CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

GEOGRAPHY **0460/05**

Paper 5 Alternative to Coursework

October/November 2003

1 hour 45 minutes

Additional Materials: Answer Booklet/Paper
                          Ruler

READ THESE INSTRUCTIONS FIRST

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet.
Write your Centre number, candidate number and name on all the work you hand in.
Write in dark blue or black pen on both sides of the paper.
Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer **all** questions.
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.
Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.

[Turn over

1 A group of students visited two shopping areas, A and B, in a city to investigate shopping habits. Area A is in the city centre and area B is a suburban shopping area.

(a) The students made a preliminary visit to both shopping areas. Fig. 1 shows the observations made by one student in the preliminary visit.

Fig. 1 One Student's Observations of Shopping Area A and B

Shopping Area A
Lots of shops e.g. smart clothes shops, stationers, bookshops, restaurants, CD shops i.e. high order goods, fast food places Street vendors, Lots of people, busy, large buildings

Shopping Area B
Small shops and buildings, peeling paintwork, not many people around, limited types of shops selling low order goods. Several bus stops A few cafes Wide road and lots of houses close by

   (i) Give **two** reasons why these observations of the shopping areas may not be accurate. [2]

   (ii) Explain the difference between high and low order goods. [2]

(b) A questionnaire was written after the preliminary visit. Table 1 (Insert) shows the questionnaire and the results from 50 shoppers recorded at each shopping area.
Complete Fig. 2 (Insert) to show how people travelled to shopping area B. Use the key provided. [4]

(c) Study Table 1 and the observations of the student (Fig. 1). For **each** question (Q1–Q4) on Table 1, describe and explain **one** difference between the shopping habits of shoppers in area A and in area B. [8]

(d) One student decided to ask an additional question to investigate the length of time shoppers spent at each shopping area.

   (i) Suggest a wording of the question and the layout for recording the answers. [3]

   (ii) What do you think might be the results of this question in area A? Give reasons for your answer. [3]

(e) The teacher instructed the students to record their own observations of people's age and gender (male/female).

   (i) Explain why the teacher gave this instruction. [1]

   (ii) Why is age and gender information important to the investigation? [1]

   (iii) Describe the shoppers in area A and in area B using the information in Table 2 (Insert). [4]

   (iv) Outline **two** reasons why these results may not be representative of the people visiting areas A and B. [2]

[Total: 30 marks]

2 Students investigated a wadi (dry desert valley). The students tested the following hypothesis:

'loose rocks and pebbles will be larger and more angular at the head of the wadi than at the base'.

Fig. 4 (Insert) shows the plan of a wadi and four sites W, X, Y and Z. Site W is near the head of the wadi (higher area) and site Z is near the base of the wadi (lower area). At each site 20 pebbles were randomly selected and examined for size and shape.

Pebble Size

The size of each pebble was measured using a pebbleometer. A pebbleometer is a board containing measured squares of different sizes through which pebbles are passed to assess their size. Study Fig. 4 and Table 3 (Insert) showing the results recorded.

(a) State **two** advantages of using a tally method to record the results. [2]

(b) Pebble size can also be measured using callipers, two short lengths of metal hinged together, and a ruler. Describe this method in detail. [3]

(c) Use the pebbleometer results to complete the divided graph for site X on Fig. 4. [4]

(d) Students suggested that the loose rocks and pebbles were the result of flash floods or were the result of weathering.
Explain why a flash flood may change the size, shape and position of pebbles in a wadi. [3]

Pebble Shape

At each site the students observed the sample of pebbles using a scale of roundness, shown in Fig. 3. The results are shown in Table 3.

Class 1	2	3	4	5	6
very angular	angular	sub-angular	sub-rounded	rounded	well rounded

Fig. 3

(e) (i) Plot all the pebble shape results for sites W and Z on Fig. 4. [4]

   (ii) In detail, explain how weathering in this desert wadi may result in angular pebbles. [4]

(f) Write a conclusion to this investigation. You should state if the hypothesis is correct and use evidence from pebble size and shape results to explain your decision. [5]

(g) (i) Another group of students collected a larger sample of pebbles at each site and produced different average results for both size and shape. Suggest **two** possible reasons for this. [2]

   (ii) Describe and explain how a systematic sampling system may improve the reliability of the results. [3]

[Total: 30 marks]

4

BLANK PAGE

Centre Number	Candidate Number	Name

CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

GEOGRAPHY   **0460/05**

Paper 5 Alternative to Coursework

October/November 2003

1 hour 45 minutes

INSERT

READ THESE INSTRUCTIONS FIRST

This insert contains Figs 2 and 4 and Tables 1, 2 and 3.

