GradeMax

Cambridge Assessment International Education

Cambridge IGCSE™

GEOGRAPHY **0460/42**

Paper 4 Alternative to Coursework **May/June 2020**

MARK SCHEME

Maximum Mark: 60

Published

Students did not sit exam papers in the June 2020 series due to the Covid-19 global pandemic.

This mark scheme is published to support teachers and students and should be read together with the question paper. It shows the requirements of the exam. The answer column of the mark scheme shows the proposed basis on which Examiners would award marks for this exam. Where appropriate, this column also provides the most likely acceptable alternative responses expected from students. Examiners usually review the mark scheme after they have seen student responses and update the mark scheme if appropriate. In the June series, Examiners were unable to consider the acceptability of alternative responses, as there were no student responses to consider.

Mark schemes should usually be read together with the Principal Examiner Report for Teachers. However, because students did not sit exam papers, there is no Principal Examiner Report for Teachers for the June 2020 series.

Cambridge International will not enter into discussions about these mark schemes.

Cambridge International is publishing the mark schemes for the June 2020 series for most Cambridge IGCSE™ and Cambridge International A & AS Level components, and some Cambridge O Level components.

© UCLES 2020

[Turn over

GradeMax

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.

© UCLES 2020

GradeMax

Question	Answer	Marks
1(a)(i)	Examples Impossible / impractical to give the questionnaire to all residents (1) Would take too much time / saves time / need too many researchers (1) Would be too much data to analyse (1)	**1**
1(a)(ii)	Examples Collected by researchers themselves (1) Not obtained from another source (1) Data that has not been collected before (1)	**1**
1(a)(iii)	Examples It is only using the questionnaires with mothers (1) It does not take answers / opinions from males / other females (1) It will probably be used only with mothers of children at the school (1) Using only local school location (1) Answers may be biased / not typical of the whole population (1) It may produce a narrow range of answers (1) (1 + 1 + 1)	**3**
1(a)(iv)	**1 mark Reserve for stating one of these three methods. If not stated can credit valid statements up to 2 max.** **Stratified (1R)**: Find out gender or age balance of residents (1) Ask a balanced number or proportionate number of residents of different age group and gender (1) Sample would be similar to structure of the whole population / not biased (1) **Systematic (1R)**: Choose residents at regular intervals (1) Every nth / tenth resident who passes them (1) Avoids asking people who are together / from same group / family (1) Not biased (1) **Random (1R)**: Use random number table / similar method to produce random numbers (1) Use numbers to identify person to ask / ask 4th/6th/10th etc. (1) Not biased (1) (1R + 1 + 1)	**3**
1(b)(i)	Plot **42** for typhoid in unplanned housing area	**1**

© UCLES 2020

GradeMax

Question	Answer	Marks
1(b)(ii)	Hypothesis is **true** – 1 mark reserve Examples of evidence There are more diseases overall in unplanned housing area (1) There is more cholera / diarrhoea / typhoid (tuberculosis / diabetes) / respiratory disease in unplanned housing area (1) Credit 1 mark MAX/RESERVE for paired data e.g. 233 illnesses in unplanned and only 162 in planned (1) 61 cholera and only 26 in planned (1) If no hypothesis conclusion and credit evidence (1HA + 1 + 1 + 1RD)	**4**
1(c)(i)	Complete pie graph of permanent housing area 1 mark for line at 26% clockwise. 1 mark for correct shading to match key. (1 + 1)	**2**
1(c)(ii)	**NOTE:** the decision **incorrect** has been given to candidates. Examples of evidence More / most / majority residents in both areas use private medical sources (1) Government sources 2nd most used behind private sources (1) **1 mark RESERVE/MAX for comparative data** e.g. 58% private and 36% government in unplanned area (1) e.g. 74% private and 21% government in permanent area (1) (1 + 1 + 1RD)	**3**
1(d)(i)	Examples Would have given an opportunity to test questions / see if the answers were as expected (1) Would save time as students would have checked questionnaire works / improved questionnaire (1) Might have suggested that an extra question could be added to questionnaire (1) Would save time going back to the areas to ask the extra question (1) (1 + 1)	**2**
1(d)(ii)	Complete divided bar graph. 1 mark for plotting lines at 88 and 98 from left. (1) 1 mark for correct shading using key (1) (1 + 1)	**2**

