MARK SCHEME for the May/June 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 May/June 2014 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.

1 (a) (i) Immigration/250,000 immigrants per year/due to migration into Canada;
1 mark [1]

    (ii) Ideas such as:
employment/jobs/high pay;
entertainments/bright lights (or example);
education/schools/colleges/universities;
health care/doctors/clinics;
brick built housing/housing with electricity/running water/toilets;
etc.

2 @ 1 mark [2]

    (iii) Ideas such as:
availability of contraception/family planning;
can afford contraception/family planning;
educated how to use contraceptives;
availability of abortions;
women have careers;
education/emancipation of women;
high cost of children;
lack of religious influences;
later marriages;
low infant mortality rate;
look after them in old age/have pensions;
etc.

3 @ 1 mark [3]

(b) (i) By 2006 there were:
a greater percentage/increased from Asia/lower percentage in Asia in 1971;
lower percentage from Europe;
a greater percentage from Africa;
lower percentage from United States;
lower percentage from Oceania;
1971 most came from Europe but in 2006 most came from Asia idea   max 1.
Less from MEDC's in 2006/more from LEDC's in 2006;

NB: Must have comparison.
No marks for statistics without interpretation.
Can accept converse in each line.

3 @ 1 mark [3]

(ii) Ideas such as:
enlarges labour force/more workers;
cheap labour/low wages;
people will do jobs locals will not do/dirty jobs/unsociable/long hours/or examples;
skilled labour (or example – doctors/engineers)/bring new skills;
cultural exchange/multi-cultural society/learn different languages;
specific services set up (or example – Chinese restaurants etc.);
learn different languages;
pay taxes/government has enough money to pay pensions/or set up services;
open up businesses to provide work;

4 @ 1 mark   [4]

(iii) Ideas such as:
lack of qualifications/skills/education/no experience;
some cannot speak the language;
some are doing low paid jobs;
some are unable to obtain employment/not enough jobs;
unable to buy homes/overcrowding;
some may have to live away from their families;
discrimination may occur/racism/cultural conflict;
illegal migrants live in fear of deportation/may be deported;
poor access to services/or examples;
exploitation by employers;
high cost of living;
hard to adapt to local culture or examples;
etc.

5 @ 1 mark or development.

NB: only 1 development mark per idea e.g. do not credit multiple development ideas from 1
idea.   [5]

(c) Levels marking

Level 1 (1–3 marks)
Statements including limited detail which explain the push factors which have caused
international migration.

Level 2 (4–6 marks)
Uses named example.

More developed statements which explain the push factors which have caused international
migration.

(**NB.** Max. 5 if no named example or inappropriate 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;
Lack of work,
Poverty,
Natural hazards/disasters,
Poor educational facilities,
Lack of health care/disease etc.

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

NB: Do not credit pull factors.   [7]

[Total: 25 marks]

2 (a) (i) The spread of an urban/town/city area into the rural/farmland/countryside surroundings/town spreads/grows outwards;

1 mark   [1]

(ii) Industry is declining:
 in inner city/within ring road/East of river/within built up area/south/South east of CBD;

(General/All)Dormitory settlements are:
growing outside ring road/outside built up area/distance from CBD/outside greenbelt/ rural-urban fringe;

2 dormitory settlements:
west of river/south of ring road/south west from CBD/outside greenbelt/south west of bridge;   etc.

NB: Can accept either the 2 dormitory settlements or all of the dormitory towns – depending upon how the candidate has interpreted the question.
Any distance or direction from any named feature on the map is acceptable but near or close to is not.

2 @ 1 mark   [2]

(iii) Ideas such as:
less business/profit for CBD services/shops/less customers;
closure of shops/empty properties;
dereliction of parts of CBD/doughnut effect;
it becomes less noisy/crowded;
growth of charity shops/£1 shops/cheap shops;

less air pollution;
less traffic congestion in CBD;
shops/businesses move to out of town shopping centres;
etc.

