MARK SCHEME for the October/November 2014 series

0460 GEOGRAPHY

0460/13  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 October/November 2014 series for most Cambridge IGCSE®, Cambridge International A and AS Level components and some Cambridge O Level components.
1 (a) (i) Person who moves from one country to another/moves into another country; N.B.: must convey movement idea to another country.

1 mark

(ii) Lesotho
Nigeria

2 @ 1 mark

(iii) Ideas such as they can:
- support family/escape poverty/higher standard of living/better quality of life/provide basic needs/buy luxuries or examples;
- buy food/be better nourished/eat better diets;
- build clinics/pay for health care (or example – vaccinations for children);
- send children to school/build a school;
- pay for improvements to their farms (or example – fertilizer, machines)/buy more land;
- improve water supply/dig wells/sanitation;
- improve roads/tarmac roads/buy cars;
- improve housing/buy better building materials/buy houses; etc.

3 @ 1 mark

(iv) Ideas such as:
- smaller workforce/less tradesmen;
- loss of skilled/qualified workers;
- loss to economy/slow down economy/less tax to government/GDP decreases/temporary economic depression;
- decline in agricultural production;
- families split by migration/wife and family remains behind;
- children disruptive or misbehaving as parents can’t control them;
- increasing divorce rates;
- no one left to care for elderly/elderly dependents increase;
- pay more taxes/work longer to pay for pensions;
- declining birth rates/aging population;
- loss of male population/gender imbalance created; etc.

4 @ 1 mark

(b) (i) northward route;
- 2500 – 3500 kilometres;
- (Cameroon) to Niger/Agadez;
- Through Algeria to Melilla/Niger/Agadez to Algeria/Melilla;
- Melilla to Spain; etc.
N.B.: Can accept route via Senegal or Mauritania.

3 @ 1 mark
(ii) Ideas such as:
- some are unable to obtain employment/not enough jobs;
- lack of qualifications/skills/education/no experience;
- many cannot speak the language;
- exploitation by employers;
- low paid jobs;
- do jobs other people don’t want/do dirty jobs/live in poverty/don’t earn enough to sustain themselves;
- work long hours;
- unable to buy homes/live in poor conditions/overcrowding;
- some may have to live away from their families;
- discrimination may occur/racism;
- some may have entered illegally/not be allowed in;
- poor access to services/or examples;
- getting used to culture/different foods/laws;
- difficulties in practicing religion/religious discrimination;
- high cost of living; etc.

5 @ 1 mark or development

(c) Levels marking

Level 1 (1–3 marks)
Statements including limited detail which explain why it has a low population density.

Level 2 (4–6 marks)
Uses named example.
More developed statements which explain why it has a low population density.

(N.B. Max 5 if no named example)

Level 3 (7 marks)
Uses named example.
Comprehensive and accurate statements including some place specific reference.

Content Guide:
Answers are likely to refer to;
Relief,
Accessibility,
Climate,
Water supply,
Employment,
Natural resources etc.

Place specific reference is likely to consist of:
Named parts of the chosen country/locational detail,
Population data etc.

[Total: 25]
2 (a) (i) Manila

1 mark [1]

(ii) (All) railway lines lead there;
Airport in densely populated area;
Capital city/More large towns/cities (which will have services); etc.

2 @ 1 mark [2]

(iii) Ideas such as:
• much migration to cities;
• inadequate amount of housing;
• cheap accommodation/people cannot afford other housing/unemployed;
• can build squatter settlements themselves/materials easily available or e.g.’s;
• squatter settlements often located close to work places/along main transport routes; etc.

3 @ 1 mark [3]

(iv) Ideas such as:
• site and services schemes;
• self-help schemes;
• donations of building materials/donate tools;
• people being taught skills/how to build;
• supply of piped water/plumbing;
• supply of electricity;
• sewage pipes/treatment;
• regular rubbish collection;
• strong materials/make houses more permanent/build with bricks/put on proper roofs/make solid structures;
• make more legal/legalise them; etc.

4 @ 1 mark [4]

(b) (i) Ideas such as:
• high buildings;
• market stalls/traders;
• busy road/taxis/lorries;
• shops/banks/offices;
• large companies/multi-national phone company;
• street lights/electricity;
• wide/tarred road;
• lots of people/people walk rather than drive;
• buildings close together/lack of open space; etc.

3 @ 1 mark [3]
(ii) Ideas such as:
- more space available/less space in CBD;
- room for car park;
- lower cost land;
- ease of deliveries/ease of access/close to roads/motorways;
- will not have to use congested roads of CBD;
- more pleasant environment/more greenery;
- closer to housing areas;
- room for expansion;
- workers live nearby/easier to get to than CBD; etc.

5 @ 1 mark or development

(c) Levels marking

Level 1 (1–3 marks)
Statements including limited detail which identify function and/or explain reasons for growth.

Level 2 (4–6 marks)
Uses named example.
More developed statements which explain reasons for growth.
(N.B. Max 5 if no named example)

Level 3 (7 marks)
Uses named example.
Comprehensive and accurate statements which identify function and explain reasons for growth, including some place specific reference.

