



**Cambridge International Examinations**  
Cambridge International General Certificate of Secondary Education

CANDIDATE  
NAME

CENTRE  
NUMBER

--	--	--	--	--

CANDIDATE  
NUMBER

--	--	--	--

**GEOGRAPHY**

**0460/43**

Paper 4 Alternative to Coursework

**October/November 2017**

**1 hour 30 minutes**

Candidates answer on the Question Paper.

Additional Materials:      Calculator  
   Protractor  
   Ruler

**READ THESE INSTRUCTIONS FIRST**

Write your Centre number, candidate number and name in the spaces provided.

Write in dark blue or black pen.

You may use an HB pencil for any diagrams or graphs.

Do not use staples, paper clips, glue or correction fluid.

DO **NOT** WRITE IN ANY BARCODES.

Write your answer to each question in the space provided.

If additional space is required, you should use the lined pages at the end of the booklet. The question number(s) must be clearly shown.

Answer **all** questions.

The Insert contains Figs. 1, 2 and 6 and Tables 2 and 3 for Question 1, and Fig. 7 and Tables 4, 5, 6 and 7 for Question 2.

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

Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.

At the end of the examination, fasten all your work securely together.

The number of marks is given in brackets [ ] at the end of each question or part question.

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

This document consists of **16** printed pages, **4** blank pages and **1** Insert.

- 1 Students in the UK visited a coastal area where a spit had formed. Fig. 1 (Insert) shows a map of the area.

(a) Which **one** of the following is the correct description of a spit? Tick (✓) your answer.

Description	Tick (✓)
a resistant rock that is separated from the land by erosion	
a tall, steep cliff which extends out into the sea	
an inlet which is sheltered on both sides by cliffs	
a sheltered area of coastline where sand collects	
a ridge of sand or shingle attached to the land at one end	

[1]

The students decided to test the following hypotheses:

**Hypothesis 1:** *The spit has been formed by constructive waves moving beach material along the coast.*

**Hypothesis 2:** *The coastal area is being managed to encourage sustainable tourism.*

Sustainable tourism meets the needs of people now and protects the area for future generations.

- (b) Before they began their fieldwork the students discussed safety on the beach with their teacher.

Suggest **three** precautions the students or teacher needed to take to reduce the risk of accidents.

1 .....

.....

2 .....

.....

3 .....

..... [3]



(d) The students had learned that longshore drift is important in moving beach material along the coast.

- (i) Which **one** of the following statements about longshore drift is correct?  
Tick (✓) your answer.

Statement	Tick (✓)
Waves approach the coastline at an angle.	
Swash moves material down the beach.	
Longshore drift occurs in deep water.	
Backwash moves material up the beach.	
The direction of longshore drift depends on the tide.	

[1]

- (ii) To investigate longshore drift the students used two fieldwork methods. These are described in Fig. 2 (Insert), which is part of a student's fieldwork notes.

Suggest **one** disadvantage of method 1.

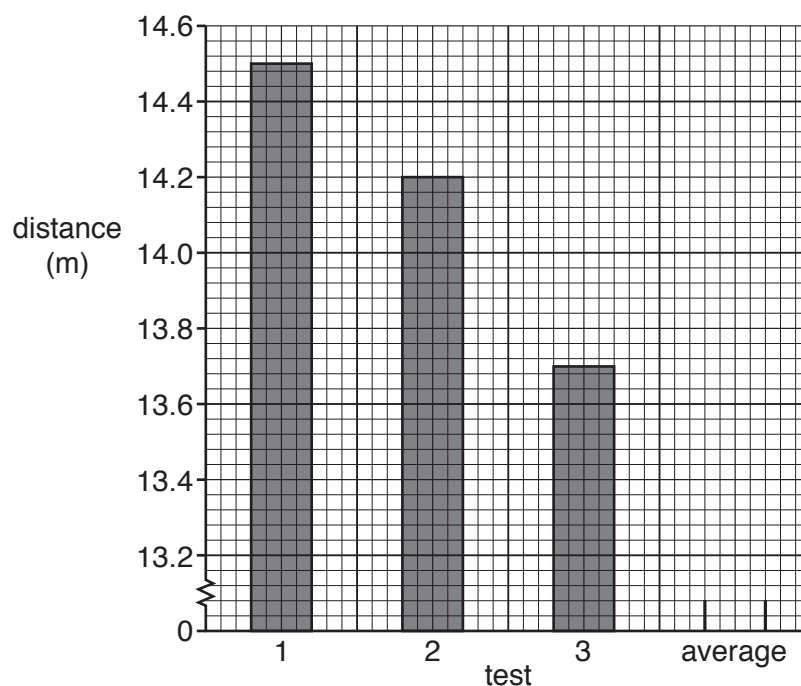
.....  
 .....[1]

- (iii) Suggest **one** way the students could have made sure that their results using method 2 were accurate.

