GCSE

Edexcel GCSE

Geography B (1313)

Paper 2F

Summer 2005

Mark Scheme (Results)

Question A1

a)
i) The number of people/babies born(1) in a year (1) for every
   1000 people (1)
   Do NOT accept the number of <u>births</u>   2 marks

ii) Two accurate plots - 1 mark x 2
    Accurate connecting line (1) must be straight   3 marks
(If any plot wrong, no mark for line)

                                                                5 marks

b)
i) 1920   1 mark

ii) 24 (per thousand)   1 mark

                                                                2 marks

c)
   Y
   Z
   X
   One correct (1), two or three correct (2)   2 marks

d)
 i) Improved medical care (1) e.g. vaccinations (1), new drugs (1)
    cures discovered for diseases (1)
    Improved hygiene (1) e.g.sanitation (1), piped water (1)
Improved diet (1), so more resistant to disease(1)   2 marks

ii) Poor parents benefit from having large families (1)
    because children can work on family farm (1) and look after
     parent in old age (1)
    More births to off-set high infant mortality (1)
    Lack of access to contraception (1)
    Lack of knowledge of contraception (1)
    Lack of education for <u>girls</u> who follow tradition of having large
    families/ do not have a career (1)   3 marks

iii) Rapidly growing population (1) may outstrip resources such as
     food   (1) and water (1)
     resulting in increased poverty(1), starvation(1), homelessness(1)
     High dependency ratio (1)
     High % of young people (1) requires expansion in education (1)
     and health care (1), and it is difficult for LEDC to find money
     for this investment   3 marks

                                                                8 marks

e)

 i) Movement of people from one country to another
    Accept the people leaving a country plus the people moving into
    It.   1 mark

ii) Increase by 172,000
    Accept *increase* because immigration (*480,000*) exceeded
emigration (308,000)   1 mark

iii) Any two – France, Germany, Spain, Italy, Austria, Belgium,
     Denmark, Finland, Greece, Ireland, Luxemburg, Netherlands,
     Portugal, Sweden.
     Accept countries that joined EU after 2003- Czech Republic,
     Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland,
     Slovakia, Slovenia.   2 marks

iv) Immigrants fill vacancies in menial jobs/occupations shunned by
     indigenous people (1)plus example(1).
     Immigrants may work for lower wages than indigenous people(1)
     Immigrants full vacancies in skilled jobs (1)
     Plus example eg doctor/nurse (1)
     Young immigrants off-set problem of an ageing population (1)
     by reducing dependency ratio (1) and providing tax revenues (1)
     Immigrants enrich culture(1)e.g. by introducing new music
     /foods (1)
                                                                     3 marks

                                                                     7 marks
    f)

Level 1 1 – 3 marks	Mentions a few environmental effects: e.g. air pollution, water pollution, visual pollution.
Level 2 4 – 6 marks QWC	Mentions a range of environmental effects or describes one or two in some detail. May refer to the extraction of the energy resource as well as its processing. To reach the top mark: Writes in sentences with a clear and structured style. Spells, punctuates and uses the rules of grammar with considerable accuracy.

Max.3 marks if LEDC named.   Total 30

Accept 'fossil fuels' or individual ones e.g. coal, oil, gas.
Accept nuclear power
Accept geothermal energy.
Accept biogas.

Question A2
a)

Grid square	Economic Activity	P, S or T
4665	Farm (NOT Fm)	P
5066	Works / factory (NOT Wks)	S
5059	Hotel	T

6 marks

Activity must be correst to score for P/S/T

b)
  Museum (1)
  Town Hall (1)
  Tourist Information Centre (1)
  Bus station (1)
  Enclosed by inner ring road (1)

  Not accept library/college or public buildings   2 marks

c)
 i) Motor vehicles are banned from driving there (1)
    Only people on foot are allowed on them (1)   1 mark

 ii) Safe from traffic accidents (1)
     Less noise pollution (1) NOT just 'less pollution'
     Less air pollution (1)
     More space to walk in(1) (NOT 'less congested')   2 marks

iii) Increases congestion or air/noise
     pollution on nearby roads (1)
     Deliveries to shops made difficult (1)
     Shops lose passing motorist trade (1)
     Have to carry shopping some way to car/bus (1)   1 mark

          4 marks

d)
 i) 4259 or 4354 or 4454   1 mark

ii) Travellers park their cars and then catch a bus or tram or public
    transport (1).
    Plus one further mark for locating car park on edge of city or
    destination as city centre (1)   2 marks

iii)To reduce traffic congestion *in the city centre* (1)
    To reduce air/noise pollution *in the city centre* (1)
    To encourage greater use of public transport *to city centre* (1)   1 mark

