UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

GCE Ordinary Level

MARK SCHEME for the October/November 2010 question paper

for the guidance of teachers

2217 GEOGRAPHY

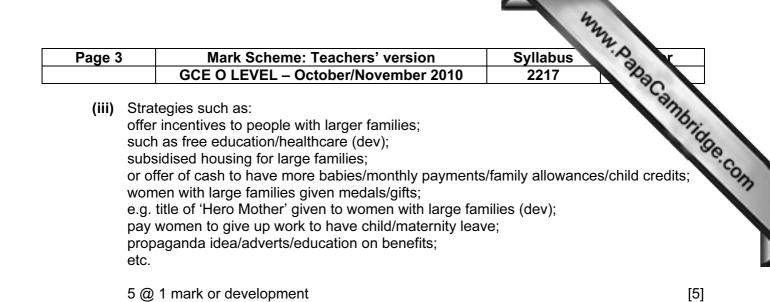**2217/13** Paper 1 (Geographical Themes), maximum raw mark 75

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 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 2010 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

1   (a) (i) 35 to 39

          1 mark

     (ii) A. More old people/65+/old dependents/2050 pyramid has wider apex/top to pyramid/
          large amount/bulge of economically active in 2000 have become old in 2050
          Can also use comparative statistics.
          etc.

          B. Greater percentage of population in dependent ages/young and old people/smaller
          proportion of economically active/central part of pyramid is narrower in relation to top
          and bottom.
          etc.

          NB: A comparative element is needed.

          2 @ 1 mark   [2]

     (iii) Ideas such as:
          strain on working population/work harder/longer hours;
          higher taxation/have to pay for pensions/government spending on pensions;
          more money has to be spent on care homes/health care/old peoples homes;
          less pressure on job market/lower unemployment/less competition for jobs;
          reduced supply of workers leads to increase in wages;
          less money to spend on services for economically active;
          racial tension in country;
          slow down economic growth;
          etc.

          3 @ 1 mark   [3]

     (b) (i) Ideas such as:
          so there are more workers/to fill job vacancies;
          birth rates are too low;
          population is ageing/'greying';
          boost economy/increase productivity;

          3 @ 1 mark   [3]

     (ii) Ideas such as:
          competition for jobs;
          it may lead to increased crime;
          and create more traffic congestion;
          causes property prices to fall;
          xenophobic reaction/they are prejudiced
          fear of racial conflict
          increased demand for housing/increased house prices;
          etc.

          4 @ 1 mark   [4]

(iii) Strategies such as:
offer incentives to people with larger families;
such as free education/healthcare (dev);
subsidised housing for large families;
or offer of cash to have more babies/monthly payments/family allowances/child credits;
women with large families given medals/gifts;
e.g. title of 'Hero Mother' given to women with large families (dev);
pay women to give up work to have child/maternity leave;
propaganda idea/adverts/education on benefits;
etc.

5 @ 1 mark or development [5]

(c) Levels marking

Level 1 (1–3 marks)
Statements including limited detail explaining low rates of natural population growth.
(e.g. children have to attend school, there is plenty of contraception, Many women work, low birth rate, high death rate, high cost of children, death rate is equal to birth rate. etc.)

Level 2 (4–6 marks) Max 5 if no example. 3 developed statements plus named example for 6 marks.
More developed statements explaining low rates of population growth.
(e.g. children have to attend school therefore large numbers create a greater economic burden, contraception is easily available in all parts of the country, many women are career minded so prefer to wait longer until they have children, developed reasons for high death rate and low birth rate. etc.)

Level 3 (7 marks) Must include place specific information.
Uses named example (e.g. France).
Comprehensive and accurate statements including some place specific reference.
(e.g. children have to attend school therefore large numbers create a greater economic burden, contraception is easily available even in rural area such as Massif Central as there are family planning clinics, in urban areas such as Paris many women are career minded so prefer to wait longer until they have children. Could also quote accurate population growth rates/dates for place specific. etc.) [7]

[Total: 25]

2 (a) (i) Area where town and countryside meet/edge of town/city etc.

1 mark [1]

(ii) Golf course;
Tennis courts;
School/educational;
Farm/agricultural;
Housing/residential;
Roads/streets;

2 @ 1 mark [2]

(iii) Ideas such as:
construction noise/disturbance from noise;
extra traffic on roads/congestion;
more dangerous to cross (dev);
spoils view/visual pollution;
pressure on local schools/overcrowded classes;
air pollution from vehicles/machinery/lorries;
loss of hedgrows/trees/wildlife/Greenland/open space/habitats;
property prices fall;
etc.

