CAMBRIDGE INTERNATIONAL EXAMINATIONS Cambridge International General Certificate of Secondary Education

MARK SCHEME for the May/June 2015 series

0460 GEOGRAPHY

0460/11

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



Ρ	age 2	Mark Scheme	Syllabus	Paper
		Cambridge IGCSE – May/June 2015	0460	11
1	(a) (i)	Asia		[1]
	(ii)	A. Europe; B. Asia	$(2 \times 1 \text{ mark})$) [2]
) [4]
	(iii)	Ideas such as:		
		high birth rates/growth rates;		
		 education about family planning/sex education/contraception; 	4 \.	
		 lack of, cost of, access to contraception/family planning (max ' economic reasons for large families; 	I),	
		 high infant mortality; 		
		 decreasing death rates/increased life expectancy; 		
		• investment in health care/vaccinations/better, more doctors/nu	irses (max 1);
		better water supply/sanitation;	, ,	
		 traditional/in their culture/part of their religion to have large fan incompany of fand sumplies (nutrition (better dist) at a 	-	
		 improved food supplies/nutrition/better diet; etc. 	$(3 \times 1 \text{ mark})$) [3]
	(iv)	Ideas such as:		
	. ,	Poverty;		
		 people do not have enough resources; 		
		pressure on energy supplies (or example)/strain on utilities e.g	J. gas or eleo	ctricity;
		 lack of work; inclosure food supplies/malpourished/stan/stion; 		
		 inadequate food supplies/malnourished/starvation; poor access to education/government spend more on education 	n.	
		 poor access to concentration/government spend more on concentration poor access to health care/government spend more on health 		
		 overcrowded housing/homeless/shanty towns develop; 	our o,	
		• inadequate water supply/sanitation/government spend more o	n water sup	oly or
		sanitation;overuse of agricultural land/overgrazing;		
		 overuse of agricultural land/overgrazing; deforestation/loss of natural vegetation/habitats; 		
		 increase in specified pollution type (Max 1) etc. 	$(4 \times 1 \text{ mark})$) [4]
	(b) (i)	 Ideas such as: uneven distribution; many people live near/densely populated near Lake Victoria/in many in/densely South West/near Rwanda border; many close to capital city/Kampala/close to cities (urban area) many along river between lake Victoria and Lake Kyoga; few/sparsely populated in NE/North of country; 	•	
		 few/sparsely populated near South Sudan border/Northern Ke any appropriate latitude and longitude with corresponding don 		

any appropriate latitude and longitude with corresponding dense/sparse/many/few reference (Max 1);
 (3 × 1 mark) [3]

Page 3	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – May/June 2015	0460	11

- (ii) Ideas such as:
 - more likely to live on flat land;
 - people are more likely to live in lowland areas/avoid living in mountains/live in a valley;
 - people live in areas of temperate climates/where it is wet/warm;
 - people avoid areas which are too hot/too dry/too cold/areas with extreme climate conditions;
 - flood plains are avoided;
 - swampy areas are not built on;
 - in tropical areas higher land is attractive to live in as temperatures are lower;
 - large areas of rainforest are sparsely populated;
 - people live near a water source/rivers/nodal points for rivers/where rivers meet;
 - people live near fertile soil;
 - defensive sites e.g. surrounded by mountains/meander/on a hill;
 - dry desert areas are avoided/have few people;
 - near to natural resources/fossil fuels/minerals; etc.

NB: development is likely to be explanation e.g.as mountains/steep slopes are difficult to build on (dev) or need fields to graze cattle/grow crops; etc.

Max 1 development mark for each idea.

No double credit for opposites.

 $(5 \times 1 \text{ mark or development})$ [5]

Page 4	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – May/June 2015	0460	11

(c) Levels marking

Level 1 (1–3 marks)

Statements including limited detail which describe and/or explain recent changes in population structure.

<u>Level 2</u> (4–6 marks) Uses named example.

More developed statements which describe and/or explain recent changes in population structure.

(NB Max 5 if no named example)

Level 3 (7 marks)

Uses named example. Comprehensive and accurate statements describe and explain recent changes in population structure, including some place specific reference.

Content Guide:

Answers will depend on country chosen but most are likely to refer to;

- ageing population,
- reducing proportion of young dependents;
- increasing proportion of elderly
- male/female imbalance
- migration ideas; etc.

place specific reference is likely to consist of: named parts of the chosen country/locational detail, population data etc.