          4 marks

3

e)
Near main road(1) for delivery of components/goods or easy
access (1)
Flat land (1) easy to build on (1)
Cheap land(1) on edge of town (1)
Near university/college (1) for skilled workforce /research (1)
Near motorway junction(1) for good accessibility (1)
Has lakes for attractive environment (1)
Near housing for workers (1)
Room to expand(1)
NOT accept near railway or park and ride.   2 marks

f)
i) Brownfield site (1) so will have some existing infrastructure/(eg
electricity/water) (1)
No farmland/countryside will be lost (1)
Disused airfield offers room for expansion (1)
Cheaper land than nearer city (1)
Probably outside Cambridge Green Belt (1)
Flat land will be easy to build on (1)
Near railway *station* for good accessibility (1)
Near A10/main road for good accessibility (1)   3 marks

ii) Increased traffic congestion (1)
Pressure on local services (1)
Visual pollution (1)
Reduction in value of own house (1)
NIMBY attitude (1)
Air pollution form traffic (1)
Noise pollution from traffic/ building work (1)   3 marks

                                                             6 marks

g)

Level 1 1 – 3 marks	Mentions rural-urban migration and one reason for this Mentions one improvement: e.g. self-help scheme; site-and-services scheme; low-cost council housing	
Level 2 4 – 6 marks QWC	Refers to rural-urban migration, giving a few reasons for it. May mention high rates of natural increase. Mentions a range of improvements or describes one or two schemes in some detail. To reach the top marks: Writes in sentences with a clear and structured style. Spells, punctuates and uses the rules of grammar with considerable accuracy.	6 marks

Max.3 marks if MEDC city named

                                                             Total 30

a)

i)Ice-caps   Three or four correct – 2 marks
 Groundwater   Two correct – 1 mark
 Surface Water
 Atmosphere   2 marks

ii)It is usually cleaner/safer to drink (1)
 It may be more reliable (1).   1 mark

iii)It is saltwater   1 mark

                4 marks

b)
 i)325   1 mark

ii)1270 – 1370   1 mark

                2 marks

c)
i) Concrete   1 mark

ii) 50 metres   1 mark

iii)*The dam* could be an eyesore (1)
 A road would be flooded (1)
 A farm would be flooded (1) or loss of farmland (1)
 The villagers would be cut off from the pub (1)
 The publican would lose trade from the village (1)
                4 marks

iv)Use it for their own recreation (1)
 and/or <u>appropriate</u> examples e.g. fishing (1) sailing (1),
 windsurfing (1)
 Not accept motorised water sports or "water sports" or
 swimming
 Make money from tourists (1)
 plus example e.g. open a café, B & B, or cycle hire shop (1) 2 marks

                8 marks

d)

Level 1 1 – 3 marks	Points out there are more uses of water in MEDCs than LEDCs and gives a few examples. Probably refers to domestic uses only.
Level 2 4 -- 6 marks	Describes briefly some details regarding contrasting uses of water in MEDCs and LEDCs. Relates the differences to personal living standards. May mention industrial or agricultural uses of water.

Note: case study knowledge is not required but should be credited if given.
               6 marks

               Total 20

<u>Question B4</u>
a)
 Weather – C
 Climate – A   2 marks
b)
 i) When normal rainfall becomes polluted (1)
   by the addition of sulphur/nitrogen(1) or burning of fossil fuels (1)
    Accept when the ph value, which measures acidity (1) of rainfall
      becomes lower than 5.5 (1)   1 mark

 ii) 2 marks for shading the entire area within the pH 4.5 line
      1 mark for shading 1/4 of the area within the pH 4.5 line (e.g.
      may leave the area below 4.3 unshaded)   2 marks

 iii) South westerly   1 mark

                                                                         4 marks

 c)
 i)

Acid rain does not fall in the United Kingdom	
The rain in Wales is less acidic than the rain in Eastern England	√
The most highly acidic rain falls in Norway	
Northern Denmark receives acid rain with a pH of less than 4.5	√
Acid rain with a pH of 3.0 falls in Norway	
Acid rain with a pH of 4.3 falls in Germany	√

                                                                         3 marks

 ii)Acid rain affects several countries (1)   1 mark
   One country causes acid rain in another (1)
 d)
  Sequential points needed.

 E.g. UK has power stations/factories/motor vehicles (at least two)
 (1)
      which burn fuels (1)
      that produce sulphur and nitrogen <u>oxides</u> (1) (not 'emissions')
      which rise or are reteased into the atmosphere (1)
      and are carried by (prevailing) winds (1)
      towards the Scandinavian uplands (1)
      which cause air to rise / cool (1)
      which causes precipitation to fall(1)   4 marks

 e)

Level 1 1 – 3 marks	Mentions a few simple influences: e.g. animals can die in drought; floods can kill crops. May only refer to weather influences.
Level 2 4 -- 6 marks	Briefly explains a few influences: e.g. some crops need warm climate to grow; sheep can survive in cool climates. Must include a climatic influence for top mark

  Note: case study knowledge is not required but should be credited if given.
                                             6 marks   Total 20

a)upland (1)
  grass (1)
  sheep (1)   3 marks

b)
 i)

Level 1 1 – 2 marks	Lists a few specific features: e.g. crops, lots of trees, hillside, large farmhouse, golden colour, dry ground.
Level 2 3 – 4 marks	Includes some generalisations as well as specifics: e.g. mainly arable land; trees planted in rows; lack of natural vegetation; neat, regular landscape; small fields; trees as field boundaries.

