media place is the whole area served by a local TV station, local radio station or local newspaper. ⬭

**C** Experienced places are places where people live but media places are based on literature, like ‘Shakespeare Country’. ⬭

**D** Experienced places are those places that a person has spent time in but media places are those that the person has only read about or seen on film. ⬭

**0 1 . 2** Which of the following lists has endogenous and exogenous factors about a town in the correct columns?

**[1 mark]**

| | Endogenous factors | Exogenous factors | |
|---|---|---|---|
| **A** | A large immigrant population.<br>On a plateau about 200 m above sea level. | Several tower blocks near the CBD.<br>Three National Parks within 50 km. | ⬭ |
| **B** | At the foot of a scarp slope.<br>Still has a castle with a moat. | First built in the fifteenth Century.<br>Close to a motorway junction. | ⬭ |
| **C** | Built at a bridge point.<br>A market square in the centre. | 25 km from the capital city.<br>Visited by many Japanese tourists. | ⬭ |
| **D** | On a coal field.<br>Near to a major port. | A banking centre.<br>A high percentage of old people. | ⬭ |

**0 1 . 3** Name **one** place that you have studied.

Name **one** artistic source (eg painting, song, text) and explain how it helped you to develop your knowledge and understanding of that place.

**[3 marks]**

**Question 1 continues on the next page**

**Figure 1a** is from the current Ordnance Survey 1:50 000 series and shows part of south east Oxford.

**Figure 1b** is taken from the Ordnance Survey map of that same area, published in 1899. The 1899 map has been enlarged to the same scale as the current map.

**Figure 1a**

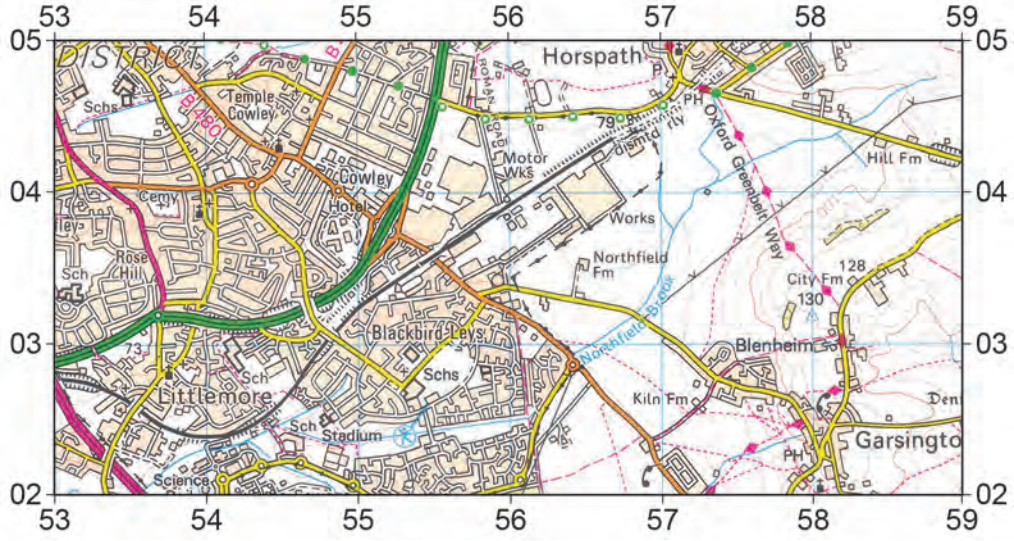
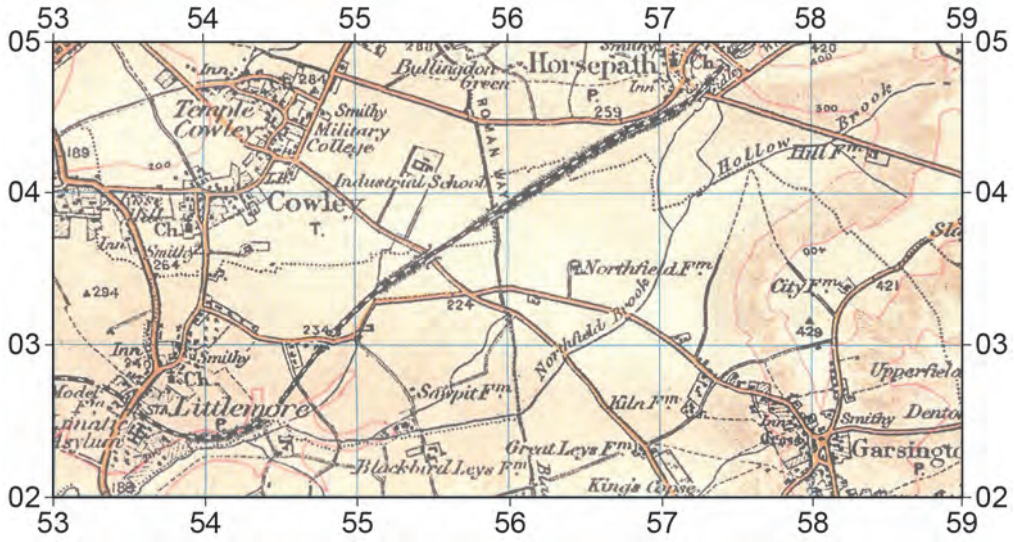





