Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

GEOGRAPHY **0460/23**

Paper 2 **May/June 2017**

MARK SCHEME

Maximum Mark: 60

Published

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GradeMax

Question	Answer	Marks
1(a)(i)	power line	**1**
1(a)(ii)	Marsh	**1**
1(a)(iii)	(marked prepared) ski trail	**1**
1(a)(iv)	673	**1**
1(a)(v)	farm/farmhouse	**1**
1(b)	swimming, ski jump, sports park, (illuminated) ski trail, hotel/lodging, restaurant, nature reserve/nature conservation area, marked footpath, café, boatshed, Credit best three answers given.	**3**
1(c)	variable width/widens to south/narrows to north, island(s), 119–123 m, nature conservation area/nature reserve, river mouth(s)/tributary(ies), delta, bends/not straight, flow to south,	**4**
1(d)	trigonometric point,	**1**
1(e)	near lake/lake side/by Mjøsa, both sides (of lake), more on east side, confluence (of rivers/valleys), on low(er)/avoids high(er), on gentle(r)/on flat(ter)/avoids steep(er), in valley(s), on/along roads,	**3**
1(f)	A steep uphill slope, B gentle uphill slope, C gentle downhill slope D shallow valley, If more information given, credit correct answers unless information is from more than one answer from the list.	**4**

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Question	Answer	Marks
2(a)(i)	central business district/CBD	**1**
2(a)(ii)	tall buildings/skyscrapers, high building density/little open space, name on buildings,	**2**
2(b)	variable heights, One mark for each pair of items from the following list: roads/railway/helicopter landing pad, flats/apartments/houses/residential, stadium/area, offices/hotels, park/grass/trees, car park,	**2**
2(c)	flat, main/wide road, railway, residential area for labour, residential area for market, river for transport/navigable river/port, river for water supply/waste disposal/cooling, space for development,	**3**

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Question	Answer	Marks
3(a)	*painted white* – to reflect solar radiation/reflect the sun/prevent heat absorption, *louvres or slats* – to allow air into the screen/ventilation, *double roof* – to protect against solar radiation/solar heat/prevent conduction/ for insulation, *door faces north/south* – to prevent sun's rays/heat falling on the instruments/prevent sun entering, *raised on legs to a standard height above ground* – standardisation/comparability, – to avoid terrestrial radiation/ground heat,	**5**
3(b)(i)	6 (°C), 18 (°C),	**2**
3(b)(ii)	Wednesday	**1**

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Question	Answer	Marks
4(a)(i)	bar at 270 mm	**1**
4(a)(ii)	130	**1**
4(a)(iii)	rain in every month, lowest month is 130 mm/at least 130 mm every month/more than 100 mm every month/>150 mm every month except September, average 200–250 mm per month, lowest monthly total is high, high annual total/high overall rainfall, annual total 2630–2730 mm/more than 2600 mm,	**3**
4(a)(iv)	sun always at a high angle/overhead, day and night of same length all year, cloudy climate,	**2**
4(b)	12	**1**

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Question	Answer	Marks
5(a)(i)	geothermal,	**1**
5(a)(ii)	biofuel/biomass/biogas,	**1**
5(b)(i)	overall increase, by 12%/from 26% to 38%, fluctuated, 2011 increase then decrease, 2012 increase then decrease, 2013 increase (then stable), 2014 stable, peak (early) 2014,	**3**
5(b)(ii)	period of calm stops generation of electricity by wind, strong winds stop generation of electricity by wind, solar power reduces in cloudy/low sun periods, solar power reduces at night, HEP stops if river freezes, HEP stops during drought, (some) biofuel is seasonal/affected by crop failure, Increased use of other sources/named source,	**3**

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Question	Answer	Marks
6(a)(i)	plot for world: 26% 0–14, 66% 15–64, 8% 65 and over. correct triangle but clearly inaccurate within it = 1 reasonably accurate within the correct triangle = 2	**2**
6(a)(ii)	25/26/27,	**1**
6(a)(iii)	large(st) 15 to 64/working age, low(est) 65+,/old dependents low(est) 0–14/children/young dependents,	**1**
6(b)(i)	population aged 0–14 and 65 and over/population that are not working/children and old people/population not economically active,	**1**
6(b)(ii)	many/50% children <u>to support</u>/many/50% <u>young</u> dependents, pay for food/schools/health care etc., low tax revenue, rapid population growth in the future, lack of education/uneducated/unskilled workforce,	**3**

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