3 @ 1 mark [3]

(iv) Ideas such as:
Advantages:
Retains rural/peaceful environment/stops excessive urban growth/prevents sprawl/ prevents unsightly buildings being built;
people can easily access land for walking dog/cycling/amenity;
lead to increased property prices;
Provides clean air for city/stops/reduces air pollution;
May contain water sources for city/no water pollution e.g. reservoir/river;
Can be used for producing food/farming;
etc.

Disadvantages:
Makes expansion of urban area more difficult;
less land to build services e.g. schools;
Therefore building of new housing is difficult/not enough homes for people;
encourages upward growth/high rise;
Have to live further away from city/development has to be at other side of green belt;
leads to more traffic movement/congestion/more fumes/air pollution from traffic;
makes construction of ring roads/by passes difficult/rail/airport;
increased property prices;

MAX 3 marks on Advantages/disadvantages
NB: No double credit.

4 @ 1 mark [4]

(b) (i) Differences such as:
high rise in A lower in B;
flats/apartments in A/housing in B;
houses with gardens in B but not in A/more private space in B;
off road parking/drives in B but not in A;
higher cost housing in B;
houses in B have more land/area than A;
Fences in B none in A;
B is more spacious/bigger than A/A is more crowded/dense than B;
A is brightly coloured B is lighter/cream;
etc.

NB: Must be comparative and use evidence from the photographs.

3 @ 1 mark [3]

(ii) Ideas such as:
In A quality of life is likely to be lower;
As there will be more noise from adjacent properties (dev);
And homes are less spacious/overcrowded (dev);
In B people will have more land/be able to relax in gardens;
Lower unemployment in B;
Therefore people will have more disposable income/be able to afford higher quality of life (dev);
there are more car owners in area B;
therefore people have more mobility/do not have to rely on public transport (dev);
People in Area B are likely to feel more secure;
As they are surrounded by fences (dev)
Higher percentage of owner occupied in B;
etc.
NB: Must be comparative.

5 @ 1 mark or development [5]

(c) Levels marking

Level 1 (1–3 marks)
Statements including limited detail describing a change in land use in a town or city and/or advantages and/or disadvantages of the change.
(e.g. loss of farmland, easy to go shopping by car, competes with businesses in centre etc.)

Level 2 (4–6 marks) Max 5 if no example. 3 developed statements plus named example for 6 marks.
More developed statements about advantages and disadvantages of the change, along with some description of the change in land use.
(e.g. traffic congestion as many people who use new shopping centre travel by car, loss of farmland due to new shopping centre/road construction, atmospheric pollution from increased traffic, easy to go shopping by car as out of town centre has free car parking etc.)

Level 3 (7 marks) Must include place specific information.
Uses named example (e.g. Warsaw).
More developed statements about advantages and disadvantages of the change, including some place specific reference, along with some description of the change in land use.
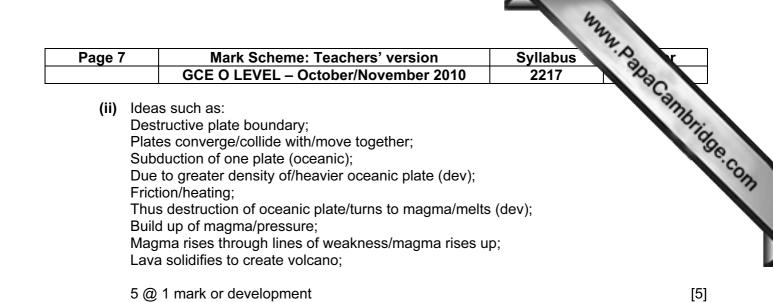(e.g. building Arkadia shopping mall covering a total area of 287 000 m^2 the biggest shopping mall in Central Europe, disadvantage is: traffic congestion as many people who use new shopping centre travel by car, as there are 4000 free parking spaces which is an advantage, other advantages include: easy to go shopping as Arkadia is served by 15 bus routes and 10 tram lines, offers people greater shopping choice including Lacoste, Gant, Peek & Cloppenburg and Tommy Hilfiger, as well as high street chains like Zara, Espirit and Kappahl etc.)

