



Cambridge Assessment International Education
Cambridge International General Certificate of Secondary Education

GEOGRAPHY

0460/43

Paper 4 Alternative to Coursework

October/November 2019

INSERT

1 hour 30 minutes



READ THESE INSTRUCTIONS FIRST

The Insert contains Figs. 1.1, 1.2, 1.3 and 1.5 and Tables 1.1 and 1.2 for Question 1, and Figs. 2.1, 2.2 and 2.5 and Tables 2.2 and 2.3 for Question 2.

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

This syllabus is regulated for use in England, Wales and Northern Ireland as a Cambridge International Level 1/Level 2 Certificate.

This document consists of **11** printed pages and **1** blank page.

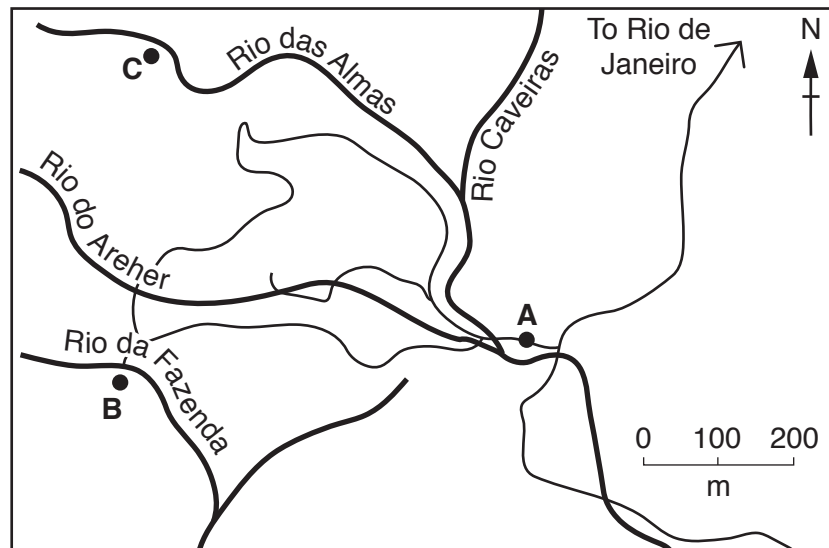
Fig. 1.1 for Question 1

Three fieldwork sites

Site A is located 460m above sea level. It is a popular site for people to visit. The site contains a car park and picnic tables from which footpaths lead into the forest. Tourist developments have changed the original forest so it is less dense than originally.

Site B is located 560m above sea level. Much of the original vegetation was removed to create a coffee plantation. Since the plantation was closed the natural vegetation has grown back but the vegetation is less dense than it was originally.

Site C is located 685m above sea level. It is an area of natural rainforest which is less accessible than sites A and B. Little development has taken place here.



