

**MARK SCHEME for the October/November 2011 question paper
for the guidance of teachers**

0460 GEOGRAPHY

0460/22

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 October/November 2011 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

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- 1 (a) (i) ruin(s), [1]
- (ii) A/main A, (main alone = 0) [1]
- (iii) pit(s)/quarry(ies)/rock(s)/cliff(s), [1]
- (iv) marsh/swamp, [1]
- (v) 446, [1]
If more than one, take the first feature given.
- (b) filaos/casuarinas,
scrub/scattered trees, (allow shrub)
coral/reef,
headland/point/peninsula, (extract from names but Pte = 0)
bay(s)/Petite Rivière Bay,
sand/mud/beach, (allow sand dunes)
spit,
estuary/river mouth/ river enters sea/stream enters sea/watercourse enters sea,
gentle/flat/steep location e.g. steep in 8493 or 8494, (gentle/flat score without location)
low/lowland, [5]
- (c) river/stream/watercourse, (don't allow if from sea but allow the rest of the points to score)
La Ferme Reservoir/reservoir(s)/dam(s),
irrigation channel/distributary (channel)/channel,
pipeline,
water tank, (don't extract if whole line is copied from the key) [3]
- (d) (i) Bench mark: 97.09 (allow 97.08 or 97.05 or 97.03 or 97.02)
Difference: 50.83, (allow 50.84 or 50.87 or 50.89 or 50.90)
Both needed. [1]
- (ii) 3670, [1]
- (iii) 1 in 71–73, (any figure within range)
- Carry errors forward from (d)(i) and (ii) using the ECF symbol as follows:
The distance used must be one of the choices in (d)(ii) but allow if rounded up or down.
If the correct height difference but an incorrect choice of distance from (d)(ii) have been used,
for 3070 accept 1 in 60–61
for 3270 accept 1 in 64–65
for 3470 accept 1 in 68–69
for 3870 accept 1 in 75–77.
If an incorrect height difference has been used, calculate the answer using the candidate's height difference from (d)(i) and distance from (d)(iii).
Allow answers rounded up or down to the nearest whole number. [1]

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(e) (i) linear/in a line, (along road = 0)
dispersed/scattered/sparse,
varied size/large and small/some larger/some smaller,
under construction, [2]

(ii) school/education,
village hall,
community centre,
hotel,) allow tourism once if neither of these given
public beach,)
water tank/water supplies/water services,
youth camp,
fish landing station,

2 services correct for each mark. [2]

2 (a) (i) Philippines/West Indies/Japan, (allow Eastern Asia)

If more than one answer given and one is wrong answer scores 0. [1]

(ii) Europe,

If more than one answer given the answer scores 0. [1]

(iii) Australasia, (allow Australia)

If more than one answer given the answer scores 0. [1]

(b) scattered/in patches/in separate areas (or similar expressions),
coastal/at edges/at boundaries/none inland,
in south/none in north,
outside tropics/south of Tropic/south of $23\frac{1}{2}^{\circ}$ /none in tropics/none north of Tropic/none north
of $23\frac{1}{2}^{\circ}$, (above/below tropic = 0)
in south west/in south east, [3]

(c) cold/low temperatures,
snow/ice/permafrost,
dark (winters)/little sun,
difficult/unsuitable for farming,
lack of roads/railways/difficult transport, [2]

3 (a) (i) 400–600
1900–2100,

Both figures needed for the mark. Can be in any order. [1]

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- (ii) coffee higher/sugar cane lower, (allow by correct figures)
 coffee steeper/sugar cane gentler/flatter, (allow steep and flat)
 coffee on more irregular slope/sugar cane on smoother slope, (allow a variety of expressions)
 coffee wider range of heights/sugar smaller range of heights,

“more relief” = 0 “hilly” = 0 [2]

(b) coffee, [1]

(c) ash/volcano makes soil fertile/gives soil minerals etc., [1]

(d) (i) rainfalls on mountains,
 water/rivers flow down to the area/gravity feed,
 flat/gentle slope for ease of supplying water, [1]

(ii) rain shadow,
 wind from NE is a dry wind/wind comes from the land/offshore,
 wind/air descends so no condensation/so water evaporates, [1]

(iii) (near) port, [1]

4 (a) (i) divergent (constructive), [1]

(ii) Two clearly diverging arrows, one on the Arabian Plate and one on the African Plate.
 They need not be at right angles to the plate boundary. [1]

(b) (i) Africa/African Plate/continent/Ethiopia split/part becomes an island/N E Africa moves away from the rest of Africa,
 new water/sea/ocean/more coastline/Red Sea extends (into Rift Valley),
 wider Rift Valley/increased land area,
 more/new volcanoes/volcanoes form, (volcanic material = 0)
 Addis Ababa will be further west/northwest, [2]

(ii) molten rock/magma rising, (active volcano = 0) [1]

(c) (i) within Rift Valley = 1,
 Centre of cross 25mm–35mm from centre of Addis Ababa = 1,
 Mark each point independently.
 Accept other ways of showing location if clear. [2]

(ii) on/near a plate boundary/margin/in the Rift Valley, [1]

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- 5 (a) (i) cumulonimbus, [1]
- (ii) cumulus, [1]
- (iii) cirrus, [1]
- (b) white/light grey/darker base,
dense/thick,
great vertical extent/tall/from low to high, (large = 0, high = 0),
anvil/wide(r) at top,
narrow(er) middle,
flat top,
flat base, [3]
- (c) Photograph A – heated air rising,
Photograph B – air rising as it crosses over higher ground at the coastline, [2]
- 6 (a) (i) gas, [1]
- (ii) 11/12, [1]
- (iii) electricity less than the fuel = 1,
quantification: e.g. electricity less than half/only 28–32 mtoe of electricity but 80–84 mtoe
of fuel/fuel input more than double/fuel almost three times as much as
electricity = 2, [2]
- (b) (i) hydro-electric, [1]
- (ii) natural lakes/lakes for water storage/water available in lakes,
height difference/head of water/flow from high to low/gravity feed possible/sloping
ground,
ponds = 0 [2]
- (iii) it is underground,
little/no visual pollution/not visible,
little/no atmospheric pollution, (ozone layer, greenhouse effect and global warming = 0)
little/no noise pollution,
little/no water pollution,
cheap electricity/economic to produce,
high demand for electricity,
tourist attraction, [1]