Investigating river environments -3

Name: _____

Class: _____

Date:_____

Time:

Total Marks Available:

Total Marks Archived:

Level: IGCSE Mathematics A

Subject: Geography

Exam Board: Edexcel IGCSE Geography- it is however suitable for use by mathematics student of other boards

Topic: Investigating river environments -3

Type: Topic Questions

To be used by all students preparing for Edexcel IGCSE Geography- Students of other Boards may also find this useful

Questions

Q1.

Investigating coastal environments

Answer the question with a cross in the box you think is correct ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

Study Figure 5a in the Resource Booklet. It shows the data collected for an investigation about changes along a coastline.

(i) Identify the correct unit for sediment long axis size in Figure 5a.

(1)

☐	**A** mm
☐	**B** m²
☐	**C** mm³
☐	**D** m/s

(ii) Calculate the mean gradient on Figure 5a.

Give your answer to one decimal place.
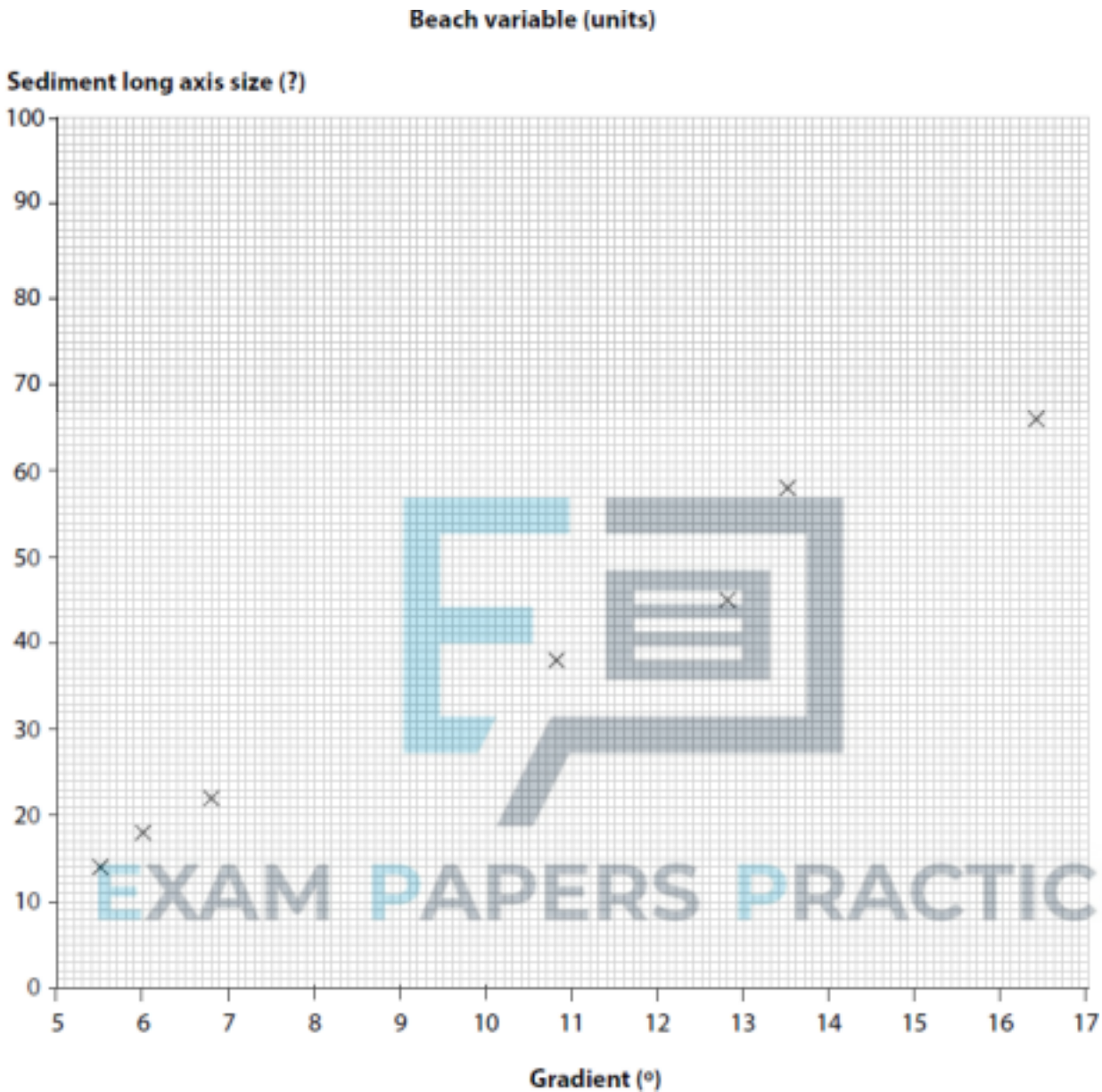
You must show all your workings in the space below.

(2)

.... °

Using the data in Figure 5a:

(iii) plot the points for Site 4 and Site 7 on Figure 5b.