Key



- A,B,C fieldwork sites
-  river
-  road

Fig. 1.2 for Question 1

Fieldwork equipment

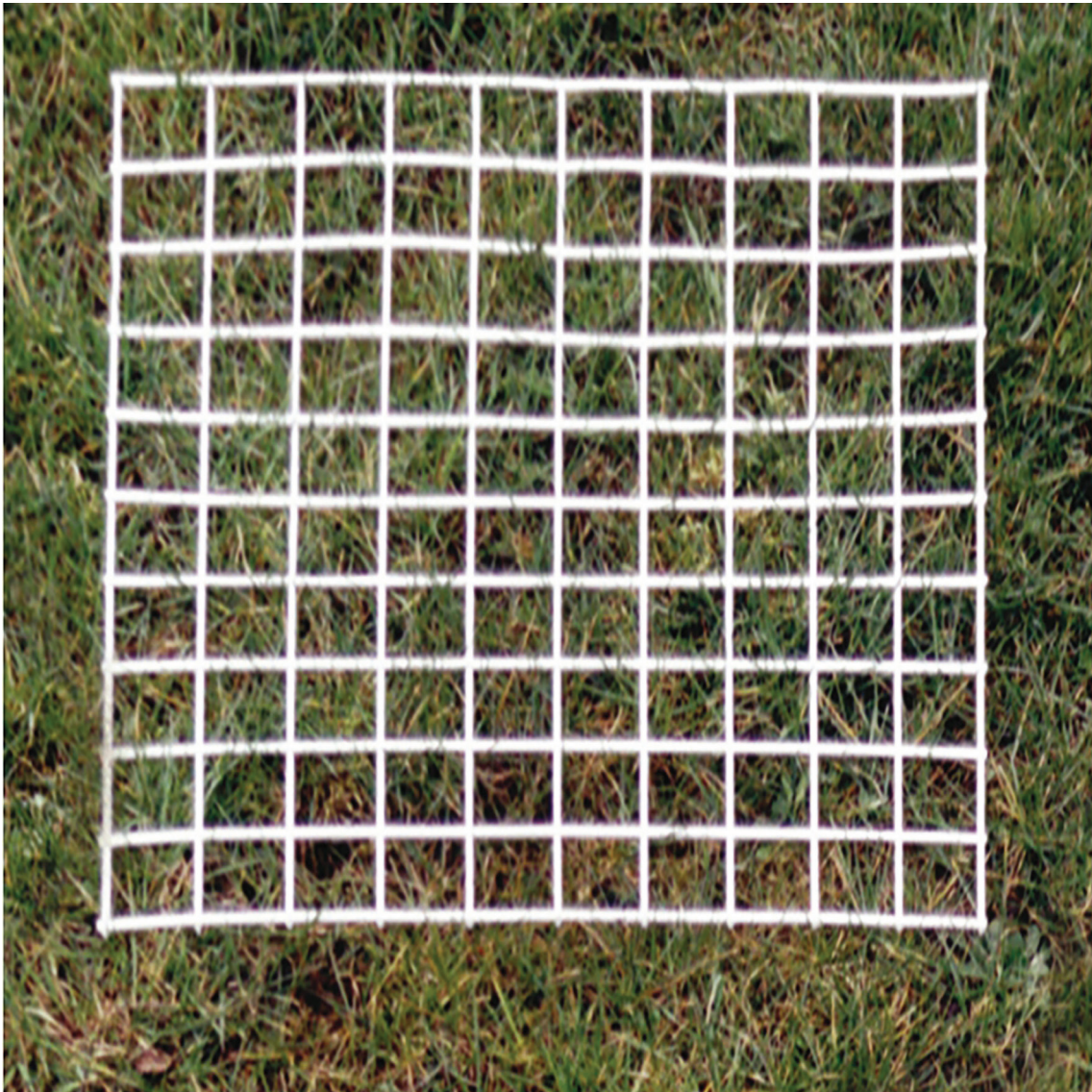


Fig. 1.3 for Question 1

How to measure humidity

We used cobalt chloride paper to measure the humidity of the air. This paper is blue when it is dry and turns pink when exposed to humid air. We took a piece of cobalt chloride paper from the dry container where it had been kept and held it in the air. We used a stopwatch to measure how long it took for the paper to change from blue to pink. **The faster this change of colour occurred, the greater the humidity of the air.**

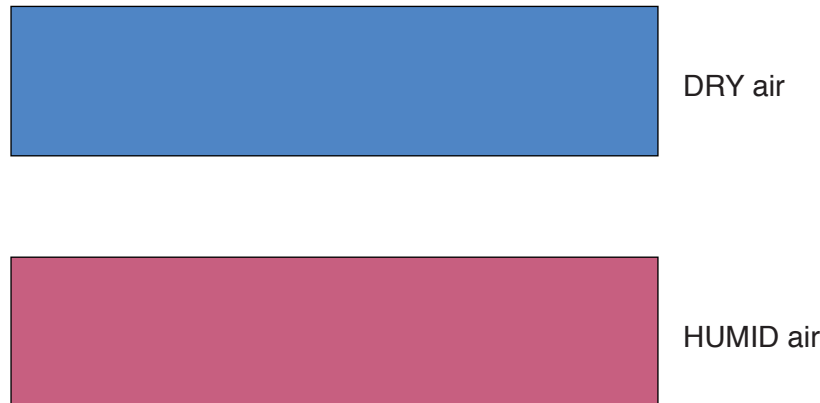


Table 1.1 for Question 1

Results of students' measurements

Measurement 1	Measurement 2	Measurement 3	Measurement 4	Measurement 5	Average
---------------	---------------	---------------	---------------	---------------	---------