**Figure 1b**



**0 1 . 4** Using evidence from **Figures 1a** and **1b**, analyse the main changes to the human geography of the area that have occurred in the period shown.

**[6 marks]**

**Question 1 continues on the next page**

**0 1 . 5** Name **one** source of quantitative data that you used to study your distant place.

Evaluate the usefulness of that source in helping you to understand the place, by comparing it with the qualitative sources used to study that place.

**[9 marks]**

**0 1 . 6** Assess the extent to which the experiences of people living in a place that you have studied have been affected by the development of the area's infrastructure.

**[20 marks]**

**Question 1 continues on the next page**

## Section B

## Geography fieldwork investigation and geographical skills

Answer Question 2.

**0 2 . 1** Explain why some form of sampling is almost always used when students are carrying out fieldwork to collect data for a geographical investigation.

**[2 marks]**

**Question 2 continues on the next page**

**0 2 . 2** Study **Figure 2**, an aerial photograph of an area where a geographical investigation is to be undertaken.

Using evidence from the photograph, explain why this area is suitable for a variety of geographical investigations

**[4 marks]**

**Figure 2**

**0 2 . 3** State, using evidence from **Figure 2**, **two** appropriate hypotheses or questions for geographical investigation in this area. One should be based on physical geography. The other should be based on human geography.

**[2 marks]**

**0 2 . 4** You have experienced geography fieldwork as part of your course. Use that experience to answer the following questions.

State the aim of your fieldwork investigation.

Explain how the investigation helped you develop your geographical understanding of the place studied.

**[6 marks]**

**0 2 . 5** Evaluate the success of your data collection methods and explain how you would make use of an opportunity to revisit the location to develop your enquiry further.

**[9 marks]**

**Turn over for next Question**

Answer Question 3 **or** Question 4.

Shade the circle below to indicate which optional question you have answered.

Question 0 3 ⬭ Question 0 4 ⬭

CORRECT METHOD ⬬ WRONG METHODS ⊗ ⦿ ≈ ✓

**0 3** A group of students was carrying out an investigation into the effects of globalisation on the small town where they lived. The local chemical factory was closed down 18 months previously and production was transferred to the company's factory in Hungary. The students' aim was to discover whether people in different parts of the town felt that the closure had made the town a better or a worse place to live. Their hypothesis was 'People are more pleased with the factory closure as distance from the old factory site increases'.

