CAMBRIDGE INTERNATIONAL EXAMINATIONS

Cambridge International General Certificate of Secondary Education

MARK SCHEME for the October/November 2015 series

0680 ENVIRONMENTAL MANAGEMENT

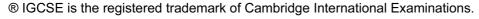
0680/41 Paper 4 (Alternative to Coursework), maximum raw mark 60

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





Page	2	Mark Scheme S Cambridge IGCSE – October/November 2015	Syllabus 0680	Paper 41				
l (a)	,	ncreasing population; more crops for export; increasing wealth; from industrial/service sector; AVP;						
(b)) rair	nfall: WZ more rainfall/DZ less rainfall; use of data;						
	we	t days: WZ more / DZ less; use of data;						
temperature: WZ only 2°C range/eq., DZ 6°C range/average temperature higher of data;								
(c)	(i)	(enough rain) to allow germination/eq./allows crop to continue grow	ring/eq.;	[1]				
	to the soil;							
		no plants to take up water; so soil becomes moist; more light gets to plants for faster growth;		[2]				
	(iii) not much rainfall; some plants/weeds will grow; so intercept rainfall/prevent roots bind soil; ref. to high rate of evapotranspiration/evaporation;							
	(iv) land is left to recover/eq.; fertilisers/pesticides not needed; low input low of soil structure/fertility not damaged in the longer term;							
(d)) (i)	(87.4 – 61.2 =) 26.2; 42.8/43(%);						
		Award two marks for the correct answer alone.		[2]				
	(ii)	increase in volume of milk imported; price increases/idea of supply and demand; increased costs of production; example of increased cost; inflation;						
	(iii)	2009 with reasons for drop in value and volume of imported milk, e.g. less milk consumed/domestic production increased; so less den	nand; AVP	; [2]				
(e)) (i)	y-axis labelled with units; maize produced plotted; maize imported plotted; (allow one error per key used/identifies lines;	plot)	[4				
	(ii)	production: increased (until 2010) then decreased; imported: (initial increase) then/general decrease;		[2				
	/:::\	in 2007 to 2010; mare maize harvested due to better seeds/better as						

(iii) in 2007 to 2010: more maize harvested due to better seeds/better seed

too expensive; favourable conditions for maize growth;

selection/GMO/eq.; more land area planted; more machinery used; more irrigation used; better prices/more demand; use of affordable/better fertiliser; AVP, e.g. imports

in 2010–2011: converse of above; ref. to less maize as other crops more profitable;

[3]

Pa	age :	3	Mark Scheme	Syllabus	Paper			
			Cambridge IGCSE – October/November 2015	0680	41			
	(f)	ar m	farmers can afford to pay for a cow/more cows; over several years; animals have better health/diseases treated; so more milk; imported cows may produce more milk/eq.; imported cows increase total number of cows; can be crossbred with local cows; to improve milk production; [4]					
2	(a)	(i)	12.5 million; (Allow 12500000.)		[1]			
		(ii)	jobs that supply services/materials to the port or port workers/eq. delivery/ship repair/laundry/hotels for crew members/other valid		as food [2]			
		(iii)	to protect from storms/cyclones/hurricanes; tsunami; prevent dan cargo; so port can always work; ref. to rising sea levels/frequency climate change;					
	(b)	(i)	deforestation; loss of habitat; loss of endangered species; scare w erosion; air/dust/visual/noise pollution; damage to roads;	ildlife away;	soil [3]			
		(ii)	sand would only have to be dumped somewhere else; possible da sustainable used of sand; saves fuel/transport costs/eq.; save lab	•	mping/ [2]			
	(c)	(i)	key completed; three schools and two green spaces; road network buildings other than schools; any other two features, such as a maservice, e.g. gas lines, sewage pipes;					
		(ii)	high spec. building, e.g. solar panels/small wind turbines; good in recycled materials; another valid example; all sewage collected; so no organic matter pollution; all garbage re					
			no visual pollution/spread of disease; green spaces/parks; absorb air pollution; AVP, e.g. transport relat		[4]			
	(d)		tra interest has to be paid; so less contribution to GDP/eq.; no jobs, mains; no improvement in standard of living; no taxes paid; AVP;	so unemplo	yment [2]			
	(e)	(i)	can survey people with low literacy skills; make sure data is collec	ted;	[1]			
		(ii)	valid selection method, e.g. stratified/equal numbers for each age several different interest groups/named groups;	/gender gro	oup; [2]			
		(iii)	(add up answers) and express as a percentage response/pie cha	t/eq.;	[1]			
		(iv)	suitable questions related to the text given, e.g. Do you own land? owned/buildings owned/sources of income/compensation paid;	/size of land	d [3]			

Mark Scheme

AVP = Alternative Valid Point.

Page 3

[Total: 60]

Syllabus

Paper