(2)

Beach variable (units)

Figure 5b

(iv) draw a line of best fit on Figure 5b.

(1)

(v) explain **one** reason for the relationship shown on Figure 5b.

(2)

....

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(Total for question = 8 marks)

Q2.

Investigating river environments

Study Figure 4b which shows some data about river velocity at four sites. (i)

Calculate the mean river velocity at Site 2.

Give your answer to one decimal place.

You must show all your workings in the space below.

(2)

.... m / s

(ii) State **one** type of sampling students could have used to choose their data collection sites.

(1)

....

(iii) Suggest **one** reason why the data for Site 1 may not be reliable.

(2)

....

....

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....

(Total for question = 5 marks)

Q3.

Investigating river environments

Answer the question with a cross in the box you think is correct ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

Study Figure 4a in the Resource Booklet. It shows the data collected for an investigation about changes in a river channel.

(i) Identify the correct unit for velocity in Figure 4a.

(1)

☐	**A**	m²
☐	**B**	m/s
☐	**C**	m³
☐	**D**	m

(ii) Calculate the mean width of the river shown in Figure 4a.

Give your answer to one decimal place.
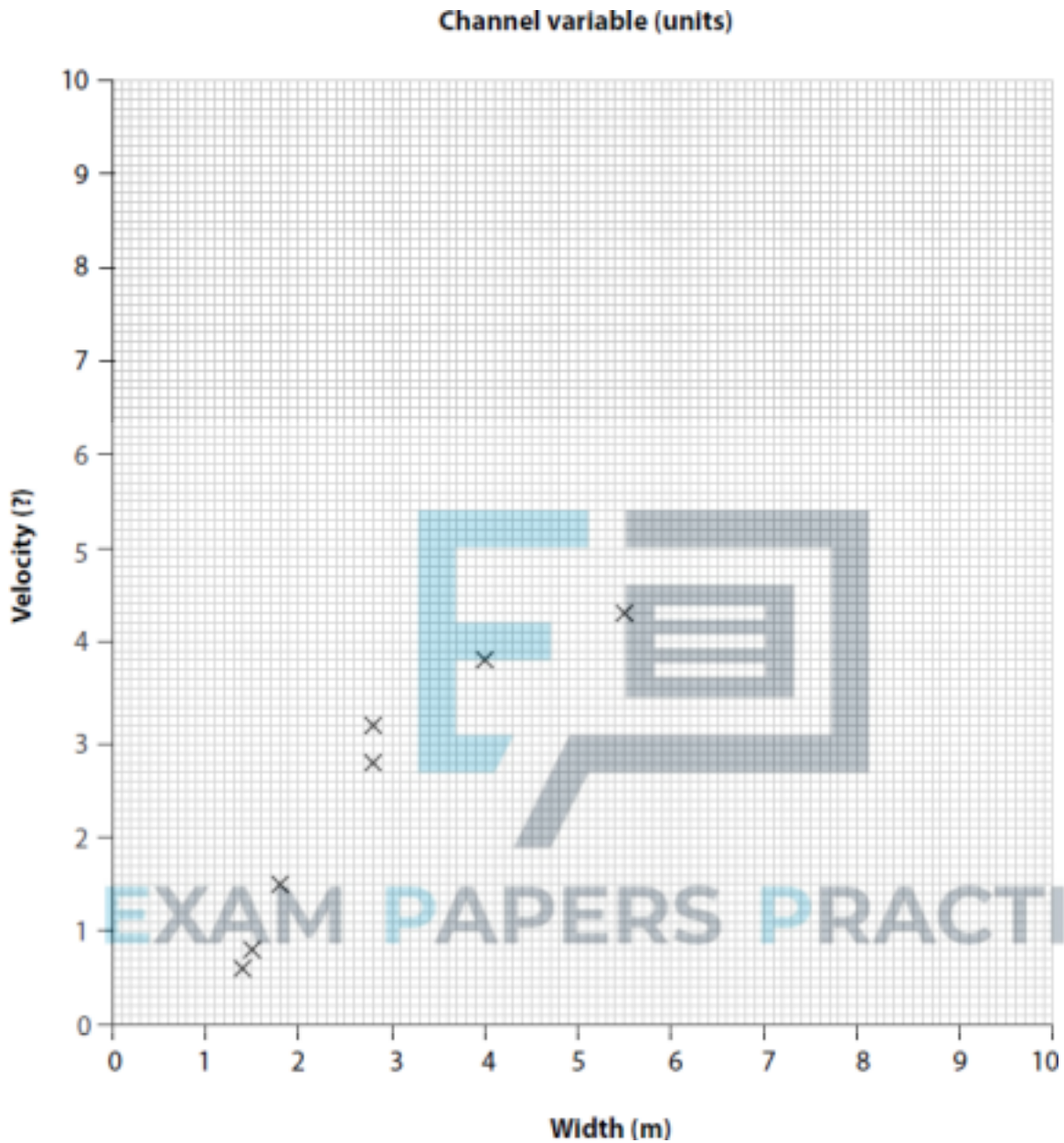
You must show all your workings in the space below.

