



Cambridge IGCSE™

GEOGRAPHY

0460/42

Paper 4 Alternative to Coursework

March 2020

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.

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This document consists of **8** 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)	<p>Wind picks up sand and moves it up the beach Friction with an obstacle on the beach slows down the wind Sand is deposited around the obstacle and the dune begins to grow The growth of marram grass helps to stabilise the dunes</p> <p>4 correct = 3 marks, 2 or 3 correct = 2 marks, 1 correct = 1 mark</p>	3
1(b)	<p>Ranging poles: Poles between two breaks of slope (1) Ensure they are vertical (1) Must rest on surface, (1)</p> <p>Tape measure: Lay it out between the two poles (1) Measure the distance between poles (1)</p> <p>Clinometer: Hold clinometer next to top on a ranging pole / at eye level (1) Sight other ranging pole at top (1) Allow clinometer to adjust to angle (1) Read off / measure angle (1)</p> <p>Reserve 1 mark for <u>use of</u> each piece of equipment (1R + 1R + 1R) + 3</p>	6
1(c)	<p>Hypothesis is true / correct – 1 mark reserve</p> <p>The dune features are in the same order as the textbook OR Embryo – fore – main – fixed (1) NOTE: Can be in reverse order if correct. Embryo matches (2), fore (4), main (10), fixed (14) OR ref to distance from sea i.e. E-10, F-40, M-140, F-230 (1) Relative height of the four dunes is the same as the textbook model (1) Main – fixed – fore – embryo (1)</p> <p>If no hypothesis conclusion credit evidence</p> <p>(1HA + 1 + 1)</p>	3
1(d)(i)	Quadrat	1
1(d)(ii)	Site 9	1
1(d)(iii)	Plot 35% vegetation cover at site 7	1

Question	Answer	Marks
1(d)(iv)	<p>Hypothesis is partially supported – 1 mark reserve</p> <p><u>Agree</u>: Any 2 percentages and 2 site numbers that show increase. e.g. Percentage of cover increases from 0% at site 1 to 90% at site 14 (1)</p> <p><u>Disagree</u>: Any 2 percentages and 2 site numbers that show decrease. e.g. Percentage of cover is 90% at site 11 and 20% at site 12 (1)</p> <p>If no hypothesis conclusion credit evidence</p> <p>NOTE: Accept data if no units e.g. 90 instead of 90% is OK (1HA + 1 + 1)</p>	3
1(e)	<p><u>Examples</u> Another student checks measurements (1) Take more measurements / more sites / intervals and <u>average</u> results (1) Measure along more than one dune profile/another part of beach (1)</p> <p>(1 + 1)</p>	2
1(f)(i)	<p><u>Examples</u> Photograph / take sample / sketch / write a description of vegetation (1) Look up in book / internet / app / vegetation chart (1) Ask ranger / teacher / expert / farmer (1)</p> <p>(1 + 1)</p>	2
1(f)(ii)	Plot 4 species at site 10 – line not needed.	1
1f(iii)	<p><u>Examples</u> Number of species does vary between sites / increases / decreases / no regular pattern (1) Any 2 sites with different numbers e.g. Site 2 is 7 and Site 3 is 2 (1) Number varies between 0 and 7 (1) Overall more species at sites furthest from the sea (1) Some anomalies e.g. 6 and 7 same (1)</p> <p>(1 + 1 + 1)</p>	3

Question	Answer	Marks
1(g)	<p>1 mark reserved for each method. Must state method plus how it works.</p> <p><u>Examples</u></p> <p>Method 1 The sign/keep off the dunes – should prevent people trampling/walking over them (1)</p> <p>Method 2 The footpath / boardwalk / bridge allows people to cross dunes / not walking on them (1)</p> <p>Method 3 Planting grass / plants / vegetation to help stabilise dunes / stops erosion (1)</p> <p>Method 4 Walkway / fencing keeps people off the dunes / stops walking on dunes (1)</p> <p style="text-align: right;">(4 × 1)</p>	4

