



ADVANCED SUBSIDIARY (AS)
General Certificate of Education
2012

Centre Number

71

Candidate Number

Geography

Assessment Unit AS 1

assessing

Physical Geography

[AG111]



WEDNESDAY 13 JUNE, AFTERNOON

TIME

1 hour 30 minutes.

INSTRUCTIONS TO CANDIDATES

Write your Centre Number and Candidate Number in the spaces provided at the top of this page.

Section A: candidates must answer this section.

Section B: answer **all three** questions in this section.

Section C: answer any **two** questions from this section.

You should write your answers in the spaces provided in this question paper.

At the end of the examination your summary of fieldwork and table of data should be attached securely to this paper using the treasury tag supplied.

INFORMATION FOR CANDIDATES

The total mark for this paper is 90.

Quality of written communication will be assessed in **all** questions.

Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question.

For Examiner's use only

Question Number	Marks
1	
2	
3	
4	
5	
6	
7	

Total Marks

[illegible]

[8]

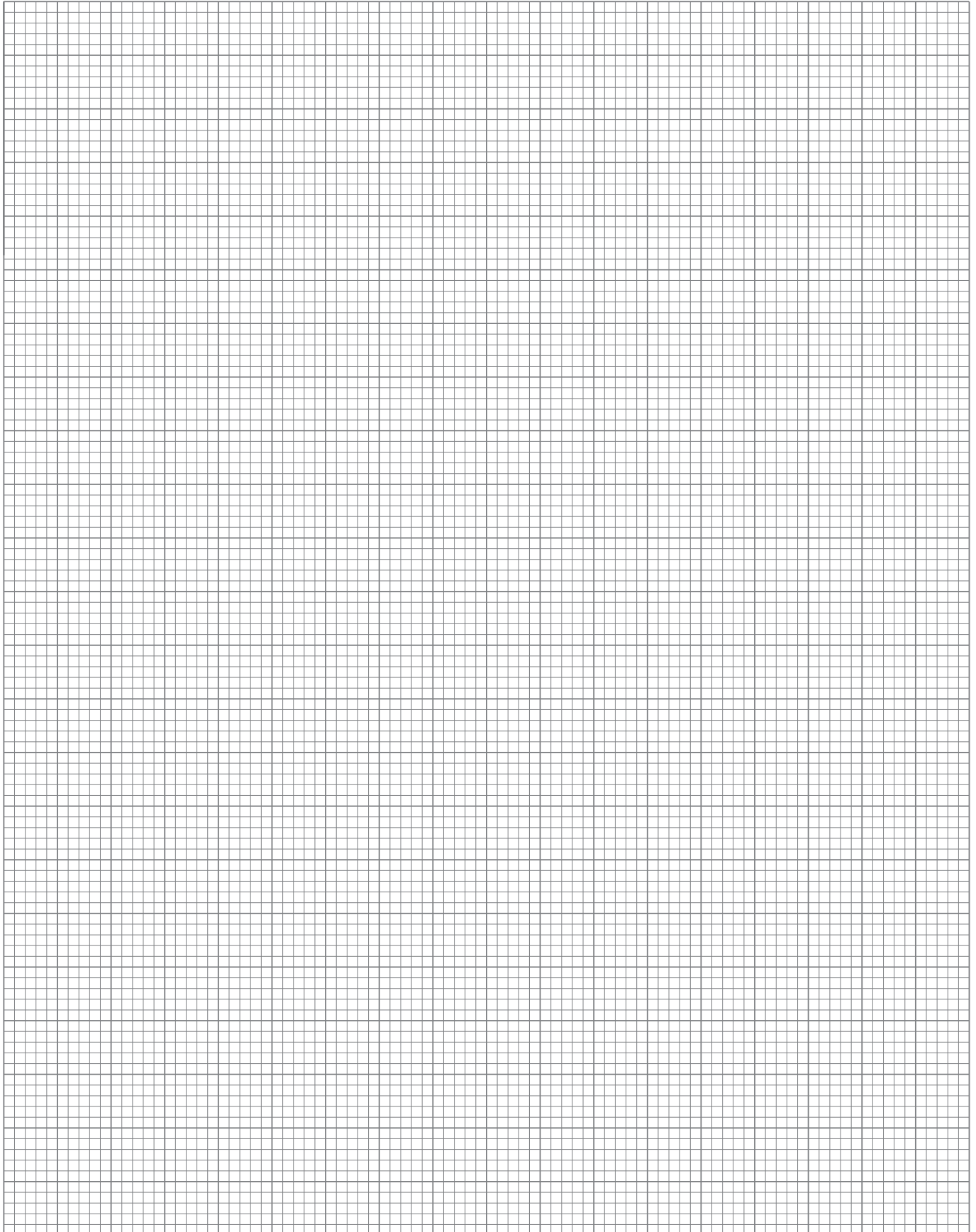
Examiner Only	
Marks	Remark

- (b) (i)** On the graph paper below, use an appropriate graphical technique to present accurately data relevant to the aim/hypothesis of your fieldwork. (You must select this data from your table)

[7]

Title of graph: _____

Examiner Only	
Marks	Remark



[e]

- (c) (i)** State **two** advantages of using primary data to investigate the aim of your fieldwork.

