MARK SCHEME for the May/June 2011 question paper

for the guidance of teachers

0460 GEOGRAPHY

0460/22   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.

- Cambridge will not enter into discussions or correspondence in connection with these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2011 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

1 **(a)** **(i)** wide tarred, [1]

    (ii) dense bush/very dense bush/dam, [1]

    (iii) dip tank, [1]

    (iv) track/cut line/game trail, [1]

    (v) (seasonal) marsh, [1]
        Mark the first type of land use given.

  (b) **(i)** gently sloping, (more than one tick = 0) [1]

    (ii) dam/furrows/reservoirs/rivers/streams/watercourse, (high drainage density = 0) [1]

    (iii) power line/33kV, (power supply = 0) [1]

    (iv) staff quarters/huts/buildings/Welbeck Township/Mazoe Township, (houses, village = 0) [1]

    (v) <u>tarred</u> road(s), (large road = 0) [1]

  (c) **(i)** 794 673, [1]

    (ii) SE, [1]

    (iii) 213°, (more than one tick = 0) [1]

  (d)

		Type of land		
		Steep slopes	Gentle slopes	Next to rivers
Land use	Cultivation		✓	
	Seasonal marsh			✓
	Dense bush	✓		

    More than one tick per row = 0 [3]

  (e) flows NE/NNE/N,
    stream(s)/<u>small</u> river(s)/<u>small</u> watercourse(s), (smaller rivers = 0)
    tributary/confluence/tributaries/confluences/affluents, (splits into tributaries = 0)
    meanders/bends etc.,
    dendritic pattern,
    dam(s), (reservoir, lake = 0)
    tributaries join at acute angles,
    high drainage density/many streams/many rivers/many tributaries, (many tributaries = 2)
    gentle gradient/flows on gentle land (must be referring to rivers),
    wider downstream/wider in NE/NNE/N, [4]

2 (a) (i) farming,
forestry,
fishing,
mining,
quarrying,

extraction/production of raw materials = 0 [1]

(ii) any manufacturing or processing industry,
'factory' or 'manufacturing' or 'processing' alone = 0 [1]

(iii) any service or distributive industry including quaternary industries,
'services' alone = 0
retailing/selling/shops/office work = 1

Allow answers expressed as occupations, e.g. teacher

If more than one given and one is wrong credit the first example given. [1]

(b) Two correct lines plotted (63 mm, 11 mm and 26 mm spaces) = 2,
Correct use of key = 1

Allow in any order. Mark independently. [3]

(c) position of Malaysia: from the start of the 28th square to the end of the 31st square from the left,
position of Australia: from the start of the 44th square to the end of the 47th square from the left,

4 square tolerance for each.

Must be shown by a vertical arrow or line with a label. If lines or arrows do not have country names max 1. [2]

3 **(a)** increase (overall or at the beginning),
more rapid/rapid/exponential/increasing rate at end,
(allow a variety of expressions)

Answers such as 'gentle increase at first then a rapid increase' = 2.

References simply to the slope of the graph = 0.   [2]

(b) **(i)** Japan,
Indonesia.   [2]

(ii) pressure on finances,
pressure on/need for more social services/care/health services,
pressure on pension funds,
smaller economically active population/not enough workers/military,
less tax raised.

greater dependency ratio alone = 0   [1]

(c) **(i)** correct position of USA shown by a dot or a cross, (no label needed)   [1]

(ii) negative/inverse relationship,
one increases as the other decreases etc., e.g. 'as one gets higher the other gets lower'
(should not just describe a single point on the graph).   [1]

(iii) birth rate/use of contraception,
migration, (however expressed)
death rate/infant mortality,
natural increase/decrease,

Mark the best factor given.   [1]

