GradeMax

Cambridge Assessment International Education

Cambridge IGCSE™

GEOGRAPHY **0460/22**

Paper 2 Geographical Skills **May/June 2023**

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 2023 series for most Cambridge IGCSE, Cambridge International A and AS Level and Cambridge Pre-U components, and some Cambridge O Level components.

© UCLES 2023

[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 2023

GradeMax

Question	Answer	Marks
1(a)(i)	B road/secondary road/B7047.	**1**
1(a)(ii)	Church/place of worship with spire/minaret/dome.	**1**
1(a)(iii)	Mast.	**1**
1(a)(iv)	85 (metres).	**1**
1(a)(v)	Non-coniferous trees/woods/forest/vegetation.	**1**
1(b)(i)	208/9483/4.	**1**
1(b)(ii)	2.53 (km) (accept 2.4–2.6 km or 2400–2600 m).	**1**
1(c)(i)	(Carlung) farm/building(s)/other road/drive/track.	**1**
1(c)(ii)	A road/A78/main road.	**1**
1(c)(iii)	Rises to a hill at/just above 60 m above sea level (allow 55–64 m).	**1**
1(d)(i)	Castle; Pier; Picnic site; Golf Club/course; Coastal path/National Trail/Recreational route; Public house/pub; Hotel; Beach.	**4**
1(d)(ii)	Island(s)/rocks (in sea)/offshore rocks/stack(s)/stump(s)/craig/crag; Sand(y)/sand & shingle/beach(es); Loose rock(s)/boulders/(rock) outcrop/wave-cut platform; Headland; Bay; Raised beach; Cliff/vertical face; (Jenny's) dyke/(Sandy's) creek.	**3**
1(e)	Follows/along/through valley/on valley floor; (Height mark) keeps to low(er) land/base of hills/avoids high(er) land/curves around/along the side of/avoids hill(s); (Gradient mark) keeps to gentle gradient/flatter land/on flat land between Drummilling and Law Hill/curves around/avoids steep(er) slopes/parallel to slopes; Follows coastline in the south.	**3**

© UCLES 2023

GradeMax

Question	Answer	Marks
2(a)(i)	27.5–28 (%).	**1**
2(a)(ii)	Line correctly drawn at 139–142; Both sectors correctly shaded.	**2**
2(b)	All increased; (or increase in each country for whole period stated separately.) China increased the most/has the most rapid increase/highest % increase; Especially after/since any date between 2000 and 2005/in the last 10–15 years; India increased the least/increased more gradually/USA lowest % increase; India lowest/always lower; China overtook USA (in 2005)/USA produced the most until 2005 but China produced the most after 2005/China second biggest in 1960 but largest in 2015; China and USA beginning to fall but India still increasing; USA falling more quickly; USA fluctuates the most/India fluctuates the least. **Note:** All statements must be comparative and refer to trends.	**3**
2(c)	Less car/vehicle ownership/more walking/cycling; Less central heating; Less air-conditioned buildings; Less use of (household) appliances (or example, e.g., washing machines); Less use of computers/mobile phones/games consoles; Less use of machinery/equipment (can be in industry or agriculture); Fewer flights/air travel/planes (into and out of the country); Less developed secondary industry/industrial sector/manufacturing sector/ few(er) industries/factories (that produce carbon emissions); LEDCs make greater use of locally produced products (which require less long-distance transport). **Note:** Accept 'can't afford' instead of 'less/fewer'. If not stated, assume the answer is from LEDC point of view. Can be answered from MEDC point of view if stated.	**2**

© UCLES 2023

GradeMax

Question	Answer	Marks
3(a)	Warehousing/buildings for storage; Factories/industry/manufacturing; Containers/container storage/storage units/crates; Wharves/docks/docking/piers/quays/jetties/berths for ships/loading areas/unloading areas; (Lorry/car/vehicle) parking; Road(s); Housing/offices; Trees (adjacent to road); Bridge; Vacant/derelict land/free/open space; Cranes.	**5**
3(b)	Flat land so easier to build; Rural land so cheaper/land available for building since empty; Warehousing present for storage of materials; Large area of land for wide berths/large buildings/factories/expansion/storage/car parks; Wide/large river/canal/area of water so easy to navigate/for large ships; River/canal provides access to transport (raw) materials/products/goods/water for manufacturing processes; Roads provide access to transport (raw) materials/products/goods/for worker access; Road/river for transportation/for accessibility; Constant arrival of ships makes it easy to receive materials; Low cost of transportation.	**3**