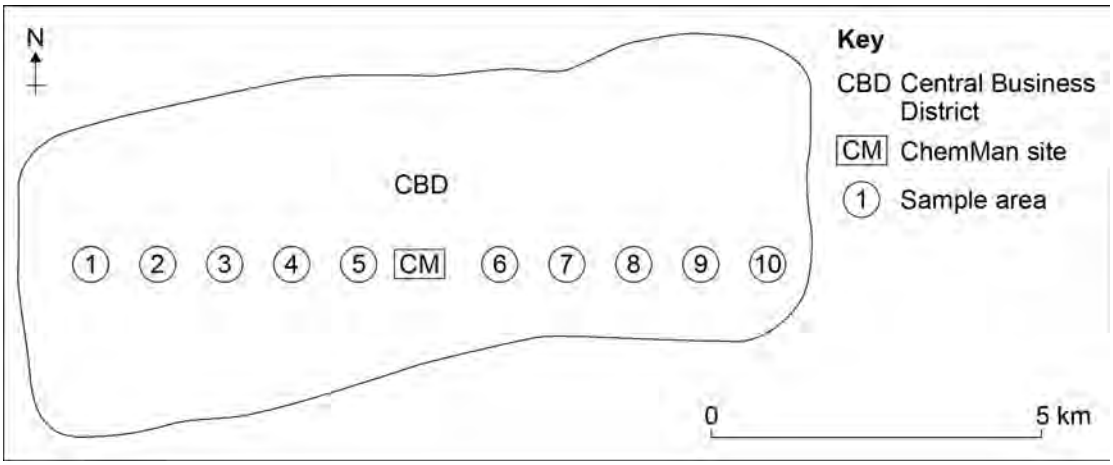
They carried out a questionnaire survey in ten places at varying distances from the old factory site. **Figure 3** shows one of the tables of data that they produced. It shows responses to the question 'Has the closure of the ChemMan factory made this town a better place to live?'

**Figure 3**

| Sample area | Distance from site (in km) | Yes (%) |
|---|---|---|
| 1 | 4.5 | 56 |
| 2 | 3.5 | 38 |
| 3 | 2.5 | 14 |
| 4 | 1.5 | 12 |
| 5 | 0.5 | 14 |
| 6 | 1 | 47 |
| 7 | 2 | 53 |
| 8 | 3 | 58 |
| 9 | 4 | 61 |
| 10 | 5 | 70 |

The site of their survey is shown on the map, **Figure 4**.

**Figure 4**




**Question 3 continues on the next page**

One of the students tested for a correlation between the two sets of data in **Figure 3**, using a Spearman's rank correlation test. **Figure 5** shows how she set out the data and started her calculations.

**Figure 5**

**Calculation of the Spearman's rank correlation coefficient (Rs).**

| Sample distance from site | | Rank of distance | Yes % | Rank Yes % | d | $d^2$ |
|---|---|---|---|---|---|---|
| Area | (km) | R1 | | R2 | (R1–R2) | |
| 1 | 4.5 | 9 | 56 | 7 | 2 | 4 |
| 2 | 3.5 | 7 | 38 | 4 | 3 | 9 |
| 3 | 2.5 | 5 | 14 | | | |
| 4 | 1.5 | 3 | 12 | 1 | 2 | 4 |
| 5 | 0.5 | 1 | 14 | 2.5 | –1.5 | 2.25 |
| 6 | 1.0 | 2 | 47 | 5 | –3 | 9 |
| 7 | 2.0 | 4 | 53 | 6 | –2 | 4 |
| 8 | 3.0 | 6 | 58 | 8 | –2 | 4 |
| 9 | 4.0 | 8 | 61 | 9 | –1 | 2 |
| 10 | 5.0 | 10 | 70 | 10 | 0 | 0 |

$\sum d^2 =$ _____

$6 \times \sum d^2 =$ _____

$$Rs = 1 - \frac{6\sum d^2}{n^3 - n}$$

$= 1 -$ _____ / 990

$= 1 -$ _____

$= Rs$ _____

**0 3** . **1** Complete the calculation of Rs (show your working).

**[4 marks]**

**Figure 6** shows an extract from the table of critical values for Rs.

**Figure 6**

**Critical values of Rs for Spearman's rank correlation coefficient.**

| n | Level of significance | |
|---|---|---|
| | 0.05 | 0.01 |
| 8 | 0.643 | 0.833 |
| 9 | 0.600 | 0.783 |
| 10 | 0.564 | 0.746 |
| 12 | 0.506 | 0.712 |