[2]

Examiner Only	
Marks	Remark

- (ii) Describe **one** of the primary data collection methods used in your fieldwork and comment on how you ensured that accurate data was collected.

[4]

Examiner Only	
Marks	Remark

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(Questions continue overleaf)

[4]

[4]

- (ii) Discuss the likely impact of **this** land-use change on river discharge and the storm hydrograph.

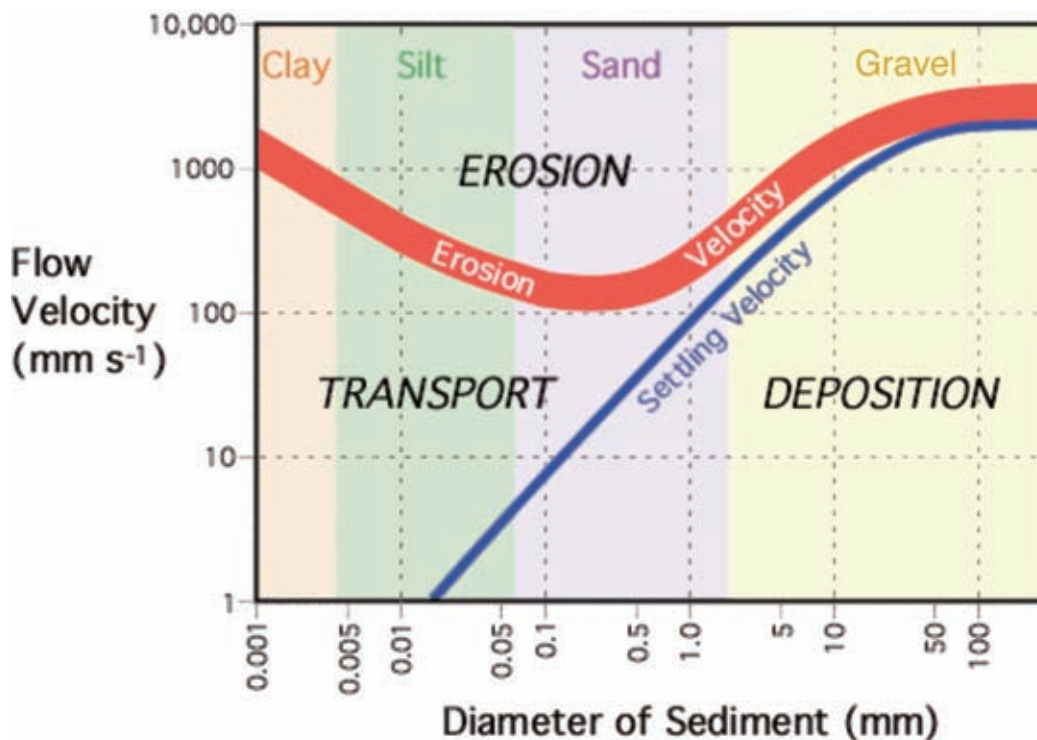
[3]

[3]

Examiner Only	
Marks	Remark

- (b) Study **Resource 2B**, (the Hjulstrom Curves) which shows the relationship between the flow velocity of a river, sediment size and the processes operating in a river.

Resource 2B



© <http://www.physicalgeography.net/fundamentals/10w.html> Reproduced with kind permission.

- (i) What is the minimum flow velocity required to transport sediment with a diameter of 1 mm?

