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CAMBRIDGE INTERNATIONAL EXAMINATIONS

Cambridge International General Certificate of Secondary Education

MARK SCHEME for the October/November 2014 series

0460 GEOGRAPHY

0460/11 Paper 1, maximum raw mark 75

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1 (a) (i) Higher/more density in Victoria/26 (per sq km) (Victoria) compared with 9/10 (per sq km) (NSW)/Victoria is denser/more than double/triple/has twice as many people living there; etc.

N.B.: Need to state which region they are referring to. [1] **[1]**

(ii) Density is a measure of how closely packed they are/number of people per sq km or unit area; [1]

Distribution shows how people are spread around the area/where they live. [1] **[2]**

(iii) Ideas such as:
- Population distribution is uneven;
- Mainly coastal;
- Especially in eastern/south/south east;
- Coasts of states such as Queensland/NSW;
- Many inland/central areas are empty/desert area is empty/few in Northern territory/Western Australia;
- Population more evenly spread across Victoria/Tasmania; etc. [3 × 1] **[3]**

(b) (i) Ideas such as:
- Steep slopes/mountainous/high land/no flat land; A and C
- Agricultural land; B
- Lack of employment; A, B and C
- Isolation/inaccessible/remote; A, B and C
- Densely vegetated; A
- Infertile soils/can't grow crops/produce food; etc. C [3 × 1] **[3]**

(ii) Ideas such as:
High density:
- People prefer to live there or there is a higher population density in temperate climates or areas that are warm/not too hot/not too cold/medium amount of rainfall;
- Explanation – for example, it is easier to grow crops;

Low density:
- People do not want to live there or there is a lower population density in areas of extreme climate/harsh climate/arid areas/(very) cold areas/icy areas/areas that are too wet etc.;
- Explanation – for example, there is a lack of water supply for drinking.

N.B: No double credit on explanations for opposites. Must be climatic ideas. [4 × 1] **[4]**

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(iii) Ideas such as:

- Flat land;
- Less expensive to build infrastructure;
- Easy to construct settlement;
- Good accessibility;
- Ease of trade/exporting goods/build ports/harbours;
- Fishing;
- Work in tourism or examples leisure/tourism/tourist activities;
- Sporting activities;
- Water for industry;
- Scenic value/retirement/clean sea air/sea breeze; etc. [5 × 1] **[5]**

(c) Levels marking

Level 1 [1–3 marks]
Statements including limited detail which explain why it has a high rate of population growth.

Level 2 [4–6 marks]
Uses named example.
More developed statements which explain why it has a high rate of population growth.

(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:
Contraception,
Religion,
Tradition,
Women`s education,
Economic value of children,
Care in old age,
Lack of government policy,
Migration etc.

Place-specific reference is likely to consist of:
Named parts of the chosen country/locational detail,
Population data etc. **[7]**

[Total: 25]

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2 (a) (i) Settlements in an area in order of size/importance/services/population/a list of settlements in a pyramid shape. [1] **[1]**

(ii) There are more smaller settlements than large ones/not many big settlements and lots of small/there are more smaller settlements than large ones. (1)
E.g. Only 2 large towns but 14 small towns/only 5 large villages but 17 small ones. (1) [2 × 1] **[2]**

(iii) Ideas such as:
- Higher order in Navan;
- Larger sphere of influence in Navan;
- More public transport or examples in Navan;
- More specialist in Navan;
- More services in Navan;
- Shopping malls in Navan/bigger shops in Navan;
- More schools/secondary school in Navan, primary school in Nobber;
- More hospitals/bigger hospitals in Navan/clinic in Nobber but hospital in Navan/hospital in Navan none in Nobber; etc.