Question	Answer	Marks
2(a)	A zone where both rural and urban land uses are located	1
2(b)(i)	<p><u>Examples</u></p> <p>Original shape is linear (1)</p> <p>In three parts/ groups / discontinuous (1)</p> <p>Built along / around / next to a road / old road (1).</p> <p>Near / next to river (1)</p> <p style="text-align: right;">(1 + 1)</p>	2
2(b)(ii)	<p><u>Examples</u></p> <p>Village has grown / expanded / spread / developed in size (1)</p> <p>On both sides / along / around / away from the <u>old</u> road (1)</p> <p><u>Between</u> the old road and the by-pass (1)</p> <p>Most expansion between 1960 and 1985 (1)</p> <p style="text-align: right;">(1 + 1)</p>	2
2(b)(iii)	<p>Credit 1 mark reserve for location and 1 mark for reason. If wrong location is chosen = 0</p> <p>Location 3 (1R)</p> <p>Shows old houses / built before 1960 (1)</p> <p>Shows linear housing (1)</p> <p>Shows old road through village (1)</p> <p style="text-align: right;">(1R + 1)</p>	2

Question	Answer	Marks
2(c)	<p>1 mark reserve for Method and 2 for explanation. If method incorrect can credit explanation if is appropriate for the methods below.</p> <p>NOTE: in Systematic/Random must give some ref. to method to get the 'avoids bias' mark. On its own 'avoids bias' not enough.</p> <p>Systematic sampling (1R) Quick method / reliable / saves time (1) Picks every nth person so <u>avoids bias / is fair test</u> (1)</p> <p>OR</p> <p>Random sampling (1R) Quick method / reliable / saves time (1) Pick anybody on the street so <u>avoids bias / is fair test</u> OR Random numbers / picking numbers out of a hat so <u>avoid bias / is fair test</u> (1)</p> <p>OR</p> <p>Stratified (1R) Reliable / fair test (1) Covers age/gender OR get balance of people / representative sample (1)</p> <p style="text-align: right;">(1R + 1 + 1)</p>	3
2(d)(i)	<p>Plot peaceful = 7% and attractive scenery = 3%. Tolerance 10/12° from north.</p> <p>1 mark for line, 1 mark for shading</p> <p style="text-align: right;">(1 + 1)</p>	2
2(d)(ii)	<p>Hypothesis is false / incorrect – 1 mark reserve</p> <p>Most / majority people have other reasons why they live in the village (1) 89% or 63/71 have other reasons / 11% or 8/71 born in the village (1R)</p> <p>Main reason / most / majority live there for easy access to work (1) 63% or 45/71 live there for easy access to work (1R)</p> <p>If no hypothesis conclusion credit evidence</p> <p style="text-align: right;">(1HA + 1 + 1R)</p>	3
2(d)(iii)	Plot flow line to show 6 work in Bridlington	1

Question	Answer	Marks
2(d)(iv)	<p>Hypothesis is true / correct – 1 mark reserve</p> <p><u>Within 20 km from village</u> Most / more than 2/3rd / around ¾ work in 5 places / Hornsea, Beverley, Hull, Driffild and Tickton OR half work in Beverley and Hull (1) e.g. 37/52 (72%) work within 20km OR 26/52 (50%) in Beverley and Hull(1R)</p> <p>OR</p> <p><u>More than 20 km from village</u> Few / less than 1/3rd / around ¼ work in 2 places / York and Bridlington (1) e.g.15/52 (28%) work beyond 20 km (1R)</p> <p>If no hypothesis conclusion credit evidence</p> <p style="text-align: right;">(1HA + 1 + 1D)</p>	3
2(e)(i)	Secondary	1
2(e)(ii)	Plot 752 in 1971 and 1053 in 1981; 1 mark per plot No credit for line	2
2(e)(iii)	Credit only trends not data	2
2(e)(iv)	<p><u>Examples</u> Destruction of fields / vegetation / farmland / woodland / loss of trees / land cleared (1) Loss of habitats / reduction in wildlife (1) Air pollution / traffic fumes / exhaust gases (1) Noise <u>scaring animals</u> (1) Litter <u>eaten by animals</u> / causes water pollution (1)</p> <p style="text-align: right;">(1 + 1)</p>	2

Question	Answer	Marks
2(f)	<p><u>Generic answers.</u> Devise a hypothesis or example of hypothesis (1) Carry out a pilot survey (1) Count / tally number or type of shops and services (1)</p> <p><u>Then One Method only such as:</u> Get a map / draw a sketch map of village (1) Take photographs (1) Plot / mark / note down / on map shops and services (1) Make sure cover all village (1) Identifying / classify different types / order of shops and services (1)</p> <p>OR</p> <p>Questionnaire / interview / survey / ask people (1) Decide where OR when to do Q (1) Example of Q e.g., which shops using / where from / how often (1 MAX for question) Explain purpose / be polite (1) Ask a cross-section of people in village (1)</p> <p style="text-align: right;">(4 × 1)</p>	4