NB: do not combine simple description and explanation for level 2.

[7]

Pa	ige 5		Mark Scheme Cambridge IGCSE – May/June 2015	Syllabus 0460	Paper 11
	(a)	(i)	Apatzingan/ Los Reyes/Nueva Italia/Patzcuaro/Zacapu/Zamora	(1 mark)	[1]
	((ii)	A. An area of countryside with scattered buildings/houses/separat area where houses/services are separated/outside city;	ted by distand	ce/large
			NB: need both dispersed idea and rural location for mark.		
			B. A built up area/town/city/area with high population/high density people live there/industrialised area;	buildings/lots (2 × 1 mark	
	(1	iii)	 Ideas such as: flat land/room for expansion; industry/factories/businesses; markets for surrounding area/trade from surrounding area; migration (from surrounding rural area); commercial/retail development; mining/raw materials/extraction of resources; meeting of roads/route centre/transport links meet together; 		
			central location; etc.	$(3 \times 1 \text{ mark})$.) [3
	(1	iv)	 Ideas such as: It is typical of a hierarchy – reserve 1 mark; there are more small settlements/low order than large ones/h larger settlements are further away from each other than sma are closer together; there is only one settlement over 200 000 but there are 9–11 to 20 000 people or 38–40 settlements between 2501 and 10 alternatively could provide comparative examples of distance NB: Statistics must be comparative or could use terms such a most/least/many/few; 	all ones/small settlements c 000 people; s;	of 10001
	(b)	(i)	 Ideas such as: travel more varied distances for shops; e.g. 0.5km to 25 km for shops compared with 20–23 km for lei generally travel further for leisure/don't travel as far for shopp a valid comparison e.g. meat and cinema; anomaly is furniture as travel up to 25kms but must refer to d 	ing;	etc.
			NB: Must be comparative	(3 × 1 mark) [3

Page 6	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – May/June 2015	0460	11

- (ii) Ideas such as;
 - travel further for high order goods;
 - it depends on the availability of the services;
 - e.g. there are lots of shops selling bread (dev);
 - so people will be able to buy it locally (dev);
 - main leisure facilities may only be found in large urban areas;
 - so have to travel to a nearby city to go to cinema (dev);
 - for some goods people go further so they have a better choice/a wider variety of goods in some shops;
 - travel further for a better quality product;
 - General frequency of use idea e.g. don't go there very often so will travel further;
 - travel further for a specialized shop not found near where they live;
 - travel further for cheaper prices;
 - travel further for expensive goods e.g. car; etc

NB: Any example used properly is acceptable for development.

 $(5 \times 1 \text{ mark or development})$ [5]

(c) Levels marking

Level 1 (1–3 marks)

Statements including limited detail which describe location and/or sphere of influence of a shop or service.

<u>Level 2</u> (4–6 marks) Uses named example.

More developed statements which describe location and/or sphere of influence of a shop or service.

(NB Max 5 if no named example)

Level 3 (7 marks)

Uses named example.

Comprehensive and accurate statements which describe location and sphere of influence of a shop or service.

Content Guide:

Answers will depend on example chosen, however reference may refer to location:

- within CBD,
- on specific street,
- road network,
- proximity other services etc.(7)

NB: Not looking for explanation

[7]

Page 7	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – May/June 2015	0460	11
(a) (i	Wet and dry bulb thermometer/hygrometer	(1 mark)	[1
(ii	 Ideas such as: read off <u>wet and dry bulb</u> temperatures/read both tempera	m dry bulb (8–6)/w epression figures (^v	
		$(2 \times 1 \text{ mark})$) [2
(111	 Ideas such as: reflect sun's rays/so they are not heated by the sun/to a so that air flows gently around them/they are not affecte so they measure condition of air not ground; so they are a standard height above ground; so they are not affected by concrete; 	-	t;
	 to avoid tampering; etc. 	$(3 \times 1 \text{ mark})$) [3
(iv	Two marks for instruments and two for weather characteristi	cs they measure:	
	e.g. maximum and minimum thermometer = highest and low max and min daily temps	est temperatures/r	neasure
	barometer = air pressure	$(4 \times 1 \text{ mark})$) [4
(b) (i	 Ideas such as: west/SW is more likely in March/or comparative stats 11 days from West and 2 from South West in October; 	I/7 days compared	with 3

- October more days with winds from 5 from north/7 from north west/compared with 2 from North/ 1 from North East in March;
- as an alternative to first two lines can have statement such as mainly from west in March but mainly from North/North west in October;
- fewer days with winds from the (2)east in March/(4) in October;
- more calm days in (27)October/more days with wind in March (29); etc

NB: Must compare March and October any two sets of statistics for max 1.