Write your name, Centre number and Candidate number in the spaces at the top of this page and attach the insert to your answer paper/answer booklet.

This document consists of **5** printed pages and **3** blank pages.

SP (SM/SLC) S40798/1
© CIE 2003

UNIVERSITY *of* CAMBRIDGE
Local Examinations Syndicate

[Turn over

2

Table 1 for Question 1

Question		Area A City Centre	Area B Suburban Area
Q1. How far away do you live?	Under 1 km	3	12
	1–5 km	12	34
	5–10 km	26	4
	Over 10 km	9	0
Q2. How often do you shop here?	Daily	11	33
	2–3 times a week	6	10
	Weekly	23	5
	Monthly	10	2
Q3. How did you travel here?	Walk	6	22
	Bicycle	4	18
	Private Car	22	8
	Bus	14	2
	Taxi	4	0
	Other	0	0
Q3. What type of item do you usually buy?	Food	14	20
	Household goods	19	6
	Electrical goods	11	0
	Newspaper/magazines	6	24

Table 2 for Question 1

		Area A	Area B
Age	0–15 years	5	7
	16–30 years	9	12
	31–60 years	27	16
	Over 60 years	9	15
Gender	Male	27	20
	Female	23	30

Fig. 2 for Question 1
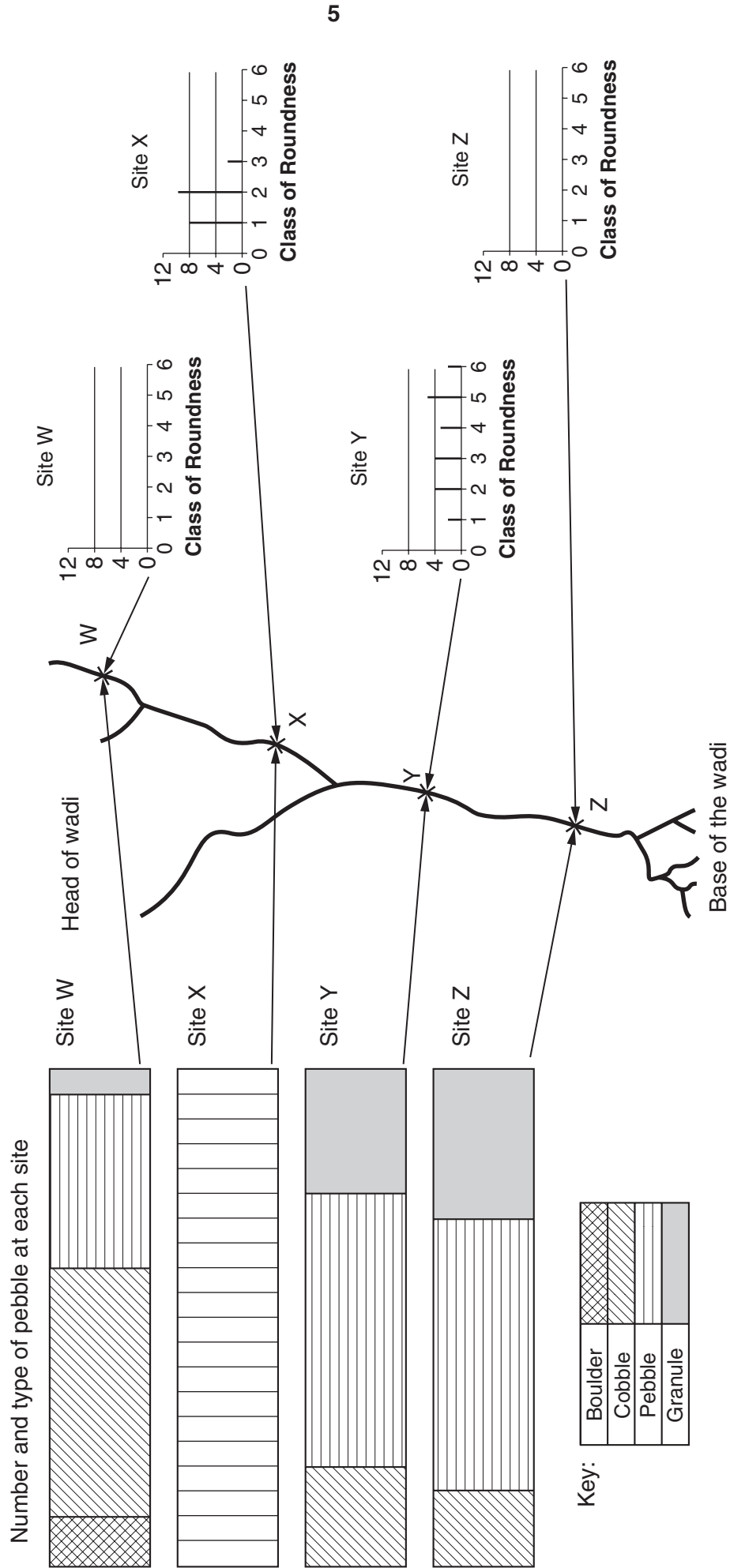
Method of travel to the shopping areas