NB: For level 3 must have advantage and disadvantage. [7]

[Total: 25]

3 (a) (i) It had not erupted before/it was thought to be dormant/extinct/first recorded eru

1 mark

(ii) Distance = 4 to 5 km
Direction = west

2 @ 1 mark [2]

(iii) Effects such as:
damaged/destroyed buildings;
towns had to be evacuated/people left the island;
destruction of forests/trees;
loss of farmland/crops;
disruption of transport;
tourists unlikely to visit;
factories destroyed;
jobs lost;
economic decline/lowers GNP;
impact on river;
wildlife/habitats/ecosystems/food chains destroyed;
etc.

3 @ 1 mark [3]

(iv) Ideas such as:
they were not expecting the eruption/not predicted;
were not prepared;
they had no previous experience of dealing with volcanic eruption;
it continued to erupt for over 2 years;
it destroyed many houses/people homeless/have to rebuild houses;
capital city affected therefore most important buildings lost;
loss of business/income/earnings;
no food available/loss of agricultural land/can't produce food/grow crops;
small island so large proportion was affected;
so aid difficult to reach;
etc.

4 @ 1 mark [4]

(b) (i) Ideas such as:
along plate boundaries/where plates meet; (Reserve 1 mark)
e.g. down middle of Atlantic Ocean;
around Pacific Ocean/west coast of Americas/East Asia;
through Mediterranean/North Africa;
East Africa is an exception.

NB: May use names of places or plates if relevant.

3 @ 1 mark [3]

(ii) Ideas such as:
Destructive plate boundary;
Plates converge/collide with/move together;
Subduction of one plate (oceanic);
Due to greater density of/heavier oceanic plate (dev);
Friction/heating;
Thus destruction of oceanic plate/turns to magma/melts (dev);
Build up of magma/pressure;
Magma rises through lines of weakness/magma rises up;
Lava solidifies to create volcano;

5 @ 1 mark or development   [5]

(c) Levels marking

Level 1 (1–3 marks)
Statements including limited detail describing causes of a flood, tropical storm or drought.
(e.g. heavy rain, impermeable rocks, flood plains built on, for drought: a prolonged period of time without rainfall, delayed rainfall etc.)

Level 2 (4–6 marks) Max 5 if no example. 3 developed statements plus named example for 6 marks.
More developed statements describing causes of flood, tropical storm or drought.
(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, for drought – late arrival of SW monsoon etc.)

Level 3 (7 marks) Must include place specific information.
Uses named example (e.g. Lynmouth floods).
Comprehensive and accurate statements including some place specific reference.
(e.g. thunderstorms associated with frontal depression formed torrential rain – 229 mm 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]

4 (a) (i) Physical = Freeze-thaw/exfoliation
Chemical = Carbonation/oxidation

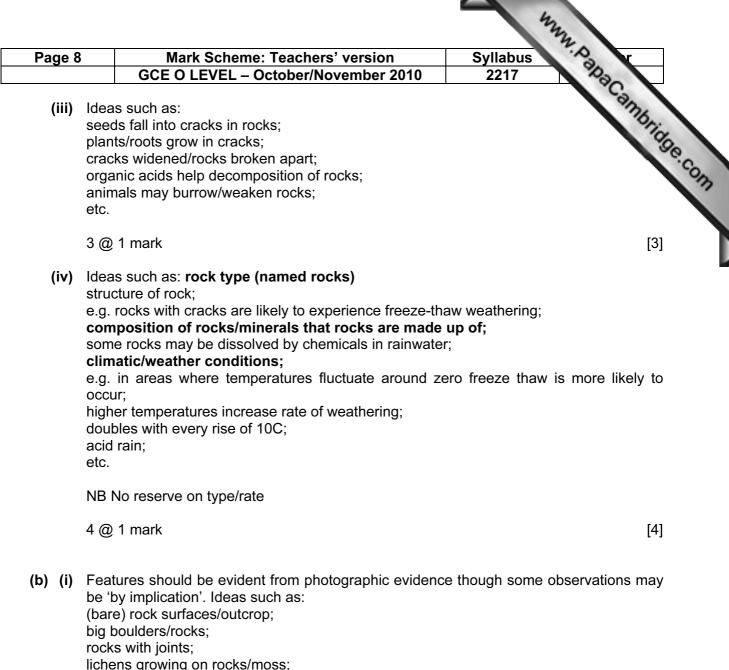1 mark   [1]

(ii) Chemical weathering involves a change in (chemical) composition of rocks/physical does not involve chemical change/involves rocks breaking down into smaller particles.

2 @ 1 mark   [2]

(iii) Ideas such as:
seeds fall into cracks in rocks;
plants/roots grow in cracks;
cracks widened/rocks broken apart;
organic acids help decomposition of rocks;
animals may burrow/weaken rocks;
etc.

