



Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

GEOGRAPHY

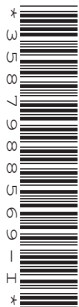
0460/43

Paper 4 Alternative to Coursework

October/November 2018

INSERT

1 hour 30 minutes



READ THESE INSTRUCTIONS FIRST

The Insert contains Figs. 1.1, 1.2, 1.3, 1.4 and Tables 1.2, 1.3 and 1.4 for Question 1, and Table 2.1 for Question 2.

The Insert is **not** required by the Examiner.

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This document consists of **8** printed pages.

Fig. 1.1 for Question 1

Ashes Hollow stream



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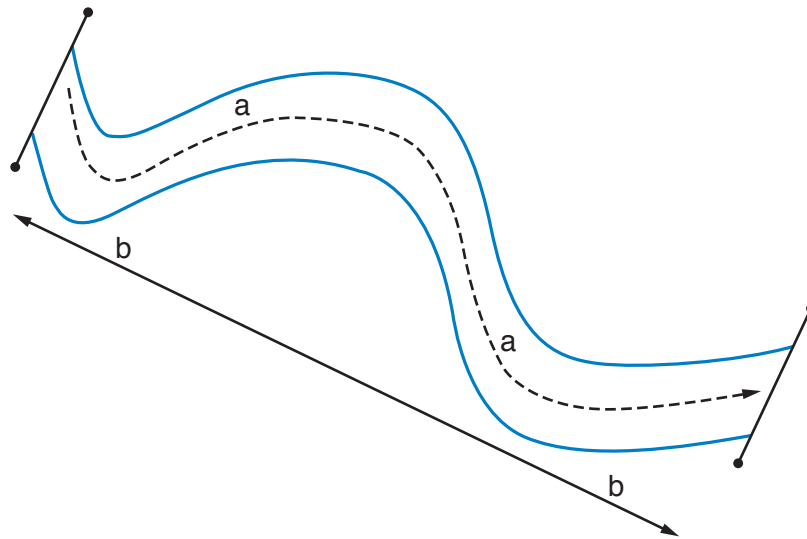
Fig. 1.2 for Question 1

Ashes Hollow waterfall



Fig. 1.3 for Question 1

Sinuosity of a stream



$$\text{Sinuosity} = \frac{a}{b}$$

a is the distance measured along the stream (m)

b is the straight line distance (m)

Fig. 1.4 for Question 1

Photographs from student's notebook showing measurement methods

Photograph A



Photograph B



Photograph C



Table 1.2 for Question 1

Channel cross sectional area at the 12 sites


Site number		Cross sectional area of channel (sqm)
1	upstream  downstream	0.12
2		1.52
3		0.51
4		0.32
5		1.65
6		0.71
waterfall		
7		0.23
8		3.65
9		0.89
10		1.83
11		4.21
12	0.84	

Table 1.3 for Question 1

Sinuosity score at the 12 sites

Site number		Distance measured along stream (m)	Straight line distance (m)	Sinuosity score	Average sinuosity score
1	upstream ↑	119.4	100	1.19	sites 1–6 = 1.11
2		118.0	100	1.18	
3		117.1	100	1.17	
4		105.5	100	1.06	
5		101.4	100	1.01	
6		104.0	100	1.04	
waterfall					
7	↓ downstream	120.8	100	1.21	sites 7–12 = 1.35
8		114.0	100	1.14	
9		162.7	100	1.63	
10		153.0	100	1.53	
11		124.2	100	1.24	
12		137.1	100	1.37	

Table 1.4 for Question 1

Width of valley floor

Site number		Width of valley floor (m)
1	upstream ↑	2.4
2		18.2
3		24.7
4		5.0
5		16.7
6		8.8
waterfall		
7	↓ downstream	4.2
8		8.4
9		6.1
10		10.3
11		21.1
12		28.0

Table 2.1 for Question 2

Results of environmental quality survey

Main land use	Site reference	Distance from town centre (km)	Environmental quality score
Industry	IN1	2.6	10
	IN2	3.5	8
	IN3	4.6	11
	IN4	5.5	17
	IN5	1.2	7
			Average = 10.6
Open space	O1	5.8	12
	O2	3.1	16
	O3	4.0	6
	O4	1.0	13
	O5	4.5	15
			Average = 12.4
Residential	R1	1.4	8
	R2	5.3	10
	R3	3.8	20
	R4	4.4	17
	R5	2.0	12
			Average = 13.4
Shops	S1	0.2	20
	S2	0.8	17
	S3	5.1	16
	S4	2.9	13
	S5	1.7	15
			Average = 16.2

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