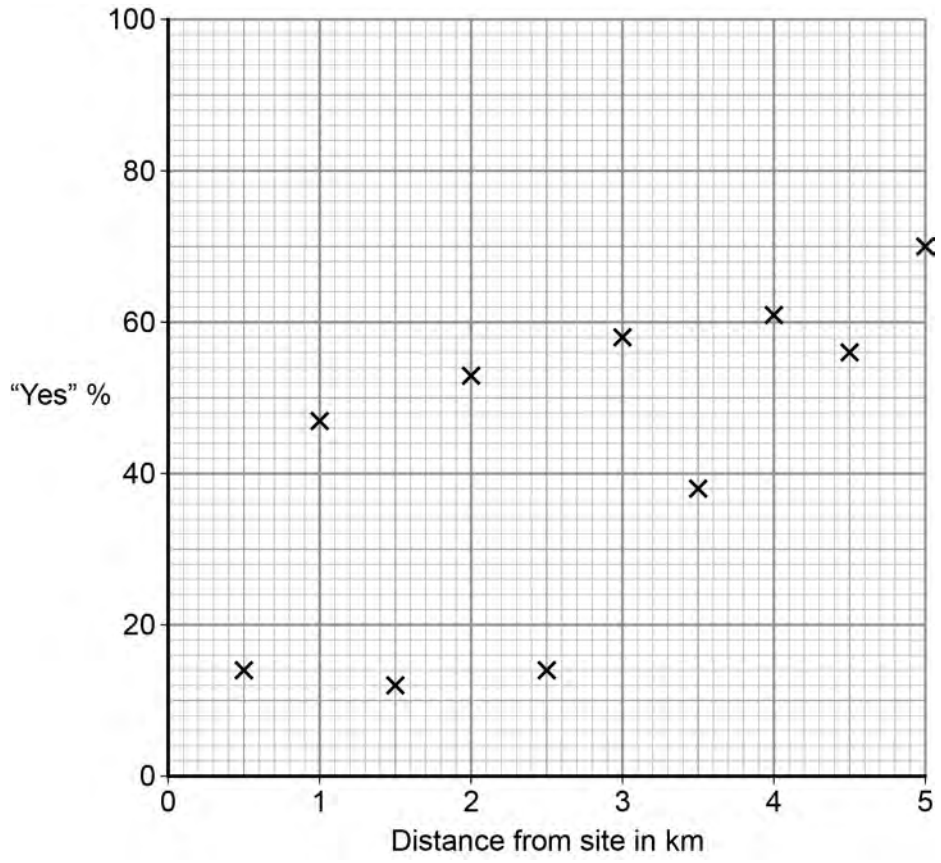
**0 3 . 2** How confident can you be that the student's hypothesis, 'People are more pleased with the factory closure as distance from the old factory site increases' is supported by the data?

**[2 marks]**

**Question 3 continues on the next page**

**0 3 . 3** The student thought that using a scatter graph to show the data would help her analysis. She drew the graph shown in **Figure 7**.

**Figure 7**




Draw a best fit line on the graph, **Figure 7**.

**[2 marks]**

**0 3 . 4** ‘People are more pleased with the factory closure as distance from the old factory site increases.’

To what extent does the evidence in **Figures 3**, **4** and **7** support this hypothesis?

**[9 marks]**

**Turn over for next question**

**0 4** A group of students was carrying out an investigation into rates of infiltration at different points on a transect down a valley side. Their aim was to test the hypothesis that 'The rate of infiltration will be faster on the higher land than it is on the lower land that is on or close to the flood plain.'

They timed how long it took for a measured volume of water to infiltrate into the soil at ten points along the transect. They also measured the angle of slope and the altitude at each of the ten points.