Area A

Area B
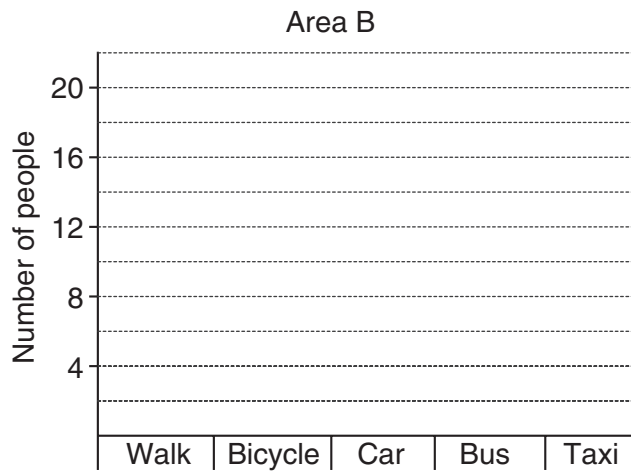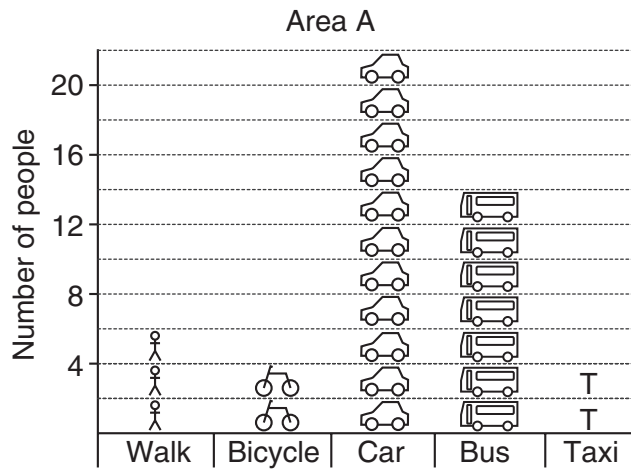
Key to Fig. 2	
⚇	2 people walk
🚲	2 people bicycle
🚗	2 people use car
🚌	2 people use the bus
T	2 people use taxi

[Turn over

Table 3 for Question 2

	Pebbleometer results				Site	Results of roundness observations					
	Boulder +256 mm	Cobble 64–256 mm	Pebble 4–64 mm	Granule 2–4 mm		Class 1	Class 2	Class 3	Class 4	Class 5	Class 6
	II	⊬⊬ ⊬⊬	⊬⊬ II	I	**W**	4	4	10	2	–	–
	I	⊬⊬ III	⊬⊬ IIII	II	**X**	8	10	2	–	–	–
	–	IIII	⊬⊬ ⊬⊬ I	⊬⊬	**Y**	2	4	4	3	5	2
	–	III	⊬⊬ ⊬⊬ I	⊬⊬ I	**Z**	–	–	4	6	6	4

5

Fig. 4 for Question 2

Number and type of pebble at each site

Site W

Site X

Site Y

Site Z

Head of wadi

Base of the wadi

Key:
Boulder
Cobble
Pebble
Granule

Site X
Class of Roundness
Site Z
Class of Roundness
Site W
Class of Roundness
Site Y
Class of Roundness

BLANK PAGE

BLANK PAGE

8

BLANK PAGE