

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 document consists of 11 printed pages and 1 blank page.



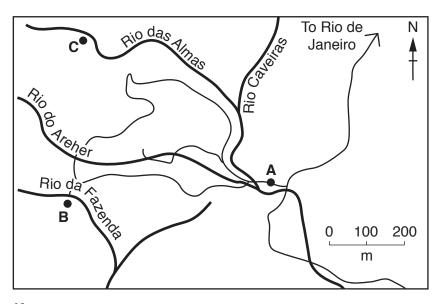
Fig. 1.1 for Question 1

Three fieldwork sites

Site A is located 460 m 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 560 m 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 685 m 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

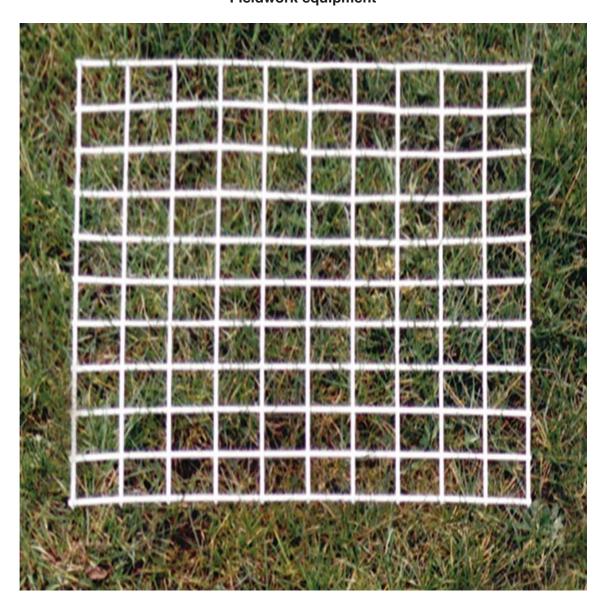


Fig. 1.3 for Question 1

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.

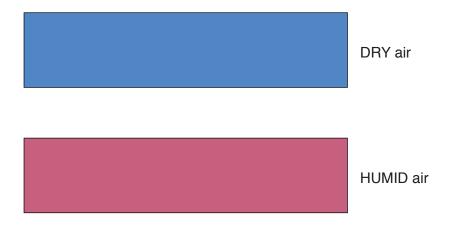


Table 1.1 for Question 1

Results of students' measurements

| | Measure- ment 1 | Measure- ment 2 | Measure- ment 3 | Measure- ment 4 | Measure- ment 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