3 @ 1 mark   [3]

(iv) Ideas such as: **rock type (named rocks)**
structure of rock;
e.g. rocks with cracks are likely to experience freeze-thaw weathering;
composition of rocks/minerals that rocks are made up of;
some rocks may be dissolved by chemicals in rainwater;
climatic/weather conditions;
e.g. in areas where temperatures fluctuate around zero freeze thaw is more likely to occur;
higher temperatures increase rate of weathering;
doubles with every rise of 10C;
acid rain;
etc.

NB No reserve on type/rate

4 @ 1 mark   [4]

(b) (i) Features should be evident from photographic evidence though some observations may be 'by implication'. Ideas such as:
(bare) rock surfaces/outcrop;
big boulders/rocks;
rocks with joints;
lichens growing on rocks/moss;
round/smooth rock surfaces;
vertical/steep slopes;
rolling hills/gentle slopes/farmland in the background/trees/woodland in background;
eroded rock in middle/worn down in middle;
different levels/steps;
etc.

3 @ 1 mark   [3]

(ii) Candidates should describe the process of freeze-thaw weathering. Cre[...]
answers or information included as part of labelled diagrams (do not double cred[...]
Expect ideas such as:
rain collects in cracks/joints;
temperature falls;
thus water freezes;
expands (dev);
stress on cracks/joints;
joints opened(dev)/therefore pressure on rock;
melting;
more water enters the joints/repetition
etc.

NB: Diagram must be labelled or link to answer.

5 @ 1 mark or development   [5]

(c) Levels marking

Level 1 (1–3 marks)
Statements including limited detail describing opportunities for people who live in chosen area. e.g. fast flowing river
(e.g. Scenic beauty, tourist industry, HEP, transport etc.)

Level 2 (4–6 marks) Max 5 if no example. 3 developed statements plus named example for 6 marks.
More developed statements describing opportunities for people who live in chosen area. e.g. fast flowing river
(e.g. Scenic beauty/tourist industry provides specified employment opportunities, HEP attracts industry/multiplier effect, downriver transport of logs etc.)

Level 3 (7 marks) Must include place specific information.
Uses named example (e.g. Montmorency River, Quebec).
Comprehensive and accurate statements including some place specific reference.
(e.g. Scenic beauty e.g. waterfall at Montmorency Falls; tourist industry provides specified employment, HEP generated for Quebec City, attracts industry/multiplier effect as smelting industries have been established close to where it joins St Lawrence river, downriver transport of logs from upper reaches to sawmills near Quebec etc.)   [7]

[Total: 25]

5 (a) (i) High technology industries

1 mark

(ii) Products such as:
Computer software/hardware/computers (or other example);
Office machinery/fax/photocopiers (or other example);
Producing pharmaceuticals/research into drugs/medicines;
Communications equipment/mobile phones (or other example);
Hospital equipment/MRI scanners (or other example)
Developing/testing cosmetics (or other example);
Aircraft/space technology;
etc.

2 @ 1 mark   [2]

(iii) Ideas such as:
edge of Norwich/rural/urban fringe of Norwich;
western edge;
approx 10 km from centre/CBD/any correct use of distance from named feature;
near/next to University of East Anglia/John Innes Centre/Norwich and Norfolk University Hospital;
on B1108 road;
close to A47/Southern by-pass;
near River Yare;
etc.

3 @ 1 mark   [3]

(iv) Ideas such as:
skilled/highly qualified workforce from nearby university;
good road communications/easy access;
greenfield site/attractive scenery/peaceful environment;
presence of university/hospital for research links;
cheaper land outside urban area;
large expanse of land/room for expansion/lots of space;
etc.

4 @ 1 mark   [4]

(b) (i) Ideas such as
Large/increasing market in LEDCs;
Cheap labour supply;
Low cost of land;
Few labour restrictions/limited trade union activity;
Ease of global transport of components/products by air/sea;
Low bulk/low cost transport;
Government incentives or examples;
Lack of environmental restrictions;
Cheaper to build factory;
etc.

3 @ 1 mark   [3]

(ii) Ideas such as:

Advantages
more people in employment;
higher wages than existing work;
improvement in skills;
improvements in transport e.g. roads/rail;
improvements in infrastructure e.g. electricity/water supply/sanitation;
rising standard of living or specifics e.g. housing;
improvement in public services or specifics e.g. health care/education;
multiplier effect;
etc.

