UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS International General Certificate of Secondary Education

MARK SCHEME for the October/November 2008 question paper

0460 GEOGRAPHY

0460/01

Paper 1, maximum raw mark 75

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.

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 discussions or correspondence in connection with these mark schemes.

CIE is publishing the mark schemes for the October/November 2008 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.



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Levels of response marking is used for section (c) of each question.

It is the quality of the response which determines which level an answer is achieved, rather than the number of statements contained within it. However once assigned to a level the mark achieved within that level is determined by the number of points made.

Levels 1 and 2 are distinguished by whether statements are simple (level 1) or developed/elaborated (level 2). A candidate can immediately enter L2 by making developed points without making any L1 statements. In order to achieve L3 a candidate must have already reached the top end of L2 – in addition his/her answer should have a clear example (for 6 marks), and if the answer is place specific as well (7 marks).

Summary:

Level 1 (1 to 4 marks): 1 simple statement (1 mark) 2 simple statements (2 marks) 3 simple statements (3 marks) 4 or more simple statements (4 marks)

Level 2 (3 to 5 marks):

1 developed statement (3 marks)

2 developed statements or 1 developed statement + 2 or more simple statements (4 marks)

3 or more developed statements or 2 developed + 2 simple statements (5 marks)

Level 3 (6 or 7 marks)

3 or more developed statements + named example or 2 developed + 2 simple statements + named example (6 marks)

3 or more developed statements with at least one piece of place specific detail + named example or 2 developed + 2 simple statements + named example + one piece of place specific detail. (7 marks)

All answers, whether marked by point marking or levels, should have signs of having been assessed by the examiner. Crosses are acceptable to signify wrong answers and a red line accompanied by the letters 'I/R' should be used to indicate those which are irrelevant.

	Page 3			Mark Scheme	Syllabus	Paper
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1	(a)	(i)	Рор	ulation of working age		[1]
		(ii)	a A	Freater %/more old in Japan at 75+/old depende pex/top to pyramid etc. ny individual bar can be taken as long as compare v apan 65+ 15–7% Indonesia 3–5%		nid has wider
			p	breater percentage of population in 0–4 age gr yramid. Etc. ndonesia 11–11.5% Japan 4.5–5%	oups/wider base	to Indonesian
			2@	1 mark		[2]
		(iii)	prov	didates should compare here though we should lin iding they are not simple repetition of figures withou s such as:	-	crete accounts
			abou abou Can	ter proportion of young dependents in Indonesia; ut 33–35% of population of Indonesia compared with ut 2x percentage in Indonesia than Japan; not look at individual bars – must be 0–14	about 14–16% of	that of Japan;
			-	1 mark with 1 mark reserved for use of figs 2 marks if no figures		[3]
		(iv)	birth acce educ educ degr marr poly IMR impa influe attitu whe desi deat heal care whe Do r	erence to factors such as: rates; ess to contraceptives; cation about birth control; cation about adverse impacts of large families; ree of mechanisation of/dependence on agriculture; ry young gamy ; acts of government policy; ence of over decision making; udes towards women; ther women want a career before children; re for material possessions; h rates; th care; structure for old (or examples) ther pension schemes are set up; etc. not double credit. 1 mark or development		[4]
	(b)	(i)	Japa Japa Japa Japa Acce Max	s such as: an percentage higher than that of Indonesia; an percentage increasing more rapidly than Indones an 7% 1970 Indonesia 3% 1970; an 18–19% 2005 Indonesia 5% 2005. ept any other year up to 2005 as long as figs correct 2 for use of figures 1 mark		[3]

PMT

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(ii) Reasons such as: longer life expectancy; better treatment of diseases
e.g. cholera, typhoid, AIDS (LEDC diseases)
e.g. cancer, heart attack, stroke, AIDS (if not above) (MEDC) improved health care/medical facilities/hospitals, clinics more doctors, nurses, or other staff; more medicines, drugs, vaccinations investment in care homes services for elderly or example low birth rates/small families (max 2) improved food supplies better sanitation/water supplies etc.
5 @ 1 mark or development

[5]

(c) Levels marking

Level 1 (1-4 marks)

Statements including limited detail explaining why the government is concerned by an ageing population.