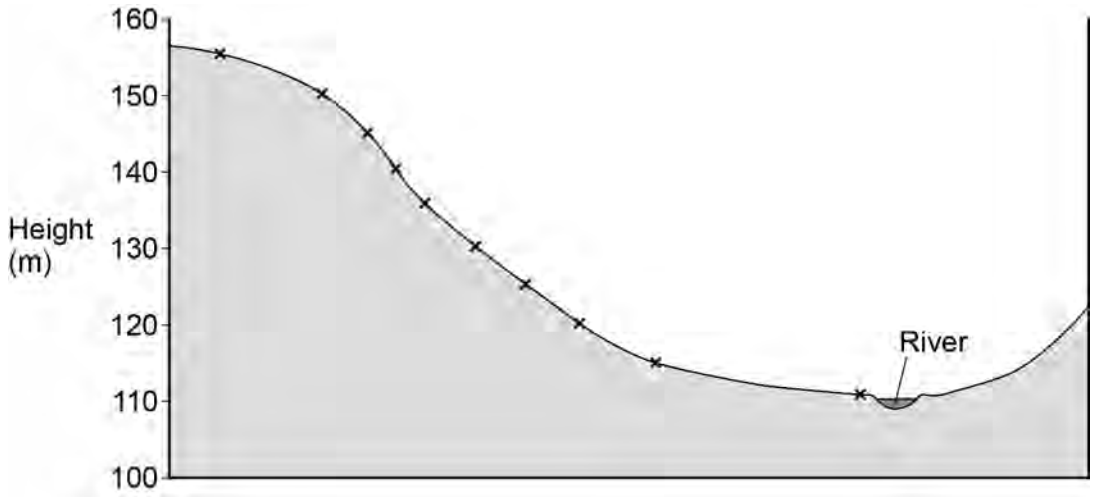
**Figure 8** shows the table of data that they produced.

**Figure 8**

| Sample site altitude (in metres) | Time taken for infiltration (in seconds) | Angle of slope (in degrees) |
|---|---|---|
| 155 (top of valley side) | 55 | 3 |
| 150 | 33 | 8 |
| 145 | 28 | 10 |
| 140 | 26 | 12 |
| 135 | 22 | 11 |
| 130 | 20 | 8 |
| 125 | 20 | 5 |
| 120 | 40 | 5 |
| 115 | 82 | 4 |
| 110 (on river bank) | 120 | 2 |

**Figure 9** is a cross section showing the locations of the sampling points.

**Figure 9**




**Question 4 continues on the next page**

One of the students tested for a correlation between the two sets of data in **Figure 8**, using a Spearman's rank correlation test. **Figure 10** shows how she set out the data and started her calculations.

**Figure 10**

**Calculation of the Spearman's rank correlation coefficient (Rs).**

| Sample site | Rank altitude | Infiltration time | Rank time | d | $d^2$ |
|---|---|---|---|---|---|
| Altitude (m) | R1 | (secs) | R2 | (R1–R2) | |
| 155 | 1 | 55 | 8 | –7 | 49 |
| 150 | 2 | 33 | 6 | –4 | 16 |
| 145 | 3 | 28 | 5 | –2 | 4 |
| 140 | 4 | 26 | 4 | 0 | 0 |
| 135 | 5 | 22 | 3 | 2 | 4 |
| 130 | 6 | 20 | | | |
| 125 | 7 | 20 | 1.5 | 5.5 | 30.25 |
| 120 | 8 | 40 | 7 | 1 | 1 |
| 115 | 9 | 82 | 9 | 0 | 0 |
| 110 | 10 | 120 | 10 | 0 | 0 |

$\sum d^2 =$ _____

$6 \times \sum d^2 =$ _____

$$Rs = 1 - \frac{6\sum d^2}{n^3 - n}$$

$$= 1 - \frac{\quad}{990}$$

$$= 1 - \quad$$

$= Rs$ _____

**0 4 . 1** Complete the calculation of Rs (show your working).

**[4 marks]**

**Figure 11** shows an extract from the table of critical values for Rs.

**Figure 11**

| n | Levels of significance | |
|---|---|---|
| | 0.05 | 0.01 |
| 8 | 0.643 | 0.833 |
| 9 | 0.600 | 0.783 |
| 10 | 0.564 | 0.746 |
| 12 | 0.506 | 0.712 |

