

# Cambridge IGCSE™

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**GEOGRAPHY****0460/22**

Paper 2

**February/March 2025****MARK SCHEME**Maximum Mark: 60

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**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 February/March 2025 series for most Cambridge IGCSE, Cambridge International A and AS Level components, and some Cambridge O Level components.

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This document consists of **13** 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.



**Annotations guidance for centres**

Examiners use a system of annotations as a shorthand for communicating their marking decisions to one another. Examiners are trained during the standardisation process on how and when to use annotations. The purpose of annotations is to inform the standardisation and monitoring processes and guide the supervising examiners when they are checking the work of examiners within their team. The meaning of annotations and how they are used is specific to each component and is understood by all examiners who mark the component.

We publish annotations in our mark schemes to help centres understand the annotations they may see on copies of scripts. Note that there may not be a direct correlation between the number of annotations on a script and the mark awarded. Similarly, the use of an annotation may not be an indication of the quality of the response.

The annotations listed below were available to examiners marking this component in this series.

**Annotations**

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

The points below supplement the RM Assessor Guide.

- 1 The mark scheme allows one mark per correct point. The points in the mark scheme are generally written on single lines, separated by commas.
- 2 Allow all reasonable alternative expressions and terms.
- 3 Alternative answers are indicated by a forward slash (/).
- 4 Non-essential parts of an answer are placed in brackets (.....).
- 5 For clarification, essential parts of an answer may be underlined in the mark scheme.
- 6 Please use the RM Assessor marking tools whenever you think there is a need to explain why marks have, or have not, been awarded.
- 7 In all answers, it is possible to score more than one mark per line of writing, including where numbered spaces are provided for the candidate's answer.
- 8 Where a candidate's answer extends beyond the marking mode screen view or onto additional pages, go into the whole script view to continue reading the answer. Link the additional text to continue marking. Your team leader will explain this process if necessary.
- 9 Where the ruler or protractor is used in a question, please remember that these are very precise and measure to a greater degree of accuracy than the thickness of a pencil line. Don't insist on unrealistic accuracy.
- 10 Put 'SEEN' on all blank pages at the start of the script and attach any additional pages used to the relevant question(s).
- 11 Please consult your team leader where further guidance is needed, if possible using the RM Assessor messaging system.

Question	Answer	Marks																
1(a)(i)	(marked) footpath.	1																
1(a)(ii)	cultivated area/farming/cultivation.	1																
1(a)(iii)	Euroroute/national road/County road.	1																
1(a)(iv)	147 <u>m</u> .	1																
	For (a)--(iv) credit first answer given.																	
1(b)	308356.	1																
1(c)(i)	NE.	1																
1(c)(ii)	3.5 km (tolerance 3.4–3.6 km). If answer is given in metres, km must be crossed out and replaced with metres.	1																
1(c)(iii)	40 ° (tolerance 39 °–42 °).	1																
1(d)	information; (car) ferry; car park/parking; camping cabins/camp site cabins; caravan site/camp site = 0 nature reserve/conservation area; swimming (place/pool); marked footpath; viewpoint.  Allow any 3 correct answers. = 0 hotel.	3																
1(e)(i)	<table><tr><th>settlement</th><th>Oanes</th><th>Forsand</th><th>Rettedal</th></tr><tr><td>dominant building</td><td>x</td><td>✓</td><td>x</td></tr><tr><td>farm house</td><td>✓</td><td>✓</td><td>✓</td></tr><tr><td>dwelling house</td><td>✓</td><td>✓</td><td>✓</td></tr></table> All 3 correct for 2 marks. 2 or 1 correct for 1 mark.	settlement	Oanes	Forsand	Rettedal	dominant building	x	✓	x	farm house	✓	✓	✓	dwelling house	✓	✓	✓	2
settlement	Oanes	Forsand	Rettedal															
dominant building	x	✓	x															
farm house	✓	✓	✓															
dwelling house	✓	✓	✓															
1(e)(ii)	Forsand (has a dominant building and a church).	1																

Question	Answer	Marks
1(f)	<ul style="list-style-type: none"> <li>meanders/bends/curves/winds/zig-zags;</li> <li>islands/eyots/braiding;</li> <li>flows from NE/to SW/mouth is to the SW;</li> <li>variable width/gets wider/narrower/widens;</li> <li>enters lake/Hogsfjorden/sea (near Helle);</li> <li>tributaries/confluences.</li> </ul> <p>= ^ tributaries towards the SE/flow SE.</p> <p>= 0 oxbow lakes, joining The Helle.</p>	3
1(g)	<p>3232 to 3531 on flat(ter)/plain/gentle land/on/between gentle gradient/on lowland/between hills/in/on valley floor; avoids steep slopes = 0</p> <p>3530 to 3528 along/through valley/ between/avoids hills / by the lake side/ on flatter land (next to steep areas) /along the coast/on gentler land; between the valleys = 0; towards/meets the coast / gentle slope = ^</p> <p>3628 to 4031 at the base of steep slopes/follows/along/follows (river) valley/valley floor/parallel/to river/ flat(ter)/plain land next to steep areas/flat(ter)/plain land to its SE/E/on gentle gradient/on low(er) land; near/river/lake/water body/N of Espedals lake = 0</p> <p>No credit for reference to the direction the road takes. Allow flatter land (near to steep areas) only twice. Reserve 1 for each section.</p>	3