(2)

.... m

Using the data in Figure 4a:

(iii) plot the points for Site 4 and Site 7 on Figure 4b.

(2)

Channel variable (units)

Figure 4b

(iv) draw a line of best fit on Figure 4b.

(1)

(v) explain **one** reason for the relationship shown on Figure 4b.

(2)

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(Total for question = 8 marks)

Q4.

Investigating hazardous environments

Answer the question with a cross in the box you think is correct ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

Study Figure 6a in the Resource Booklet. It shows the data collected for an investigation about a tropical storm.

(i) Identify the correct unit for air pressure in Figure 6a.

(1)

☐	**A**	mm
☐	**B**	m²
☐	**C**	mb
☐	**D**	°C

(ii) Calculate the mean wind speed in Figure 6a.

Give your answer to one decimal place.

You must show all your workings in the space below.

(2)

.... knots

Using the data in Figure 6a:

(iii) plot the points for Day 4 and Day 7 on Figure 6b.
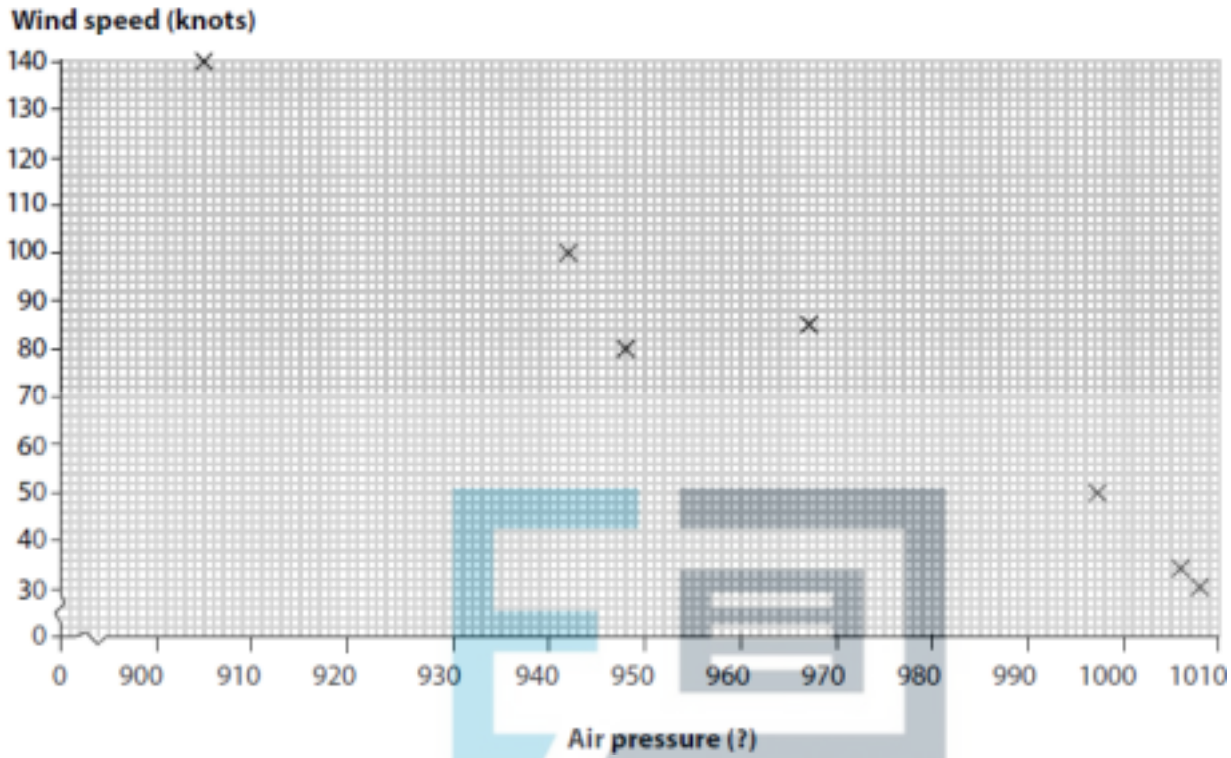
(2)

Weather variable (units)

Figure 6b

(iv) draw a line of best fit on Figure 6b.

(1)

(v) explain **one** reason for the relationship shown on Figure 6b.

(2)

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(Total for question = 8 marks)

Q5.

Investigating hazardous environments

Study Figure 6b which shows some data on wind speed at four sites where data was collected.
(i) Calculate the mean wind speed collected at Site 2.

Give your answer to one decimal place.

You must show all your workings in the space below.

(2)

.... mph

(ii) State **one** type of sampling students could have used to choose their data collection sites.

(1)

....

(iii) Suggest **one** reason why the data for Site 1 may not be reliable.

(2)

....

....

....

....

(Total for question = 5 marks)