N.B: expect that answer refers to Navan unless otherwise stated but must be comparative. Can state opposite ideas e.g. smaller/less in Nobber. [3 × 1] **[3]**

(iv) Ideas such as:
- For work;
- Buy specialist goods/shopping trips/comparison goods/chain stores/specialist services/greater choice/variety of shops;
- University;
- Specialist hospital/large hospital;
- Entertainment or example (e.g. international football/rugby match/theatre);
- Government departments (e.g. to get a passport);
- To see family and friends; etc. [4 × 1] **[4]**

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(b) (i) Ideas must relate to the developer not shoppers or workers, such as:
- Cheap land = so money can be saved;
- Room for expansion = as large areas may be needed to extend the mall in the future;
- Plenty of parking space = as people go there by car/increases number of likely customers;
- Good accessibility = for shoppers/deliveries so they are not stuck in traffic jams;
- Attractive environment = to attract more families/shoppers;
- Workers close by = so it is easy to obtain labour force; etc. [3 × 1] **[3]**

(ii) Ideas such as:
- Less business for other services/shops/loss of customers;
- Reduced profits;
- Closure of shops;
- Properties are left empty;
- Empty properties may be vandalised/graffitied;
- Dereliction of parts of CBD/doughnut effect;
- It becomes less busy/noisy/crowded; etc. [5 × 1] **[5]**

(c) Levels marking

Level 1 [1–3 marks]
Statements including limited detail which describe the environmental problems as a result of urban sprawl.

Level 2 [4–6 marks]
Uses named example.
More developed statements which describe the environmental problems as a result of urban sprawl.

(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:
Loss of vegetation,
Loss of habitats,
Extinction of species,
Water pollution,
Air pollution etc.

Place-specific reference is likely to consist of:
Named parts of the city/locational detail,
Specific reference to species etc.

N.B.: LEDC example is max 5. **[7]**

[Total: 25]

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3 (a) (i) Friday [1] **[1]**

(ii) Graph completion [2 × 1] **[2]**

(iii) Wind vane = wind direction

Barometer = Air/atmospheric pressure

Wet and dry bulb thermometer = (Relative) humidity [3 × 1] **[3]**

(iv) Ideas such as:
- Use rain gauge;
- Rainfall enters through funnel;
- Check at set time each day/every 24 hours;
- Pour from container into measuring cylinder;
- Read off level;
- Digital rain gauge; etc. [4 × 1] **[4]**

(b) (i) Ideas such as:
- D is more likely to produce rain E is not/D is stormy E is fair weather;
- D are dark and E are white;
- D cover the whole sky E do not;
- D are lower than E;
- D are nimbus/cumulonimbus E are cirrus;
- D is thick or dense/E is thin or wispy or sparse;
- D has more clouds/fewer or less in E; etc.

N.B: Need comparison or to state which picture they are referring to. [3 × 1] **[3]**

(ii) Ideas such as:
- High humidity in TRF;
- More evaporation in TRF than desert;
- More vegetation in TRF;
- More transpiration in TRF;
- More condensation/saturation in TRF;
- Air rises in TRF/sinks in desert;
- High pressure in desert/low pressure in TRF;
- Deserts are further away from water sources/sea/lack of water to evaporate;
- Winds have lost their moisture blowing over large areas of land; etc.

N.B: Reserve 1 on each area (TRF and Desert). Don't need comparison. [5 × 1] **[5]**

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(c) Levels marking

Level 1 [1–3 marks]
Statements including limited detail which describe impacts of drought on people and/or the natural environment.

Level 2 [4–6 marks]
Uses named example.
More developed statements which describe impacts of drought on people and/or the natural environment.

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

Level 3 [7 marks]
Uses named example.
Comprehensive and accurate statements which describe impacts of drought on **people and the natural environment**, including some place-specific reference.

Content Guide:
Answers are likely to refer to:
Loss of vegetation/species,
Loss of habitats,
Extinction of species,
Lack of food/low crop yields,
No drinking water,
Death/dehydration/starvation etc.

Place-specific reference is likely to consist of:
Named parts of the country or countries within the area (if large area like the Sahel chosen)/locational detail,
Specific reference to species/tribal groups,
Statistical information etc.

