



Cambridge O Level

GEOGRAPHY

2217/03

Paper 3 Geographical Investigations

For examination from 2020

MARK SCHEME

Maximum Mark: 60

Specimen

This document has **6** pages. Blank pages are indicated.

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)		2
	Source;	1
	Mouth.	1
1(b)(i)	<u>Examples</u> check measurement by repeating process <u>and take average</u> ; another student/pair <u>checks</u> the measurement; make sure the tape is taut/stretched out/tight/flexed; make sure the tape is at right angles/straight across the river.	2
1(b)(ii)	Plot width of 7.6 at site 6.	1
1(b)(iii)	One mark is available for a diagram that shows measuring depth of river or a cross-section. <u>Three</u> marks maximum for labelling. Diagram to show labels in correct context: measuring stick/pole/ruler (must be labelled and in the water); vertical; equal distance apart; pole/ruler <u>touches bed</u> ; water level/river/water named; measure section which is wet; tape measure across river; one ranging pole on each bank.	4
1(b)(iv)	Two correct plots at site 4.	3
	Plot at 6.4/0.4;	1
	Plot at 8.0/0.32;	1
	Shade in cross-sectional area.	1
1(b)(v)	2.4×0.27 i.e. width \times average depth. Accept international conventions i.e. ['] instead of [×] and [,] instead of decimal point. Ignore any calculated figure they provide.	1
1(b)(vi)	' <u>partially</u> ' – 1 mark is available. <u>Supports</u> : Area increases from site 1 to site 5/increases from 0.65 sq m to 5.93 sq m (1 mark maximum); <u>Does not support</u> : Area at site 6 is smaller than/decreases from site 5;/decreases to 3.57 sq m at site 6 from 5.93 sq m at site 5 (1 mark maximum). If candidates state that site 6 is anomaly, they need to give a reason why.	3

Question	Answer	Marks
1(c)(i)	Candidates need to mention each piece of equipment once for each mark; 1 mark maximum for each piece of equipment. <u>Examples</u> put <u>poles/sticks/rods</u> at fixed distance/>5 up to 10 metres along river/at start and end of fixed distance; use <u>tape measure</u> to measure a fixed distance/10 metres; put <u>orange</u> in river at start of measured distance; start <u>stopwatch/timer/watch</u> when orange/ball is put in river/ <u>stopwatch/timer/watch</u> measures time it takes to travel the measured distance/ stop <u>stopwatch/timer/watch</u> when orange reaches end of measured distance.	4
1(c)(ii)	Complete bar plot at <u>0.67</u> for site 6. No credit for shading.	1
1(c)(iii)	Examples of evidence that does NOT support hypothesis. Can refer to any two sites that provide relevant evidence: velocity at sites 1 and 2 are identical/both are 0.29 m/s; velocity at site 3 faster than site 4/with 0.58 m/s compared to 0.46 m/s; velocity is slowest at site 5/being the lowest figure of 0.21 m/s all others are 0.29 m/s or higher. One mark is available for paired data. Note: there is no hypothesis mark here as the choice decision is given in the stem.	3
1(d)(i)	Plot data of 3.57 sq m (Area) and 0.67 m/sec for site 6 on scatter graph. Plot must be an x with 6 written by it.	1
1(d)(ii)	<u>Evidence for partial relationship</u> <u>Credit paired data (need four figures) to show positive relationship.</u> There is a <u>positive</u> correlation between results <u>at four sites</u> OR refers to relationship at any <u>three of sites</u> 1, 2, 3 or 6 that supports hypothesis. e.g. site 2 area 1.15sq m and velocity 0.29 m/s both increase at site 6 to 3.57 sq m and 0.67 m/s Site 5, however, is an anomaly <u>because</u> it has the largest area but lowest velocity. One mark maximum is available for anomaly.	3
1(d)(iii)	<u>Examples:</u> large area so less water is in contact with sides/bed of channel so there is less friction to slow river down; small area so more water is in contact with sides/bed of channel so more friction/rocks slow water down.	2