(e.g. increasing percentage of elderly dependents; strain on working population; higher taxation; need for more money to be spent; lack of workforce; harder to defend country; increase in rates of pay; under use of services for young etc.)

Level 2 (3–5 marks)

More developed statements explaining explaining why the government is concerned by an ageing population.

(e.g. increasing percentage of elderly dependents causes strain on working population; higher taxation as a result of increasing percentage of elderly dependents; need for more money to be spent on care homes/health care etc.; lack of innovative workforce; not enough recruitment to forces to defend country; lack of workers means need to attract foreign workers; reduced supply of workers leads to increase in rates of pay; under-use of services for young leads to inefficiency/closure of schools etc.)

Level 3 (6–7 marks)

Uses named example (e.g. Japan).

Comprehensive and accurate statements explaining why the government is concerned by an ageing population, including some place specific reference.

(e.g. With over 20% of population elderly dependents causes strain on working population; higher taxation as a result of increasing percentage of elderly dependents; need for more money to be spent on care homes/health care etc.; lack of innovative workforce causes stagnation in electronics industries; not enough recruitment to forces to defend country; lack of workers means large need to attract Chinese and Filipino workers; reduced supply of workers leads to large MNCs like Sony having to increase in rates of pay/may reduce likelihood of future investment; under-use of services for young leads to inefficiency/closure of schools etc.)

[7]

[Total: 25]

	Ра	ge 5	6	Mark Scheme	Syllabus	Paper
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2	(a)	(i)	Mod	lel A		[1]
		(ii)	X = (CBD/business/commercial		
				Industry		10
			2@	1 mark		[2
		(iii)		ilarities such as:		
				i has CBD in the middle centric pattern;		
				stry in wedge around main road etc.		
				erences such as:	ality (
				odel A centre is surrounded by band of medium qua sing/model B surrounded by low quality housing;	anty	
			mod	lel A has squatter settlements/model B does not;		
				 quality residential is in a sector in model A/in mode in a band etc. 	el B	
				lel A gets worse as go out, model B gets better as g	jo out.	
			4@	1 mark with max 3 on each of similarities/difference	es	[4
	(b)	(i)	Idea	is such as:		
	(~)	(•)		nly outside/on edge of built up area;		
				e to Pan-American highway/main road or highway		
				hills/close to edge of highland/ lowland usters;		
			one	cluster to north of Lima/west of Cono Este/one cl	uster to south east	/west of Con
			Sur (Near	etc. r River [Rimac]		
				1 mark		[3
		(ii)		is such as:	1	
				re there is plenty of space/where land is free or ava within reach of city for employment opportunities/ca		a
			land	which has not been used for commercial activities;	-	
				may be prone to flood/landslide/too steep for buildi 1 mark	ng;	[3
			0 @	THAIR		l.
		(iii)		is such as: iy people migrate from countryside;		
				vork opportunities (dev);		
			to im	nprove quality of life (dev);		
				er provision of doctors/hospitals (dev) etc.; er chance of education for children (dev);		
				y people are unable to obtain jobs;		
				k for low pay/cannot afford housing/work in informal loguate investment in housing stock;	sector;	
				equate investment in housing stock; s of natural increase are high etc.		
			brigh	ht lights		
				much space 1 mark or development		[5
						L ^x

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Level 1 (1–4 marks)

Statements including limited detail on methods used to improve quality of life in squatter settlements.

(e.g. improve water supply, improve sanitation, Infrastructural development; build more housing; provide better education facilities; provide better health facilities; Improvement of communications; self help schemes; charitable initiatives working with street children etc.)

Level 2 (3–5 marks)

More developed statements on methods used to improve quality of life in squatter settlements.

(e.g. Installation of mains water; Laying of sewage pipes/building of sewage works; increase of local authority housing stock; build tarred roads to shanty towns; provide public transport to shanty towns; Regular collection of refuse; Site and services schemes; education in building skills; provision of low cost building materials; building of schools; building of clinics/hospitals; provide free education for street children etc.)