Site A

Percentage of vegetation cover	36	20	8	38	19	24.2
Percentage of bare ground	64	80	92	62	81	75.8
Humidity measurement (seconds)	60	52	46	49	56	52.6
Infiltration time (seconds)	36	40	58	60	44	47.6

Site B

Percentage of vegetation cover	65	48	68	28	12	44.2
Percentage of bare ground	35	52	32	72	88	55.8
Humidity measurement (seconds)	100	175	135	129	125	132.8
Infiltration time (seconds)	25	35	21	48	52	

Site C

Percentage of vegetation cover	72	68	80	57	65	68.4
Percentage of bare ground	28	32	20	43	35	31.6
Humidity measurement (seconds)	96	90	103	115	84	97.6
Infiltration time (seconds)	20	28	25	22	30	25.0

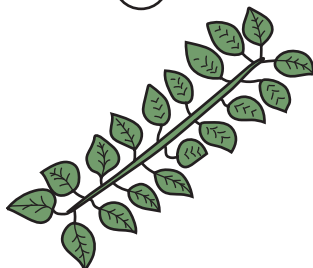
Fig. 1.5 for Question 1

Species of vegetation

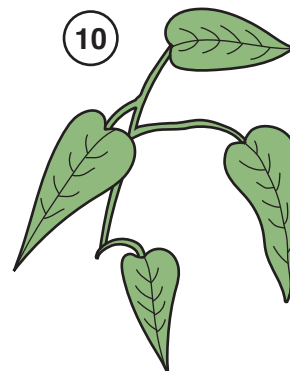
1



6



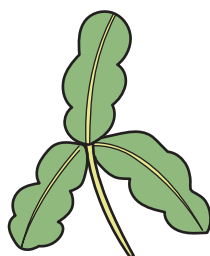
10



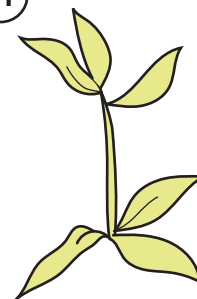
2



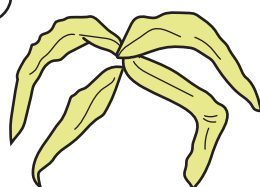
7



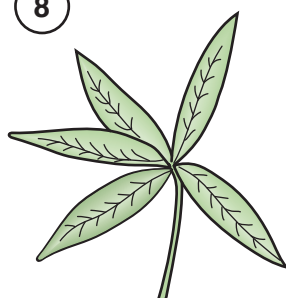
11



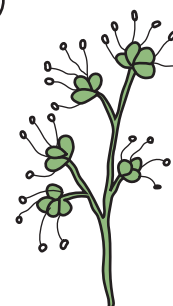
3



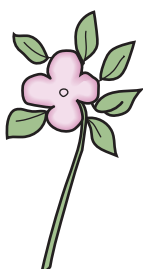
8



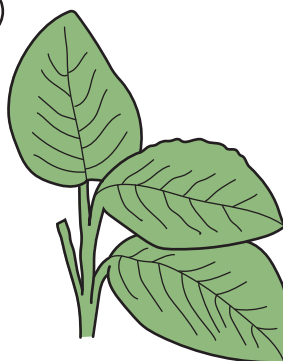
12



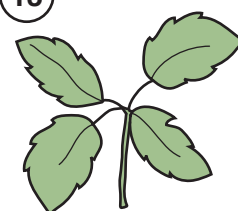
5



9



13



4

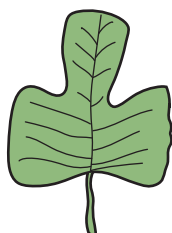


Table 1.2 for Question 1

Different species* identified by students

Species reference number	1	2	3	4	5	6	7	8	9	10	11	12	13
Site A	✓	✓				✓		✓		✓		✓	
Site B	✓	✓	✓	✓	✓				✓		✓		
Site C	✓	✓	✓	✓			✓	✓	✓		✓		✓