.....  
 .....[1]

- (iv) The results of method 1 are shown in Table 2 (Insert). Use these results to **plot the average distance moved along the beach** in Fig. 3 below. [1]

**Results of method 1**



**Fig. 3**



(e) The coastline where the students did their fieldwork attracts many visitors. To investigate **Hypothesis 2: The coastal area is being managed to encourage sustainable tourism**, the students needed to assess the types and amount of management found on and near the beach.

(i) First they recorded evidence of management methods in the tally chart shown in Fig. 5 below. **Complete the tally chart** with their result of counting **eight** litter bins in the area.

[1]

Tally chart

Evidence of management	Tally	Number counted
board-walk		5
café		1
campsite		2
car park		2
direction signpost		9
fence		3
footpath		4
information board		2
litter bin		
recycling point		1
toilets		1
tourist information centre		1

Fig. 5

(ii) Another student located some of this evidence on a sketch map of part of the area near the beach. This is shown in Fig. 6 (Insert).

Describe the location of the footpaths shown on the map.

.....

.....

.....

..... [2]



**BLANK PAGE**



- 2 Students in India wanted to find out more about people who had migrated to the city of Jaipur from within India and lived in squatter settlements made up of homemade shelters on pavements or next to roads.

The students decided to test the following hypotheses:

**Hypothesis 1:** *More migrants who live in the squatter settlement came from the area around Jaipur than areas further away.*

**Hypothesis 2:** *The quality of life of residents in the squatter settlement is poor.*

- (a) To investigate the hypotheses the students used a questionnaire with 10% of the residents of the squatter settlements.

- (i) Describe a sampling method for how the students could choose people to complete the questionnaire. Explain why you have chosen this method.

Name of sampling method .....

Description of method .....

.....

Explanation for choice .....

.....

..... [3]

- (ii) Explain why a 10% sample (300 people) is an appropriate number of residents to answer the questionnaire.

.....

.....

.....

..... [2]

(b) The questionnaire is shown in Fig. 7 (Insert).

(i) The results of Question 1 (Which state did you come from when you moved to Jaipur?) are shown in Table 4 (Insert). **Complete Fig. 8** below by plotting the data for Gujarat. [1]










**States from which migrants to the squatter settlement came**



**Key**

× Jaipur

number of migrants

- |   |               |   |                        |
|---|---------------|---|------------------------|
|  | more than 100 |  | international boundary |
|  | 51–100        |  | state boundary         |
|  | 21–50         |  | disputed boundary      |
|  | 11–20         |   |                        |
|  | 1–10          |   |                        |
|  | 0             |   |                        |

**Fig. 8**

(ii) Suggest **one** other suitable method to display the results of Question 1 on a map of India.

.....[1]

(iii) What is the correct conclusion about **Hypothesis 1**: *More migrants who live in the squatter settlement came from the area around Jaipur than areas further away*? Support your answer with evidence from Fig. 8 and Table 4.