4 (a) (i) correct position of E,
correct position of D,
correct position of F,

The points of the arrows must be within the tolerance. If letters without arrows are used then the majority of the letter should be within the tolerance.
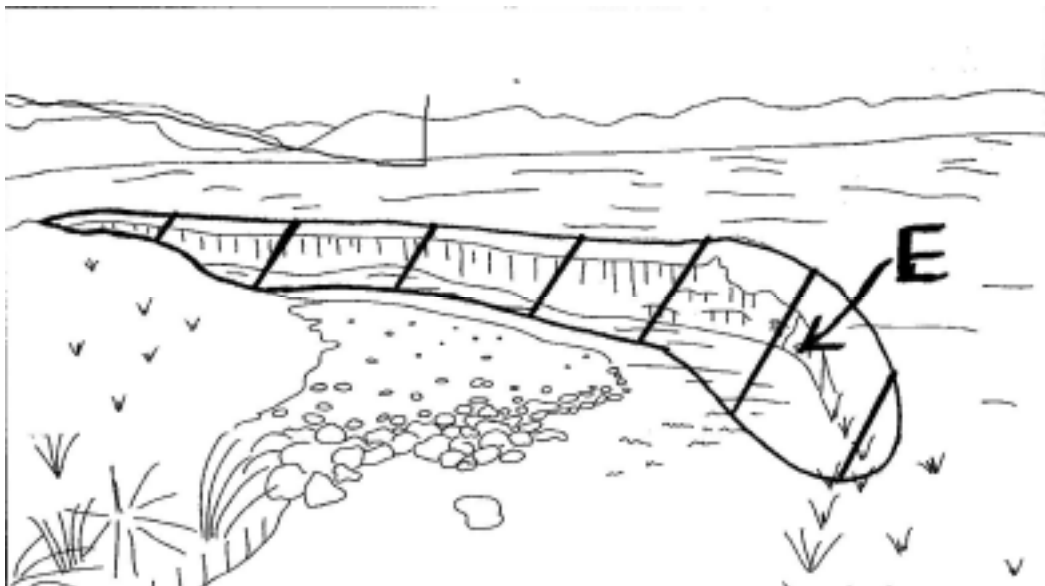
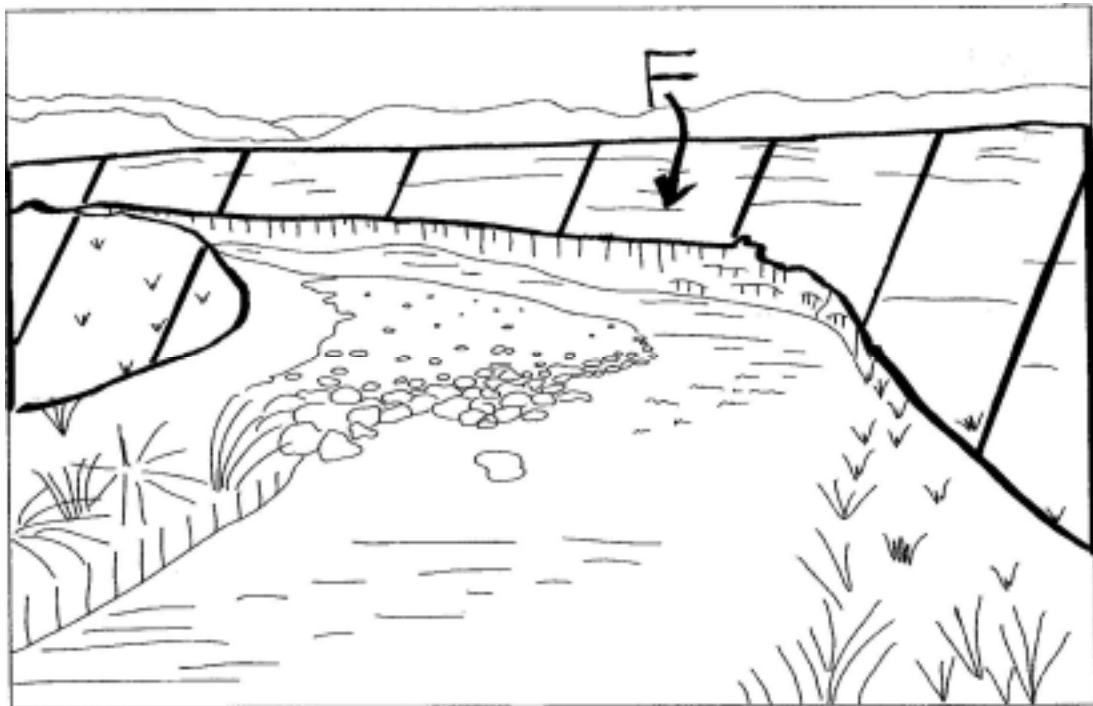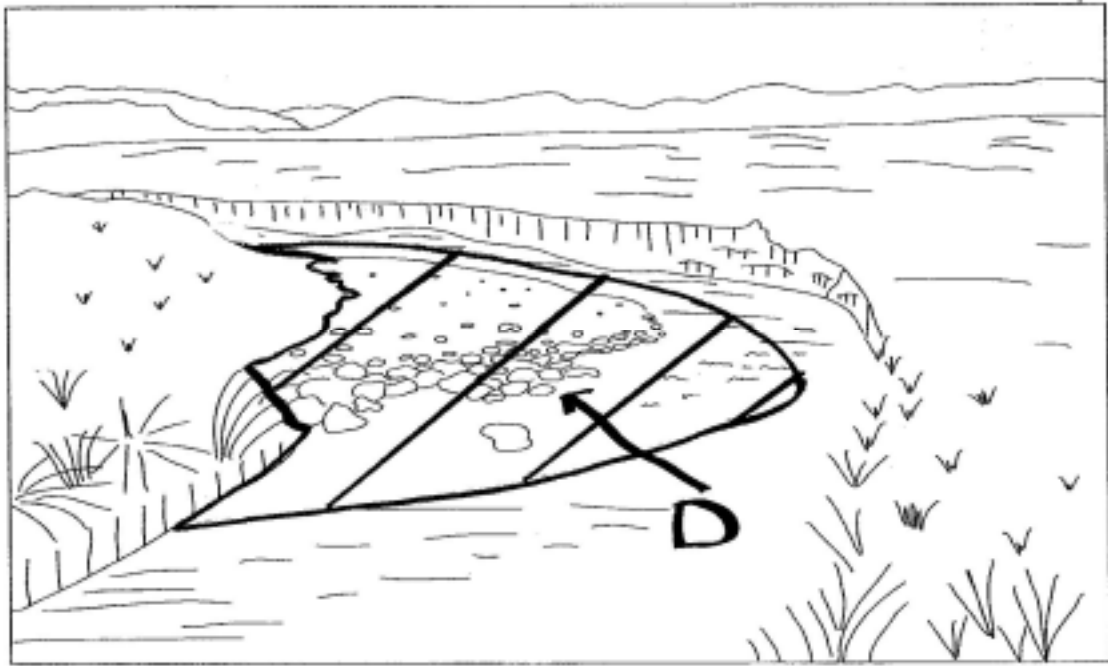If more than one is given and one is wrong = 0. [3]

