

**MARK SCHEME for the May/June 2012 question paper  
for the guidance of teachers**

**0460 GEOGRAPHY**

**0460/23**

Paper 2, maximum raw mark 60

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes must be read in conjunction with the question papers and the report on the examination.

- Cambridge will not enter into discussions or correspondence in connection with these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2012 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

|               |                                       |                 |              |
|---------------|---------------------------------------|-----------------|--------------|
| <b>Page 2</b> | <b>Mark Scheme: Teachers' version</b> | <b>Syllabus</b> | <b>Paper</b> |
|               | <b>IGCSE – May/June 2012</b>          | <b>0460</b>     | <b>23</b>    |

- 1 (a) (i) 206 (allow 208) [1]
- (ii) power line [1]
- (iii) (Rivulet) Lovard [1]
- (iv) track [1]
- (v) water tank [1]

(b)

| Vegetation type    | Relief  |
|--------------------|---|
| 1 – tea            | gentle sloping/flat/330 to 369 m/valley side  |
| 2 – riverine trees | flat/valley floor/low/lower/lowest/floodplain   |
| 3 – scrub          | steep/north facing/high/higher/highest/any height between 370 and 440 m/hill/mountain |

If the vegetation is wrongly identified, the description of the relief can still be credited.

One mark for each cell. [6]

- (c) NE → N → SE → N (accept any two so long as sequence/location is clear)  
 zigzags/bends/hairpins/twists and turns/U turns/curves/ winding  
 up and down  
 crosses river  
 crosses valley  
 crosses ridge  
 parallel to the slope/along the slope/across the slope/around the hill/keeps as level as possible  
 avoids steep slope/avoids hill/avoids higher  
 plantation/sugar  
 scrub [4]

- (d) (i) westwards [1]

- (ii) dam extends to the west  
 flat/level ground/gentle slope  
 marsh  
 cannot expand to south because of dam  
 cannot expand to east because of hill/steep slope [2]

- (iii) reservoir (for water storage)  
 steep slopes (for fast water flow)  
 decrease in height/head of water  
 road/valley access [2]

| Page 3 | Mark Scheme: Teachers' version | Syllabus | Paper |
|--------|--------------------------------|----------|-------|
|        | IGCSE – May/June 2012          | 0460     | 23    |

- 2 (a) (i) Kilauea [1]
- (ii) Nazca and South American [1]
- (iii) Cocos/Nazca/Antarctic [1]
- (iv) North American and Eurasian/Europe [1]
- (b) along the uncertain plate boundary/rift valley  
in East Africa/east of plate/named country  
inland/on land [2]
- (c) (i) ash [1]
- (ii) blown by the wind [1]
- 3 (a) waterfall  
spray  
rapids  
winding/meanders (river or valley)  
interlocking spurs  
V shaped valley  
bare rock/rocky/pale/multicoloured rock/little vegetation/sparse vegetation  
gorge/ravine/canyon  
steep (sides)/cliffs  
no/little floor (or flood plain)/river fills the floor/narrow valley  
deep valley  
scree  
forest/coniferous/evergreen/pine trees [5]
- (b) gentle  
waterfall/very steep  
plunge pool  
rapids/irregular  
smooth  
  
Only accept labels in appropriate places. [2]
- (c) it would spoil the beauty of the area  
expense  
effect on plants/animals  
earthquake possibility  
specific effect on people upstream or downstream [1]

| Page 4 | Mark Scheme: Teachers' version | Syllabus | Paper |
|--------|--------------------------------|----------|-------|
|        | IGCSE – May/June 2012          | 0460     | 23    |

- 4 (a) (i) bar at 550 000 [1]  
(ii) 215 000 – 224 000 [1]
- (b) (i) higher/high GDP/standard of living/wealthy countries/rich English language  
Allow high GDP/person and high GDP rank = 2 [2]  
(ii) no/distance has little/no effect  
have almost the same number of migrants/slightly more in Kuwait [2]
- (c) line at 59% (or 41% if largest segment is to the right)  
correct shading (larger segment block shading, smaller line shading)  
Accept in any order [2]
- 5 (a) division between 80% and 18% – smaller segment 64–66°  
shading correct (raw materials lines, labour etc. block shading – larger segment black)  
Accept in any order. [2]
- (b) (i) university for well educated workforce/research  
railway/expressway for transport of raw materials/components/products/  
employees/customers  
airport for transport of raw materials/components/products/employees/customers  
cities for market [2]  
(ii) components/raw materials/products are light in weight/low bulk/high value for bulk  
only need small quantities of raw materials [1]  
(iii) highly skilled workforce  
qualified employees expect high wages  
need to attract the best workers [1]
- (c) shortage of land in Singapore/more land available in Bangalore  
cheaper land in Bangalore  
cheaper labour costs in Bangalore  
financial incentives offered by the Indian Government  
access to large/growing market [2]

|               |                                       |                 |              |
|---------------|---------------------------------------|-----------------|--------------|
| <b>Page 5</b> | <b>Mark Scheme: Teachers' version</b> | <b>Syllabus</b> | <b>Paper</b> |
|               | <b>IGCSE – May/June 2012</b>          | <b>0460</b>     | <b>23</b>    |

- 6 (a) cannot measure it/difficult to measure  
it was getting worse day by day/more leaked out  
deep/1500 m  
moved by currents/wind  
spreading out/200 km [1]
- (b) (i) Louisiana  
SE/onshore winds  
nearest coast to the well
- Florida  
carried by ocean current  
SW winds/NE winds/onshore winds
- Mississippi  
SE/onshore winds  
near to the well
- Alabama  
SW winds/SE winds/onshore winds  
near to the well
- Cuba  
carried by ocean current  
NE winds/onshore winds
- Name = 1 Reasons = 2. [3]
- (ii) carried by ocean current  
onshore/NE winds carry it on to the beach  
(contradictions = 0) [2]
- (iii) people involved directly or indirectly with tourism e.g. hotel owners/coach drivers/  
shopkeepers – loss of earnings/unemployment
- fishers – loss of earnings/unemployment
- tourists owning holiday homes – possibility of oil on beaches
- environmentalists – damage to ecosystems/wildlife/no repetition of the event
- Two different reasons required [2]