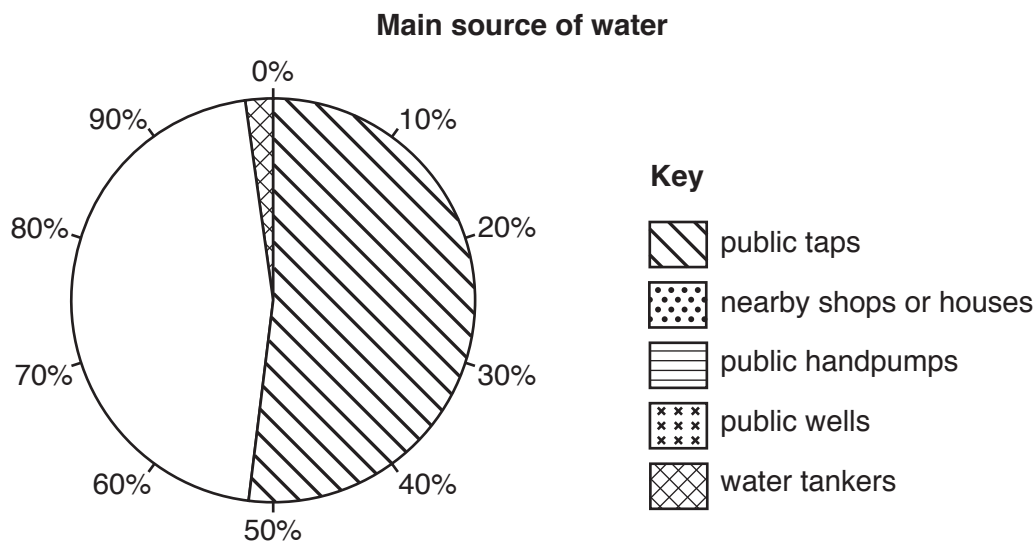
.....  
.....  
.....  
.....  
.....  
.....  
.....[3]

(iv) Suggest reasons for the pattern of migration shown in Fig. 8.

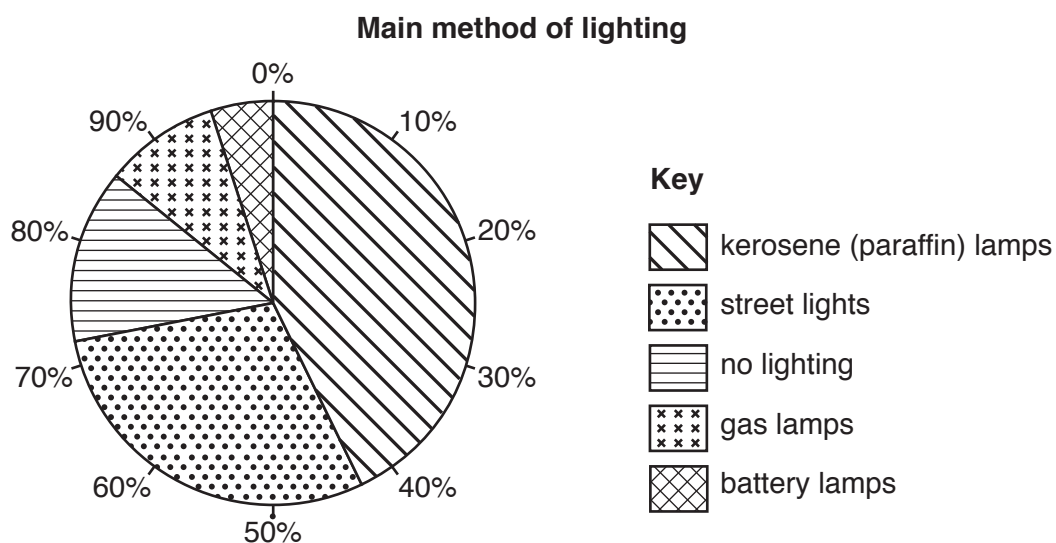
.....  
.....  
.....  
.....[2]

(c) To investigate **Hypothesis 2**: *The quality of life of residents in the squatter settlement is poor*, the students used the results of Questions 2, 3 and 4 in their questionnaire.

(i) The students plotted their results of Question 2 (Where do you get most of your water from?) and Question 3 (What is your main method of lighting?) in pie graphs shown in Figs. 9A and 9B below. Use the data in Table 5 (Insert) to **complete the pie graph** in Fig. 9A. [3]