N.B: Can be LEDC or MEDC but impacts will be different. **[7]**

[Total: 25]

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4 (a) (i) Large part/piece/section of the earth's crust or surface/the way in which the Earth's surface is broken or fractured into pieces; [1] **[1]**

(ii) On Fig. 5. [2 × 1] **[2]**

(iii) Ideas such as:
- X is closer to a plate boundary/Y is further away;
- X is weaker part of the crust than Y;
- Plates move in relation to each other at X but not at Y;
- At X friction/plate boundaries lock;
- Friction overcome/jolts apart; etc.

N.B: Assume referring to X unless otherwise stated. No need for comparison.[3 × 1] **[3]**

(iv) Ideas such as:
- Convection currents moving in mantle;
- Plates move together;
- Subduction occurs/denser plate sinks/forced under;
- Friction/heating;
- Destruction/melting of crust;
- Pressure builds up/gases build up/magma builds up;
- Magma forced upwards/magma finds its way to surface (through cracks); etc. [4 × 1] **[4]**

(b) (i) Ideas such as:
- Gases produced/gases released by hot magma;
- Volcanic activity releases gases/causes gases to escape;
- Gas cloud moved by wind/blown away.

N.B: Points must show some understanding and not be directly copied from Fig. 6. If all three points are directly copied then 1 mark max. [3 × 1] **[3]**

(ii) Ideas such as:
- They can`t afford to move;
- They have lived there all their lives/sentimental attachment;
- Lack of space elsewhere;
- Population pressure;
- They do not want to move away from work/farmland/education;
- Work in tourist industry;
- Relatives/friends in area;
- Confidence in prediction;
- They are unaware of the risk;
- Willing to take the risk/benefits outweigh the risk (or example);
- Fertile soils;
- High yields of crops;
- Geothermal power;
- A cheap source of energy;
- Scientists/study the volcano;
- Minerals/quarries/lava;
- Worship volcano;
- Use of hot springs for health benefits/tourism; etc. [5 × 1] **[5]**

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(c) Levels marking

Level 1 [1–3 marks]
Statements including limited detail which describe impacts of earthquake.

Level 2 [4–6 marks]
Uses named example.
More developed statements which describe impacts of earthquake.

(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:
Damage to buildings,
Fire/explosions,
Death/injury,
Impacts on infrastructure,
Economic impacts/loss of work,
Cost of rebuilding etc.

Place-specific reference is likely to consist of:
Named parts of the city or area/locational detail,
Reference to specific plates,
Statistical information/date/magnitude, etc. **[7]**

[Total: 25]

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5 (a) (i) 15–16 billion Swiss francs. [1] **[1]**

(ii) Ideas such as:
- Renting rooms/hotels/stay in hotels;
- Selling souvenirs/trade in shops/buy from shops/paying for goods;
- Providing food for tourists;
- Transportation for tourists;
- Currency exchange;
- Entry fees into museums/tourist attractions or examples;
- Work (in tourist industry) so earn wages/pay taxes;
- Selling of visas; etc. [2 × 1] **[2]**

(iii) Ideas such as:
- Hotels;
- Restaurants;
- Transportation/taxi drivers/bus drivers etc.;
- Entertainment industry (or example e.g. busker)/at tourist attractions; max.1
- Shop/selling fruit/souvenirs/jewellery;
- Construction;
- Jobs on farms producing food for tourists;
- Tour guides/holiday reps;
- Keeping area clean;
- Travel agencies;
- Water/ski instructor (or other type of instructor); etc. [3 × 1] **[3]**

(iv) Ideas such as:
- Earns more money so can afford to do so;
- (Build/better/improve) roads/railways;
- (Build/extend) airport;
- (Build) ports;
- Electricity network/supply electricity;
- Water pipes/supply water;
- Sewage disposal facilities/public toilets;
- Better infrastructure to attract more/cope with numbers of tourists; etc. [4 × 1] **[4]**