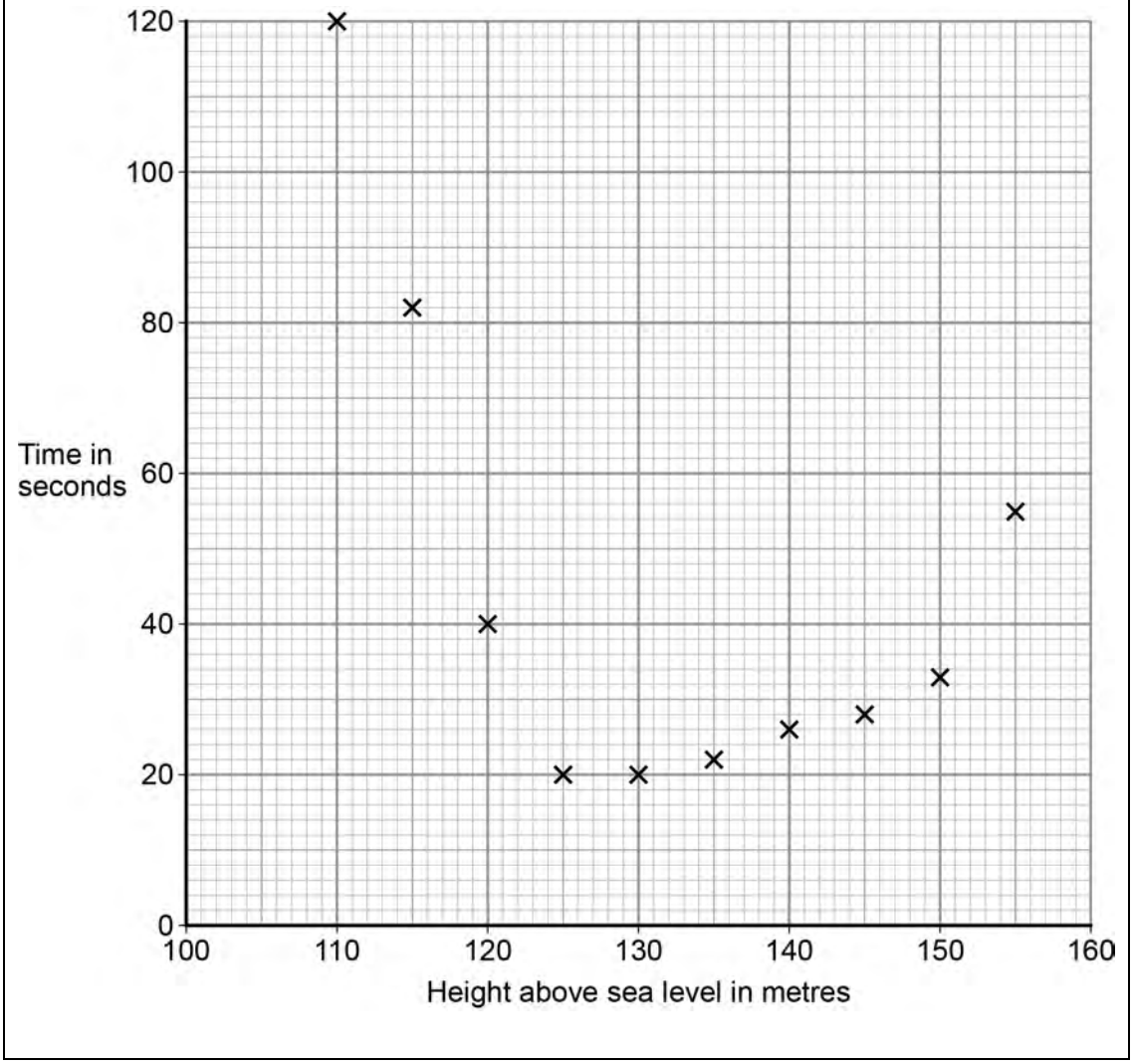
**0 4 . 2** How confident can you be that the student's hypothesis, 'The rate of infiltration will be faster on the high land than it is on the lower land that is on or close to the flood plain' is supported by the data?

**[2 marks]**

**Question 4 continues on the next page**

The student thought that using a scatter graph to show the data would help her analysis. She drew the graph shown in **Figure 12**.

**Figure 12**




**0 4 . 3** Draw a best fit line on the graph, **Figure 12**.

**[2 marks]**

**0 4 . 4** ‘The rate of infiltration will be faster on the high land than it is on the lower land that is on or close to the flood plain.’

To what extent does the evidence in **Figures 8**, **9** and **12** support the hypothesis?

**[9 marks]**

**END OF QUESTIONS**

**There are no questions printed on this page**

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