MARK SCHEME for the November 2004 question paper

0680 ENVIRONMENTAL MANAGEMENT

0680/04   Paper 4 (Alternative to Coursework), maximum mark 60

This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which Examiners were initially instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began. Any substantial changes to the mark scheme that arose from these discussions will be recorded in the published *Report on the Examination*.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes must be read in conjunction with the question papers and the *Report on the Examination*.

*   CIE will not enter into discussion or correspondence in connection with these mark schemes.

CIE is publishing the mark schemes for the November 2004 question papers for most IGCSE and GCE Advanced Level syllabuses.

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Grade thresholds taken for Syllabus 0680 (Environmental Management) in the November 2004 examination.

	maximum mark available	minimum mark required for grade:			
		A	C	E	F
Component 4	60	42	32	25	19

The threshold (minimum mark) for B is set halfway between those for Grades A and C.
The threshold (minimum mark) for D is set halfway between those for Grades C and E.
The threshold (minimum mark) for G is set as many marks below the F threshold as the E threshold is above it.
Grade A* does not exist at the level of an individual component.

INTERNATIONAL GCSE

MARK SCHEME

MAXIMUM MARK: 60

SYLLABUS/COMPONENT: 0680/04

ENVIRONMENTAL MANAGEMENT
(Alternative to Coursework)

1 (a) plan A or C; valid reasons such as only one path/not everyone samples/only one day (max 2); AVP; R communication problems (no marks if B) **3**

(b) table drawn (1); headings e.g. people/paths/wood for one day (2); **3**

(c) (i) 231;

(ii) 12078 or 12045 or 12012; **2**

(d) sample more than one day; find weight of each bundle; repeats; at different times of year; AVP; **2**

(e) (i) axes labelled; plots; orientation; scale;
(R plots without scale one plot error = 0) **4**

(ii) 160; 220; **2**

(iii) 1120 - 1350; **1**

(iv) more households; more people in each household; more people; more move into towns/eq; ref to improved standard of living/development; AVP (max 2) **3**

(f) (i) increase to C (C is highest) then decrease; **1**

(ii) stays the same/no change/only slight fall at C;
(alternatively allow good comparison with top row of data) **1**

(iii) loss of soil fertility; further qualification; loss of soil structure; further qualification; reduced organic content; ref to soil erosion/surface runoff; AVP; **2**

(iv) G1 to make more trees; acts as a seed bank; genetic resource; fruits = food for animals/humans; AVP;

G2 slow growing trees preserved; protects soil from wind; and rain; AVP;

G3 more wood produced; protections of soil/crop; AVP;

G4 prevents erosion; flooding; siltation; keeps clean water supply; animals from damaging banks; AVP; **4**

2 (a) (i) clean water/less bacteria/disease; less polluted; clear not cloudy; time saved/eq; so other specified activity possible; AVP; **2**

(ii) do not have knowledge to build; equipment; not able to find best site; or maintain it; cost qualified; AVP; **2**

(iii) they can learn to build wells/eq; maintain wells. 'ownership' of well; AVP; cost qualified (but not if already given in **(ii)**); **2**

(b) clean water to drink; ref to passing bacteria/disease between humans or faeces and water; less gastric disorders; (clean water) to prepare food; to wash in; AVP; R pollution/mosquitoes/malaria **2**

3 (a) (i) to give energy/protein/body building/vitamins A and/or D/fish oils; **1**

(ii) net size; mesh size; number of fishing trips/days/close season/quota; return rare species/eq; ref to reproduction (max 2); explanations (max 3); AVP (max 2); **6**

(b) 4 good questions about fishing (4);
layout (alternatives for two Q's) (1)   ;
5

(c) (i) malaria/bilharzia (guinea worm)/yellow fever/cholera/typhoid/dysentery/other valid diseases; **1**

(ii) fever/weight loss/sickness/tired/valid symptom; **1**

(iii) transfer to humans; from *infected* person; **2**

4 (a) (i) more money to village; qualified; country gains money so more spent on schools/medicines/eq; more jobs; AVP;; **2**

(ii) too much demand for ivory and poaching returns; too many elephants killed/eq; no more ivory; so no more money; AVP; **2**

(b) (i) do not like to see animals killed; tourists think they should all be conserved/eq; so tourists can see them; AVP; **2**

(ii) village needs money; needs to reduce elephant damage, qualified; some elephants kill villagers; AVP; **2**

TOTAL 60

AVP   Alternative Valid Point