

**UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS**  
International General Certificate of Secondary Education

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

**0460 GEOGRAPHY**

**0460/22**

Paper 22, 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.

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

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.



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- 1 Please note that some points have been added to the mark scheme to accommodate the reproduction of some of the map extracts. These points are shown in italics.
- (a) (i) golf (course)/(intensive) conservation (area), [1]
- (ii) staff quarters, [1]
- (iii) narrow tarred, [1]
- (iv) built-up area/smooth rock/cultivation, (buildings = 0) [1]
- (v) cutting/railway cutting, (embankment spoils) [1]  
 MARK THE FIRST FEATURE GIVEN
- (b) (i) gentle, [1]
- (ii) north east/from south west, [1]
- (iii) meanders/bends,  
 variable width/narrows/widens,  
 island/braided/splits and rejoins,  
 tributaries/confluence, [3]
- (c) 385731, [1]
- (d) (i) 895.4, [1]
- (ii) trigonometrical station/triangulation station/trig. point, [1]
- (iii) steep slope, ) For 2 marks the slopes must be located in  
 gentle(r) slope, ) some way or in be in the correct sequence.  
 ) If unclear allow 1 mark max. Allow in reverse if clear.  
 (flat = 0)  
 concave, (no alternative – the word needed)  
 valley,  
 falls to below 720m/falls to 701–719 m/falls by 175 to 195 m, (Allow any figure between  
 tolerances) [3]
- (iv) 66–71 (and any between), [1]
- (e) Accept 5500 to 5700, [1]

|        |                                |          |       |
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(f) (i) 4470 shaded, (Accept any type of shading. Need not shade whole square) [1]

(ii) Mine dump drawn using the correct symbol, (not the quarry/open cast symbol).  
 All or almost all of it must be in the southern half of square 4370.  
 All of it must be in the eastern third of square 4370.  
 It must touch easting 44.  
 A small amount of it can go into square 4470.  
 If both mine dumps are drawn allow if correct. If an opencast area/quarry is drawn as well = 0. [1]

2 (a)

Photograph A

Photograph B

flats/apartments/luxury/high-quality/high class/well-maintained  
 balconies  
widely overhanging roofs  
 one type of building material/concrete/cement/brick/good quality/'proper' materials  
 steep sloping roof  
 permanent  
 tiles/not corrugated iron/not wood  
 no stones on roofs  
 strong/well constructed  
 one colour/white  
 expensive  
 attractive  
 designed/planned  
 4/5 storeys/tall/high rise (skyscrapers = 0)  
 large(r) (area)

shanty dwellings/shacks/huts/slums/low quality/low class squatter,  
 no balconies,  
 no/less overhang,  
 cheap/variety of materials/re-cycled/scrap/'random'/one example,  
 less steep/flat roofs,  
 temporary,  
 corrugated iron/wood ,  
 stones on roofs,  
 weak/flimsy,  
 various colours/examples,  
 cheap,  
 ugly,  
 unplanned,  
 one storey/low (could use small as a comparison),  
 small(er),

clean = 0  
 modern = 0  
 density = 0  
 safety = 0  
 car parks = 0  
 windows = 0  
 quality of life/living conditions = 0

4 differences = 4 marks.  
 Points about one photograph only = 0.

Comparatives e.g. larger, higher, more permanent, stronger etc. = 1 (but don't allow a second mark for the converse).

The only negatives allowed are those already stated in the scheme.

The numbers are to help the candidate. Reward differences wherever they are stated e.g. two or more marks could be awarded in the lines headed '1'. Link any points made under separate numbers. [4]

|               |                                       |                 |              |
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- (b) less noisy/quieter/more peaceful,  
 more privacy,  
 more living space,  
 more space outside/more space for cultivation/car park/less congested,  
 (more space alone, not stated as inside or outside = 1)  
 less prone to disease/more healthy,  
 a better view/scenery (sea, lake, mountains),  
 electricity/use of electrical appliances,  
 protection from weather/wind/rain/better shelter,  
 less litter/cleaner, (less pollution alone = 0)  
 better quality building/stable/well-constructed/lasts longer,
- personal safety or security = 0  
 better facilities = 0  
 water supply = 0  
 quality of life/living conditions = 0

If candidate just discusses Photograph C without any comparison with Photograph B, allow the marks to stand. [4]

- 3 (a) (i) plot for June at 17°C on the line in the centre of the correct space,  
 (Need not be joined by a line to the plots for May and July)
- rainfall bar for April at 25 mm,  
 (Accept without bar shading) [2]
- (ii) 10.4,  
 low,  
 in the hottest season, [3]
- (b) (i) horizontal line drawn at 250 mm and correct at both ends (need not be labelled), [1]
- (ii) 2001 and 2002, [1]
- (iii) rainfall varies a lot/some years much higher/some years much lower/very unreliable/very variable/very unpredictable/wide range/some years far from mean,  
 Allow use of figures to make this point.
- Seasonal rain = 0. [1]

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- 4 (a) (i) mechanical/physical (top space) and chemical,  
Both needed for one mark [1]
- (ii) exfoliation,  
freeze-thaw,  
oxidation, [3]
- (b) D,  
B,  
C,  
A, [4]
- 5 (a) (i) bar at 6.45 million (shading not necessary) and correctly placed, [1]
- (ii) South Africa, [1]
- (iii) Egypt,  
5.4 million / 5 400 000, [2]
- (b) (i) near(er)/shorter distance to Europe/MEDC countries/Italy/Spain/France/any European country/Saudi Arabia/UAE, = 1  
cheap(er) travel cost/short/less time spent travelling, = 1  
(easier to get to = 0, more accessible = 0)  
Accept opposite approach for Botswana, Kenya and Nigeria. [2]
- (ii) physical – climate/weather,  
wildlife,  
scenic attractions e.g. beaches, mountains,  
coastal/landlocked,  
size of country,  
relief, (too steep or mountainous = 0 as a disadvantage)
- economic – standard of/variety of accommodation/hotels,  
transport facilities/air/roads (in the country),  
air/transport links (to the country), (distance to country = 0)  
degree of development/facilities/services available,  
amount of investment, (not financial resources/richer/poorer alone)  
built attractions e.g. shops, historical buildings,  
security provided, (not crime or problems)  
exchange rate,  
marketing/advertising,  
cheaper living costs,
- One physical and one economic point correctly linked. If more than one given mark the best.
- Accept differences or references to a single country. [2]

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- 6 (a) (i) coastal development, [1]  
(ii) 29/30/31, [1]
- (b) (i) spills from oil tankers/tourist boats,  
litter from tourist boats/tankers,  
leaks from pipelines, [1]
- (ii) power station on south coast,  
winds from NE/N/to SW/S, (blows SW/S = 0)  
winds will blow pollution out to sea/away from island,  
(blow pollution away alone = 0)  
power station is downwind of settlement, [2]
- (iii) Please note that this part of the question refers specifically about location on Fig. 10.
- visual – development/construction will:  
spoil the views/scenery of/from the coast/beach/sand/hotels/nature reserve/bird  
sanctuary/other parts of the island,  
lights at night will disrupt nature reserve/bird sanctuary,  
lead to unsightly litter/waste/garbage on the beaches/sand/coast/in the sea,
- noise – development/construction will:  
affect the coast/beach/sand/hotels,  
affect the nature reserve/bird sanctuary,
- Max 2 on visual pollution. [3]