

Cambridge IGCSE™

GEOGRAPHY**0460/23**

Paper 2 Geographical Skills

October/November 2024

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 2024 series for most Cambridge IGCSE, Cambridge International A and AS Level components, and some Cambridge O Level components.

This document consists of **9** 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 descriptions 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.

Marking Annotations

Examiners must use the following annotations:

Annotation	Meaning
	Correct point
	Incorrect point
BOD	Benefit of the doubt given
NAQ	Material that does not answer the question
REP	Point has been repeated
TV	Point is too vague
LNK	Two or more ideas or paired data have been linked together for credit
^	Omission mark; the answer does not go quite far enough to gain a mark
Highlight	Highlight used to show a significant part of the response or can be used with another annotation e.g. IRRL
[]	Brackets used to show a significant part of the response or can be used with another annotation e.g. LNK
SEEN	Used to show that questions with no response have been checked and all additional pages have been checked

Question	Answer	Marks
1(a)(i)	Tarred road	1
1(a)(ii)	Sibla	1
1(a)(iii)	560	1
1(a)(iv)	Path <u>with signs</u>	1
1(a)(v)	Mastanico	1
1(b)	121 575	1
1(c)(i)	Linear	1
1(c)(ii)	Along/on/next to/in/by the road/river/valley Between river and steep slopes	1
1(d)(i)	1800 m	1
1(d)(ii)	SE/SSE	1
1(e)(i)	River/F Chiese/difficult path/boundary of the municipality	1
1(e)(ii)	Main road (with 2 and 4 lanes)	1
1(e)(iii)	Peak at 450 m (440–460m) Meets left axis at 300–350m	2
1(f)	River: Flowing S/SSE/SE or from N/NNW/NW; Variable width; Islands/splits and rejoins/eyot; Tributaries/confluence; Meandering; Straight sections. Valley: Steep (sides); Flat (floor/in the valley)/flat land on (both) sides of river; Flood plain; U-shaped; Narrow; Variable width; N/NNW/NW – S/SSE/SE direction; NOTE Reserve 2 marks for each	6

Question	Answer	Marks
2(a)(i)	8000	1
2(a)(ii)	Both increased (overall); Bigger increase in Asia; Asia big increase/more than doubled and Europe slow/small increase /remained steady; Asia from 1300–1400 million to 4500–4600 million/ by 3100–3300 million and Europe from 500-600 million to 700–750 million/ by 100–250 million; NOTE 1 mark for statement, 1 mark for statistics. Million only needed once. Accept calculated difference in range.	2
2(b)(i)	(+) 2	1
2(b)(ii)	(+) 5.9	1
2(c)	Contraception/birth control/family planning/knowledge of family planning; (Greater access to) abortion; More female employment/career; Education of girls; Later marriage; Less infant mortality (or described); Less child labour/farm labour replaced by machinery; Children not needed for economic support/pensions; Children are expensive to bring up/increase in/high cost of living; Effect of government policies; War; Famine.	3

Question	Answer	Marks
3(a)	(Relief) – gently sloping land easier to build on/farm; (Aspect) – sunny side of the valley; (Shelter) – within the valley and sheltered from wind/rain; (Defence) – high land/cliff from which to defend settlement; Stone useful for building/jobs in quarrying/mining; Wood useful for building/fuel; Road can be used for transport/communication/access/trade.	4
3(b)	Positive (correlation); Higher population, the more services/lower population, the fewer services; High population has high services and low population has low services.	1
3(c)(i)	Primary school	1

Question	Answer	Marks
3(c)(ii)	Small sphere of influence – people not prepared to travel far for low order services / there are lots of them/low-cost items/used frequently don't merit travel; Low threshold population – few people needed to justify the provision of low order services/used frequently so need less customer/small number of people/income provides business with enough profit.	2

Question	Answer	Marks
4(a)(i)	4.3	1
4(a)(ii)	Settlement / Withernsea Road	1
4(b)(i)	<i>(Concrete) sea wall/revetment</i> Stops water reaching base of cliff/prevents undercutting; (Sloping so) waves are reflected/deflected/disperses wave energy; Prevent erosion/flooding/barrier to protect land. <i>(Timber) groynes</i> Trap sediment/build up beach; Stop movement by longshore drift/along the coast; Prevents erosion. <i>Rock armour</i> Absorb energy from waves; Traps sediment; Protects the cliff/prevents undermining of sea wall/prevents erosion.	2

Question	Answer	Marks
4(b)(ii)	2 for advantages and 2 for disadvantages <i>(Concrete) sea wall</i> <u>Advantages:</u> Prevents erosion/flooding; Strong/stable; Different designs; Can incorporate promenade/walkway; Safe for public; (Relatively) long term use; Doesn't use up part of the beach. <u>Disadvantages:</u> Poor energy absorption; Wave reflection can destabilise beach; Expensive to build/maintain; Take a long time to construct; Visually intrusive; Can make it difficult to access beach; Destroys coastal habitat. <i>(Timber) groynes</i> <u>Advantages:</u> Effective in beach building; Constructed relatively easily/quickly; Cheap; Prevents/reduces effects of longshore drift. <u>Disadvantages:</u> Frequent maintenance/doesn't last long; Wood rots; Not attractive; Obstructs people movement along the beach; Down-drift material depletion. <i>Rock armour</i> <u>Advantages:</u> Long lasting; Good energy dissipation; Can be used in exposed sites; Requires little ongoing maintenance; Constructed relatively easily/quickly; Cheaper than sea wall; <u>Disadvantages:</u> Expensive to purchase/transport boulders; Unsafe for public; Unattractive.	4

Question	Answer	Marks
5(a)	A – Condensation B – Precipitation / rainfall C – Interception D – Surface run-off/overland flow	4
5(b)	Reserve 1 for each part <u>Evapotranspiration</u> Combination of evaporation and transpiration; Evaporation is change in state of water from liquid to gas/water changed to water vapour; Transpiration is water returned to atmosphere from leaves. <u>Groundwater flow</u> Water moving through rock/aquifer; Permeable/porous/cracks; Downhill/gravity.	4

Question	Answer	Marks
6(a)	Natural inputs – relief Human inputs – labour Processes – planting Outputs – vegetables 1–2 correct = 1 mark 3–4 correct = 2 marks	2
6(b)	NOTE All bullet points can score, but don't double credit. <i>Increase in temperatures will:</i> • increase yields; • increase length of growing season; • reduce frosts. <i>Increase in heavy precipitation will:</i> • reduce yields; • destroy crops; • increase soil erosion; • flood fields. <i>Increase in flooding will:</i> • reduce amount of land used for agriculture; • destroy crops; • kill animals; • produce nutrient-rich soil; • cause salination of soil; • bring water-borne disease/contaminants affecting animals/farmers. <i>Decrease in precipitation/droughts/increase in evapotranspiration will:</i> • increase water demand; • increase costs for farmers; • mean lack of water for animals; • cause salination/degraded soil/damaged land. <i>Reduced yields will mean:</i> • less income for farmer; • increase prices; • decrease exports; • shortage of food; • lead to less farmers/less employed in agriculture. <i>Increased yields will mean:</i> • more income for farmer; • reduce prices; • Increase exports. <i>Changes in conditions will:</i> • change areas in which crops are grown; • cause diversification.	6