Content Guide:
Answers are likely to refer to:
Accessibility,
Relief,
Water supply,
Historical factors,
Trade,
Industrial growth,
Natural resources,
Defence etc.

Place specific reference is likely to consist of:
Named parts of the settlement/locational detail,
Specific employment types/trade links,
Employment data etc.

[Total: 25]
3 (a) (i) Photograph C

1 mark

(ii) D = Cliff
E = Stack
F = Natural Arch

3 correct = 2 marks
1 or 2 correct = 1 mark

2 marks

(iii) Ideas such as:
- flat land/around an estuary/on a sand spit;
- onshore winds;
- supply of sand;
- obstruction for sand to build up around;
- colonisation/plants to colonise/marram grass to hold them together; etc.

3 @ 1 mark

(iv) Ideas such as:
- erosion (or named example – hydraulic action/corrosion);
- description of process;
- enlarges joints/lines of weakness/faults opened up;
- formation of cave;
- cave breaks through to form arch/back to back caves/cave erodes all the way through; etc.

4 @ 1 mark

(b) (i) Ideas such as:
- collapse/slumping of loose rocks/landslide;
- more loose rocks/beach extended seawards/beach is wider/beach nearer lighthouse;
- retreat of cliff/cliff eroded;
- lower angle of cliff/cliff not as steep; etc.

3 @ 1 mark

(ii) Ideas such as:
- danger to properties on cliff top;
- people may need to evacuate;
- loss of farmland/loss of gardens;
- reduction in food production;
- roads may be damaged;
- collapse of cliffs may make beaches dangerous/rock falls can kill people;
- less tourists come;
- cost of protection measures;
- can’t get insurance for properties/unable to sell properties; etc.

5 @ 1 mark or development
(c) Levels marking

**Level 1** (1–3 marks)

Statements including limited detail which explain formation of sand spit.

**Level 2** (4–6 marks)

More developed statements which explain formation of sand spit.

**Level 3** (7 marks)

Comprehensive and accurate statements which explain formation of sand spit, including fully labelled diagram(s).

Content Guide:
Answers are likely to refer to;
- Prevailing wind,
- Longshore drift,
- Deposition,
- Change of direction of coastline etc.

Place specific reference is not needed however for Level 3 a labelled diagram is needed or a sequence of labelled diagrams/numbers with description. [7]

[Total: 25]
4 (a) (i) Y

1 mark [1]

(ii) Y = Tropical rainforest
     X = Tropical desert

2 @ 1 mark [2]

(iii) • sun directly overhead/high angle of sun;
     • lack of clouds;
     • nothing to prevent heat reaching desert in day/it’s exposed to sun;
     • allows escape of heat at night;

3 @ 1 mark [3]

(iv) Ideas such as: N.B.: must be processes.
     • heated by sun;
     • evaporation of water/transpiration;
     • water vapour/air rises;
     • cools down;
     • condensation;
     • build up of clouds/saturation/turns into clouds; etc.

4 @ 1 mark [4]

(b) (i) Ideas such as:
     • reduced cover in all of Kalimantan/less trees or forest/smaller percentage of forest cover in 2000;
     • particularly large reduction in South/east Kalimantan/uneven distribution across Kalimantan;
     • 91–92 to 62–63% in east Kalimantan/60 to 46–47% West/48–49 to 17–18% South/76–77 to 61% Central; (1 mark for any appropriate pair of statistics)

(N.B. 1 mark reserved for use of statistics)
3 @ 1 mark [3]

(ii) Ideas such as:
     • lumbering/logging/logs;
     • export/use of wood for furniture;
     • mining/quarrying/drilling;
     • bauxite/iron ore/oil/gas;
     • cattle ranching;
     • expansion of settlements/for housing;
     • commercial agriculture/growing sugar cane or other/soy beans/ or examples;
     • road construction/railways;
     • give people plots of land to produce own food;
     • to raise money for country/to pay debts; etc.

5 @ 1 mark or development [5]
(c) Levels marking

Level 1 (1–3 marks)
Statements including limited detail which describe impacts of large scale deforestation on the local people and/or natural environment.

Level 2 (4–6 marks)
Uses named example.
More developed statements which describe impacts of large scale deforestation on the local people and/or natural environment.

(N.B. Max 5 if no named example)

Level 3 (7 marks)
Uses named example.
Comprehensive and accurate statements, describe impacts of large scale deforestation on the local people and natural environment.
Including some place specific reference.

Content Guide:
Answers are likely to refer to:
it destroys animals/plants;
threatens species with extinction;
impacts on food chain;
loss of habitat;
reduces interception;
increases run off/ causes floods;
sedimentation of rivers;
death of local tribes people;
introduction of ‘western’ diseases;
reduction of food supply/materials used for building; etc.

Place specific reference is likely to consist of:
Locational details;
Named species and locations within rainforest;
Details of inhabitants/tribe names etc.
N.B.: developed ideas must be of the impact not the cause.