**Fig. 9A**



**Fig. 9B**

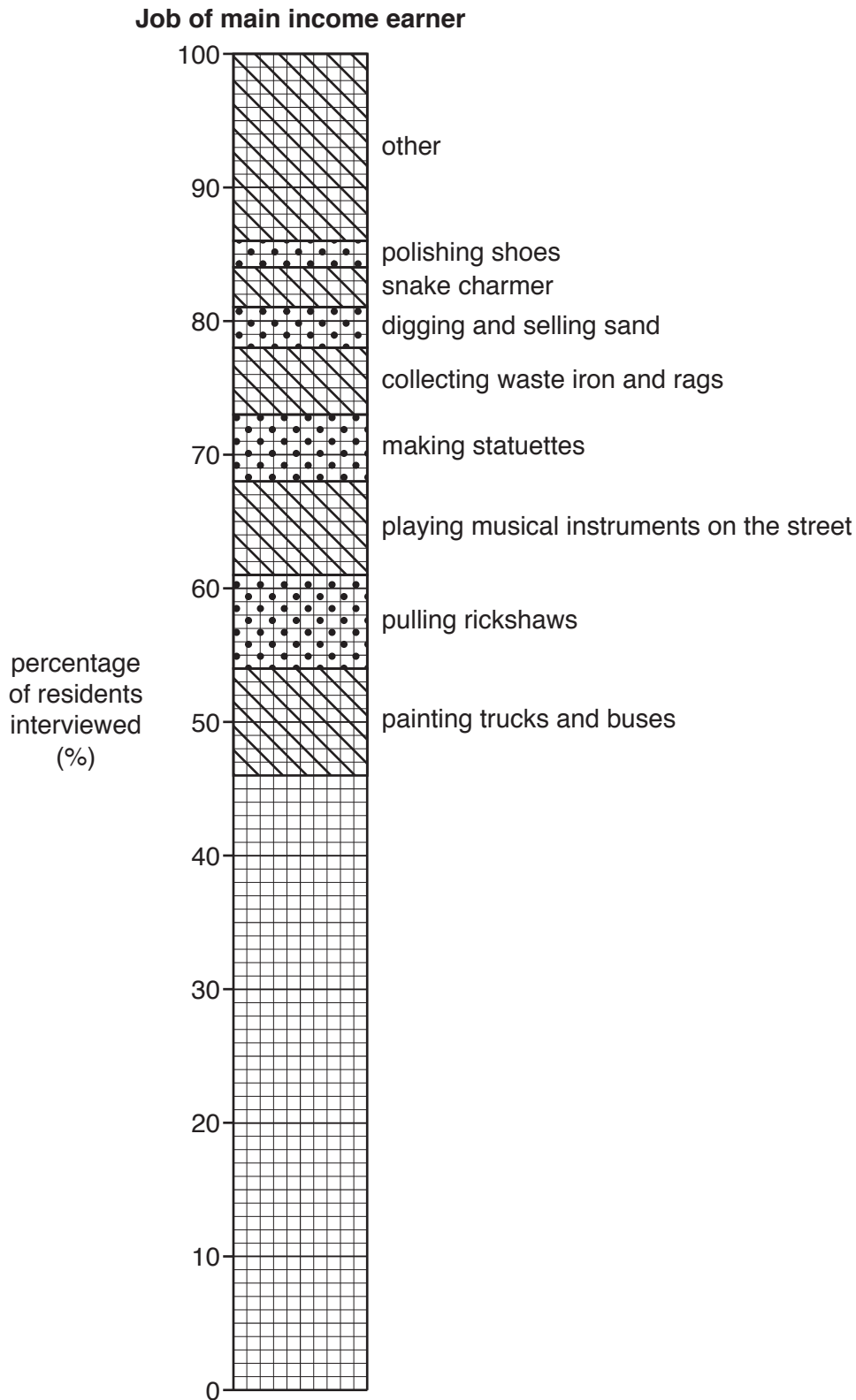
(ii) In Fig. 9B what percentage of residents have 'no lighting'?

.....%

[1]



- (d) (i) The answers to Question 5 (What is the job of the main income earner in the family?) are shown in Table 7 (Insert). Use the results to **complete Fig. 11** below. [3]



**Fig. 11**

- (ii) Why do the jobs shown in Fig. 11 help to support the students' conclusion that residents in the squatter settlement have a poor quality of life?

.....  
.....  
.....  
..... [2]

- (e) To extend their work the students discussed ways to solve the problem of people living on pavements or next to roads. They suggested two possible solutions which are shown in Fig. 12 below.

**Two possible solutions suggested by students**

<p>Solution A Build low-cost houses with basic water, sewage and power supplies which are cheap to rent.</p> <p>Solution B Police remove the people living on the pavements or next to roads and council workers clear the area of rubbish.</p>
---

**Fig. 12**

Explain why solution A is better for people living on pavements or next to roads than solution B.

.....  
.....  
.....  
.....  
.....  
.....  
.....  
..... [4]

[Total: 30 marks]











**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 International Examinations Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at [www.cie.org.uk](http://www.cie.org.uk) after the live examination series.

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