Question	Answer	Marks
2(a)(i)	choropleth map.	1
2(a)(ii)	<p>&lt; 1 person per sq km (Reserve 1)</p> <ul style="list-style-type: none"> <li>in S/SW/SSW;</li> <li>in the centre/inland/middle.</li> </ul> <p>100 +&gt;100 people per sq km (Reserve 1)</p> <ul style="list-style-type: none"> <li>in E/SE;</li> <li>coastal;</li> <li>in the north.</li> </ul> <p>= ^ near the S. Pacific Ocean (TV), uneven distribution, edge of the map.</p>	3
2(b)	<p>4.4 people per sq km (accept 4.3 to 4.5) (<math>55760 \div 12555</math>)</p> <p>4 people per sq km (since rounded down to the nearest whole number)</p> <p>Mark is for the correct answer not the calculation.</p>	1

Question	Answer	Marks
2(c)	<ul style="list-style-type: none"> <li>high(er) density on lowlands/below 200 m/density increases as altitude decreases/inverse relationship;</li> <li>low(er)/less density on higher land/on the highlands/density decreases as altitude increases;</li> <li>relationship is not perfect/weak/is not very clear in places/not very proportional;</li> <li>in the south/south-west there is lowland but a low population.</li> </ul> <p>Allow inverse relationship only once.</p> <p>= ^ there are flat areas with low population density (needs where).</p> <p>= 0 no correlation between population density and relief, no reference to relief/population categories unless stated in MS.</p>	2
2(d)	<ul style="list-style-type: none"> <li>climate/weather/temperature/rainfall;</li> <li>vegetation/forest;</li> <li>presence of rivers/lakes/water supply/water bodies/the sea;</li> <li>presence of raw materials;</li> <li>soils.</li> </ul> <p>Allow any correct answer.</p> <p>= ^ fish/fishing, natural hazards, named hazards, e.g. earthquakes/volcanic eruptions/tropical storms/ tsunamis.</p>	1

Question	Answer	Marks
3(a)	<ul style="list-style-type: none"> <li>general increase/world population has increased;</li> <li>biggest increase in sub-Saharan Africa;</li> <li>Latin America/the Caribbean have decreased/all regions have increased apart from Latin America and the Caribbean.</li> </ul> <p>Allow points even if urban population living in squatter settlements is not mentioned.</p>	2
3(b)(i)	<ul style="list-style-type: none"> <li>A collection of buildings/settlement where people have no legal rights to the land they are built on/people are living there illegally/on land not owned or rented by its inhabitants; unofficial = ^</li> <li>An area of crowded/low quality/temporary housing/slum <u>occupied by</u> (urban) poor people/people who have a poor living standard.</li> </ul> <p>= 0 slum on its own (needs the two parts for the second point), no credit for description of housing materials.</p>	1

Question	Answer	Marks
3(b)(ii)	<ul style="list-style-type: none"> <li>• multi-storey/built on top of one another; vertical zoning = ^</li> <li>• cramped for space/no proper separation between houses/densely packed with no space; small/compact = ^</li> <li>• no set pattern/unplanned;</li> <li>• roofs of different materials;</li> <li>• made of flimsy/low quality materials/weak structure/prone to collapse/made of wood rather than stone/brick;</li> <li>• patched up with brick in a few places;</li> <li>• made of recycled materials/materials that can be found (e.g. corrugated iron);</li> <li>• sloping roofs/corrugated iron/tin roofs flat roofs = ^</li> <li>• some have windows/open spaces for windows/window with bars/small windows/windows which lack glass;</li> <li>• windows on its own = ^</li> <li>• cracks in the building structure/damaged walls/poorly maintained.</li> </ul> <p>Expect arrows to point to the correct places, e.g. for cracked structures.</p> <p>= ^ list of features, e.g. bricks, antenna, window, steps, temporary housing/rooftops/sheds, unstable.</p> <p>= 0 washing hung out to dry on main streets (not housing), community spirit, people know each other and socialise together (not housing), low standard of housing (not housing), lack doors/infrastructure.</p>	<b>3</b>



