CAMBRIDGE INTERNATIONAL EXAMINATIONS

Cambridge Ordinary Level

MARK SCHEME for the October/November 2015 series

5014 ENVIRONMENTAL MANAGEMENT

5014/22 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 should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

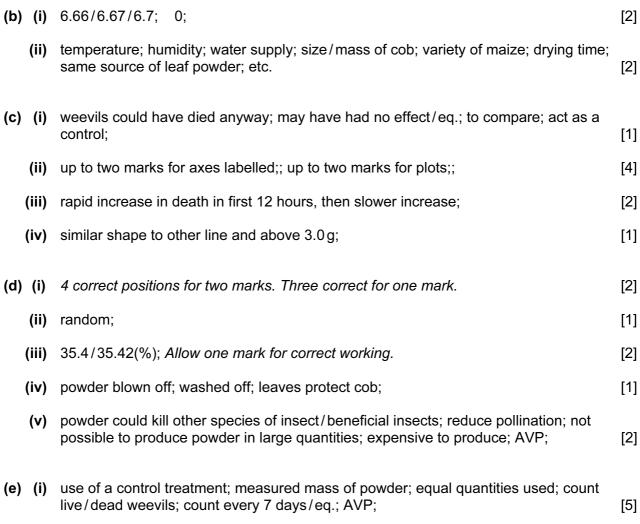
Cambridge is publishing the mark schemes for the October/November 2015 series for most Cambridge IGCSE[®], Cambridge International A and AS Level components and some Cambridge O Level components.



Pa	ge 2	2	Mark Scheme Syllabus	Paper
			Cambridge O Level – October/November 2015 5014	22
1	(a)	(i)	provides protein; vitamins; named vitamins A/D etc.; omega oils; energy;	[2]
		(ii)	weak immune systems; can easily kill; allow other serious infections/eq.; stop growth/eq.;	[2]
		(iii)	famine; food shortages; under-nourished mothers; so not enough for growing baby/eq.; mother smokes; premature birth;	[2]
		(iv)	low calorie diet/energy intake; malnutrition; lack of protein; deficiency diseases;	[1]
		(v)	2.49/2.50 20.08/20.03/20.0 normal 2.72 18.01/18.0 underweight	
			Any two correct for one mark. Any three correct for two marks. All correct for three marks.	[3]
		(vi)	20% is a significant figure/eq.; obesity/overweight is quite rare/eq.;	[2]
	(b)	(i)	only one family/village;	[1]
		(ii)	weighs every egg;	[1]
		(iii)	489; 48.9; Allow ECF from first answer.	[2]
		(iv)	find total number of families and select every fifth one etc./other valid method;	
			Accept randomly.	[1]
		(v)	repeat (for more weeks); other times of year; more families; more villages; more	districts; [2]
	(c)	•	s as they will never run out of food; no need to buy food; good use of food waste; /P, e.g. only some food needed from environment;	[2]
	(d)	(i)	315 000;; Allow one mark for correct working/585 000 alone.	[2]
		(ii)	chickens do not live long/eq.; stop laying eggs; need extra food/find their own for which might not be available/too expensive; ref. to data to show mortality rate;	ood; [2]
	(e)	(i)	males breed with local hens; pass on genes for more egg laying/eq.;	[2]
		(ii)	villagers do not keep hens in pens/eq.; this takes time; and money; eggs laid anywhere/in unknown locations;	[1]
		(iii)	local hens are a genetic resource/CEP may reduce genetic variation; may lose resistance/eq.; may lose being adapted to climate; AVP, e.g. more eggs eaten by predators;	

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2	(a)	makes local maize cheaper to buy; so farmers confident they will get a good price/profit/	eq.;
		keeps demand for local maize high/eq.;	[2]



(ii) table drawn for six weeks; headings relating to the expected method;;

AVP = Alternative Valid Point.

Allow ECF for headings.

[Total: 60]

[3]