

CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

MARK SCHEME for the May/June 2014 series

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 should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2014 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.

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- 1 (a) (i) Dip tank/Jeta Dip [1]
- (ii) Adoka [1]
- (iii) Bridge [1]
- (iv) National monument/place of historic interest/rock painting [1]
- (v) Waterfall(s)/weir [1]
- (b) Flows N/NNE
 (Then) flows NE/ENE/E, meanders
 (Fairly) straight sections
Many/several tributaries/confluences
Small tributaries, (Don't allow tributaries leaving the river)
 100m – 300m wide (allow distances between)/wide/widens towards Pote/NE/downstream
 Islands/braided/splits and rejoins
 Rapids
 Waterfall(s)
 Gentle gradient [5]
- (c) Hill/mountain/high/upland/Jeta hill
 Plateau/flat(ter) top/gentle(r) top,
 Steep (sides)
 1401m – 1459m (Allow any height in between)
 Escarpment/scarp
 Valley(s) [3]
- (d) (i) 244/5 787 [1]
- (ii) 236⁰ [1]
- (e) (i) Linear [1]
- (ii) On/along road/for transport/for access
 Gentle slope/avoids steep/avoids high
 Edge of cultivated land
 Water supply from small rivers
 Avoids flooding
 Mark (i) and (ii) independently [1]
- (f) (i) Inyauri river 61 – 63mm from left [1]
- (ii) Road, 37 – 39mm from left [1]
- (iii) Smooth rock 7 – 27mm or 83 – 100mm from left (two options) [1]

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| Page 3 | Mark Scheme | Syllabus | Paper |
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- 2 (a) (i) Point on the Earth's surface above the focus [1]
- (b) (i) Line passing between the 7s and 8s north of Yokohama
Line passing between the 7 and the 9 near Iwate and Furukawa [2]
- (ii) High intensity close to epicentre/highest 300km from epicentre/lower further away from epicentre
Higher in E/NE/lower in W/SW
Intensities from 9 to 4 (wherever stated)
Concentric zones
Sendai an anomaly [2]
- (c) (i) Close to epicentre/high(est) intensity/intensity 8
Affected by tsunami
Has a large population [2]
- (ii) Far from epicentre/named distance from epicentre
In sheltered bays/protected by land/did not face tsunami [1]
- 3 (a) **Relief**
Flat/gentle slopes/plain (lower areas),
Small hills/small mounds/isolated hills/knolls/kopje,
Plateau/ridge/flat top,
Steep slopes/cliffs,
Boulders/large rocks,
(Dry) river bed/valley,
Inselberg/mesa
- Vegetation**
Sparse/little/scattered/bare ground/widely spaced/in patches (referring to vegetation generally and not just to trees, bushes or grass)
Trees
In leaf/some not in leaf
Bushes/scrub/shrubs
Brown/yellow/dry/dead/tussocks of grass
- Maximum four marks for each – No transfer of marks between sections. [6]
- (b) Shallow/widely branching root to catch rain/use rain before it evaporates
Plants widely spaced so less competition for moisture
Long/deep/tap roots to reach water
Small leaves/no leaves/thorns/spines to reduce transpiration/water loss/evaporation
Thick cuticle/few stomata/no stomata/waxy/glossy/hairy leaves to reduce transpiration/water loss/evaporation
Succulents/bulbous trunks/roots to store water
Short life cycle/long dormant periods/seeds lie dormant until rains/intermittent rain
Low plants avoid wind and reduce transpiration/water loss
- Description and explanation needed in each case. [2]

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4 (a) Landform X

Beach
Sand,
Gentle slope/slopes down to sea/fairly flat/quite flat
Low tide

Landform Y

Cliff
Layers of rock/sedimentary rock
Different colours/two named colours/two rock types
A little/patches of vegetation (on cliff),
Bare rock

Maximum 3 marks for each [5]

(b) Wave action

Abrasion/corrosion/hydraulic action, (or description of process)
Undercutting/notches formed/caves formed/erosion of base,
Collapse/landslip,
Retreat,
Repeated action,

[3]

5 (a) (i) Total population more young/more children

Total population fewer middle age/working age
Total population more old
Total population has largest/modal group at about 40 years but foreigners have largest/modal group at about 30 years, (not majority)
Total population has more dependents
Total population has more even age groups

Or emphasis on foreign born population

Differences needed.

Various age ranges are permissible and allow references to a single age group.

Don't insist on percentages.

Don't allow descriptions of the shape of the pyramid. [2]

(ii) Allow a variety of expressions for the following:

Children too young to travel
Migrant workers
Many migrants are single and don't have children
Old retire and go home/too old to travel

[1]

(b) (i) Increase

[1]

(ii) Immigration exceeds emigration/698 thousand immigrants and 450 thousand emigrants
immigration growing faster than emigration, = 1

Causing total population to increase, = 1 [2]

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|--------|-----------------------|----------|-------|
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(iii) Net migration/immigration – emigration is different from the population increase/does not account for the population increase

Example of a correct pair of calculated figures, (allow without the thousands) birth rate/death rate affect total/natural increase also occurs

[2]

6 (a) (i) south west

[1]

(ii) 550m

[1]

(b) Coal deposits are close to the border with China, (allow “China is just over the border”) therefore reduced transport costs/easier transport,

China has large/larger/largest population, (not just the figure) therefore high demand, (allow various expressions such as “will buy more”)

[2]

(c) **Advantages**

Financial resources great(er)/profits/investment/money/improved economy, able to develop roads/schools/hospitals/services/infrastructure/produce electricity

Disadvantages

Damage to grazing/grass lands of wild animals/destruction of habitats/loss of wilderness/loss of cold desert

Roads/power grids affect migrating animals/birds

Mines consume water used by people, (connection clear)

Effect of dust on people e.g. health, (connection clear)

Visual pollution of open cast mines

Environmental damage affects tourism

Maximum 3 marks on either

[4]