Level 3 (6–7 marks)

Uses named example (e.g. Rio de Janeiro).

Comprehensive and accurate statements on methods used to improve quality of life in squatter settlements, including some place specific reference.

(e.g. Installation of mains water in favelas; Laying of sewage pipes/building of sewage works in areas such as Rocinha; increase of local authority housing stock; build tarred roads to shanty towns on mountain slopes on edge of city; provide public transport to shanty towns; Regular collection of refuse; Site and services schemes; education in building skills; provision of low cost building materials; building of schools; building of clinics/hospitals; provide free education for street children etc.)

[7]

[Total:	25]
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3	(a)	(i)	Stevenson Screen	[1]
		(ii)	(Maximum/minimum) thermometer; Barometer 2 @ 1 mark	[2]
		(iii)	 A to reflect sun's rays/so it is not heated by the sun B to allow free flow of air C so it measures condition of air not ground 3 @ 1 mark 	[3]
		(iv)	Ideas such as: open space/away from trees and/or buildings; so instruments are not sheltered from wind so instruments are not shaded from sun on grass/not on concrete or any other surface as temperatures above concrete will be artificially high (reason);/on grass will standard or measure real air temp. in a fenced/walled compound; to avoid tampering (reason) etc.	be
			4 @ 1 mark crediting reasoning as development NB Max 3 without any reasoning	[4]

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 (b) (i) Ideas such as: reduction in air pressure between 12.00 (15 Oct) and 04.00 (16 Oct); overnight lowest point in early morning or 4am from 985/986mb to 962/963mb; increase up to 12.00 (16 Oct)/morning from 962/963mb to 995mb; increase steeper then reduction etc. 3 @ 1 mark

(ii) Ideas such as: (can compare via words or figures but need comparison) or could use figures for development as (1 + 1) higher air pressure at 16.00; higher temperature at 02.00; raining at 16.00, dry at 02.00; higher wind speed at 02.00; wind direction 30–40 degrees at 16.00, 200–210 degrees at 02.00. 5 @ 1 mark

(c) Levels marking

Level 1 (1–4 marks)

Statements including limited detail describing problems experienced by people as a result of drought.

(e.g. people killed, crops destroyed, they have no water to drink, soils ruined, people move away, food shortages, vegetation catches fire etc.)

Level 2 (3–5 marks)

More developed statements describing problems experienced by people as a result of drought.

(e.g. people have to walk long distances to find water; lower crop yields leads to lack of food; death through starvation/malnutrition; farmers unable to leave land fallow therefore soils exhausted; overgrazing of livestock takes place;

Increased likelihood of soil erosion by wind; loss of vegetation leads to more rapid run off; greater potential for flash floods;

people move to cities to find food/water: veg catches fire and destroys crops/settlements/create haze etc.)

Level 3 (6–7 marks)

Uses named example (e.g. Eritrea). COUNTRY or Sahel

Comprehensive and accurate statements describing problems experienced by people as a result of drought, including some place specific reference.

(e.g. lower crop yields so malnutrition rate reached 19.1 percent in Gash Barka zone; 2.3 million people in Eritrea/almost two-thirds of the population depend on food aid; although 80 percent of the population is rural the country only produced 47 percent of its average harvest; over a million Eritreans are likely to go hungry this year; it is made worse because Eritrea is still recovering from a war with neighbouring Ethiopia; also the resettlement of Eritrean refugees returning from Sudan is an extra strain on the country's resources. Etc.)

