

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

0460 GEOGRAPHY

0460/05

Paper 5 (Computer Based alternative to Coursework),
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.

Page 2	Mark Scheme: Teachers' version	Syllabus	Paper
	IGCSE – May/June 2010	0460	05

- 1 Primary industry = A (Extracting raw materials) [2]
 Another example of primary = D (Farming). [C]
 1 mark per correct answer
- 2 Labour = Input (A); Cutting rock = Processes (B); Outputs = Input (A) [3]
 1 mark per correct answer [C]
- 3 Albus quarry – 532645 (B); distance between Albus and Bora quarry = 6.1km (C) [2]
 1 mark per correct answer [C]
- 4.1 Cement works is near to quarries because:
 The rock/stone is heavy/bulky to transport; because rock/stone is expensive to transport.
 (Not quick/easy) [2]
 1 mark per correct answer (max 2)
- 4.2 Cement works is away from housing because of:
 Dust (from lorries); noise (from lorries); the cement works is an eyesore; more traffic.
 (Answers do not need to be qualified) [2]
 1 mark per correct answer (max 2)
- 5.1 Wear a hard hat [1]
- 5.2 Wear ear protection/protectors/defenders/cover ears/ear plugs. [1]
 (Allow headphones but not earpieces)
- 6 Bora Quarry
 A – quarry face (E); B = mining tunnels (D); C = waste rock (F); D = cut blocks of stone (A) [4]
 1 mark per correct answer [C]
- 7 Albus Quarry
 Method – Open air (A); Noise – Noise from blasting (B); Distance from housing – 170m (B);
 Area of quarry – 0.65km² (B); Distance from main road – 1.5km (A) [5]
 1 mark per correct answer [C]
- 8 Name of student (C); Date and time (B) [2]
 1 mark per correct answer [C]
- 9.1 –12 (must have 'minus' – sign or word) [1]
- 9.2 –4 (must have 'minus' – sign or word) [1]
- 10 Bar 0 = –12; Bar 1 = –4 [2]
 1 mark per correct bar/answer BUT allow marks if bars match incorrect answers for 9.1 and 9.2

Page 3	Mark Scheme: Teachers' version	Syllabus	Paper
	IGCSE – May/June 2010	0460	05

- 11.1 B
- 11.2 A (1 mark if both correct) [1]
- 11.3 B
- 11.4 B (1 mark if both correct) [1]
- 11.5 1
- 11.6 3 (1 mark if both correct) [1]
- 11.7 4
- 11.8 2 (1 mark if both correct) [1]
- 12.1 Against: 4, for: 1 (1 mark if both correct) [1]
- 12.2 Against: 2, for: 3 (1 mark if both correct) [1]
- 12.3 B [1]
- 13.1 For: produces money for the economy/brings income/improves economy/produced local building materials (Do not allow jobs or transport) [1]
- 13.2 Against: more traffic on roads/quarry is ugly/an eyesore/habitats destroyed/environment destroyed. [1]
- 14.1 Agree (or partly agree) [1 mark res.]
Reasons: allow 1 mark (up to 2) for any negative impacts such as: noise from blasting rock/using explosives; many lorries taking the crushed rock or stone away (-3); ugly landscapes/bare rock scars (-2); a lot of dust generated (-3); only 1 person is 'for' the quarry and 4 people were 'against' it; it had a high environmental impact or low environmental quality score (-12).
Reserve 1 mark for data (data can be number of people or EQ score).
Qualification not needed apart from noise (noise from ...) [4]
- 14.2 Less impact [1 mark]
Allow 1 mark per correct explanation (up to 2 marks) such as:
It makes less noise (because they do not use blasting methods); it makes less dust (because they do not use blasting methods); was less visible (because it uses tunnels/quarry is below ground surface); is smaller (0.25km² as opposed to 0.65km²); it had a lower environmental impact or higher environmental quality score of -4. Can credit data. [3]
- 15.1 Allow 1 mark per valid suggestion *explained* such as:
Interview more people (5 are not enough); conduct a questionnaire (in order to ask [1]
- 15.2 specific questions); ask a variety of people regarding age/gender/employees (to ensure the sample interviewed is not biased); use equipment to measure noise (to get specific [1]
- 15.3 readings); use equipment to measure dust (to get specific readings); interview people who do not live near to the quarry (to get a balanced view). [1]

Page 4	Mark Scheme: Teachers' version	Syllabus	Paper
	IGCSE – May/June 2010	0460	05

- 16** D (Using resources carefully without damaging the environment) [1]
1 mark for correct answer [C]
- 17** Allow positive and negative effects such as:
A caravan site would: provide jobs for local people; it would generate more income/money for the area; more customers in local shops and pubs (money needs to be qualified); more rubbish; more noise from people; more traffic congestion. (Not just 'more tourism').
A recreational area (e.g. motorbikes) would: provide somewhere for leisure activities – especially for young people; may provide income; may be noisy; may cause more litter; more soil erosion.
A nature reserve would: improve the visual impact; create habitats for wildlife; may provide income; would be quieter; less dust/dirt.
 Allow 1 mark per effect area [3]
- 18.1** Fair and valid interview by:
 Using systematic/random/stratified sampling methods; making sure that the sample had the same number of males/females; making sure that the sample had the same number of people from different age groups; by asking a suitably large sample – such as 50.
 1 mark per way given (allow 1 mark max. for naming a sampling method) [2]
- 18.2** number of cars: stand at the main gate and do a tally of the cars entering the theme park; (not just counting cars – must say where/how)
number of visitors: stand at the turnstile/payment kiosk and count the number of visitors (or interview the owner/manager to find out the number of tickets sold); (not just counting visitors – must say where/how)
origin of visitors: interview visitors to find out where they are from; survey number plates.
 Allow 1 mark per valid way (max. 1 mark per option) [3]
- 19** Agree/support hypothesis (1 mark).
 Allow 1 mark per valid benefit given – reserve 1 mark for each category (environmental, social and economic) such as:
 Former quarries (when used for recreational activities such as sailing/water sports/caravan sites/nature reserves) can improve the area.
Environmentally – caravans are screened by the quarry and make less noise/less air pollution than quarries; a nature reserve will protect the environment and attract wildlife back to the area
Socially – a tourist attraction will provide a meeting point/entertainment for local people (e.g. motorbike trail)
Economically – caravan sites/tourist attractions may bring jobs and money/income to the area. [4]