



Cambridge IGCSE™

GEOGRAPHY

0460/23

Paper 2 Geographical Skills

May/June 2023

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 May/June 2023 series for most Cambridge IGCSE, Cambridge International A and AS Level and Cambridge Pre-U components, and some Cambridge O Level components.

This document consists of **6** printed pages.

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) | Road <u>less</u> than 4 m wide. | 1 |
| 1(a)(ii) | Footbridge. | 1 |
| 1(a)(iii) | <u>Coniferous/non-coniferous</u> trees/woodland/forest. | 1 |
| 1(a)(iv) | 288 (metres above sea level). | 1 |
| 1(a)(v) | Middleton. | 1 |
| 1(a)(vi) | Whitlie Burn. | 1 |
| 1(b) | 218626/5. | 1 |
| 1(c) | Fishing; Parking: Picnic site; Recreational route. | 2 |
| 1(d) | There are no settlements; Highest point is 489 metres above sea level; Gradients are steep; No rivers flow above 475 metres above sea level. | 4 |
| 1(e) | Flows SW/ then SSW/S OR SW/SSW (overall); or opposite e.g., from NE; Steep gradient/variable gradient; Waterfall; River width varies/wider downstream/wider in S/SW/narrower in N/NE; (Joined by) tributaries/confluences/affluents; More tributaries on western/north-western side; Meanders/curves/bends/zig-zags; Narrow valley floor/V shaped valley; Steep (sided) valley; Deep valley/gorge; Steeper on eastern/south-eastern side; Trees/woodland/forest; Bracken/heath/ <u>rough</u> grassland. Note: Reserve 1 mark for each of valley and river. | 7 |

| Question | Answer | Marks |
|----------|---|-------|
| 2(a) | High density/close together/clustered/congested; Single storey; (Built on) tyres/wheels/terraces; Wood; Metal sheets/corrugated iron/metal roofs; (accept any named metal) Low pitch/flat roofs; Windows; Porch/veranda/balcony; Aerial/dish. | 5 |
| 2(b) | Unstable buildings/houses likely to collapse/slide downhill; Landslides/mudslides/rockfall; Soil erosion/difficult to grow crops/exposed soil could wash away; Low/dangerous electricity wires; Difficult to access/difficult to walk on slope/only accessible on foot/rocks are a trip hazard. | 3 |

| Question | Answer | Marks |
|-----------|---|-------|
| 3(a)(i) | Warm/hot/tropical/high (temperature); Ocean/sea; High humidity. | 2 |
| 3(a)(ii) | Typhoons. | 1 |
| 3(a)(iii) | North-west/North-east. | 1 |
| 3(b)(i) | 1991. | 1 |
| 3(b)(ii) | Number of events varies (per year); Scale of event/severity varies/power/magnitude (not earthquakes) (per year); Speed of formation; Depends on population density/urban v rural; Depends on the preparedness/education (about what to do); Speed of response; (Access to) emergency relief/medical aid; Level of development/LEDC v MEDC/building condition; Forecasting/warnings (may affect whether people evacuate). | 3 |

| Question | Answer | Marks |
|----------|--|-------|
| 4(a)(i) | (River) Tone. | 1 |
| 4(a)(ii) | Low lying land; Silted rivers; High tides; Wettest January/high rainfall/heavy rain (in January). | 4 |

| Question | Answer | Marks |
|----------|--|-------|
| 4(b) | Expensive; Takes a long time to build; Visual pollution/eyesore; Noise pollution <u>during construction</u> ; Stops river traffic/boating; Kills wildlife/affects habitat/prevents migration of fish; Interferes with natural river flows; May be placed on their property. | 3 |

| Question | Answer | Marks |
|----------|--|-------|
| 5(a)(i) | Positive correlation/directly proportional; <u>Fairly/relatively</u> strong relationship; As food supply increases then life expectancy increases; <u>OR</u> Better the food supply, the longer the life expectancy; <u>OR</u> Low food supply has low life expectancy <u>and</u> high food supply has high life expectancy; Some anomalies/exceptions (e.g., Japan, Lesotho). | 2 |
| 5(b)(i) | Drought; Floods; Tropical storms/cyclones/hurricanes/typhoons; Pests/diseases or named example e.g., locusts/leaf curl virus; Volcanic eruption. | 2 |
| 5(b)(ii) | Wars destroy farms/crops/kills or injures farmers/prevents food distribution/blocks access to food supply; Politically opposed countries may stop food exports/food aid which means people are left to starve; Influx of refugees can outstrip food supply; Labour shortage/rural urban migration means less food produced; Political corruption diverts money away from investment in agriculture/unfair distribution of food; Lack of/can't afford investment in agriculture/machinery/fertiliser/HYV seeds; Poverty lowers the amount of income families have to spend on food; Inflation/rising costs of production (e.g., feed and energy) increases food prices, so can afford less; Poor countries lack finance to import food thus reducing food supply; Lack of transport network means food crops unable to reach market/deteriorates before reaching market; Lack of policies to control population growth means consumption outgrows supply; Focus on cash crops rather than food for local population; Urbanisation/industrialisation reduces farmland. | 4 |

| Question | Answer | Marks |
|----------|--|-------|
| 6(a)(i) | Clear/clean/blue/calm <u>sea/water</u> ; Sand/ beach; Clear/blue skies/sunny; Palm/coconuts trees/tropical vegetation. | 3 |
| 6(b)(i) | 8(%) (allow 8.05/8.06/8.1% based on measurement of 29 degrees). | 1 |
| 6(b)(ii) | (Divided/compound) bar graph/chart/donut graph. | 1 |
| 6(c) | <p><i>Transport:</i></p> <p>Use animal power; Promote walking/cycling/more cycle paths/free public bikes; Electric vehicles; Restrict/ban vehicles on island; Develop public transport; Restrict visitor numbers/number of international flights/cruise ships to the island; Tax on car hire/increase tax on fuel/buying cars.</p> <p><i>Agriculture:</i></p> <p>Promote locally sourced food; Prohibit deforestation/burning woods; Reduce use of chemical fertilisers/use natural fertilisers; Discourage the use of machinery such as tractors; Encourage farmers to use renewable energy/solar power or wind turbines; Reduce rice production;(due to production of methane). Less animals raised (e.g., beef cattle)/more vegetables grown.</p> <p>1 reserve for each category.</p> | 3 |