

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the May/June 2006 question paper

0460 GEOGRAPHY

0460/04

Paper 4, maximum raw mark 60

These mark schemes are published as an aid to teachers and students, to indicate the requirements of the examination. They show the basis on which Examiners were initially instructed to award marks. They do not indicate the details of the discussions that took place at an Examiners' meeting before marking began. Any substantial changes to the mark scheme that arose from these discussions will be recorded in the published *Report on the Examination*.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes must be read in conjunction with the question papers and the *Report on the Examination*.

The minimum marks in these components needed for various grades were previously published with these mark schemes, but are now instead included in the *Report on the Examination* for this session.

- CIE will not enter into discussion or correspondence in connection with these mark schemes.

CIE is publishing the mark schemes for the May/June 2006 question papers for most IGCSE and GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.



Page 2	Mark Scheme	Syllabus	Paper
	IGCSE – May/June 2006	0460	04

- 1 (a) (i)** A low cost item/bought frequently item/low profit item
e.g. milk/bread/newspaper 2 @ 1 mark [2]
- (ii)** Cost of land change 4 @ 1 mark [4]
Description Higher cost in centre/decreasing cost away from centre
Explanation e.g. Competition for land forces up the price
Accessibility by road change
Description Main road/junction of roads increases accessibility Des and Exp
Explanation e.g. Roads bring customers to the shops for each
- (b) (i)** 3 bars plotted at 3, 12 and 64 3 @ 1 mark [3]
- (ii)** General comment
Shop B is larger in all aspects
Specific comment
Shop A has less employees/less customers/smaller frontage
No credit for list 2 @ 1 mark [2]
- (c)** Advantage of pacing
- quick/easy/no equipment needed
Disadvantage of pacing
- not precise/inaccurate measurement/varies between students 2 @ 1 mark [2]
- (d) (i)** 500 spaces/large area suggests the shop expects people to use cars 1 @ 1 mark [1]
- (ii)** $175/500 \times 100 = 35\%$ 1 @ 1 mark [1]
- (iii)** Accurate plotting of 35% onto Fig. 3 using key 2 @ 1 mark [2]
- (e) (i)** e.g. Choose five items which will be sold in both shop A and B; find the price of each item; The items should be the same size/quantity; Record/write down the price of each item in both shop A and B; 2 @ 1 mark [2]
- (ii)** Must have Shop A and B in individual columns, items 1 – 5 or examples, rows/columns well presented 4 @ 1 mark [4]
- | ITEM | SHOP A | SHOP B |
|------|--------|--------|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
- (f)** E.g.
Shop A will have a smaller sphere of influence than shop B 1 mark res
Credit reasons e.g. for statement
Shop B has 175/many people coming by car but shop A has only 2 marks for
5/few people; If people come by car they usually travel greater reasons
distances so there will be a larger sphere of influence; Shop B sells
comparison goods so people will travel further 3 @ 1 mark [3]
- (g)** - Statement that hypothesis is correct
- Comparative comments with supporting data about
(i) size
(ii) business
(iii) importance 4 @ 1 mark [4]

[Total 30 marks]

Page 3	Mark Scheme	Syllabus	Paper
	IGCSE – May/June 2006	0460	04

- 2 (a) High pressure = sinking air, stable unchanging conditions, expected dry weather
Low pressure = rising air, unstable changeable conditions, expected wet weather 3 @ 1 mark [3]
- (b) (i) To provide/gain reliable results/for easy comparison/no bias/fair test 1 @ 1 mark [1]
- (ii) Correct reading of barometer at 1018 Mb and complete Table 5 and complete line graph on Fig. 6 1 @ 1 mark [1]
- (iii) Ideas should include
- after each daily reading the index pointer is moved to the pressure indicator;
- It indicates the change in the pressure from the previous reading; 2 @ 1 mark [2]
- (c) e.g. Very little change over the seven days; all readings are between 1020 and 1016; small increases on 10th and 12th; fluctuating 2 @ 1 mark [2]
- (d) (i) Advantage = quick/more accurate/no student error Res 1 mark
Disadvantage = costs money/needs batteries/may go wrong for adv.
2 @ 1 mark [2]
- (ii) Complete the wind speed bars at 4, 12, 13 and 11 km/hr 2 @ 1 mark [2]
- (e) Description of difference (up to 2 marks)
e.g. Wetter/more rainfall/higher rainfall; up to 2000 mm compared to 250 mm; Res 1 mark
Explanation e.g. uprising of moist air at the equator causing high rainfall for exp.
3 @ 1 mark [3]
- (f) (i) Correct plotting of the 8 points on line graph (Fig. 6) 4 @ 1 mark [4]
- (ii) School X always has higher pressure than school Y;
School Y varies less than school X; Res 2 for
Latitude/location; School Y has an equatorial location with the exp.
highest insolation causing low pressure; ITCZ 4 @ 1 mark [4]
- (g) Hypothesis = inconclusive Res 1 mark
Data = Fig. 7 shows no correlation; Fig. 6 shows school Y has lower for
pressure but not higher wind speeds; hypothesis
Data collection methods = only for seven days; student error; siting of Res 2 for DC
barometer; etc. and 2 marks
for data
6 @ 1 mark [6]

[Total 30 marks]