[7]

[Total: 25]

[3]

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(a)	(i)	С			[
	(ii)	A ha B ha A is	s such as: as steeper sides; as wider valley floor/it has a flood plain but A does n more V shaped B is more "U"/open V shaped etc. 1 mark	iot;	[
	(iii)	corra corra attrit Acce	aulic action; asion/abrasion; osion/solution ion ept either name of process or description 1 mark		[
	(iv)	pebl light mate 4 @	e materials being pushed/rolled along bed (traction) bles being picked up by water and bounced along th materials carried within the water (suspension); erials dissolved in the water (solution) 1 mark 1 mark for 2 named processes – or 2 marks for all 4	ne bed/series of hop	os (saltation); [/
		· ·		,	L
(b)	(i)	stee long mair sma lake bare white spra wate	tures should be evident from photographic evidence p/vertical falls/cliff drop/high n falls are wide; ller falls to left; /plunge pool at base; e rock of falls; e water/fast flowing/powerful y at base erfall has cut down etc. 1 mark	e. Ideas such as:	[
	(ii)	Ben scer touri spec HEF attra dow	s such as: efits: nic beauty; st industry; cified employment opportunities (dev) o; ncts industry/multiplier (dev) nriver transport of logs		
		caus	ses problems with navigation of river; sing falls is difficult etc.		
		50	1 mark or development		

Level 1 (1-4 marks)

Statements including limited detail explaining the causes of a river flood. (e.g. heavy rain, impermeable rocks, flood plains built on, deforestation, urban growth, dam collapse etc.)

Level 2 (3–5 marks)

More developed statements explaining the causes of a river flood.

(e.g. heavy rain falling over a relatively short period, impermeable rocks encouraging overland flow and rapidly raising river levels, underlying rocks river/constricting flow, urban growth leads to more rapid run off etc.)

Level 3 (6–7 marks)

5

Uses named example (e.g. River Lyn).

Comprehensive and accurate statements explaining the causes of a river flood, including some place specific reference.

(e.g. thunderstorms associated with frontal depression formed torrential rain – 229mm near Longstone Barrow on Exmoor, saturated from previous rainfall as it had rained for 12 of the previous 14 days, impermeable rocks of Exmoor encouraging overland flow and rapidly raising river levels, river had been diverted and its channel made narrower due to building of hotels in Lynmouth, bridges over river trapped boulders and formed temporary dams etc.)

[7]

[Total: 25]

(a)	(i)	680 million	[1]
	(ii)	A Europe B Asia-Pacific 2 @ 1 mark	[2]
	(iii)	Ideas such as: increasing affluence/increased income/higher wages particularly in countries such as China (dev) longer (paid) holidays/increased leisure time/paid holidays further developments in air travel; low cost airlines (dev); investment in larger airline capacity (dev) growth of marketing of holidays; ease of booking through internet etc. development of tourist facilities (airports, hotels etc.) increase in grey market/no of retired 3 @ 1 mark or development	[3]

Page 10	Mark Scheme	Syllabus	Paper
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fore ena dev dev cult rete incr sale loca	as such as: re jobs are created for local people or egs eign exchange/income; abling spending on education/hospitals etc. velopment of infrastructure (water, electricity, gas, t velopment of transport networks, roads, airport etc. cural exchange; ention of culture/traditions; reased market for local farmers; es of local craft items als can use tourist facilities e.g. shopping malls/cine 0 1 mark or development)	[3
incr loss imp nois exp sea sho litte lack loss tou	as such as: rease in local traffic (on St Louis Road)/congestion/ s of local culture/traditional way of life; bact of behaviour of tourists/drunkeness etc.; se from tourists; (leaving Boat House Creole Buffet bloitation/low paid jobs/long hours; usonal work; ortage of water supplies; or from tourists (on Beau Vallon beach) < of privacy; s of farmland for building rist buy houses a pollution etc.		n from traffic;
(iii) Fea obs suc san calr (tro mai hea Nat boa	 1 mark + 1 reference to map/photos atures should ideally be evident from photos atures may be 'by implication'. No maximum thas: ady/large beaches; m/clear/blue seas; pical) lush vegetation/palm trees/rainforest/jungle rine parks (or example); adlands/bays; tional Park; at trips/fishing ernational air access; 		

mountains; blue skies/sunshine/warm or hot weather or temperature creole food/local cuisine botanical gardens small islands offshore etc.