3 @ 1 mark [3]

(iv) Ideas such as:
lack of space in inner city areas/more space on edge of city/more space for parking;
closure of traditional industries due to competition etc.;
growing industry on edge in better location for using road
transport/less congested roads on edge;
lower cost of land in rural urban fringe;
environmental/planning regulations/protests forcing closure in inner
city/close to where people live;
better environment or examples/good working environment;
etc.

NB: No need to look for comparison.

1 mark reserved on growth and 1 mark reserved on decline.

4 @ 1 mark [4]

(b) (i) Ideas such as:
Larger shops in CBD;
More floors/taller in CBD;
Higher order shops in CBD/more expensive goods sold;
Examples such as shoe shop/jeweller in CBD compared with newsagent in suburban
shopping area; (1 max)
Specialist shops in CBD, convenience in suburban centre;
Busier in CBD/more crowded;
More shops in CBD/more services;
More shops to let in CBD;
Buildings are older in CBD/more modern in suburban area;
etc.

NB: Must be comparative.

3 @ 1 mark [3]

(ii) Ideas such as:
higher order services available in CBD;
which need a larger threshold population/need/more customers (dev);
more specialist goods/services in CBD;
which are not available locally (dev);
transport links CBD with all city, suburban centre more difficult to get to;
more shops selling comparison goods in CBD;
which don't but frequently (dev);
so people travel further to use services in CBD;
big brands;

wider range of goods/more choice in CBD;
more/a lot of people work in CBD and will use the services;
etc.

NB: No need for comparison – assume writing about CBD unless otherwise stated.

5 @ 1 mark or development   [5]

(c) Levels marking

Level 1 (1–3 marks)
Statements including limited detail which describe attempts to reduce traffic congestion.

Level 2 (4–6 marks)
Uses named example.

More developed statements which describe attempts to reduce traffic congestion.

(NB 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;
Road improvement/widening;
Ring roads;
By-passes;
Public transport systems;
Congestion charging;
Alternate number plates idea;
etc.

Place specific reference is likely to consist of:
Named parts of the urban area/street names/locational detail/road numbers,
Names of public transport schemes etc.

NB: Area can be from MEDC or LEDC.
Development must be of attempts to reduce traffic congestion not the impact of it.

[7]

[Total: 25 marks]

3 **(a) (i)** 2549 (metres).

1 mark [1]

(ii) Features such as:
Viewpoints;
camp sites;
picnic areas;

2 @ 1 mark [2]

(iii) Evidence such as:
Debris avalanche;
Mudflow;
Pyroclastic flow;
Forests are scorched/blown down;
Crater/crater walls;
Lava dome;

3 @ 1 mark [3]

(iv) Ideas such as:
plates move together/towards each other/converges;
subduction occurs;
friction/heat builds up;
destruction/melting of crust/magma is created;
pressure build up/magma builds up/high pressure;
etc.

4 @ 1 mark [4]

(b) (i) Ideas such as:
Uneven distribution;
Mainly to South East of Iceland;
To South West of Iceland;
North/North East of Iceland/East of Iceland;
Countries such as UK/France/Germany/Norway (2 needed);
North West Europe;
Any correct and valid use of distance/scale;
etc.

3 @ 1 mark [3]

(ii) Ideas such as:
disruption of flights;
so people are stranded (dev);
airlines lose money (dev);
ash covers crops;
reducing yields (dev);
closure/damage to workplaces (or examples);

disruption to road/rail transport;
prevents movement of raw materials/products (dev);
cost of repair to buildings/infrastructure/rebuilding;
reduces tourism;
cost of medical care/rescuing people/or other specific idea such as this;
people become too ill to work;
etc.

5 @ 1 mark or development [5]

(c) Levels marking

Level 1 (1–3 marks)
Statements including limited detail which describe the impacts of a drought.

Level 2 (4–6 marks)
Uses named example.

More developed statements which describe the impacts of a drought.