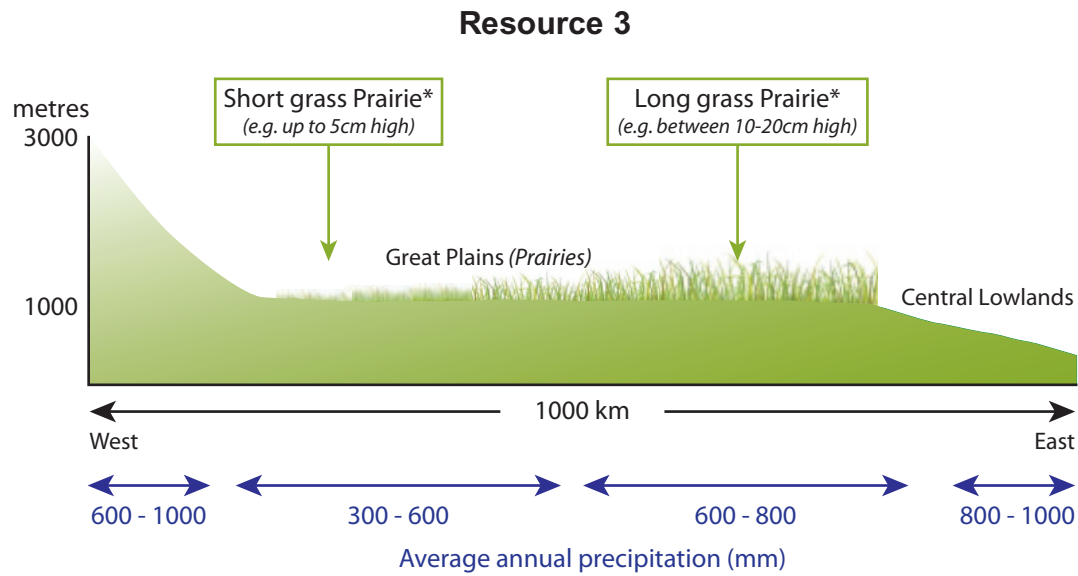
_____ mm s^{-1} [1]

- (ii) Describe and explain the relationship between the erosion velocity and sediment size.

_____ [4]

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- 3 (a) Study **Resource 3**, which shows a cross-sectional view of the North American mid-latitude Prairie Grasslands.



* Height of grass is not to scale

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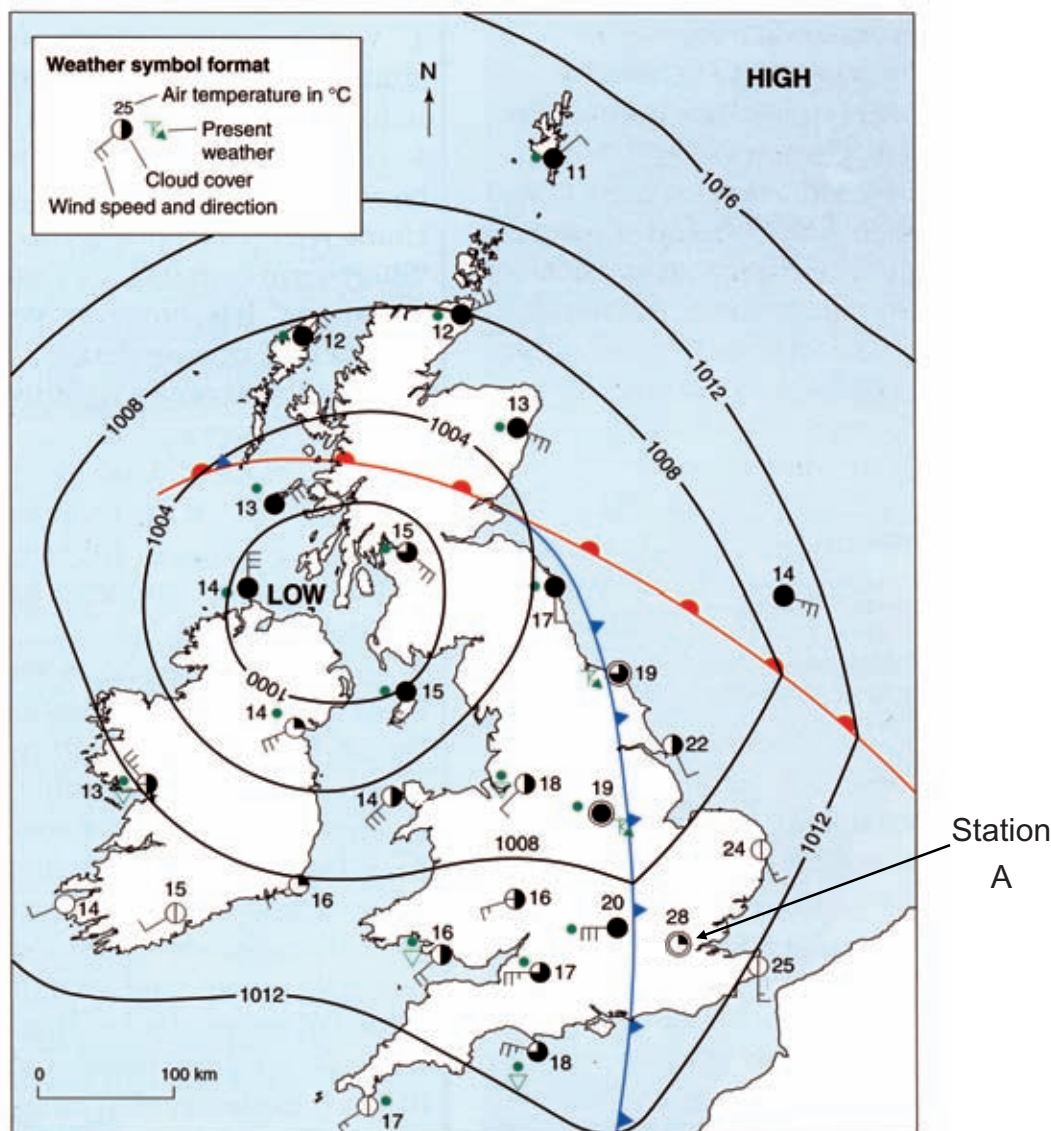
- (i) Use **Resource 3** to help you describe how the vegetation of mid-latitude grasslands is adapted to the climate.

