# MARK SCHEME for the May/June 2009 question paper for the guidance of teachers 

## 0460 GEOGRAPHY

0460/02 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 must be read in conjunction with the question papers and the report on the examination.

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1 (a) (i) railway,
(ii) narrow tarred,
(iii) cultivation,
(iv) mine dump, (mark first given)
(v) trigonometrical station/trig point/pillar,
(vi) dam(s)/reservoir(s),
(b) hospital/medical,
aerodrome/landing area/airstrip, (airport $=0$ )
sports (field),
police station/law/security,
post office/postal,
district administration office/administration/local government,
sewage (pond),
rifle (range),
$\operatorname{mine}=0$
Points may be expressed as service or function.
(c)

|  | Richlands | Grahamsdale | Neither of these <br> areas |
| :--- | :---: | :---: | :---: |
| line of huts | $\checkmark$ |  |  |
| steep slopes |  | $\checkmark$ |  |
| quarry or excavation |  |  | $\checkmark$ |
| power line |  |  | $\checkmark$ |
| high density of drainage |  | $\checkmark$ |  |

More than one tick per row $=0$

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(d)


W and $C$ as shown,
F between 880 metre contours,
More than half letter within tolerance (or an arrow etc. within tolerance)
More than one attempt and one is wrong $=0$
(e) (i) 4650 metres,

More than one circled $=0$
(ii) No mark for horizontal distance

Difference in height = 45 (metres),
1 in 103,
Carry errors forward from (e)(i) and (ii) but the horizontal distance must be the one used in (e)(i).
E.g. answers using $45 \mathrm{~m} \quad 1$ in 87/8 (from 3950 m )

1 in 93 (from 4200 m )
1 in 108/9. (from 4900 m )

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2 (a) 10\% correctly plotted, $5 \%$ correctly plotted,

Don't insist on shading.
(b) (i) greater, (allow more etc.)
(ii) less,
(iii) less,
(c) (i) Maori percentage will increase, (allow expressions linked back to the question)
(ii) large(r) young population, high(er) birth rate, large(r) child bearing population/young adults, more births in the future,

Allow transfer of marks between (i) and (ii)
Allow answers expressed in terms of the non-Maori population.

3 (a) hilly/hills, (high/mountains/upland $=0$ )
steep slopes,
gentle/flatter in foreground/on right,
low(er) in foreground/on right,
many/small valleys,
narrow/V shaped valley,
spur/ridge,
(b) on highest land, in valleys,

More than two circled $=0$
(c) steep slopes,
bare ground/lack of vegetation/little vegetation, deforestation/removal of vegetation,

Absence of trees $=0$

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4 (a) 15(\%),
(b) segment drawn between $67^{\circ}$ and $77^{\circ}=1$,
segment drawn between $71^{\circ}$ and $73^{\circ}=2$,
correct key used for renewable $=1$,
e.g. not diagonal shading or dots
(mark the smaller segment)
(c) (i) increased supply,
won't run out/sustainable, renewable $=0$
variable supply,
costs may increase,
(ii) birds killed/injured, animals frightened by noise, improved air quality/no air pollution/reduced $\mathrm{CO}_{2}$ emissions, habitats not affected by digging,
pollution alone/noise pollution alone/visual pollution $=0$

5 (a) plates moving towards each other, plates moving north west and south east,

If more than two ticks $=0$.
(b) (i) in Pacific Ocean, close to/west of/along plate boundary, off east coast of Japan,
(ii) in Japan/islands, further from/away from plate boundary, west of shallow earthquakes,
(iii) in Sea of Japan/China,
far from plate boundary, west of other earthquakes, off west coast of Japan, in south/Philippine Plate, (allow "near to" Philippine Plate)

Allow "on Eurasian Plate" to score once in either (i) or (ii)
Allow "linear pattern" to score once in (b) in water, on land $=0$

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(c) plates converge, (contradictions $=0$ but note the movements on Fig. 10) subduction/description of subduction, Pacific Plate beneath Eurasian Plate, friction, compression/stress/pressure, fracturing/faulting/sudden movement, release of energy, (release of pressure $=0$ )
Benioff Zone/earthquake zone deeper to west,
Destructive margin $=0$

6 (a) two correct lines plotted $=2(17 / 54 / 6 \mathrm{~mm})$, correct use of key $=1$,
(b) distant from (South African) coal/ore/raw materials, high transport costs for raw materials,
market in Western Cape/nearby densely populated area, concentrates on export/main market is export, distant from other internal markets,
coastal location/sea transport for export, coastal location/sea transport for import of raw materials, (allow "near to coast" for coastal location in these points) sea transport alone $=1$ if neither of the above score, (coastal location alone $=0$ )
sea transport cheap(er)/land transport (more) expensive,
labour Western Cape/nearby densely populated area,
Allow points expressed as advantages or disadvantages where relevant.

