UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the November 2004 question paper

0460 GEOGRAPHY

0460/04 Paper 4 (Alternative to Coursework), maximum mark 60

This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which Examiners were initially instructed to award marks. It does 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*.

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

CIE is publishing the mark schemes for the November 2004 question papers for most IGCSE and GCE Advanced Level syllabuses.

Grade thresholds taken for Syllabus 0460 (Geography) in the November 2004 examination.

	maximum mark available	minimum mark required for grade:			
		A	C	E	F
Component 4	60	37	28	19	16

The threshold (minimum mark) for B is set halfway between those for Grades A and C.
The threshold (minimum mark) for D is set halfway between those for Grades C and E.
The threshold (minimum mark) for G is set as many marks below the F threshold as the E threshold is above it.
Grade A* does not exist at the level of an individual component.

November 2004

INTERNATIONAL GCSE

MARK SCHEME

MAXIMUM MARK: 60

SYLLABUS/COMPONENT: 0460/04

GEOGRAPHY
Alternative to Coursework

UNIVERSITY of CAMBRIDGE
International Examinations

Res = Reserved mark
H or Hyp = Hypothesis
Dev = Development of a point
Des = Description
Imp = improvement

1	(a)	characteristics should be more than the CBD and focus on the central point of the CBD e.g. most accessible location/where main roads meet; busiest/lots of people/highest number of pedestrians; most traffic/most congested/noisiest area; tallest buildings/highest buildings; highest cost of land/highest rents/highest rates; high street shops/comparison shops/large shops/department stores; banks/services/offices/public buildings etc.	4 @ 1 mark max 2 marks for general comments about CBD rather than specific central area of CBD	**[4]**
	(b) **(i)**	must be related to site selection advantage: wide area/all around X/large area/all different directions /equal distance or area in paces idea/no bias /easy/simple disadvantage: different length or size paces/not equal distance/ depends on the roads/depends on the direction/does not include outer area of town	2 @ 1 mark	**[2]**
	(ii)	name/student group; date; time; location/road name/site number/direction from X; pedestrian flow direction; weather	2 @ 1 mark	**[2]**
	(c) **(i)**	isoline 30 should be drawn half way between the 10 isoline and the 50 isoline on the Insert, with 2mm tolerance. must not include the points 24, 26 or 28 within area	4 @ 1 mark 3 marks for line (top, left and right) res 1 mark for label of 30	**[4]**
	(ii)	correct identification of area over 50 pedestrians/area inside 50 line; correct use of key shading	2 @ 1 mark 1 mark for identifying the correct area 1 mark for using the key correctly.	**[2]**

(d)	**(i)**	number of pedestrians decreases away from X; not an even distribution but bulges in the S and W/higher number in the south and west	2 @ 1 mark 1 mark for general recognition of decrease 1 mark for recognising uneven decrease	**[2]**
	(ii)	identify services on map likely to attract pedestrians e.g. bank; secondary school, car park reasons for change for each service e.g. people are attracted to and from the Bank car park attracts people because they park the car and walk to X; side streets attract less people;	4 @ 1 mark max 2 marks for service	**[4]**
(e)	**(i)**	item bought infrequently/bought after comparing prices /high value/high profit margin e.g. TV/CD player/ furniture/shoes/clothes	2 @ 1 mark credit correct example	**[2]**
	(ii)	e.g. survey the 60 shops and count the number of conv/comp and apply that ratio to 20 shops/find out the type of every shop then ask a proportion of each; e.g. ask every 3rd shop/systematic sample; different sizes of shops; different types of shops; variety of locations	2 @ 1 mark	**[2]**
(f)		shopkeepers may be in a hurry; did not know; cannot remember; subjective/biased/not quantitative; could be more than one period; may not fit times of survey/recording sheet; results may vary with different days	2 @ 1 mark credit development	**[2]**
(g)		credit the decision that the hypothesis is true; the decrease in pedestrians is not even; credit evaluation comments such as: repeat more interviews with shopkeepers; use the results of the interviews to select times of counts; repeat pedestrian survey at different times; 12.00 - 14.00 i.e. busiest; repeat on different days	4 @ 1 mark res 1 for Hyp credit development of ideas res 1 for imp credit development of ideas	**[4]**

Total 30 Marks

2	(a)		rope extended/held/across stream; rope marked/knotted at 0.5 m intervals; measuring stick placed into stream vertically/to bed/depth measured every 0.5 m across stream; also credit points if on diagram	3 @ 1 mark	**[3]**
	(b)	(i)	2 marks for correct plotting depth at 490, 390 and 0 with line joining all points; max 1 if not to 0 at B max 1 if no line	2 @ 1 mark max 1 mark if one incorrect point 0 marks if 2 incorrect points	**[2]**
		(ii)	general pattern e.g. shallow at A and gradually becoming deeper/depth increases then decreases from A to B; specific comment or data e.g. deepest area at 2 m /steeper gradient before B/not uniform change/irregular change	2 @ 1 mark max 1 mark for list credit dev for 2nd mark	**[2]**
	(c)	(i)	for a more reliable/more representative/accurate /average result;	1 @ 1 mark	**[1]**
		(ii)	10m divided by average time (secs)/10m (i.e. distance) divided by Average Time (secs)	1 @ 1 mark	**[1]**
		(iii)	complete graph at 0.36 and 0.31; tolerance 2 mm 2 marks for correct height of bars 1 mark for correct width with division at 2.75	3 @ 1 mark	**[3]**
	(d)	(i)	description: e.g. first 1.5 m is shallower with lower velocity; central area is the deepest and the fastest water; credit use of depth/velocity data explanation: e.g. friction of the riverbed slows down the water/deeper water can overcome the frictional drag so faster flow of water;	4 @ 1 mark res 1 for description res. 1 for explanation	**[4]**
		(ii)	object is restricted from free flow by water plants; restricted by rocks etc.; student error in timing; effects of wind	2 @ 1 mark	**[2]**

(e) **(i)** labels with arrows — 3 @ 1 mark

- to right bank area of deposition i.e. slip off slope;
- to left bank area showing slight lateral erosion area/undercutting;
- to flat area probably to left of river i.e. flood plain/any area likely to flood

[3]

(ii) meander shown/asymmetrical cross-section;
depth/speed greater on outside of bend/meander;
erosion on outside of bend/meander but deposition on inside of bend;
different friction/velocity due to different cross-section shape

3 @ 1 mark
res 1 for how/des
res 1 for why/exp

max 2 marks if no comparison with Fig. 2

[3]

(f) **(i)** e.g. hypothesis true/correct;
(take care not to credit wording of the hypothesis)

comments to support the decision e.g. deeper water in centre has highest velocity/shallower depth has slower speed; 0.36m/sec compared to 0.26m/sec

3 @ 1 mark
res 1 for H
max 2 marks if no depth /velocity data

[3]

(ii) more sites; different rivers; other times of year; more speed measurements; use of a flow meter; etc.

3 @ 1 mark
credit dev

[3]

Total 30 Marks