(ii) sketch of curved channel to right of existing channel and parallel or sub-parallel to it,

Allow if just one margin of the river is drawn. If both margins are drawn and one is wrong = 0. [1]

(b) boulders,
traction,
clear/slower,
faster. [4]

5 (a) Z,
       X,

       2 correct = 2
       1 correct or reversed = 1   [2]

   (b) (i) tropical,
            (fairly) high temperatures/hot in summer/October/November/December/January/February/
            March/beginning and end of year,
            cool/warm/mild in winter/April/May/June/July/August/September/middle of year, (low
            temperatures = 0)
            (temperature increases, decreases, higher, lower etc. = 0)
            small/moderate annual temperature range,

            low rainfall/dry climate,
            desert,
            rain in summer/any month from September to May/beginning and end of year, (allow if
            stated as 'high' rainfall)
            dry/drought in winter/June/July/August/middle of year, (not little rain)
            (rainfall increases, decreases, higher, lower etc. = 0)

            When the candidate is describing rainfall, do not allow hot months to equal summer or
            cold months to equal winter.   [4]

       (ii) high pressure,
            descending air,
            offshore/NE/E winds,
            large distance from sea/inland,
            stable air,

            Ignore the numbers 1 and 2 on the question paper.

            (dry air, rainshadow, little evaporation, no moist winds = 0)   [2]

6 (a) 9.8–10.2 (km), Allow in metres if units stated.
6 (minutes),

Allow if candidate rounds answers to nearest minute. Don't insist on accuracy to two decimal places.   [2]

(b) Lorry driver   save time/quicker,
                              save fuel,
                              avoid congestion in town,

                              shorter, easier = 0   [1]

Resident of village   noise,
                        visual pollution,
                        exhaust fumes/air pollution,
                        lower house prices,
                        potentially dangerous new road,   [1]

Town resident   reduce noise,
                       reduce visual pollution,
                       reduce exhaust fumes,
                       make journeys quicker/less congestion/<u>less traffic therefore easier to travel</u>,
                       increased road safety,   [1]

Shop owner   reduced trade/profits,   [1]

Manager of factory   route not helping transport/access/no advantage/would not use it/ travel times unchanged,
                       a western by-pass would have been helpful,
                       ('road is on the other side of town' alone = 0)   [1]

Environmentalists   destruction of woodland/habitats/countryside/natural land,
                       disturbs wild life,
                       pollution = 0   [1]

Increase/decrease in traffic alone = 0 throughout.
Pollution without type = 0 throughout.

9 km	5.4 minutes	5 minutes 24 seconds
9.8 km	5.88 minutes	5 minutes 52.8 seconds
9.9 km	5.94 minutes	5 minutes 56.4 seconds
10.1 km	6.06 minutes	6 minutes 3.6 seconds
10.2 km	6.12 minutes	6 minutes 7.2 seconds
11 km	6.6 minutes	6 minutes 36 seconds