Question	Answer	Marks
3(c)	<ul style="list-style-type: none"> <li>self-help workforce means the cost of labour is reduced/residents put more effort into its building/they can help with the building/repairs of homes and have more responsibility/people are in control and can help each other;</li> <li>interest free loan means residents will find it easier to pay back/makes borrowing cheaper/easier/can afford proper shelter/better housing;</li> <li>building materials are reused therefore saving money;</li> <li>best use of space means a large number of people can be accommodated/provides room for facilities such as toilets/sanitation/services/houses not packed so less spread of disease;</li> <li>water means there will be less chance of disease spreading (through dirty water);</li> <li>sewerage/waste disposal/sanitation means less waste left on the street/reduces the risk of cholera/promote healthier lives;</li> <li>electricity means safer environment (lights provided)/people can work longer hours.</li> </ul> <p>(needs to go beyond providing basic resources/needs/hygiene/clean water/free services)</p> <p>Each reference to an increase in quality of life must be linked to a solution.</p> <p>= 0 no credit for allowing people to move out of squatter settlements since question is about quality of life of those in squatter settlements, improves quality of life (in question).</p>	2

Question	Answer	Marks
4(a)(i)	<p><i>Name</i></p> <ul style="list-style-type: none"> <li>a spit (Reserve 1)</li> </ul> <p><i>Description</i></p> <ul style="list-style-type: none"> <li>finger shaped projection/long/narrow piece of land/extended/elongated section of land/extension of mainland;</li> <li>stretches out into the sea/across the river/estuary;</li> <li>tapered to a point.</li> </ul> <p>Allow correct description if feature named incorrectly – avoid ECF.</p> <p>= 0 curving inward /refraction = 0 (not shown in Fig. 4.1), no credit for processes of formation/sand/shingle.</p>	3
4(a)(ii)	<p>Arrow pointing horizontally to the left (to the south) in an appropriate position = longshore drift (1 mark).</p> <p>Arrow pointing obliquely towards the top left of the map/(to the SW) in an appropriate position = main wind/wave direction (1 mark)</p> <p>Must have an arrow to score. Arrows can be anywhere along the coast, but not in the river. Longshore drift arrow needs to be on the N side of the estuary.</p>	2

Question	Answer	Marks
4(b)	<p><i>activity</i></p> <p>swimming</p> <p>water sports</p> <p>recreation/leisure</p> <p>tourism</p> <p>harbour/port</p> <p>fishing</p> <p>industry</p> <p>settlement/town/housing</p> <p>sun-bathing</p> <p>children playing/building sand castles</p> <p>Allow the same evidence only once. But evidence can be interchangeable between the activities. Allow trade as an activity. Allow ships for boats. = ^ boating due to boats, water sports since coast surrounded by water, hotels since building built near coast (TV), industries to use water for industrial purposes, boats for transport (too vague), ferries. = 0 infrastructure/employment/coast on their own (TV). shops.</p> <p><i>evidence</i></p> <ul style="list-style-type: none"> <li>– river/beach/beach huts (for changing)/people in water;</li> <li>– kayaks/canoes/sailing boats;</li> <li>– walking on the sandy spit area/beach huts/picnics on sand/wind-breaks/motor boats/boat trip/hotels;</li> <li>– beach/pier/hotels/parking; restaurants = ^</li> <li>– sheltered position behind the spit/beach/trade;</li> <li>– presence of boats/port/river;</li> <li>– adjacent to port (to service boats);</li> <li>– sheltered by hills/coastal location (for trade)/flat land;</li> <li>– people lying on beach.</li> <li>– beach</li> </ul>	3

Question	Answer	Marks
5(a)(i)	Active.	1

Question	Answer	Marks
5(a)(ii)	<ul style="list-style-type: none"> <li>gentle/gradual slopes;</li> <li><u>bare</u> rock/rocky//<u>bare</u> slopes/no vegetation/soil/barren; unused land = 0</li> <li>crater/caldera/vents;</li> <li>secondary/parasitic cone/secondary crater/secondary/side vents; (allow secondary only once)</li> <li>fissure/cracks;</li> <li>smoke/steam/gases/fumes; emissions = ^</li> <li>ash; (for 'ash cloud' allow 1 mark for ash)</li> <li>lava;</li> <li>dissected slopes/gullies/ridge;</li> <li>wide/broad. (ignore 'base')</li> </ul> <p>= ^ flat.</p> <p>= 0 high, colours, holes, uneven, steep, flat(ter), not very tall, conical, pyroclastic flow, magma, dome.</p>	4
5(b)	<p>Strato-volcano:</p> <ul style="list-style-type: none"> <li>is (more) explosive/violent eruption;</li> <li>has steep(er) sides/gradient;</li> <li>has a narrower base;</li> <li>more conical;</li> <li>unpredictable/less frequent (v continuous eruption);</li> <li>more prone to landslides;</li> <li>acidic lava v basaltic/basic lava/alkaline; (needs both sides for credit)</li> <li>covers a smaller (area);</li> <li>its lava has greater silica content;</li> <li>its lava is slower/the viscosity of the lava is great(er)/lava is thick(er)/has viscous/lava; viscous/thick without term lava = ^</li> <li>the temperature of its lava is higher;</li> <li>builds up from layers of ash and lava compared with mainly just lava (shield volcano);</li> <li>prone to pyroclastic flows/lahars;</li> <li>ejects lava bombs.</li> </ul> <p>Comparison can be from the shield volcano perspective, providing it is made clear.</p> <p>= ^ more dangerous (why?), taller, emits small clouds of gases, narrower top.</p> <p>= 0 lava moves faster, bigger magma chamber, less side vents, smaller crater, emits poisonous gases = 0 (both do!).</p>	2

