Cambridge Assessment International Education

Cambridge IGCSE™

GEOGRAPHY **0460/23**

Paper 2 Geographical Skills **October/November 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 October/November 2023 series for most Cambridge IGCSE, Cambridge International A and AS Level components, and some Cambridge O Level components.

© UCLES 2023

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

Marking annotations

Examiners must use the following annotations:

Annotation	Meaning
	Correct point
	Incorrect point
BOD	Benefit of the doubt given
IRRL	Irrelevant to the question being asked
NAQ	Material that does not answer the question
REP	Point has been repeated
TV	Point is too vague
LNK	Two or more ideas have been linked together for credit
^	Omission mark; the answer does not go quite far enough to gain a mark
Highlight	Highlight used to show a significant part of the response or can be used with another annotation e.g. IRRL
[ ]	Brackets used to show a significant part of the response or can be used with another annotation e.g. LNK
SEEN	Used to show that questions with no response have been checked and all additional pages have been checked

Question	Answer	Marks
1(a)(i)	Main road/A road/A738	**1**
1(a)(ii)	Well	**1**
1(a)(iii)	Park & ride (all year/seasonal)	**1**
1(a)(iv)	40 (m)	**1**
1(b)(i)	3.35 – 3.45 (km)	**1**
1(b)(ii)	296436	**1**
1(c)(i)	Smithstone plantation/coniferous trees/non–coniferous trees/woodland Accept bracken, heath or rough grassland	**1**
1(c)(ii)	Quarry/other pit/other pit or quarry (disused)	**1**
1(c)(iii)	Rises to hill topping between 101 and 109 m; Ends at 91 – 99 m in west.	**2**
1(d)	Uneven; Isolated/sparse/scattered/dispersed; East/south-east/to the east of Kilwinning/Corsehillmuir Wood Nature Reserve; Edge/border of the built-up area (of Kilwinning)/south-west/west of Kilwinning; Clusters/stands/pockets/strips; Some areas in north-west/north/north-east/south-west; Along/next to/near railways/roads; Along/next to/near river/Lugton Water; In valley; In quarry.	**3**
1(e)	***Site:*** Low(er) land; Gently sloping; Next to river/river flowing through/water supply/Lugton Water; Bridging point/bridge; Defensive site; Nodal point/route centre/junction of main roads/junction of railways. ***Function:*** Residential/housing; Education/schools/academy; Market town/trading Industry/industrial estate; (Formerly) mining/(disused) mine; Recreation/leisure/sports; Tourism; Cultural/religious/history; Transport/park and ride/rail station. **Note:** 2 marks reserve for site or function.	**7**

Question	Answer	Marks
2(a)(i)	5(%)	**1**
2(a)(ii)	Age/sex/population pyramid/histogram/compound bar graph	**1**
2(a)(iii)	Seeking/moving in for work/work there/wide variety of jobs available/industry needs a workforce.	**1**
2(b)	***Young dependents:*** Higher in outer London/lower in inner London; ***Economically active:*** Higher in inner London/lower in outer London; Higher in inner London from 20 to 39 but higher in outer London from 45–64/same in both areas for 40–44 age group. ***Elderly dependents:*** Higher in outer London/lower in inner London; **Note:** 1 mark reserve for each category.	**3**
2(c)	Need more care homes; Drain on health services/more money needed for healthcare services; Working age people pay more to support the elderly; More money needed for pensions/benefits/costs government more; Fewer workers; Workers can demand higher wages; Lower tax revenue/fewer taxpayers; Fewer jobs available for younger generation as older people still working.	**2**

Question	Answer	Marks
3(a)(i)	River cliff: Z Slip off slope: Y Flood plain: X	**3**
3(b)	Erosion/any named process of erosion at river cliff/outer bend/at Z; Due to faster flowing water/undercutting; Deposition at slip off slope/inner bend/ at Y; Due to slow(er) flowing water; Due to helical flow/transporting material across channel; Meander grows bigger/wider/curves more/more sinuous; Meander has a narrow(ing) neck; River cuts through; In time of flood/high rainfall; Forms an ox bow lake; **Note:** 1 mark reserve ‘why’.	**5**

© UCLES 2023

Question	Answer	Marks
4(a)(i)	South and Central America	**1**
4(a)(ii)	Wildfire	**1**
4(a)(iii)	Logging for timber	**1**
4(b)(i)	Pastoral/livestock/animal/cattle/beef/extensive/commercial;	**1**
4(b)(ii)	Tall trees: Palms/coconut trees; Isolated/separated/scattered/sparse/dispersed/spread; Straight/thin/branchless(trunks); Leaves/branches at top; Some dead trees/don't have leaves/stripped of leaves/burnt/dying leaves/palms; Some trunks cut off/stump/lower part remains; Grass; Yellow/brown/dried(grass); Bushes/shrubs/ferns.	**4**

Question	Answer	Marks
5(a)	Overall increase/increase 1988 – 2000; 2.1/2.2 to 11 tractors/by 8.8/8.9 per 100 000 km²; Steady/gradual increase from 1988 to 1995; 2.1/2.2 to 6.8 tractors/by 4.6/4.7 per 100 000 km²; Levelled off/slowest increase/slowed down 1995 until 1999; 6.8 to 7.5 tractors /by 0.7 per 100 000 km²; Increased rapidly/sharp increase in 1999/1999–2000; 7.5 to 11 tractors/by 3.5 per 100 000 km²; **Note:** 1 mark reserve for stats (Max. 2 marks for stats).	**4**

Question	Answer	Marks
5(b)	***Possible advantages*:** Help to increase agricultural output/food supply/increased productivity/yield; Can plough land more quickly/more efficiently; Allows farming at a larger scale/greater area can be covered. Need fewer workers/reduce cost of labour/less physical effort; Don't have to pay for animal feed/vets to look after animals that may have previously been used; Children not needed to work on the farm (so can go to school). ***Possible disadvantages:*** (Fewer workers needed) causes under/unemployment; Could lead to rural poverty; Causes rural-urban migration; Increase air pollution/noise pollution; Increased compaction of land: Cost to buy/import tractors is high; Cost to maintain/run tractors is high/hard to get parts/fuel; May not have the skills needed to operate tractors; Tractors can break down. Note: Responses must be in correct section. Reserve 2 marks for advantages and 2 marks for disadvantages.	**4**

Question	Answer	Marks
6(a)	Correctly plotted – line at 94%; Both sections correctly shaded according to key. **Note:** 1 mark if in wrong order but correctly shaded.	**2**
6(b)	In 2006 half of the wealthiest TNCs were in the energy sector whereas in 2016 most of the TNCs were in the technology sector. Only three named TNCs were in the top ten for both 2006 and 2016. The overall wealth of TNCs had increased in 2016 and all TNCs earned more than $USD 200 (allow tolerance up to 280) billion. A new sector healthcare joined the top ten in 2016 but no TNCs in this sector were listed in 2006. **Note:** 5 or 6 correct = 3 marks 3 or 4 correct = 2 marks 1 or 2 correct = 1 mark.	**3**

© UCLES 2023

Question	Answer	Marks
6(c)	Computerised/computer controlled; Automated/mechanised/machines; Robotic arms/robots/Artificial Intelligence(AI); Assembly; Modern/new/advanced; Car/vehicle manufacturing; Few people/workers; Clean/sterile/white room/brightly lit; Information on screen/monitors/LED displays/televisions; Camera/projector (on roof).	**3**

© UCLES 2023