(3 × 1 mark) [3]

Page 8	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – May/June 2015	0460	11
(ii	 wind direction is recorded with a wind/weather vane; labelled diagram of wind vane/description (MAX 2); direction noted is where the wind is blowing from/arrow points a blowing from; wind speed is recorded with an anemometer; labelled diagram of anemometer/description (MAX 2); both connected to computer/digital weather station; check instruments every X hours to get reading; locational idea of both instruments placed high up/on a roof/aw 1); 		
	NB: 1 mark for diagram with title		
	2 marks for diagram with title and labelling		
	No double credit for diagram and text. Etc. (5 \times 1 mark or develop	ment/labellir	ng) [5]
(c) L	evels marking		
	evel 1 tatements including limited detail which describe the impacts of droug		–3 marks]
	<u>evel 2</u> ses named example.	[4	–6 marks]
Ν	ore developed statements which describe the impacts of drought.		
1)	IB Max 5 if no named example)		
	evel 3		[7 marks]
С	ses named example. omprehensive and accurate statements which describe the impacts of ace specific information.	f drought, in	
C p C	omprehensive and accurate statements which describe the impacts of	f drought, in	

Cambridge IGCSE – May/June 2015 Wearing away/breaking down of land/cliffs by the sea/waves A = Cave/Notch B B = (Natural) Arch Headland drawn to show stage 3 with isolated stack; Iabelling of stack; reference to collapse of roof of arch either in text or on diagram; Ideas such as: alternate bands of hard and soft rock along coasts with bays hard rock resists erosion; hard rock forms headlands; soft rock easily eroded; soft rock form bays;	0460 (1 mark) (2 × 1 mark) (3 × 1 mark) and headlands;	11 [1 [2 [3
 A = Cave/Notch B = (Natural) Arch Headland drawn to show stage 3 with isolated stack; labelling of stack; reference to collapse of roof of arch either in text or on diagram; Ideas such as: <u>alternate</u> bands of hard and soft rock along coasts with bays hard rock resists erosion; hard rock forms headlands; soft rock easily eroded; 	(2 × 1 mark) (3 × 1 mark)	[2
 B = (Natural) Arch Headland drawn to show stage 3 with isolated stack; labelling of stack; reference to collapse of roof of arch either in text or on diagram; Ideas such as: alternate bands of hard and soft rock along coasts with bays hard rock resists erosion; hard rock forms headlands; soft rock easily eroded; 	(3 × 1 mark)	[3
 labelling of stack; reference to collapse of roof of arch either in text or on diagram; Ideas such as: <u>alternate</u> bands of hard and soft rock along coasts with bays hard rock resists erosion; hard rock forms headlands; soft rock easily eroded; 	. , ,	-
 <u>alternate</u> bands of hard and soft rock along coasts with bays hard rock resists erosion; hard rock forms headlands; soft rock easily eroded; 	and headlands;	
 differential erosion; 	$(4 \times 1 \text{ mark})$	[4
 Ideas such as: high; steep; overhanging/undercut; brown rock/red/rust coloured; large block at base/boulders at base; layers; jagged; crumbly appearance; bare rock; etc. 	(3 × 1 mark)	[3
 Ideas such as: hydraulic action; air in cracks compressed (dev); corrasion/abrasion; loose materials thrown at cliff by waves (dev); corrosion; rocks dissolved by chemicals in sea water (dev); undercutting; slumping/collapse; 		
	 high; steep; overhanging/undercut; brown rock/red/rust coloured; large block at base/boulders at base; layers; jagged; crumbly appearance; bare rock; etc. Ideas such as: hydraulic action; air in cracks compressed (dev); corrasion/abrasion; loose materials thrown at cliff by waves (dev); corrosion; rocks dissolved by chemicals in sea water (dev); undercutting; slumping/collapse; as cliff cannot take weight of overhanging section (dev) etc. 	 high; steep; overhanging/undercut; brown rock/red/rust coloured; large block at base/boulders at base; layers; jagged; crumbly appearance; bare rock; etc. (3 × 1 mark) Ideas such as: hydraulic action; air in cracks compressed (dev); corrasion/abrasion; loose materials thrown at cliff by waves (dev); corrosion; rocks dissolved by chemicals in sea water (dev); undercutting; slumping/collapse;

Page 10	Mark Scheme	Syllabus	Paper
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(c) Levels marking

Level 1 (1–3 marks)

Statements including limited detail which describe features of coral reef and/or explain formation.