(**NB.** 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;
Difficulties of obtaining drinking water;
Death/dehydration;
Lack of food supply/starvation/malnutrition;
Soil erosion;
Migration;
Impacts on flora and fauna;
Disease from drinking dirty water; etc.

Place specific reference is likely to consist of:
Named parts of the area/locational detail,
Precipitation statistics etc.

NB: Can be impacts on people and environment as it is not specified in the question.
[7]

[Total: 25 marks]

4 **(a)** **(i)** Valley side is forested but flood plain is grassland**;**
1 mark [1]

(ii) hydraulic action;
abrasion/corrasion;
solution/corrosion;
attrition;

2 @ 1 mark [2]

(iii) On cross section
1 mark for asymmetrical profile with P & Q in correct place.
Label with river cliff on correct side. (P).
Label with slip off slope on correct side. (Q).

3 @ 1 mark [3]

(iv) Ideas such as:
faster flow of water on outside of bend;
erosion on outer bank;
neck narrows;
cuts through neck during flooding/cutting through/meander cut off;
ends/former meander sealed by deposition;

NB: can credit information in writing or diagram but no double credit.

4 @ 1 mark [4]

(b) **(i)** Ideas such as:
both have distributaries/split into lots of separate channels;
Niger has more distributaries;
Niger is arcuate/fan shaped but Mississippi is birds foot/smoother/less indented in Niger
and more irregular for Mississippi/Niger is more triangular;
Niger covers larger area;
Mississippi has lakes but Niger does not;
River/delta in Niger is SW facing and Mississippi river/delta is SE facing;
etc.

NB: Must be comparative.

3 @ 1 mark [3]

(ii) Ideas such as:
large amounts of sediment (brought downstream);
deposition in (lower course);
speed of flow is reduced/river flows slowly;
flocculation occurs due to salt in water ;
deposited silt blocks course of river;
splits into distributaries;
deposited materials are not washed away;
lack of currents;
etc.

5 @ 1 mark or development [5]

(c) Levels marking

Level 1 (1–3 marks)
Statements including limited detail which describe problems caused by flooding.

Level 2 (4–6 marks)
Uses named example.

More developed statements which describe problems caused by flooding.

(**NB:** 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;
Injuries and deaths/drowning;
Flooding of farmland;
Impacts of food supplies,
Disruption to communications,
Water borne disease,
Economic impacts
Damage to housing, cars, possessions;
etc.

Place specific reference is likely to consist of:
Locational details;
Details of amounts of precipitation,
Named settlements along river,
Time/date etc.

NB: Development must be of the problems;

[7]

[Total: 25 marks]

5 **(a)** **(i)** 1150 – 1250 metres

1 mark   [1]

(ii) close to A there are (pine) forests
this becomes (low) shrubs
close to B there are cacti/drought resistant plants;

2 marks for reference to all 3 types of vegetation types.
1 mark for reference to 2 types

NB: It is acceptable if a candidate writes about the changes from B to A as long as they state B to A.

2 @ 1 mark   [2]

(iii) Differences in precipitation/precipitation will be greater closer to A/it is drier at B;
Differences in temperatures/temperatures will be higher closer to B;
B will be more sheltered;
There may be more frost/snow closer to A;
Differences in soil type/fertility;
Differences in relief /higher altitude/steeper/lower;
etc.

3 @ 1 mark   [3]

(b) **(i)** Characteristics such as:
steep slopes/cliffs/V shaped valley;
not much vegetation/vegetation by river/type of vegetation;
bare rocks/sedimentary rocks/layers;
river;
depth of Canyon/deep valley;
broken up/loose rocks;
flat top/plateau;
etc.

3 @ 1 mark   [3]

(ii) Ideas such as:
deforestation/loss of vegetation/trampling/wearing away vegetation/picking plants or flowers;
destruction of natural habitats;
animals killed;
loss of species/extinction/reduction in biodiversity;
food chains disrupted;
pollution of river/water pollution;
atmospheric pollution;
litter;
noise scares wildlife;
etc.