Question	Answer	Marks
5(c)	<ul style="list-style-type: none"> <li>• lava is infertile/ not sufficiently weathered/barren/lacks soil;</li> <li>• the volcano has recently erupted lava;</li> <li>• temperature is too hot;</li> <li>• it's too dangerous/risky(for farming)/volcano is active/can erupt any time;</li> <li>• some slopes are too steep;</li> <li>• lack of water/slopes won't hold water;</li> <li>• emissions of ash and smoke unhealthy for crops.</li> </ul> <p>= ^ uneven land, too much pollution, rugged.</p>	1

Question	Answer	Marks
6(a)(i)	<p>Main areas in:</p> <ul style="list-style-type: none"> <li>• N/W/NW;</li> <li>• SE/extreme S/southern tip;</li> <li>• <u>small areas/fewer/less/only two</u> in the East; two in E = ^</li> <li>• on <u>W/SE</u> coast/Indian Ocean coast; W coast = 2</li> <li>• uneven/unequal distribution.</li> </ul> <p>= 0 scattered/clustered/random, NW coast, coasts on its own.</p>	2
6(a)(ii)	<ul style="list-style-type: none"> <li>• circle divided into slices/4 sectors/portions/segments/angles/plot the degrees in a circle;</li> <li>• each segment represents the proportion/percentage of total water consumed by a use (e.g. irrigation);</li> <li>• convert % figures into degrees/x 3.6 since already in %/÷100 X 360;</li> <li>• create a key and colour code/use a pattern for each sector.</li> </ul>	2

Question	Answer	Marks
6(b)	<p><i>Advantages</i> (Reserve 1)</p> <ul style="list-style-type: none"> <li>• can supply large numbers of people/<u>increased</u> water (supply)/large amount of water;</li> <li>• stores water (in times of drought)/more reliable supply/water available all year round/famines avoided/less water shortages/ water supply in times of emergency; no shortage of water = ^</li> <li>• can irrigate <u>a large area/extend area</u> under cultivation/greater food supply due to increased irrigation;</li> <li>irrigation easier = ^ (too vague on its own)</li> <li>• prevents flooding (and therefore loss of crops);</li> <li>• less diseases/better hygiene due to availability of clean water;</li> <li>• jobs created in <u>building/maintenance</u> of the reservoir.</li> </ul> <p>Better answers will note reference to a large reservoir. No credit for a list of uses of the water.</p> <p>= 0 ref. to HEP, reduces water wastage.</p> <p><i>Disadvantages</i> (Reserve 1)</p> <ul style="list-style-type: none"> <li>• expensive to build/dam construction is expensive/LEDCs can't afford it/expensive to maintain; expensive on its own = ^</li> <li>• may take many years to build/time consuming;</li> <li>• can increase the country's debts;</li> <li>• high rates of evaporation;</li> <li>• eroded material deposited behind dam/causes dam to silt up/land below dam is less fertile;</li> <li>• requires a large area of land (to be cleared);</li> <li>• may prevent fish migration/environmental damage to wildlife habitats as trees removed/deforestation of large area; allow habitat destruction interferes with river's flow = ^</li> <li>• floods existing settlements/village need to be relocated;</li> <li>• may reduce water supplies downstream;</li> <li>• may cause habitats for disease carrying insects (such as mosquitoes)/aids spread of diseases such as malaria;</li> <li>• loss of quality agricultural land;</li> <li>• noise pollution/disturb natural beauty/visual pollution (during construction);</li> <li>• increasing the frequency of earthquakes (e.g. Koyna Dam).</li> </ul> <p>= ^ lack of skilled labour to manage the reservoir.</p> <p>= 0 no credit for flooding due to the dam breaking, unsuitable climate for reservoirs (TV).</p>	4