CAMBRIDGE INTERNATIONAL EXAMINATIONS

Cambridge International General Certificate of Secondary Education

MARK SCHEME for the March 2015 series

0680 ENVIRONMENTAL MANAGEMENT

0680/42 Paper 4 (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 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 March 2015 series for most Cambridge IGCSE[®] components.



	J -		Cambridge IGCSE – March 2015 0680 4	2			
1	(a)	(a) flooding; destruction of homes; schools/hospitals; transport links; farmland/crobusinesses/e.q.; other infrastructure, e.g. power lines/telecommunications; no water/sanitation; spread of disease/named disease; injury/death; AVP;					
	(b)	(i)	(i) births not registered/e.q., e.g. ID card; population varies; high rate of immigration; changing/unknown/high birth/death rates; mobile population/migrant workers; difficul to carry out accurate census; AVP;				
		(ii)	21/164; = 12.8(%);	[2]			
		(iii)	November – March; in other months too humid to dry; too wet; too many wet days; comment on temperature, e.g. hot enough for drying;	[3]			
			Max. two marks for reasons.				
		(iv)	84;	[1]			
		(v)	poor pay; only way to make enough bricks/e.q.; to meet demand; make enough proowner; good use of fuel/e.q.;	ofit for [2]			
	(c)	(i)	67, 762, 3.3, 14 020				
			Any two for one mark. All for two marks.	[2]			
		(ii)	B; D; B;	[3]			
		(iii)	4761; 4545;	[2]			
		(iv)	D most efficient use of coal; A least efficient use of coal; use of quoted figures to su answer; or calculated difference; not much difference in efficiency/B and E equal efficiency; C less efficient than D or more efficient than A;	pport			
			Allow C is less efficient than B and E/order of efficiency is D, B+E, C, A; ECF from part (iii).	[3]			
	(d)	(i)	sulfur dioxide/ NO_X ; ref. to acid rain in correct context; effects of acid rain on environment, e.g. suppression of crop growth;				
			carbon dioxide; ref. to greenhouse effect/global warming in correct context; effect o global warming;	f			
			soot/carbon particles reduce photosynthesis;	[3]			
		(ii)	named river(s); two rivers/rivers join; regular/annual flooding; keeps supply of silt/mud/clay; at a rate more than or equal to extraction; ref. to delta;	[2]			
	(e)	(i)	$10 \times 50 = 500;$	[1]			

Mark Scheme

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Syllabus

Paper

[1]

(ii) 2000; (allow ECF from part (i))

Pa	Page 3		Mark Scheme		Paper
			Cambridge IGCSE – March 2015	0680	42
	(iii)		some bricks break/poor shape/lost in transit/e.q./may need more delays/matching bricks;	for job/pre	vent [1]
	(f)		eps people employed; uses local materials/e.q.; cost of imports; keep relopment down; brick production can be taxed; brick factories lose s		[3]
2	(a)	(i)	heaviest rainfall; (in only) 12 wet days; ref. to 2/3 months heavy rai ground saturated/e.q.; rivers already full of water;	infall before	/e.q.; so [2]
		(ii)	table drawn; headings (cm/am/pm or 24 hr); data filled in correctly; (34 30 25 17 10) (39 28 20 11 6)	;	[3]
		(iii)	house one – blocked drains/lower lying land/closer to full river; hor concrete/paving; house 2 surrounded by soil;	use 1 surro	unded by [1]
		(iv)	bar graph; (both axes labelled) y cm; x district; all plots correct;		[4]
		(v)	there is no pattern to results/e.q., e.g. varies between districts; con results (i.e. difference of 36 cm);	nment on ra	nge of [1]
	(b)	(i)	P or R;		[1]
		(ii)	pumping adds oxygen; so animals/fish stay alive; so food web (foo maintained; further detail of food chain, e.g. ref. to producers and cannot use up all the oxygen; eutrophication not possible; AVP, e.g respire;	onsumers; I	
	(c)	(i)	residents in built houses; shanty towns; city engineers; politicians; I age groups qualified; two more age groups; males/females; any va	•	different [2]
		(ii)	to make comparisons/provides unbiased results/valid results;		[1]
	(d)		ategies – reasonable investments such as more drainage; better rubb enforcement, e.g. planning development; plant more trees; populati		
		for	each explanation of how it could help; further detail;		[6]
		ΑV	P = Alternative Valid Point.		
					[Total: 60]