

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the June 2005 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 June 2005 question papers for most IGCSE and GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.



Grade thresholds for Syllabus 0460 (Geography) in the June 2005 examination.

	maximum mark available	minimum mark required for grade:			
		A	C	E	F
Component 4	60	41	29	17	12

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.

June 2005

IGCSE

MARK SCHEME

MAXIMUM MARK: 60

SYLLABUS/COMPONENT: 0460/04

GEOGRAPHY
Alternative to Coursework



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Question 1

- (a) (i) On Insert plot 550, 350 and 108 at the correct site location
Correct curved/freehand/smooth line drawn from source on axis joining points
4 @ 1 mark
Max 3 if no line or not freehand
[4]
- (ii) Expect to see:

Site **A** – waterfalls and rapids also interlocking spurs, v shaped valleys – Not meanders

Site **C** – ox bow lakes and flood plains also meanders, levées, delta

so credit other appropriate river features
2 @ 1 mark
must have both features correct
[2]
- (b) (i) i.e. what makes the sketch identifiable after the event
Date; Name; Time; weather conditions
2 @ 1 mark

Not labels or annotation or season or month
[2]
- (ii) Advantage
e.g. visual/see rather than memory; add explanations
2 @ 1 mark

Disadvantage
e.g. depends on skill of student; no scale; can be inaccurate/subjective/biased; slow compared to photo
[2]
- (c) Minimum general comment of friction influencing speed;

Friction – rocks increase friction; bigger rocks produce more friction;
Speed – increased friction reduces the speed of the water
Flow – rocks make the flow turbulent/uneven/less smooth; diverted flow
4 @ 1 mark
credit development
Res 1 mark for each friction, speed and flow

Credit the use of the term ‘wetted perimeter’
[4]

Page 2	Mark Scheme	Syllabus	Paper
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- (d) (i) Correct bar graph completion of 9 and 7.5
Appropriate accuracy of bar widths
2 @ 1 mark
Max 1 if incorrect format [2]
- (ii) Pebbles become eroded/worn away with move downstream;
Method of erosion named or described as development
2 @ 1 mark
Credit dev [2]
- (iii) Student bias/error
1 @ 1 mark [1]
- (iv) Credit ideas such as quadrat use;
select 19 pebbles and line up; systematic/regular intervals;
increase number in sample/more than one student;
measured distance. Must be practical and relate to data collection, not site selection [2]
- (e) (i) The velocity increased (**A – B**) then decreased (**B – C**)
Must have both parts of change
1 @ 1 mark [1]
- (ii) I: velocity decreased (how) due to less water and increased friction with river bed (why)
II: insufficient energy for the stream to carry the load so deposits
3 @ 1 mark
res 1 mark for each point [3]
- (f) Levels marking
- Level 1- (1)
Only mentions one change
Level marking
Max 3 if no data
- Level 2- (2 – 3)
Comment includes one or two points with some data or mention of sketch
Also credit evaluation comments of data collection methods
- Level 3- (4 – 5)
Comment includes height/gradient or distance from source linked to pebble size and velocity with data to support each. Top level should include human influence [5]

Total 30 marks

Page 3	Mark Scheme	Syllabus	Paper
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Question 2

- (a) How – noisy/noise pollution; congested/slows traffic; air pollution; lack of parking space
Why – employment; services/offices/shops located in centre; historically small/narrow roads; meeting point of roads;
Not pollution on its own [3]
- (b) (i) Fast recording method; quick to total/read; more accurate than writing numbers; easy to use; easy to total/read; efficient
Not just 'accurate' on own. Easy is same as simple [2]
- (ii) Correct construction of proportional squares on Insert
S = 12mm x 12mm
U = 9mm x 9mm
4 @ 1 mark
Max 3 if incorrect shading [4]
- (iii) Comments to reflect that total traffic generally decreases but credit development of further description – no explanation required
1 mark = simple 'decrease'
2nd mark for further comment or data to support [2]
- (c) (i) That Site **V** always has more traffic than **U**
Comments should identify that both sites have more traffic flowing towards the centre at 08.30 than other times but then it decreases and at 16.30 the flow is greatest away from the centre
4 @ 1 mark
max. 1 mark if no comparative data
Max 3 if no V>U
List = 0 marks [4]
- (ii) Site **Q** Towards = 14 so 7 mm
Away = 44 so 22mm
1 @ 1 mark
need both correct [1]
- (iii) % at **R** flowing towards at 08.30 is 26 vehicles out of 64 total therefore 40%/41% (actual = 40.625%)
Also accept 78%/79% as total of day i.e. **R** is 26/33 [1]

Page 4	Mark Scheme	Syllabus	Paper
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- (d) (i) Key is land use and changing traffic flow 3 @ 1 mark
e.g. Residential – traffic flow away in am and to in pm
e.g. Education – to in morning and away in afternoon
e.g. Stadium – event day traffic flow [3]

- (ii) Must be land use related 4 @ 1 mark
Ideas such as:
Observe/survey buildings; organise in groups/divide town;
classify/function of buildings; transect/systematic survey;
record/mapping; land values
credit dev up to 2 marks
Not people count or Questionnaires = 0 marks [4]

- (e) Hypothesis 1 = true; but depends on the route/direction; 6 @ 1 mark
Hypothesis 2 = true; but depends on location as to the extent of the change;
Credit data to support statements
Data collection evaluation may include only one day; only for 5 minutes; single student may not be accurate; depends on the location chosen;
Evaluation comments can be positive too. max 4 if no data used
Max 5 if no evaluation [6]

Total marks = 30