CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the October/November 2

0460 GEOGRAPHY

0460/21 Paper 2, maximum raw mark 60

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 will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the October/November 2013 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.

1 (a) (i) railway,

(ii) wide tarred,

(iii) track(s)/cut line(s),

(iv) canal/narrow gravel (road)/earth,

(v) airport/aerodrome landing area,

More than one answer = 0.

(b) (i) north east, **[1]**

(ii) small rivers/streams,
high drainage density/many rivers,
tributaries/confluences/affluents,
dendritic,
tributaries join at acute angles, **[3]**

(c) (i) 400m, **[1]**

(ii) correct position of quarry (two options), **[1]**

(d) (i) trigonometrical station, **[1]**

(ii) 629713, **[1]**

(iii) 4600 – 4850 (metres), **[1]**

(iv) 171 – 173˚, **[1]**

(v) Chipoto by 79/79.1/80 (metres), (also allow 59/59.1/60 metres) **[1]**

(e) (i) gently sloping, **[1]**

(ii) dam(s)/canal(s)/furrow(s), (reservoir, lake = 0) **[1]**

(iii) power line/33kV, **[1]**

(iv) compounds/buildings, **[1]**

2 **(a)** **(i)** 29% and line correctly plotted,

(ii) 13(%),

(iii) (slight) reduction (in number of young)/aging population,
occurs in all countries,
changes are small/gentle/slight,

(b) 9 per thousand,

(c) **(i)** Germany, **[1]**

(ii) Ireland, **[1]**

(d) bigger workforce (for the future),
fewer old dependants to support,
innovative population,
personnel for army,
higher income from taxes,
more spending power, **[1]**

3 (a)

	Photograph A	Photograph B	Photog		
high class residential zone		✓			
industrial zone					
CBD					
squatter (informal or shanty) area	✓				

[4]

(b) single storey,
small,
flat/gentle roofs,
no/few windows,
metal/corrugated sheeting/old/recycled/improvised materials/scrap,
in compounds/fenced area,
weights/tyres on roofs,
chimney out of side,
detached/separate buildings,
painted/colours, **[4]**

4 (a) A narrower/B wider, Allow A smaller/B larger if neither of the
A shorter/B taller, first two points is made. Also allow pairs of figures.
A steeper/B gentler,
A concave but B straight slopes,
A lava and ash but B just lava/B doesn't have ash,
A two vents/parasitic/secondary cone but B one vent,
A no/narrow crater but B broad crater,

Allow the last two lines without terms or terms used interchanged if clear. **[5]**

(b) A more viscous lava/runs slower,
A possibly more silicic lava/A acid B basic,
A andesite/rhyolite B basalt,
A lava at lower temperature,
A more explosive,
A lava solidifies more quickly/cools more quickly,
A lava doesn't flow as far,
A less volume of lava/magma,
A has blockages,

Or emphasis on B **[3]**

5 **(a)** **(i)** wave-cut platform,

(ii) stack,

(iii) cliff,

(iv) beach,

(b) headland,
wave/sea erosion,
hydraulic action/abrasion,
weakness in rock/cliff,
cave(s)/notch(es) eroded/formed,
caves join/arch formed,
arch collapses, **[4]**

6 **(a)** largest segment 96 – 99˚ = 2,
largest segment 94 – 101˚ = 1,

key correct = 1,

Marked independently. **[3]**

(b) **(i)** reduce/cause lung problems, (allow heart problems) **[1]**

(ii) SO^2 causes acid rain,
O_3/NO_x cause (photochemical) smog, **[2]**

(c) changes may be costly (for owners/government),
fuel suppliers affected,
alternative sources of fuel may not be available,
energy prices may rise,
alternatives less effective/produce less energy/have specific problem,
job losses,
local economy suffers, **[2]**