*Species reference number in Fig. 1.5

Key

✓ species seen at the site

Fig. 2.1 for Question 2

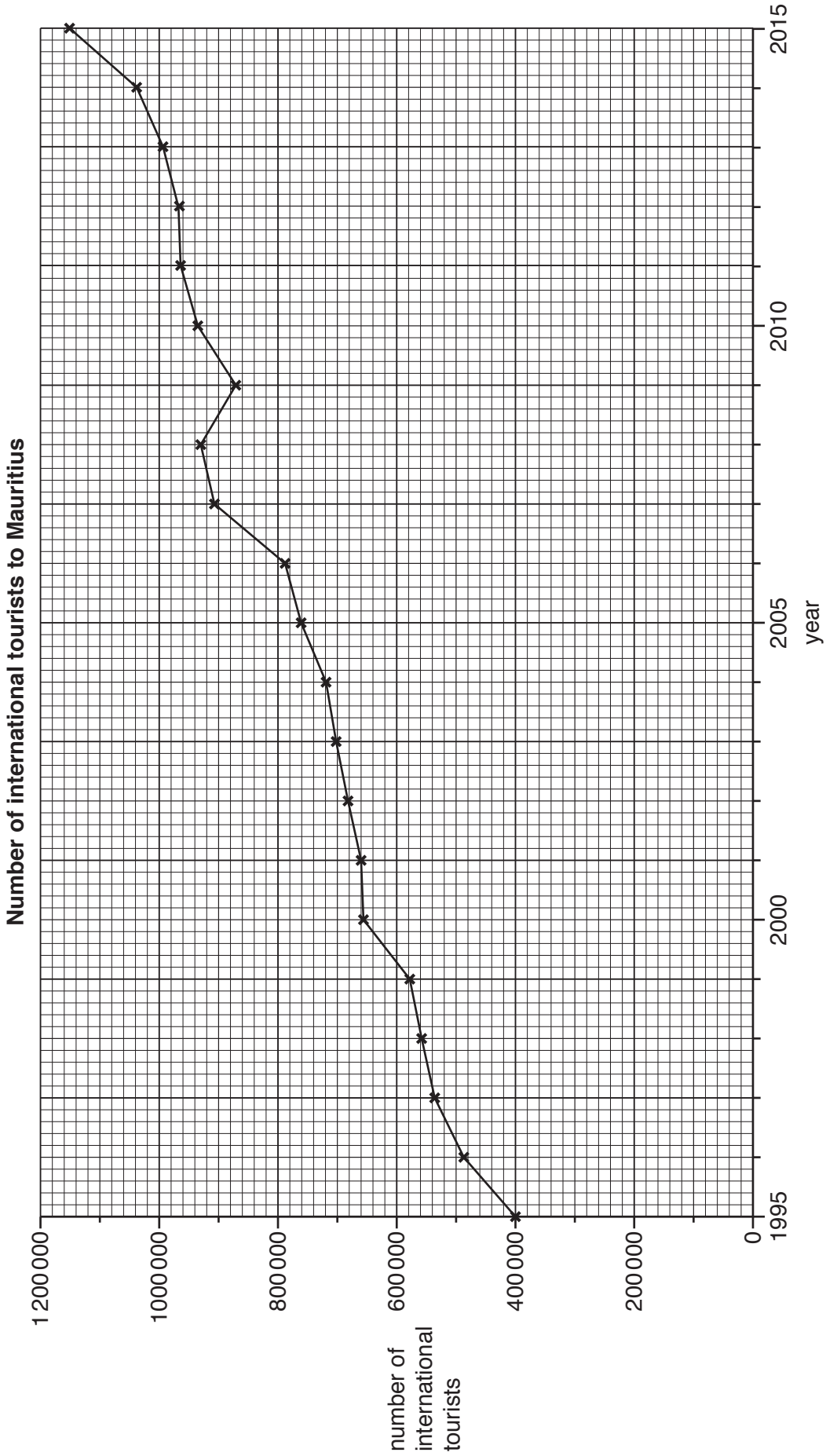


Fig. 2.2 for Question 2

Tourist questionnaire

We are doing a tourism survey as part of our *Geography* fieldwork. Please answer the following questions.

