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**GEOGRAPHY**

**0460/22**

Paper 2

**October/November 2017**

MARK SCHEME

Maximum Mark: 60

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**Published**

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This document consists of **5** printed pages.

Question	Answer	Marks																														
1(a)(i)	(marked) footpath,	1																														
1(a)(ii)	Tomasgrovi,	1																														
1(a)(iii)	916 (m),	1																														
1(a)(iv)	600 (m),	1																														
1(b)	<table border="1"> <thead> <tr> <th></th> <th>Square 6 316 at Færes-fjellet</th> <th>Square 6 416 at Grønahorgi</th> <th>Both these areas</th> <th>Neither of these areas</th> </tr> </thead> <tbody> <tr> <td>lakes</td> <td></td> <td></td> <td>✓</td> <td></td> </tr> <tr> <td>forest</td> <td>✓</td> <td></td> <td></td> <td></td> </tr> <tr> <td>marsh</td> <td>✓</td> <td></td> <td></td> <td></td> </tr> <tr> <td>glaciers</td> <td></td> <td></td> <td></td> <td>✓</td> </tr> <tr> <td>land over 1 100 m above sea level</td> <td></td> <td>✓</td> <td></td> <td></td> </tr> </tbody> </table> <p>More than 1 tick per row = 0, except for the first row where ticks in <u>both</u> the first two boxes and <u>all</u> of the first three boxes is allowed.</p>		Square 6 316 at Færes-fjellet	Square 6 416 at Grønahorgi	Both these areas	Neither of these areas	lakes			✓		forest	✓				marsh	✓				glaciers				✓	land over 1 100 m above sea level		✓			5
	Square 6 316 at Færes-fjellet	Square 6 416 at Grønahorgi	Both these areas	Neither of these areas																												
lakes			✓																													
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glaciers				✓																												
land over 1 100 m above sea level		✓																														
1(c)(i)	Roesgrovi,	1																														
1(c)(ii)	road,	1																														
1(c)(iii)	cultivation,	1																														
1(c)(iv)	valley completed clearly steeper than rest of slopes but not dropping below 200 m, (use the ruler device along the 200 m line)	1																														
1(d)(i)	south east/east south east,	1																														
1(d)(ii)	1 550–1 750 <u>m</u> /1.55–1.75 <u>km</u> ,	1																														
1(d)(iii)	568 m,	1																														
1(d)(e)	on/near cultivated land, along/near roads, in valley(s)/on valley side(s), west facing slope, on gentle(r)/avoids steep(er), (on flat = 0, but allow flat qualified) on low(er)/avoids high(er)/200–500 <u>m</u> , linear/dispersed/scattered/sparsely distributed, (nucleated spoils) none/few in forest, (more) in north, in centre/none in east/west, (also allow SE, NE, SW and NW)	4																														

Question	Answer	Marks
2(a)(i)	Denver,	1
2(a)(ii)	New York,	1
2(a)(iii)	New York,	1
2(a)(iv)	Denver,	1
2(b)	east lost population/–ve migration/people moved out/allow emigration, west gained population/+ve migration/people moved in/allow immigration,  more migration in east/less migration in west, –534 737 in east and 110 408 in west,  Allow Chicago <u>and</u> New York for east and Denver <u>and</u> San Francisco for west.	2
2(c)(i)	internal, emigration,	1
2(c)(ii)	natural increase/birth rate more than death rate/high birth rate/increased birth rate, <u>international</u> migration/migration from other countries/immigration, (not just people moving in)	1

Question	Answer	Marks
3	steep, V-shaped, narrow/gorge, no floor/flood plain,  steep long profile/steep gradient, irregular long profile,  many valleys/dissected, small valleys, tributary valleys/confluence of valleys, meandering/winding/zigzag <u>valleys</u> , (not river) spur(s), ridge(s), interlocking spurs = 2, dendritic pattern, cliffs, grass/trees/bushes/scrub, upper course/close to source (allow if referring to river), bare rock (in background)/rocks (in foreground, not channel),  Contradictions spoil, e.g. gentle spoils steep.	8

Question	Answer	Marks
4(a)(i)	13 °C,	1
4(a)(ii)	23 °C,	1
4(b)	17 mm,	1
4(c)	X,	1
4(d)	high(er) angle of the sun (in summer)/sun overhead in summer, rays more concentrated/rays pass through less atmosphere, longer days, little/less cloud cover,	2
4(e)	high pressure, descending air, warming prevents condensation, (development) stable air, offshore winds, cold ocean current, distance from the sea, rainshadow,	2

Question	Answer	Marks
5(a)(i)	area drained by a <u>river</u> /catchment area of <u>river</u> ,  divide between two drainage basins/boundary of a drainage basin, Allow if expressed as an area or highland.	2
5(a)(ii)	Ural, Syrdarya, Ili,	2
5(a)(iii)	Nura,	1
5(a)(b)	large(st) discharge, large(st) discharge in dry years, less dependent on other countries/lower flow from other countries/large(st) discharge excluding flow from other countries, large catchment/drainage basin, reservoir/dam/lake for storage,	3

Question	Answer	Marks
6(a)	<p>high(er)(est) in NW/WNW/W, low(er)(est) in E/ESE/SE, least/lower along coast/highest/higher inland (comparative needed),</p> <p>use of a figure to support any of the above statements max 1 (e.g. 1 700 kWh/(m<sup>2</sup>) in SE),</p>	3
6(b)	<p>Germany lower,</p> <p>highest in Germany lower than highest in South Africa, lowest in Germany lower than lowest in South Africa, all of Germany lower than lowest in South Africa,</p> <p>Germany smaller differences/range of values, Germany increases to south + South Africa increases to NW/WNW/W,</p> <p>Or emphasis on South Africa.</p>	2
6(c)	<p>(For) SA has high solar radiation values, SA has higher solar radiation than Germany, area with cities/population has high solar radiation/1 650–2 100 kWh/(m<sup>2</sup>) /more than Germany, (e.g. Johannesburg area) large area to generate solar power,</p> <p>(Against) area with few cities/population has high(est) solar radiation/over 2 100 kWh/(m<sup>2</sup>), (north west) area with cities/population has low(est) solar radiation, (coast)</p> <p>(Either) discussion of transmission costs/distances,</p>	3