<u>Level 2</u> (4–6 marks) Uses named example.

More developed statements which describe features of coral reef and/or explain formation.

(NB Max 5 if no named example)

Level 3 (7 marks) Uses named example. Comprehensive and accurate statements which describe features of coral reef **and** explain formation, including place specific information.

Content Guide:

Answers are likely to refer to:

- composition of coral,
- biodiversity,
- locational features,
- deposition of calcium carbonate,
- colonization etc.

NB: Accept name of coral reef as alternative to location for level 3.

[7]

Page 11 Mark Scheme Cambridge IGCSE – May/June 2015 5 (a) (i) Manufacturing/making things/assembling things/factories (ii) E = 3 F = 1 G = 2 All 3 correct = 2 marks 1 or 2 correct = 1 mark (iii) Ideas such as: • close to port/easy to export/easy to import resources; • HEP/power/electricity supply/energy supplies; • Rail transport; • Large market in the area; • Labour supply available; • Mines; • Trees; • Water source with dam/lake; etc. (iv) Two marks for likely changes and two further marks for suggested reasons.	Syllabus 0460 (1 mark) (2 marks)	Paper 11 [1]
 (ii) E = 3 F = 1 G = 2 All 3 correct = 2 marks 1 or 2 correct = 1 mark (iii) Ideas such as: close to port/easy to export/easy to import resources; HEP/power/electricity supply/energy supplies; Rail transport; Large market in the area; Labour supply available; Mines; Trees; Water source with dam/lake; etc. (iv) Two marks for likely changes and two further marks for 		
 F = 1 G = 2 All 3 correct = 2 marks 1 or 2 correct = 1 mark (iii) Ideas such as: close to port/easy to export/easy to import resources; HEP/power/electricity supply/energy supplies; Rail transport; Large market in the area; Labour supply available; Mines; Trees; Water source with dam/lake; etc. (iv) Two marks for likely changes and two further marks for 	(2 marks)	[2]
 F = 1 G = 2 All 3 correct = 2 marks 1 or 2 correct = 1 mark (iii) Ideas such as: close to port/easy to export/easy to import resources; HEP/power/electricity supply/energy supplies; Rail transport; Large market in the area; Labour supply available; Mines; Trees; Water source with dam/lake; etc. (iv) Two marks for likely changes and two further marks for 	(2 marks)	[2]
 All 3 correct = 2 marks 1 or 2 correct = 1 mark (iii) Ideas such as: close to port/easy to export/easy to import resources; HEP/power/electricity supply/energy supplies; Rail transport; Large market in the area; Labour supply available; Mines; Trees; Water source with dam/lake; etc. (iv) Two marks for likely changes and two further marks for 	(2 marks)	[2]
 1 or 2 correct = 1 mark (iii) Ideas such as: close to port/easy to export/easy to import resources; HEP/power/electricity supply/energy supplies; Rail transport; Large market in the area; Labour supply available; Mines; Trees; Water source with dam/lake; etc. (iv) Two marks for likely changes and two further marks for 	(2 marks)	[2]
 close to port/easy to export/easy to import resources; HEP/power/electricity supply/energy supplies; Rail transport; Large market in the area; Labour supply available; Mines; Trees; Water source with dam/lake; etc. (iv) Two marks for likely changes and two further marks for		
 HEP/power/electricity supply/energy supplies; Rail transport; Large market in the area; Labour supply available; Mines; Trees; Water source with dam/lake; etc. (iv) Two marks for likely changes and two further marks for		
 Rail transport; Large market in the area; Labour supply available; Mines; Trees; Water source with dam/lake; etc. (iv) Two marks for likely changes and two further marks for		
 Large market in the area; Labour supply available; Mines; Trees; Water source with dam/lake; etc. (iv) Two marks for likely changes and two further marks for		
 Labour supply available; Mines; Trees; Water source with dam/lake; etc. (iv) Two marks for likely changes and two further marks for		
 Mines; Trees; Water source with dam/lake; etc. (iv) Two marks for likely changes and two further marks for 		
 Water source with dam/lake; etc. (iv) Two marks for likely changes and two further marks for 		
(iv) Two marks for likely changes and two further marks for		
	(3 × 1 mark)	[3]
E.g. Increase in tertiary as people become more skilled/people have more disposable income for services		
Increase in secondary as the country industrializes further/MNCs set up factories etc.		
Decrease in primary as resources get exhausted/ as mechanization occurs on farms/as people move to cities/better technology used on farms; etc.		
NB: must state change first – cannot credit reasoning without ch	lange.	
	$(2 \times 2 \text{ mark})$	[4]
(b) (i) Inputs = materials used in the factory/raw materials/primary good	ds;	
Processes = Stages of production/convert raw materials into sor	mething people ι	use;
Outputs = final product/things that they make in the factory/to se	<u>ااد</u>	
	(3 × 1 mark)	[3]
(ii) Accept any secondary industry e.g. steel making, sugar manufac	cture. cars.	
 mark reserved for an example and location example can be 		