4 marks

ii) More intensive farming (1) or less human intervention (1)
   Crops grown, so soil ploughed/disturbed (1) and prone to erosion (1)
   Natural vegetation cleared (1) so wildlife habitats destroyed (1)
   Crops grown, so soil nutrients removed (1)
    Photo A has livestock which enrich soil with manure (1)
    Photo A has low density of sheep grazing (1)   3 marks

                                                                        7 marks
c)
 i) They have enough food to eat (1)
    Farmers have a fair standard of living (1)   1 mark

 ii)Guaranteed prices will encourage farmers to use all their
      available land (1)
     and to maximise their yields (1)   3 marks

Resulting farm practices that damage the environment could
include: Removal of hedges, which destroys habitats (1)
and encourages soil erosion by wind (1)
Draining of marshes/ponds, which destroys habitats (1)
Ploughing up of meadows, which destroys wild plants (1)
Use of chemical fertilisers, which can pollute rivers (1)
Use of pesticides/herbicides, which reduce biodiversity(1)
Overstocking, which can cause soil-erosion by compaction (1),
pollute streams with slurry (1) and damage habitats (1)
 1 or 2 marks for general idea + 2 or 1 for example(s) = 3 marks

d)
Desertification

Level 1 1-3 marks	Mentions a few environmental changes: e.g. grass eaten; soil eroded; rivers dried up. Mentions a few human activities (e.g. grazing animals, collecting firewood) and/or physical processes (e.g wind erosion, surface run off, drought)
Level 2 4-6 marks	Describes environmental changes briefly e.g. grass cover destroyed: soil made infertile: spread of sand dunes. Explains simply the impact of a few human (eg. Overgrazing, over cropping0 and/or physical processes (eg. Heavy rain leads to more run off and so soil erosion; without the plant cover any lose soil is blown by the wind.)

Max 3 marks of MEDC area identified.
Or Deforestation

| Level 1 1-3 marks | Mentions a few environmental changes; e.g. tress cut down; crops planted; ranches set up; soil eroded; rivers flooded

Mentions a few human activities (eg. Logging, grazing animals, road building) And/or physical processes (eg surface run-off; soil erosion) |
|---|---|
| Level 2 4-6 marks | Describes environmental changes briefly: eg. Forest cover removed and replaced by cattle ranches or soya fields; ground gulleyed; soil made infertile; habitat destroyed. Explains simply the impact of one or two physical processes (eg. Without tree cover soil losses. Nutrients from leaves; heavy rain leads to leaching of soil; heavy rain leads to more run-off and so soil erosion;silting of rivers causes flooding) Or human activities (eg. Harvesting crops removes nutrients from soil, destroying habitat threatens animals) |

Max 3 marks if MEDC area are identified

6 marks

Total 20

<u>Question C6</u>
a)
 i)Steep roof (1)
   Thatched (1)
   Timber (1
   Sections of tree trunk   4 marks

b)
 i) See exotic or rare plants/ giant trees (1)
    Observe animals in wild/bird watching (1)
    Experience a different culture (1)
    Commune with nature (1)
    Escape stress of western life-style/peaceful/secluded (1)
    Environmentally friendly/eco-tourists scheme (1)
    Boat trip to lake/farm/research centre (max 1)
                                                                   4 marks

ii) Lack normal comforts /hot water/telephone/TV (1)
    Fear of wild animals /piranhas/jaguars/crocodiles (1)
    Fear of insects /mosquitoes/ants (1)
    Fear of disease /malaria, yellow fever (1)
    Isolated in case of emergencies (1)   2 marks

                                                                   6 marks

c)
 i) Small scale/only 24 rooms – so limited volume of visitors (1)
   Only accessible by boat/no road access - so limited volume of
    visitors (1)
    Biodegradable products used - so avoids pollution (1)
    Conservation of energy resources – e.g. no heated water (1),
    and no electricity so no air conditioning (1)
    Use of local (water/crops/forest) resources – so reduced
    transport/fuel costs (1)
     No road building-so no deforestation (1)
     No electricity-so no ugly pylons/cables(1)
     Must be <u>developed</u> points.   2 marks

ii) Employment of local natives at lodge(1)-help the local
    economy(1)
    Buying of local farm produce for cooking (1)-income for
    farmers(1)
    Visits arranged to local farm – income for owner (1)
    Research use of plants for medicine - local traditions
    encouraged (1)   2 marks

    Must be <u>developed</u> points   4 marks

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d)

Level 1	1 – 3 marks	Identifies two contrasting landscapes: e.g. mountains, lakes, coast, villages. Lists some activities in each: e.g. climbing, sailing
Level 2	4 - 6 marks	Describes two landscapes, mentioning their distinctive relief, geology, vegetation and/or settlement characteristics: e.g. limestone upland, granite moor, sand dune coast, glaciated mountains, old cottages. Describes a range of leisure activities in each landscape

6 marks

Max. 3 marks if a non-EU National Park named.
If only one landscape referred to, max. 2 marks at Level 1,
and max. 4 marks at Level 2

Total 20