[3]

Examiner Only	
Marks	Remark

- 4 (a) Study **Resource 4A**, showing the atmospheric pressure and weather experienced in the British Isles with the passage of a depression.

Resource 4A



Key

— Isobar (line joining places with the same air pressure, measured in millibars)

Cloud cover symbols
(1 okta = one-eighth of sky covered)

- | | |
|-------------------|--------------------|
| ○ 0 okta | ☉ 5 oktas |
| ◐ 1 okta, or less | ☼ 6 oktas |
| ◑ 2 oktas | ☽ 7 oktas, or more |
| ◒ 3 oktas | ● 8 oktas |
| ◓ 4 oktas | ⊗ Sky obscured |

Weather symbols

- | | |
|--------------------|----------------|
| ≡ Mist | ☁ Rain shower |
| ≡ Fog | ☁ Snow shower |
| ☼ Drizzle | ☁ Hail shower |
| ☼ Rain and drizzle | ☁ Thunderstorm |
| • Rain | |
| * Snow | |

Wind symbols

(the angle of the arrow shows wind direction)

- Calm
- ◐ 1 or 2
- ◑ 3–7
- ◒ 8–12
- ◓ 13–17

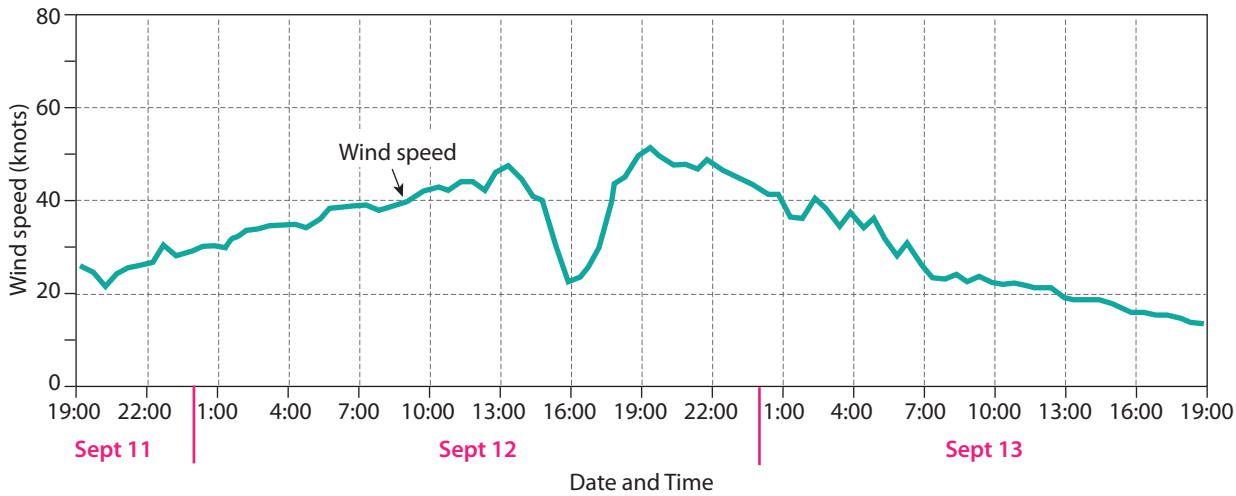
Add a half-feather for every 5 knots up to

- ◐ 48–52, then
- ◐ 53–57

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- (b) Study **Resource 4C**, which shows the change in wind speed in the north-western Gulf of Mexico with the passage of Hurricane Ike in 2008.

Resource 4C



Describe the changes experienced in wind speed and explain them in relation to the structure of a hurricane.

[3]

Examiner Only	
Marks	Remark

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Examiner Only	
Marks	Remark

[illegible]

Question
Number

Number your answers clearly

[illegible]

[illegible]

[illegible]

[illegible]

Question
Number

Number your answers clearly

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Number your answers clearly

Question
Number

[illegible]

THIS IS THE END OF THE QUESTION PAPER

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