Disadvantages
Exploitation;
Low pay;
Long hours;
Poor working conditions (or example);
Loss of rural land/farmland;
Any specified pollution e.g. air pollution or effect;
Water pollution;
Noise pollution;
Visual pollution;
etc.

MAXIMUM 3 MARKS ON EACH OF ADVANTAGES and DISADVANTAGES

5 @ 1 mark or development   [5]

(c) Levels marking

Level 1 (1–3 marks)
Statements including limited detail explaining location of manufacturing/processing industry
(e.g. large workforce, good transport links, cheap land, raw materials, energy supply, water supply, cheap labour, skilled labour etc.)

Level 2 (4–6 marks) Max 5 if no example. 3 developed statements plus named example for 6 marks.
More developed statements explaining location of manufacturing/processing industry
(e.g. large workforce with engineering skills, or from nearby (named) university, good rail links to raw material supplies, located on coalfield for energy supply, water supply to use in processing etc.)

Level 3 (7 marks) Must include place specific information. For named example must state what and where it is.
Uses named example (e.g. sugar refining in Baltimore USA).
Comprehensive and accurate statements including some place specific reference.
(e.g. good motorway links to markets in large cities such as New York and Washington, adjacent port facilities for import of sugar cane from Caribbean, government grants due to investment in declining industrial areas, large areas of flat land adjacent to waterside for storage of raw cane, large workforce in urban area which has high unemployment rate due to recent industrial decline etc.)

NB: for place specific allow statistics/names of places/universities/airports etc.   [7]

[Total: 25]

6 (a) (i) 370 000 / 370 thousand

1 mark

(ii) A = 1984/1987/1994/1998/ 2003
B = 1981/1982/198519901991/1992/2001

2 @ 1 mark   [2]

(iii) Overall increase;
by 180 000/from 370 000 (1980) to 550 000 (2004);
though not consistent/fluctuates;
allow any correct intermediate years and amounts to illustrate the fluctuation; (MAX 1)
NB: must show increase and decrease idea.

MAX 2 on figures.

3 @ 1 mark   [3]

(iv) Ideas such as:
Increasing affluence/more money to spend;
developments in air travel/airports;
Investment in larger airline capacity/larger aeroplanes;
Able to use low cost labour/land etc.;
Tourists are being more adventurous/want new experience;
More knowledge about distant locations/internet
etc.

4 @ 1 mark   [4]

(b) (i) Ideas such as:
lack of skills/education/qualifications;
large potential market/lots of rich people;
can set up with no overheads/no need for premises/doesn't cost much to set up;
immediate earnings;
no need to pay tax;
flexibility – no office hours;
can't get any other jobs; etc.

3 @ 1 mark   [3]

(ii) Ideas such as:
Local farmers can sell vegetables in hotels/fishermen sell fish to hotels or restaurant;
thus regular contracts (dev);
thus they can charge higher prices than to locals (dev);
improvement of roads;
so travel within the area is easier (dev)
infrastructural developments/electricity/water/sanitation;
development of airport for possible international travel;
cultural exchange;
retention of local cultures;
as there is a demand to see local dance/music/festivals (dev);
formal sector jobs;
examples of formal sector jobs in the tourism industry e.g. waiter in hotel (dev);
stable source of income/regular contract/pay;
etc.

5 @ 1 mark or development   [5]

(c) Levels marking

Level 1 (1–3 marks)
Statements including limited detail which explain why tourist industry developed.
(e.g. hot weather, sunny, low rainfall, nice scenery, beaches, local culture, easy to get to etc.)

Level 2 (4–6 marks) Max 5 if no example. 3 developed statements plus named example for 6 marks.
More developed statements which explain why tourist industry developed.
(e.g. long hours of sunshine especially June to September, average temperatures of over 20 °C during summer months, low rainfall April to Oct, clean blue seas, waterfront restaurants/bars, attractive headlands with cliffs, sheltered sandy bays ideal for sunbathing, ease of access via good roads and airport etc.)

Level 3 (7 marks)
Uses named example (e.g. Algarve). Must include place specific information.
Comprehensive and accurate statements, which explain why tourist industry developed, with some place specific reference.
(e.g. long hours of sunshine especially June to September, average temperatures of over 20 °C during summer months, low rainfall April to Oct, clean blue seas, waterfront restaurants/bars in resorts like Albufeira, attractive headlands with cliffs at Lagos, sheltered sandy bays ideal for sunbathing, ease of access via good roads and Faro airport etc.)

NB: Must refer to Natural and Built environment for Level 3.   [7]

[Total: 25]