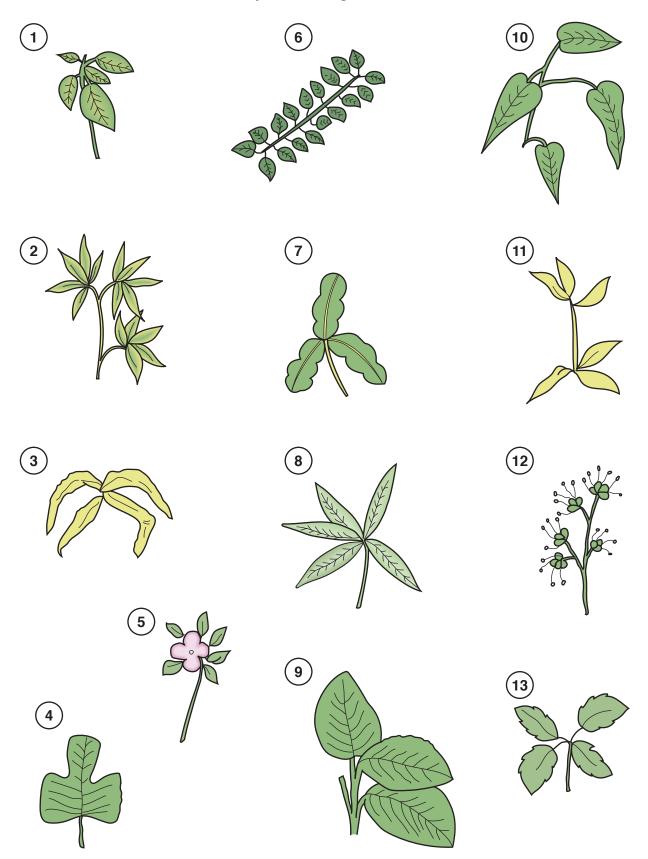


Table 1.2 for Question 1

Different species* identified by students

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

^{*}Species reference number in Fig. 1.5

Key

✓ species seen at the site

2015

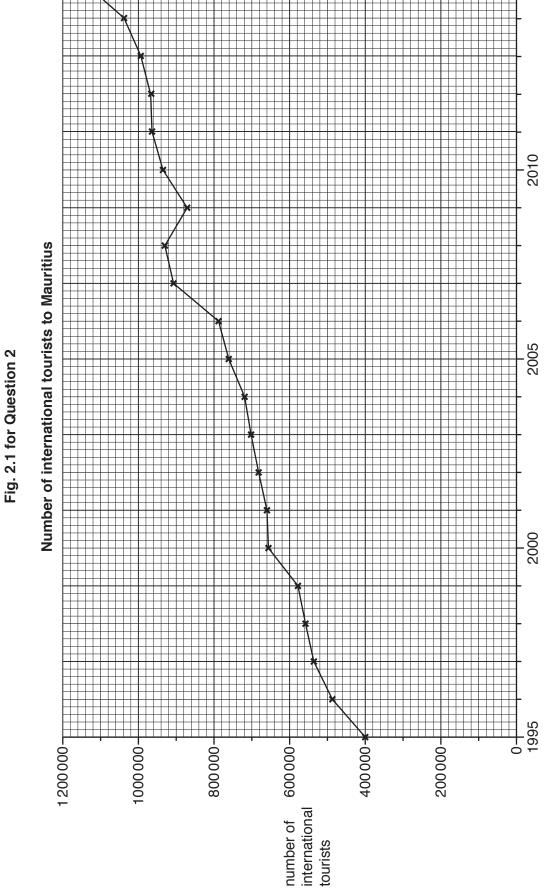


Fig. 2.2 for Question 2

Tourist questionnaire

| | doing a tourism sui g questions. | rvey as p | oart of ou | ır Geogi | raphy fieldw | ork. Please answer the |
|----------|-------------------------------------|-----------|------------|----------|---------------|------------------------|
| 1. Which | continent do you d | come fro | m? | | | |
| | Asia | | Africa | | | Europe |
| | Australasia | | North A | America | | South America |
| 2. Which | n of the following p | hysical l | andscape | attract | tions are you | visiting in Mauritius? |
| | Black River Gorge | s Nation | al Park | | Casela Bird | Park |
| | Chamarel coloured | d earths | | | Grand Baie | beach |
| | Ile aux Cerfs | | | | National Bo | tanical Garden |
| | Rochester Falls | | | | | |
| 3. Which | n of the following h | numan lar | ndscape a | ttractio | ons are you v | isiting in Mauritius? |
| | Cap Malheureux c | hurch | | | Chamarel d | istillery |
| | Fort Adelaide | | | | Flic-en-Flac | |
| | Grand Bassin temp | ples | | | Le Caudan v | vaterfront |
| | Port Louis market | | | | | |
| 4. Overd | ıll which attracted | you mos | t to Maur | ?euitir | | |
| | Physical landscape | e attract | ions | | Human land | scape attractions |
| Thank y | ou 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 |
| lle 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 following questions. | of our Geography fieldwork. Please answer the |
|---|---|
| 1. Do you live in Mauritius? | |
| Yes | |
| □ No (Fir | nish interview if 'No') |
| 2. Which are the three main benefits of | tourism in Mauritius? |
| Number your first, second and third cho | pices '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 disadvantage | ges of tourism in Mauritius? |
| Number your first, second and third cho | pices '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 greate | r 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 |

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