



GEOGRAPHY

0460/23

Paper 2

October/November 2018

MARK SCHEME

Maximum Mark: 60

Published

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 International will not enter into discussions about these mark schemes.

Cambridge International is publishing the mark schemes for the October/November 2018 series for most Cambridge IGCSE™, Cambridge International A and AS Level components and some Cambridge O Level components.

Generic Marking Principles

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptors for a question. Each question paper and mark scheme will also comply with these marking principles.

GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

GENERIC MARKING PRINCIPLE 2:

Marks awarded are always **whole marks** (not half marks, or other fractions).

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

GENERIC MARKING PRINCIPLE 5:

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

GENERIC MARKING PRINCIPLE 6:

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

| Question | Answer | Marks |
|-----------|---|-------|
| 1(a)(i) | cultural | 1 |
| 1(a)(ii) | tunnel | 1 |
| 1(a)(iii) | historical site | 1 |
| 1(a)(iv) | 400 | 1 |
| 1(a)(v) | forest | 1 |
| 1(b)(i) | western end at 0 m <u>and</u> 0–3 mm from left hand margin steepest between 100 m and 200 m height approximately | 2 |
| 1(b)(ii) | position of P/power line 39–44 mm from left hand margin position of C/cultivation 94–102 mm from left hand margin Use the ruler device to measure the answers. Arrows should end within about 1 cm of the profile. Measure to the point that the arrow projects to. There should be no ambiguity. Allow labels by names or question numbers. | 2 |
| 1(c) | coastal/near coast linear low/below 100 m flat(ter)/gently sloping regular spacing/even distribution | 2 |
| 1(d) | correct square (9914) = 1 996140/1 = 2 | 2 |
| 1(e) | 400–460 gentle(r)/flatter/convex streams/rivers/tributaries east/south-east/lake/Kjeneset south | 5 |
| 1(f) | farm in 9613 only = 1 marsh in both squares = 1 | 2 |

| Question | Answer | Marks |
|-----------|---|-------|
| 2(a)(i) | stratovolcano/composite cone | 1 |
| 2(a)(ii) | steep sides missing part of crater wall parasitic/secondary cone | 1 |
| 2(a)(iii) | settlement/people live nearby/buildings/houses danger to life/injury to people/specific volcanic hazard need to evacuate/prevent entry to area road cut/blocked/transport disrupted explosive eruptions/blast <u>towards town</u> | 3 |

| Question | Answer | Marks |
|-----------|--------------------------------------|-------|
| 2(b)(i) | earthquake | 1 |
| 2(b)(ii) | SO ₂ | 1 |
| 2(b)(iii) | magma/gas movement/pressure/build-up | 1 |

| Question | Answer | Marks |
|----------|--|-------|
| 3(a) | foot of high(er) ground/on low(er) ground/avoids high/next to hill/next to plateau sheltered from wind gentle slope/flatter/avoids steep easy to build on/cultivate roads/paths roads meet (water supply from) streams/channels (water supply from) pond/(small) lake/dam/reservoir Ignore headings. Accept points where they are given. At least one mark for each factor. | 5 |
| 3(b)(i) | E | 1 |
| 3(b)(ii) | high order good/comparison good/needs a high threshold population E is a town/the largest settlement in the area /has more choice villages too small to support a furniture shop | 2 |

| Question | Answer | Marks |
|----------|--|-------|
| 4(a) | bare rock gullies/description of gullies bare soil/lack of vegetation | 2 |
| 4(b) | terracing contour ploughing strip farming windbreaks/lines of trees to reduce the force of the wind trees/vegetation to bind soil/cover cropping hedges to prevent animal movement trees planted in gullies | 3 |
| 4(c) | dry season/June – October vegetation dies/soil bare/no crops harvesting leaves soil bare heavy rain causes erosion/washes away soil young crops cannot hold soil slope leads to erosion/soil washed downhill no/limited source of irrigation water conservation expensive/people poor/lack of machinery lack of labour no alternative employment population growth/pressure | 3 |

| Question | Answer | Marks |
|----------|---|-------|
| 5(a) | high(est) in middle of year/June/May–July low(est) at (start and) end of the year/December (and January) rise to June/middle of year rise to October double maximum/two peaks | 3 |
| 5(b)(i) | June – Lagos near the (line of) heaviest rain/middle of ITC zone December – Lagos near the edge of the rain/away from the heaviest rain | 2 |
| 5(b)(ii) | 2 | 1 |
| 5(c) | tall/great vertical extent flat top/cauliflower top anvil/wide top dark/black/grey flat base low <u>base</u> thunder/lightning/hail | 2 |

| Question | Answer | Marks |
|----------|--|-------|
| 6(a)(i) | 85–90 (TWh) | 1 |
| 6(a)(ii) | fossil fuels more than nuclear both rose from 1980 to any date up to 2000 both fluctuated/unstable 1998–2007/2008/2009/2010 fossil fuels increased <u>and</u> nuclear decreased since 2010 fossil fuels increased <u>and</u> nuclear decreased/ceased paired data showing difference = 1 | 4 |
| 6(b) | <u>Nuclear</u> policy change to replace nuclear leak/danger/harm/waste damage by earthquake/tsunami/other stations reached end of their lives <u>Fossil fuels</u> new source of fossil fuels found improvements in mining technology make up for decrease in nuclear <u>Both</u> fossil fuels cheaper/nuclear more expensive more concern about radioactive leaks than global warming | 3 |