# MARK SCHEME for the May/June 2010 question paper for the guidance of teachers 

## 0460 GEOGRAPHY

0460/23
Paper 23, 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 must be read in conjunction with the question papers and the report on the examination.

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CIE is publishing the mark schemes for the May/June 2010 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

1 (a) (i) track/cut line/game trail,
(ii) medium/dense bush, MARK FIRST GIVEN
(iii) spot height,
(iv) game fence/narrow/gravel/earth road,
(v) rapids (rapid waterfall $=0$ )
(b) (i) power line (electricity = 0) reservoir, rivers, dam, pipeline,
railway,
(wide) tarred road,
(ii) wide gravel road, narrow gravel road, (gravel road alone $=1$ ) radial/converge, concentric/circles, (spider's web = 1)
(c) (i) $272 / 3620 / 1$,
(ii) $\mathrm{N} / \mathrm{NNE} / \mathrm{NE}$ (allow from $\mathrm{S} / \mathrm{SSW} / \mathrm{SW}$ ), angle of tributaries, land lower to N , (e.g. 800 m ) V in contours points upstream,
(d) high/upland/hills/hilly/mountain, highest point 943 metres, plateau/flat top/gentle top/flat located, steep slopes, gentle lowest areas, valleys/dissected,
small streams,
springs,
no/few streams on highest areas, many streams on slopes, radial drainage,

Reserve one mark for drainage.

2 (a) (i) 1/2/4/5,
(ii) 3 ,
(iii) $2 / 5$,
(iv) $2 / 4$,
(v) 4 ,
(vi) $2 / 5$,
(vii) 1 ,
(b) 7.9 cm (per year),

3 (a) example of extractive industry or agriculture, example of manufacturing industry, example of service or distributive industry,
(b) (i) correct position of labelled point on Fig. 5,

Allow one mark for inaccurate plot in correct triangle
(ii) primary decrease,
tertiary increase,
secondary increase then decrease,
Allow by figures - primary 1883
secondary 414761
tertiary 414636 (all +/-1)

4 (a) upland/high/hilly/mountains, valley,
V-shape,
gentle slopes/shallow/open valley, (interlocking) spurs, cliff/crag/bare rock/overhang,
(rocks, rocky $=0$ )
jointed/cracked rock,
stream/small river/small waterfall,
snow/ice,
bushes/small trees,
(b) undercutting,
erosion at base of waterfall/erosion of plunge pool
collapse,
repetition, (of at least one process)
retreat,
assisted by joints,

## Page 4 <br> Mark Scheme: Teachers' version

5 (a) tropical, (near equator $=0$ ) LEDCs/none in MEDCs, most/many in Africa, India,
a few/some in South/Central America, a few/some in South East/South/East Asia,
(b) (i) failed rains/drought,
(ii) rainfall at right time/well-distributed, increased area cultivated, improved seeds, pest control,
(iii) people will be able to afford food, helps planning/budgeting, stop food being exported when cheap, promotes farming/promotes investment in farming,

6 (a) (i) 1.225,
(ii) decreases,
(iii) decreases it (total population)/slows rate of increase/decreases growth rate,
(b) points plotted at 24 BR and 6 DR , points joined by continuous and dashed lines,
(c) 3 ,

BR high/decreasing,
DR low/decreasing/stable, (birth rate higher than death rate $=1$ ) gap between BR and DR decreasing,