1. Which continent do you come from?

- | | | | | | |
|--------------------------|-------------|--------------------------|---------------|--------------------------|---------------|
| <input type="checkbox"/> | Asia | <input type="checkbox"/> | Africa | <input type="checkbox"/> | Europe |
| <input type="checkbox"/> | Australasia | <input type="checkbox"/> | North America | <input type="checkbox"/> | South America |

2. Which of the following physical landscape attractions are you visiting in Mauritius?

- | | | | |
|--------------------------|----------------------------------|--------------------------|---------------------------|
| <input type="checkbox"/> | Black River Gorges National Park | <input type="checkbox"/> | Casela Bird Park |
| <input type="checkbox"/> | Chamarel coloured earths | <input type="checkbox"/> | Grand Baie beach |
| <input type="checkbox"/> | Ile aux Cerfs | <input type="checkbox"/> | National Botanical Garden |
| <input type="checkbox"/> | Rochester Falls | | |

3. Which of the following human landscape attractions are you visiting in Mauritius?

- | | | | |
|--------------------------|-----------------------|--------------------------|----------------------|
| <input type="checkbox"/> | Cap Malheureux church | <input type="checkbox"/> | Chamarel distillery |
| <input type="checkbox"/> | Fort Adelaide | <input type="checkbox"/> | Flic-en-Flac |
| <input type="checkbox"/> | Grand Bassin temples | <input type="checkbox"/> | Le Caudan waterfront |
| <input type="checkbox"/> | Port Louis market | | |

4. Overall which attracted you most to Mauritius?

- | | | | |
|--------------------------|--------------------------------|--------------------------|-----------------------------|
| <input type="checkbox"/> | Physical landscape attractions | <input type="checkbox"/> | Human landscape attractions |
|--------------------------|--------------------------------|--------------------------|-----------------------------|

Thank you for your time.

Table 2.2 for Question 2

Answers to Questions 2 and 3 of the tourist questionnaire

Q2 Physical landscape attractions	Number of visits
Black River Gorges National Park	30
Casela Bird Park	34
Chamarel coloured earths	67
Grand Baie beach	49
Ile aux Cerfs	51
National Botanical Garden	38
Rochester Falls	21
Total	290

Q3 Human landscape attractions	Number of visits
Cap Malheureux church	22
Chamarel distillery	12
Fort Adelaide	25
Flic-en-Flac	28
Grand Bassin temples	45
Le Caudan waterfront	39
Port Louis market	33
Total	204

Fig. 2.5 for Question 2

Resident questionnaire

We are doing a tourism survey as part of our *Geography* fieldwork. Please answer the following questions.

1. Do you live in Mauritius?

Yes

No (Finish interview if 'No')

2. Which are the three main benefits of tourism in Mauritius?

Number your first, second and third choices '1', '2' and '3'.

More jobs and income Improved standard of living

More modern services Cleaner environment

Improved transport More global awareness

Reduction in crime More goods in shops

3. Which are the three main disadvantages of tourism in Mauritius?

Number your first, second and third choices '1', '2' and '3'.

Noise pollution Air pollution

Traffic congestion More crime

Decline of traditional culture Destruction of natural environment

More litter Increase in cost of living

4. Overall which do you think are greater in Mauritius?

Benefits of tourism

Disadvantages of tourism

Thank you for your time.

Table 2.3 for Question 2

Results of resident questionnaire

Question 2: Main benefits of tourism	First choice	Second choice	Third choice	Total index score
More jobs and income	39	25	11	178
Improved standard of living	15	20	28	113
More modern services	4	10	13	45
Cleaner environment	5	2	3	22
Improved transport	12	10	14	70
More global awareness	3	19	11	58
Reduction in crime	10	9	7	55
More goods in shops	12	5	13	59

Question 3: Main disadvantages of tourism	First choice	Second choice	Third choice	Total index score
Noise pollution	7	12	10	55
Air pollution	26	16	12	122
Traffic congestion	27	23	18	145
More crime	5	7	8	37
Decline of traditional culture	11	8	16	65
Destruction of natural environment	5	12	15	54
More litter	7	14	12	61
Increase in cost of living	12	8	9	61

Question 4: Overall effect of tourism	Answers
Benefits	87
Disadvantages	13

BLANK PAGE

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge Assessment International Education Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at www.cambridgeinternational.org after the live examination series.

Cambridge Assessment International Education is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of the University of Cambridge Local Examinations Syndicate (UCLES), which itself is a department of the University of Cambridge.