© UCLES 2023

GradeMax

Question	Answer	Marks
4(a)(i)	August.	**1**
4(a)(ii)	September and October.	**1**
4(a)(iii)	3000.	**1**
4(b)	True/correct for temperature but not true/incorrect/false for rainfall; (Accept 'mainly/mostly true/untrue'.) **Note:** Must have both temperature and rainfall in one statement **or** two separate statements. Temperature stays constantly/always high/hot; Low range/lack of/small variation in temperature/small difference in temperature/same most of year; Range 2°C/26–28°C; Rainfall all year; Drier/less/decreased rainfall in July–Oct/June-Nov; (Accept reference to dry Jun–Nov versus wet season.) Large variation in monthly rainfall totals/large range; 114 to 396 mm (allow 4 mm tolerance for either figure)/282 mm difference. (allow 8 mm tolerance.) **Note:** Reserve 1 mark for temperature and 1 mark for rainfall.	**4**
4(c)	Convectional rainfall; Intense/strong heating by sun/(high temperatures since) sun is directly overhead; Low pressure; Air masses converge; Humid/warm and moist/high levels of evaporation/transpiration/ a lot of moisture; Warm air holds more moisture than cold air/warm air holds large amount of water vapour; Rising air.	**1**

© UCLES 2023

GradeMax

Question	Answer	Marks
5(a)(i)	Human Development Index.	**1**
5(a)(ii)	Netherlands = Reserve 1 mark. *Reasons* Highest/longest life expectancy; Highest/most expected years of schooling; Highest/most GNI/richest.	**4**
5(b)	Lack of (funding for/access to) hospitals/health care/vaccination programmes /medicines; Fewer (trained) doctors/nurses; People have less ability to afford medicines/health care/nutritious diet; Food shortage/poor diet/malnutrition/famine; Fewer emergency services/lack of medical provision during natural hazards/ named example; Less preparation/mitigation for natural hazards/named example; Prone to named natural hazards such as flooding/tropical cyclones; High level of infant mortality; Lack of sanitation/clean water/sewerage/drainage/presence of contaminated water; More people suffer from/more vulnerable to diseases/cholera/typhoid/malaria/dengue/AIDS/diseases spread fast(er); Lack of education about health/handling food/importance of hygiene/spread of diseases/healthier lifestyle/how to take care of themselves; Lack of health and safety legislation/air and water pollution controls/ dangerous working conditions; More/many people living in poor/cramped housing conditions/shanty towns/squatter housing; Lack of/low provision for retirement/pensions/old people's homes; Wars/civil conflict; More physical jobs e.g., in farming which ages the body. **Note:** If not stated, assume the answer is from LEDC point of view. Accept an answer written from the point of view of MEDCs, providing there is a clear link to the situation in LEDCs, or comparative statements are used.	**3**

© UCLES 2023

GradeMax

Question	Answer	Marks
6(a)	Arable/crop farming/cultivation/growing/producing/used for crops/crops; Rice/paddy (fields); Irrigation/flooded land; Ponds/pools of water/water body/lake; Bunds/walls/mud borders/grass borders/(raised) banks/raised barriers; Rectangular/square/sub-divided; Terracing/steps/stairs/tiered; Bushes/palms; Trees/woodland/forest (in distance); Grassland; Hedges; Storage/farm/residential buildings/barns/houses.	**5**
6(b)	Affordable credit; Loans/grants/money/investment/funds/subsidies/discount for/to (help) buy machinery/equipment/HYVs/GM crops/seeds/fertilisers/tube wells/silos/ drainage/ treating salinity; Tax breaks; (Government) builds named infrastructure such as dams/irrigation canals/drainage system/ roads for transport of crops/raw materials/access to electricity; Education/training about different crops/farming techniques; Guaranteed prices for crops; Develop/research into HYVs/GM crops; Limit imports of similar crops/import tariffs; Land reform/consolidation/restrictions to stop farming land being built on.	**3**

© UCLES 2023