4 @ 1 mark   [4]

(iii) Ideas such as:
it protects vegetation/wildlife/environment;
numbers of visitors to the area will be reduced/controlled;
some areas will be fenced off/out of bounds;
leave time so that species can recover;
visitors will be educated/informed;
so there will be less damage to the environment (or examples) (dev);
buildings/industrial development will be controlled;
so less vegetation/land will be lost to development (dev);
money available to be spent on e.g. pathways/wildlife;
rangers are employed to help protect the area;
litter bins/litter picks/notices not to litter;
etc.

NB: cannot just state 'maintain, conserve or improve' without development as it is in the question.

5 @ 1 mark or development [5]

(c) Levels marking

Level 1 (1–3 marks)
Statements including limited detail which describe the benefits and/or problems of tourism for local people.

Level 2 (4–6 marks)
Uses named example.

More developed statements which describe the benefits and/or problems of tourism for local people.
(**NB**: Max 5 if no named example)

Level 3 (7 marks)
Uses named example.
Comprehensive and accurate statements which describe both benefits and problems of tourism for local people, including some place specific reference.

Content Guide:
Answers are likely to refer to;
Employment,
Multiplier effect,
Improvement of infrastructure or examples e.g. roads, transport, utilities such as electricity,
Increased market for local products,
Seasonal work,
Low pay,
Loss of farmland,
Impact on culture etc.

Place specific reference is likely to consist of:
Locational details;
Details of specific resorts or attractions etc.

NB: example must be smaller than a country unless it is a small country or island.

[7]

[Total: 25 marks]

6 **(a)** **(i)** The introduction/disposal of harmful substances/waste into the
environment/nature/air/water/makes environment dirty/make dirty or contaminated;

1 mark [1]

(ii) Garbage/rubbish/litter/waste (or example – plastic bags/food waste) debris;
Sewage;
Construction waste/construction debris;

2 @ 1 mark [2]

(iii) Impacts such as:
smell;
Disease (or example)/unhealthy;
Unsightly/visual pollution;
Puts off tourists/visitors;
Loss of income for local businesses/locals lose jobs;
Possible dangers e.g. broken glass could cut your foot;
etc.

3 @ 1 mark [3]

(iv) Ideas such as:
kills animals/fish/birds/ species;
extinction/endangered;
loss of biodiversity;
impacts on food chains;
damages habitats;
disrupts breeding patterns;
etc.

4 @ 1 mark [4]

(b) (i) Features such as:
unstable/ramshackle/falling down;
a variety of building materials are used/ made from wood/cardboard/sheeting etc (any reference from building materials);
self made;
small;
low level/single storey;
flat roofs;
close together;
etc.

3 @ 1 mark [3]

(ii) Candidates can choose any method as credit is to be awarded for justification of the choice.

NB: If a candidate chooses all three ideas then mark the best one. Candidate may choose one and then give reasons as to why discounted the other two ideas which is fine.

5 @ 1 mark or development [5]

(c) Levels marking

Level 1 (1–3 marks)
Statements including limited detail which describe the causes and/or impacts of air pollution.

Level 2 (4–6 marks)
Uses named example.

More developed statements which describe the causes and/or impacts of air pollution.
(**NB**: Max 5 if no named example)

Level 3 (7 marks)
Uses named example.
Comprehensive and accurate statements which describe **both causes and impacts** of air pollution, including some place specific reference.

Content Guide:
Answers are likely to refer to;
Industry,
Energy generation,
Transport,
Health issues,
Impact on flora and fauna ,
Visual/aesthetic impacts,
Impacts on transport/communications etc.
Place specific reference is likely to consist of:
Locational details;
Specific details of places within the area chosen;
Specific details of polluters;
Statistical detail or specific factual detail etc.

[7]

NB: Name of area can be any scale.

[Total: 25 marks]