Location can be any scale, city, area, country.

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4 marks for processes relevant to chosen example with development as appropriate.

 $(5 \times 1 \text{ mark or development})$ [5]

Page 12	Mark Scheme	Syllabus	Paper
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(c) Levels marking

<u>Level 1</u> (1–3 marks) Statements including limited detail explaining location of high technology industry.

<u>Level 2</u> (4–6 marks) Uses named example More developed statements explaining location of high technology industry.

NB MAX 5 marks with no named example

<u>Level 3</u> (7 marks) Uses named example. Comprehensive and accurate answer explaining location of high technology industry including some place specific reference.

There will be likely reference to ideas such as:

- transport links
- labour supplies
- cost of land
- government incentives
- environmental attractions
- economies of agglomeration
- close to components
- market/demand
- close to universities etc.

[7]

age 13	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – May/June 2015	0460	11
6 (a)(i)	Record high summer temperatures (in the USA in 2011)	(1 mark)	[1
(ii)	East coast earthquake (1 mark); earthquakes are not caused by climate/caused by tectonic action;		
		$(2 \times 1 \text{ mark})$) [2
(iii)	 Ideas such as: burning fossil fuels/oil/coal; transport/cars/vehicles/trains/lorries; aviation/planes; generating electricity/power stations/using electronic devices/ units; cattle grazing; shipping; factories; 	using air con	ditioning
	 deforestation; rice production; land fill sites; etc. 	(3 × 1 mark) [3
(iv)	 Ideas such as: melting of ice caps/glaciers; loss of habitats; threat to/extinction of species; impact on food chains; loss of biodiversity; flooding of <u>coastal</u> area/rising sea levels; some area will become drier/desertification occurs/more drou crop production will be reduced/more starvation; more incidence of weather related hazards/(eg floods/storms)) tropical insects/mosquitos may spread to other areas; loss of income from skiing resorts; loss of life due to higher temperatures/coral reefs bleached du temperatures; etc.);	
(b) (i)	Candidates can choose any source from Fig. 11 (no mark). Credit ideas relevant to chosen source.		
	E.g. transport: burns fossil fuels; which give off gases/CO ₂ or other named examples; noise from engines/horns; etc.	(3 × 1 mark) [3

Page 14	Mark Scheme	Syllabus	Paper
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(ii) Candidates can choose any type of pollution from Fig.11 except for Visual as the question refers to the environment not people (no mark for selected example).

Credit ideas relevant to chosen type.

E.g. water pollution:

- Nutrients change composition of water;
- Growth of algae;
- Lowering of oxygen supply;
- Eutrophication (dev)
- Kills fish;
- Predators have no food (dev);
- Destruction of food chain/ecosystem etc. (5 × 1 m
- $(5 \times 1 \text{ mark or development})$ [5]

(c) Levels marking

<u>Level 1</u> (1–3 marks) Statements including limited detail which describe attempts to maintain, conserve or improve the natural environment.

<u>Level 2</u> (4–6 marks) Uses named example.

More developed statements which describe attempts to maintain, conserve or improve the natural environment (NB Max 5 if no named example)

Level 3 (7 marks)

Uses named example.

Comprehensive and accurate statements which describe attempts to maintain, conserve or improve the natural environment including some place specific reference.

Content Guide:

Answers are likely to include reference to:

- legislation,
- national Parks,
- nature reserves,
- specific measures (e.g. tree planting) etc
- eco-friendly transport
- fines for littering

[7]