© UCLES 2020

GradeMax

Question	Answer	Marks
1(e)	Examples Build more hospitals / clinics (1) Train / provide more doctors / nurses / staff (1) Improve water supply / piped / clean water (1) Improve sanitation / drainage (1) Refuse / rubbish collection (1) Education about health / preventing illness (1) NGO / charities provide more healthcare facilities (1) (1 + 1 + 1 + 1)	**4**
1(f)	**Credit development of ideas related to various methods up to 2 max.** Examples Talk to people who live in the two areas / interview them / survey **about ….** (**not questionnaire**) (1) Observe / look at / make notes on / write a description of / walk round **something** e.g. housing conditions (1) Take photos of different houses to show varying conditions (1) Collect secondary data from internet / local government records / census (1) Make a podcast / video to show housing conditions (1) Draw field sketches (of houses) and label them to show conditions (1) Do a housing quality survey / bi-polar survey (1) Count / tally different types of building materials / number of brick-built houses (1) (1 + 1 + 1 + 1) or (2max + 1 + 1) or (2 max + 2 max)	**4**

Question	Answer	Marks
2(a)	Wood (1) Planks fastened to posts (1) Located perpendicular to sea / across beach (1) Located within area of pebbles / not on the sandy beach (1) (1 + 1)	**2**
2(b)	Examples Stay in designated area (1) Keep away from base of cliff / overhang (1) Avoid slippery rocks / slippery wood (1) Work in pairs / groups (1) Wear sensible shoes / waterproofs (1) Use phone / whistle in emergency (1) Don’t go in the sea (1) Arrange meeting points / agree time to meet (1) Tell teacher / adult where you are going (1) (1 + 1 +1 + 1)	**4**

© UCLES 2020

Question	Answer	Marks
2(c)(i)	Complete measurements of width = **65mm** & depth = **28mm** (1 + 1)	**2**
2(c)(ii)	Average measurement = $\frac{71+65+28}{3} = \frac{164}{3}$ **= 54.7/54.66mm** Only credit final answer; working is not needed. Error carried forward if **2(c)(i)** measurements are incorrect	**1**
2(d)(i)	Plot measurement **53 mm** on bar graph; ignore shading.	**1**
2(d)(ii)	Pebble **19**	**1**
2(e)(i)	Hypothesis is **true** / **correct / supported / yes** – 1 mark reserve (✓HA) All <u>three</u> sets of measurements decrease in size / get smaller towards sea (1) **Credit 1 MAX/RESERVE for data** that shows decrease; three possibilities. Must give all three measurements. e.g. U1 = 84, M1 = 62, L1 = 44 e.g. U2 = 94, M2 = 58, L2 = 38 e.g. U3 = 102, M3 = 87, L3 = 36 Hypothesis is false / partly true = 0 (XHA) If no hypothesis conclusion ^HA and credit evidence (1HA + 1 + 1RD)	**3**
2(e)(ii)	<u>Examples</u> More powerful swash / strong waves / big waves / storm waves take all sizes of material up the beach (1) Less powerful backwash/ water going back carries smaller material down the beach (1) Erosion more rapid close to the sea where more frequent water movement (1) Rock falls from cliff provide larger material at back of beach (1) (1 + 1 + 1)	**3**
2(f)(i)	*'The conclusion is true for sites L1, L2 and L3'*	**1**
2(f)(ii)	Pebble sizes are **44 mm** at L1, **38 mm** at L2, **36 mm** at L3	**1**
2(f)(iii)	**EITHER** Pebble sizes are **62 mm** at M1, **58 mm** at M2, **87 mm** at M3 **OR** Pebble sizes are **84 mm** at U1, **94 mm** at U2, **102 mm** at U3	**1**

GradeMax

Question	Answer	Marks
2(g)(i)	Examples Wind sock / streamer / material held up / throw grass into the air / wet finger / / observe features blown by wind (1) Use compass to see direction wind is blowing (1) (1 + 1)	**2**
2(g)(ii)	**If they draw a diagram only credit new labels that match the examples below; some may copy the one from the insert for no credit.** Examples Wind drive waves / wave move in direction of prevailing wind (1) Waves come to the beach at an angle / oblique (1) Swash carries material up the beach (1) Backwash takes material back down the beach / at right angles / under gravity / perpendicular to beach (1) Process is repeated with each wave (1) Materials move along beach in zig-zag manner (1) Materials move along beach in direction of prevailing wind (1) (1 + 1 + 1 +1)	**4**
2(h)	Examples Put tape measure out along transect line / to create a transect line (1) Put one pole at edge of sea / back of beach / start of profile(1) Put poles at equal distance OR put ranging poles at breaks of slope (1) Ensure poles are vertical (1) Measure with tape measure 5–10 m if using equal distance (1) Measure with tape measure distance between ranging poles if using break of slope (1) Rest poles on surface / equal depth into sand / equal height above sand (1) Student holds clinometer next to top / at agreed height on ranging pole / at eye level (1) Sight other ranging pole at top / same height (1) Read angle / measure angle / record angle (1) **NOT** gradient Move poles along beach / along profile to next site (1) Repeat measurements until the profile is finished (1) (1 + 1 + 1 + 1)	**4**

© UCLES 2020