## UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

**International General Certificate of Secondary Education** 

## MARK SCHEME for the October/November 2006 question paper

## **0680 ENVIRONMENTAL MANAGEMENT**

**0680/04** Paper 4 (Alternative to Coursework), maximum raw 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 instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began.

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.

The grade thresholds for various grades are published in the report on the examination for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses.

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

CIE is publishing the mark schemes for the October/November 2006 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.



Pa		age 2		Mark Scheme	Syllabus	Paper	
				IGCSE - OCT/NOV 2006	0680	04	
1	(a)	(i)		ft; attack by wild animals/carnivores/predators; spotting/preversevent overgrazing; AVP;; e.g. need milking/stop eating crops	nt diseases; lost/	straying;	[3]
		(ii) 700/140 ; =5 (maloti);					[2]
	(b)	35 –	35 – 70/5 – 10% (1/20 – 1/10);				[1]
		(ii)	(ii) 3 valid Q's about benefits of learning;;; layout (minimum one question with appropriate layour e.g. yes/no or more than two responses or line for written answer – all to be appropriate to Q);				[4]
		(iii)	method points – interview equal no's; of boys in/not in project; same ages; fair sample idea; analysis points – compare data; to find % unemployment/eq; AVP;			ole idea;	[3]
		(iv) boys get skilled/non manual jobs; so more govt tax; less poverty; social unrest; crime; ref improving economy of country; reduce unemployment; AVP;; A gender arguments				e; ref to	[2]
2	(a	(i)	(i) June and July;				[1]
		(ii)	Oct	tober/November – February/March;			[1]
	(b)	better nutrition; Such as more carbohydrates for energy; protein for muscle; become physically more motivated to help themselves/family/community/eq; more skilled at the work/eq; AVP;				lly fit/eq;	[3]
		(ii)	acc	curate description of each activity;;;			[3]
		(iii)		x 50 = 60; 60/60; = 1; wo marks for consequential error if first line incorrect			[3]
		(iv)	6 (0	days);			[1]
	(c)	(i)	sha	ading above/in both sets of rocks;			[1]
		(ii)	removes danger to animals/people; more land to graze; grazing not split up; less risk of overgrazing; do not need to move animals as often/eq; prevent (more) erosion; ref to more fertile soil; AVP;;				[2]
		(iii)		ot binding; soil protected/interception; less risk of surface water; e (roots) absorb more rainfall;			[3]
		(iv)		y cut branches; only cut/fell some trees in any year; give t lanting	ime to regrow; A'	VP; e.g.	[2]
	(d)	four \	valid advantages;;;			[4]	
	(e)	(i)	win	nd not turbulent/reduced windspeed at P/tree blocks/reduces wind	d/eq;		[1]
		(ii)	ligh	nting; cooking; work on crafts; heating; TV/radio; AVP;;			[2]
	(f)		both axes labelled (must have m/s); orientation; scale+plots;; A one error per plot			[4]	
		(ii)	site	e A increase, fall then increase/eq; e B fall, increase, fall increase again/eq; ow A higher than B on Tuesday for 1 mk			[2]
		(iii)		higher wind speeds; more consistent/eq; use of figures such as a highest day – accept A if justified;;	range/average si	te A has	[3]
3	(a)	1 planting – same no of seeds; area; time; climate; soil type; 2 harvest – same time; method; 3 record – weigh all beans/no of bags; use log/tally/write down; checked by someone else/eq; AVP;; and 1 mk for replication idea				ıx 6]	
	(b)	genes might escape to other species; by pollination; could upset balance of nature; not a local plant so may not survive; cost of GM; cost of buying new GM seed each year; fear/suspicion of GM crops; AVP;;					[3]