Question	Answer	Marks
2(a)(i)	Clothes and shoe shop	1
2(a)(ii)	Bank labelled <u>Fj</u> in box Y on Fig 2.1.	1

Question	Answer	Marks
2(a)(iii)	Entertainment	1
2(a)(iv)	<u>Examples</u> Mainly in the south; Mainly west/south west of the main road OR Forest Street/south of Finn Lane. <u>NOT</u> : At bottom of map, to left of road.	1
2(a)(v)	<u>Examples</u> : food shops are more clustered/two clusters; specialist non-food shops are more spread out/dispersed. <u>Needs to be a comparison.</u>	2
2(b)(i)	Secondary source	1
2(b)(ii)	Graph completion; 1 mark per bar. Food shops –7 Entertainment +4	2
2(b)(iii)	Hypothesis is <u>true</u> . 1 mark reserved for hypothesis conclusion plus 3 further marks for supporting evidence including statistics of change. <u>Evidence</u> : overall shop numbers have gone down/from 60 to 48; decrease in clothes/food/specialist non-food shops/from 8 to 5/20 to 13/29 to 26; overall number of services has gone up/from 33 to 34; increase in entertainment/from 5 to 9; decrease in finance/from 9 to 7; decrease in total number of shops and services/from 93 to 82; decrease in offices/from 2 to 1; only <u>other services</u> stayed same at 17 each year.	4
2(c)(i)	<u>Examples</u> : young people/under 16 at school; working people/20 to 60 age group are at work so cannot shop; over 60s/retired can go shopping during the day; used random/systematic sampling system/did not use stratified.	2
2(c)(ii)	<u>Examples</u> : repeated survey before/after working day/school hours; repeated survey on non-working days/weekends; keep a check of number in different age groups as they do the survey/limit numbers in each age group; stratified sampling targeting equal age totals.	1
2(d)(i)	<u>Completion of pie graph</u> : once a month: 20; less than once a month: 17. 1 mark for dividing line at 83% 1 mark for shading in order of key/table If dividing line is wrongly located at 20% from top, only give shading mark if the two slices are shaded correctly i.e. largest slice once a month.	2

Question	Answer	Marks
2(d)(ii)	<p><u>Completion of divided bar graph:</u> retail park 40 and other town or city 22.</p> <p>1 mark for dividing line at 78% 1 mark for shading in order of key/table</p> <p>If dividing line is wrongly located at 40% from right, only give shading mark if the two bars are shaded correctly i.e. largest bar retail park.</p>	2
2(d)(iii)	1. Shops sell specialist goods.	1
	2. Lack of choice when buying goods.	1
2(d)(iv)	<p>No hypothesis mark as decision is given in the stem.</p> <p><u>Evidence:</u> more disadvantages than advantages are given/over twice as many disadvantages; 247/69% disadvantages to 111/31% advantages; three most common answers are disadvantages; more people visit all other shopping centres; only 12% visit town centre/88% shop away from town centre; the largest disadvantage has 77 responses but largest advantage only 39.</p> <p>Credit comparative data to 2 marks maximum (use of 'only' is comparative).</p>	4
2(e)(i)	<p><u>Examples:</u> plot locations/distances/addresses where shoppers came from on a map (1) draw desire lines/flow lines of where customers come from (1) draw a boundary around the plots to show sphere of influence/catchment area (1)</p> <p>Credit also use of the information gained to study relationships between information candidates already have and the new information of knowing where shoppers live.</p> <p>e.g. frequency of shopping in town centre with distance travelled; where people live and preferred shopping area; where people live and main reason for shopping.</p>	3
2(e)(ii)	<p><u>Examples</u> Private information/intrusive question/personal.</p> <p><u>Reason</u> Concern about robbery/harassment in the future/safety/misuse of information.</p>	2