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Cambridge Assessment International Education

Cambridge IGCSE™

GEOGRAPHY **0460/21**

Paper 2 Geographical Skills **May/June 2022**

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 May/June 2022 series for most Cambridge IGCSE, Cambridge International A and AS Level and Cambridge Pre-U components, and some Cambridge O Level components.

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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.

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Question	Answer	Marks
1(a)(i)	road/main road	**1**
1(a)(ii)	footbridge	**1**
1(a)(iii)	coniferous trees/bracken/heath/rough grassland	**1**
1(a)(iv)	Gavilmoss	**1**
1(a)(v)	202 (metres)	**1**
1(b)(i)	1500–1600 (metres)	**1**
1(b)(ii)	72–78 (degrees)	**1**
1(c)	large/main river Calder; river Calder flows SE; river Calder meanders/bends; (many) small rivers/tributaries/streams/affluents/burns; flow E/SE (from W/NW)/flow S (from N/NE); waterfalls; springs; ponds/lakes; V-shaped valley;	**5**
1(d)(i)	traffic-free cycle route	**1**
1(d)(ii)	105–109 mm from left hand margin or 11–15 mm from right hand margin	**1**
1(d)(iii)	hill rising to between 87 m to < 100 m then dropping	**1**
1(e)	gentle slope; defensive site (castle remains); sheltered in valley; bridging point; railway (station) for travel/transport/commuting; road/river for travel/transport/goods; river for tourism/fishing/water source/water supply/drinking/washing/wet-point site; well for water source/water supply/drinking/washing river/floodplain creating fertile land for agriculture; wood for timber/building materials;	**5**

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Question	Answer	Marks
2(a)(i)	118.4	**1**
2(a)(ii)	increased; 114.5 in 2010 and118.8/9 in 2020/by 4.3/4 people per km; by 0.4–0.5 people per year; steeper/quicker increase 2010–2014 (credit within range); gentler/slower increase 2014–2020 (credit within range); (OR rate of increase decreases over time = 1)	**3**
2(a)(iii)	positive net migration	**1**
2(b)(i)	correct completion of 120 people per sq. km (ignore shading)	**1**
2(b)(ii)	120 × 32 082 3 849 840 (people)	**2**

Question	Answer	Marks
3(a)	increased cloud cover 2/3 to 7/8 oktas became darker/greyer; became larger/bigger; became denser/thicker/heavier; became higher/taller; cumulus to cumulonimbus; Look for comparatives or pairs of opposites e.g., light v. dark	**4**
3(b)	Temperature: decreased; Sunlight: decreased; Precipitation: increased; Humidity: increased;	**4**

Question	Answer	Marks
4(a)	along the Tropics/20 °N and S; coastal; on West of continents; e.g., western (coast of) N. America/S. America/southern Africa; (extends into) NW/central Australia; (extends into) central Africa/North Africa/Horn of Africa; Middle East;	**3**
4(b)(i)	17 (°C) (28 – 11 = 0)	**1**
4(b)(ii)	290 mm	**1**

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Question	Answer	Marks
4(b)(iii)	higher temperatures in Oct–March (or 2/3 consecutive months within range); lower temperatures May–Aug (or 2/3 consecutive months within range); temperatures drop in the middle of the year/summer; temperatures rise at the beginning and end of the year/winter;	**1**
4(c)	succulents/store water/bulbous roots; thick/waxy cuticle; stomata close (during day); thick protective bark/needles/thorns/spikes; long/tap/deep/horizontal/widespread roots; small/no leaves (reduce transpiration); glossy/shiny/waxy leaves; flower/pollinate at night; plants/seeds lay dormant until rainfalls;	**2**

Question	Answer	Marks
5(a)(i)	crude oil	**1**
5(a)(ii)	electronics	**1**
5(a)(iii)	331 billion (US dollars)	**1**
5(b)	each produce different products; more finished/manufactured/secondary/processed/tertiary (goods) in Europe; more natural resources/raw materials/primary/mined/mineral in Africa; (OR finished v. raw materials = 1) e.g., crude oil v. processed oil; most valuable is cars in Europe compared with crude oil in Africa; higher value of exports in Europe/lower value of exports in Africa; greater market share in Europe/lower market share in Africa.	**3**
5(c)	pays for improvements/modernisation/more schools/education/roads/airports/hospitals/healthcare telecommunications/sanitation/housing/electricity/water supply (named infrastructure); pays for automation/mechanisation/technology; increases wages (which increases taxes); pays for loans to industry; repayment of loans/reduces the balance of payments deficit; creates more jobs (in manufacturing/tertiary industry); pays for imports;	**2**

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Question	Answer	Marks
6(a)	mobile phone/computer/aircraft/electric car/medicine/vaccines/armaments etc.	**1**
6(b)(i)	one/two storey; modern/new; large; flat roofs; white/grey; glass/metal; rectangular; car parking; landscaped;	**2**
6(b)(ii)	accessible/close to road links; flat area; room for expansion; cheaper land on edge of urban area; workers from nearby housing/urban area; market in nearby urban area; raw materials from nearby industries; visually attractive area (for workers);	**2**
6(c)	small/light raw materials; small/light finished goods; high value finished goods; research facilities; to be near other firms to share ideas/competition; need skilled workforce; need power supply/available telecommunications; need for pleasant working environment for their (highly paid/skilled) workers;	**3**

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