5 @ 1 mark OR 4@ 1 mark plus 1 named example

[5]

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Level 1 (1-4 marks)

Statements including limited detail describing what has been done to maintain, improve or conserve the quality of the environment.

(e.g. restricting tourist numbers; conserving wildlife; ensuring vegetation/habitat is not cleared for tourist development; developing ecotourism; setting up National Parks/conservation areas; education of tourists regarding environmental issues; employing people to clear up regularly; more litter bins; restricting access etc.)

Level 2 (3–5 marks)

More developed statements describing what has been done to maintain, improve or conserve the quality of the environment.

(e.g. restricting tourist numbers by dealing with a limited number of tourist firms; ensuring wildlife is conserved by setting up National Parks/conservation areas; refusing planning permission for development of tourist facilities which would destroy vegetation/habitat; encouragement of ecotourism by governments incentives; education of tourists regarding environmental issues by guided walks/visitor centres; restricting access to sensitive areas by fencing them off etc.)

Level 3 (6–7 marks)

Uses named example (e.g. Menorca).

Comprehensive and accurate statements describing what has been done to maintain, improve or conserve the quality of the environment, including some place specific reference. (e.g. restricting tourist numbers by dealing with a limited number of tourist firms; refusing planning permission for buildings over 2 storeys within 250 m of coast; eco-tax established to raise money for environmental protection; creation of Biosphere Reserve; Just north of Mao on the coast is the Parc Natural de S'Albufera des Grau, a most important wetlands reserve

area; restricting access to sensitive areas by fencing them off and creation of marked paths such as those in S'Albufera des Grau etc.)

[7]

[Total:	25]
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6	(a)	(i)	Fuel formed from remains of plants/animals	[1]
		(ii)	Africa; Asia and/or Pacific 2 @ 1 mark	[2]
		 (iii) Candidates should identify differences here though we should link together two discre accounts. Ideas such as: Greater proportion of fossil fuels used in Europe; Greater proportion of Hydro used in South America; Greater proportion of nuclear used in Europe Greater proportion of fuelwood in South America 3 @ 1 mark 		
		(iv)	Candidates should suggest reasons for the importance of different types of energy. Expect ideas such as: availability of reserves of fossil fuels/coal/oil/natural gas; level of development/technology available; government policy/attitude/towards the environment/e.g. nuclear power; environmental conditions or examples e.g. opportunity to use solar power, HEP etc. max 2) Cannot afford set up costs etc.	(to

4 @ 1 mark or development

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like hig hig bal ma	oblems such as: ely to slow down economic growth; her production costs/cost of products increase her transport costs; ance of payments deficits/higher import bills kes them less competitive etc. 1 mark		[3]
bur with cau whi gas me rise floc oil s kills 1 re	as such as: ning oil pollutes the atmosphere; h gases such as carbon dioxide/sulphur dioxide; using acid rain; ich damages forests; ses result in global warming/enhanced greenhouse lting of ice caps; e in sea level; oding of areas of coastal lowland; spillages at sea; s aquatic life etc. eserve on each of transport/use. 2 1 mark or development	effect;	[5]

Level 1 (1–4 marks)

Statements including limited detail describing how renewable energy supplies are being developed.

(e.g. tidal power, HEP, wind power, wave power, solar, geothermal, biofuel etc.)

Level 2 (3–5 marks)

More developed statements describing how renewable energy supplies are being developed. (e.g. tidal power is being developed in bays and estuaries/where the tidal range is large, HEP is being developed in mountainous areas with high precipitation, wind power is being developed offshore and in mountainous areas, wave power is being developed where waves are large etc.)

Level 3 (6–7 marks)

Uses named example (e.g. UK).

Comprehensive and accurate statements describing how renewable energy supplies are being developed including some place specific reference.

(e.g. tidal power is being developed in bays and estuaries like the Severn Estuary, HEP is being developed in mountainous areas with high precipitation such as the pumped storage scheme at Dinorwic in Snowdonia, wind power is being developed off the coast of East Anglia and in Morecambe Bay in mountainous areas such as the Pennines etc.)

[7]

[Total: 25]