[Total: 25]
5 (a) (i) Egypt

1 mark [1]

(ii) On map
N.B.: must be the same as the key and be drawn in the correct direction.

2 @ 1 mark [2]

(iii) • installation of running water/build water pipes/plumbing/taps;
• sewage pipes/sewage systems;
• build toilets;
• sewage treatment works;
• showers/sinks/baths;
• use soap or cleaning products;
• educate people about hygiene or examples; etc.

3 @ 1 mark [3]

(iv) Ideas such as:
• dams/reservoirs;
• use of aquifer/underground water/wells/bore holes;
• desalination;
• import of water/donation of bottled water;
• use pipelines to transfer water from one part of the country to another;
• cloud seeding;
• collection in (rooftop) tanks;
• purification of water sources/treatment plants;
• repair leaking pipes;
• any conservation technique; (Max.1) etc.

4 @ 1 mark [4]

(b) (i) Ideas such as:
• smaller size of lake as years progress/parts of lake have dried up;
• totally disappeared from Niger and Nigeria/2001 only in Cameroon and Chad/disappeared from North or North West/only in South or South East;
• use of figs for scale accept any reasonable idea to show distance/percentage of lake left or lost e.g. 75+% lost;
• vegetation covering where lake used to be; etc.

3 @ 1 mark [3]
(ii) Ideas such as:
- there is less water (supply);
- for drinking/washing/sanitation/cooking;
- death/dehydration;
- less water available for irrigation/gardens die;
- reduction of food supply/yields/death of crops/starvation;
- poorer pasture for animals;
- need to migrate;
- less areas to fish;
- more land for cultivation/settlement;
- can’t use for transportation; etc.

5 @ 1 mark or development [5]

(c) Levels marking

Level 1 (1–3 marks)
Statements including limited detail which describe how use of chosen form of energy threatens the natural environment.

Level 2 (4–6 marks)
Uses named example.
More developed statements which describe how use of chosen form of energy threatens the natural environment.

(N.B. Max 5 if no named example)

Level 3 (7 marks)
Uses named example.
Comprehensive and accurate statements, including some place specific reference.

Content Guide:
Answers are likely to refer to;
Atmospheric pollution,
Threats to species,
Global warming,
Acid rain etc.

Place specific reference is likely to consist of:
Locational details;
Named species and locations;
Other areas impacted by global warming etc.

N.B.: Can include exploration and transportation of the chosen energy type. [7]

[Total: 25]
6 (a) (i) On graph
N.B.: do not have to write the name.

1 mark [1]

(ii) Higher the GDP per capita the lower the % from agriculture/negative correlation; or vice versa (1)

Paired statistics to illustrate the relationship (2\textsuperscript{nd} mark)
Must have 2 contrasting countries to show the difference. Or can use 'highest/lowest' for 1 country with appropriate stats.

2 @ 1 mark [2]

(iii) Ideas such as:
- lack of land/small plots/population pressure;
- they need to feed their families/they have no other work;
- lack of skills;
- lack of technology;
- cannot produce enough output for surplus/or to sell/they can't grow much;
- lack of or can't afford pesticides/seeds/machinery or examples;
- poor roads/isolated; etc.

3 @ 1 mark [3]

(iv) Ideas such as:
- irrigation;
- use of fertilizers or e.g.'s;
- pesticides/insecticides/manure;
- use of greenhouses;
- hydroponics/aeroponics;
- mechanization/or example;
- high yielding seeds or example's/GM crops; etc.

4 @ 1 mark [4]

(b) (i) Ideas such as:
- fewer trees/people chop down trees or deforestation/marginal land cultivated or over-cultivation/overgrazing/land over-used (max 2);
- land is left bare/nothing holds soil together;
- increased evaporation from the soil/moisture is evaporated/dries out/exposed to sun;
- loose soil is blown away by wind; etc.

3 @ 1 mark [3]
(ii) Ideas such as:
- use of fertilizers/manure;
- contour ploughing/avoid ploughing up and down slope;
- prevent water being channelled downslope;
- plant trees/prevent or control deforestation;
- reduce impact of wind;
- avoid leaving land fallow/grow cover crops;
- soil is constantly covered/roots hold soil in place;
- apply mulch;
- do not overgraze.
- irrigation;
- do not over cultivate marginal land/avoid over cultivation;
- crop rotation; etc.

5 @ 1 mark or development [5]

(c) Levels marking

Level 1 (1–3 marks)
Statements including limited detail which identify and/or explain why the land is used in this way.

Level 2 (4–6 marks)
Uses named example.
More developed statements which explain why the land is used in this way.

(N.B. Max 5 if no named example)

Level 3 (7 marks)
Uses named example.
Comprehensive and accurate statements, which identify and explain a farming type in an area, including some place specific reference.

Content Guide:
Answers are likely to refer to:
Relief,
Climate,
Soil type/fertility,
Market/demand,
Access,
Government policy etc.

Place specific reference is likely to consist of:
Locational details;
Named soil types,
Specific climatic details,
Details of markets,
Specific government policies etc. [7]

[Total: 25]