(b) (i) Natural attractions such as;
- Mountains;
- Glacier/ice and snow;
- Lakes etc. [3 × 1] **[3]**

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(ii) Ideas such as (must be problems for people):

- Increase in local traffic/congestion;
- Atmospheric pollution causes asthma or breathing problems;
- Loss of local culture/traditional way of life/lack of respect for local cultures/people;
- Impact of behaviour of tourists/drunkenness etc.;
- Noise;
- Exploitation/low paid jobs/long hours;
- Seasonal work;
- Shortage of water supplies;
- Litter from tourists;
- Lack of privacy;
- Loss of land for building/loss of farmland;
- Increase in property prices;
- Railway too busy/no seats on trains/long queues in shops;
- Prices in shops increase;
- Water pollution (impact on people);
- Visual impact;
- Crime or example; etc. [5 × 1] **[5]**

(c) Levels marking

Level 1 [1–3 marks]
Statements including limited detail which describe the impacts of tourism on the natural environment.

Level 2 [4–6 marks]
Uses named example.
More developed statements which describe the impacts of tourism on 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 could be positive or negative and are likely to refer to:
Loss of vegetation/deforestation,
Impact on habitats and food chains,
Pollution of lakes, seas and rivers,
Atmospheric pollution,
Conservation of natural environment by National Parks etc.

Place-specific reference is likely to consist of:
Locational details,
Specific details of species affected,
Named settlements in tourist area, etc. **[7]**

[Total: 25]

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6 (a) (i) Mexico. [1] **[1]**

(ii) More in Canada/less in Ecuador/greater/only; (1)
7100 in Canada compared with 726 in Ecuador/10× as much in Canada, etc.

N.B.: Must state which country referring to. [2 × 1] **[2]**

(iii) Ideas such as:
- More mechanization of farms in MEDCs;
- More people work in industry/more factories/machines used in factories in MEDCs/more farms in LEDC's;
- Greater amount of transport in MEDCs;
- Electricity more likely to be used in the home in MEDCs or examples e.g. fridge/cooker/vacuum;
- More energy used for heating/air conditioning/lighting in homes in MEDCs;
- MEDC's are more urbanized; etc.

N.B: Assume referring to MEDC unless otherwise stated. Don't need comparison. [3 × 1] **[3]**

(iv) Ideas such as:
- Water is a basic need for survival/the body needs water/cannot function without water/prevent dehydration/prevents people being thirsty;
- Reduction of **water borne** diseases or examples e.g. cholera, typhoid/dirty water kills people;
- People are able to work/able to produce food/earn money;
- More water for irrigation for use in agriculture/increases yields of crops;
- Develop manufacturing industry (or example); etc. [4 × 1] **[4]**

(b) (i)
- Groundwater = water in the rocks/aquifer/below the surface/underground;
- Desalination = taking salt out of (sea)water;
- Recycling = treated or cleaned **and** reused; [3 × 1] **[3]**

(ii) Ideas such as:
- Treatment of waste water;
- Regulations on pollution of rivers;
- Strict enforcement;
- Hosepipe bans/use buckets instead;
- Use of water meters;
- Paying for water;
- Use showers not baths/take shorter showers;
- Put brick in toilet cistern;
- Turn off taps when not being used;
- Use of roof-top tanks/water butts/collecting rainwater;
- Mend leaking pipes;
- Use of drip irrigation;
- Educate people about the careful use of water;
- Re-use/recycle water or examples; etc. [5 × 1] **[5]**

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(c) Levels marking

Level 1 [1–3 marks]
Statements including limited detail describing how a country obtains its energy.

Level 2 [4–6 marks]
Uses named example.
More developed statements describing how a country obtains its energy.

(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:
Fossil fuels,
Nuclear power,
HEP schemes,
Solar/wind/wave/tidal energy,
Geothermal energy,
Fracking, etc.

Place-specific reference is likely to consist of:
References to places within the country/locational details;
Statistical information, etc. **[7]**

[Total: 25]

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