

Mark Scheme (Results)

Summer 2008

GCSE

GCSE Geography B (1313/2F)

Unit 1313 Paper 2F

A1 Providing for population change

Question Number	Answer	Mark
1(a)(i)	Something that is used by people	(1)

Question Number	Answer	Mark
1(a)(ii)	Something that will not run out	(1)

Question Number	Answer	Mark																											
1(a)(iii)	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Energy Resource</th> <th style="text-align: center;">Renewable</th> <th style="text-align: center;">Non-renewable</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Coal</td> <td></td> <td style="text-align: center;">✓</td> </tr> <tr> <td style="text-align: center;">Solar energy</td> <td style="text-align: center;">✓</td> <td></td> </tr> <tr> <td style="text-align: center;">Hydro Electricity</td> <td style="text-align: center;">✓</td> <td></td> </tr> <tr> <td style="text-align: center;">Natural Gas</td> <td></td> <td style="text-align: center;">✓</td> </tr> <tr> <td style="text-align: center;">Wind</td> <td style="text-align: center;">✓</td> <td></td> </tr> <tr> <td style="text-align: center;">Tidal</td> <td style="text-align: center;">✓</td> <td></td> </tr> <tr> <td style="text-align: center;">Biogas</td> <td style="text-align: center;">✓</td> <td></td> </tr> <tr> <td style="text-align: center;">Oil</td> <td></td> <td style="text-align: center;">✓</td> </tr> </tbody> </table> <p style="margin-top: 10px;">7 or 8 correct = 4 marks 5 or 6 correct = 3 marks 3 or 4 correct = 2 marks 1 or 2 correct = 1 mark</p>	Energy Resource	Renewable	Non-renewable	Coal		✓	Solar energy	✓		Hydro Electricity	✓		Natural Gas		✓	Wind	✓		Tidal	✓		Biogas	✓		Oil		✓	(4)
Energy Resource	Renewable	Non-renewable																											
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Question Number	Answer	Mark
1(b)	<p><u>Air / atmospheric pollution</u> OR <u>Release of unwanted/polluting/greenhouse</u> gases into the atmosphere (1) e.g. sulphur dioxide (1) carbon dioxide (1) (leading/contributing to) global warming (1) and / or acid rain (1) - then 1 further mark for one environmental effect of global warming and or acid rain (e.g. melting ice caps, killing forests)</p> <p>visual pollution / dust from (open cast) mining (1) warm water pumped into rivers affects fish / river life / ecosystem (1)</p> <p style="text-align: right;">2+2, 1+3 or 3+1</p>	(4)

Question Number	Answer	Mark
1(c)	Increased population means greater demand for energy (1) OR increased population means demand will exceed supplies (1) Many people rely on <u>non-renewable</u> energy resources (1) Fossil fuels / non-renewables will run out (1) Renewable supplies may not be enough to provide for demand (1)	(2)

Question Number	Answer	Mark
1(d)(i)	(Population) pyramid <i>or</i> age-sex diagram / pyramid	(1)

Question Number	Answer	Mark
1(d)(ii)	0 - 4 (1)	(1)

Question Number	Answer	Mark
1(d)(iii)	35 - 39 (1)	(1)

Question Number	Answer	Mark
1(d)(iv)	Sudan has more / higher proportion of young / 0-4/5-9/ 10-14 (than the U.K.) (1) Sudan has less / lower proportion of middle aged / any group between 30-65 (than the U.K.) (1) Sudan has less / lower proportion of elderly / any group over 65 (than the U.K.) (1) Credit reference(s) to the shape of the population pyramids e.g Sudan's has a wider base/UK's has a narrower base (1) Sudan's pyramid decreases consistently / UK's has a bulge in middle - aged group (1) (Credit any vice-versa statement but do not double mark)	(2)

Question Number	Answer	Mark
1(d)(v)	<p>Sudan is an LEDC / The U.K. is an MEDC (1) They are at different stages of development (1)</p> <p>Sudan has a higher birth rate / higher death rate (than the U.K.) (1) NOT just they have different birth / death rates UK has a longer life expectancy (1) Credit explanation of factors causing the differences e.g. better healthcare means more elderly / longer life expectancy in the U.K (1) More contraception means lower birth-rate/fewer children in the UK (1) (Credit any vice-versa statement but do not double mark)</p>	(2)

Question Number	Answer	Mark
1(e)(i)	<p>15 - 64 / Between 15 and 64 0 -14 / Between 0 and 14 /14 and under / under 15 NOT accept 15 and under</p>	(2)

Question Number	Answer	Mark
1(e)(ii)	<p><u>high</u> X <u>higher</u> X <u>increase</u> X low lower decrease (3 x 1)</p>	(3)

Question Number		Indicative content
1(f)		(6)
Level	Mark	Descriptor
	0	No rewardable material
Level 1	1-3	Mentions one population change e.g. more old people / people living longer. Mentions one problem e.g. more old people means more health care needed. Mentions one solution e.g. providing more hospitals / doctors. For 3 marks, one change, one problem and one solution are needed.
Level 2	4-6 QWC	Mentions two or more population changes e.g. more old people and fewer children OR describes one e.g. gives statistics about the change Mentions two problems e.g. more health care for the elderly needed, but fewer schools. OR explains one problem e.g. more old people due to longer life expectancy means more pensions are needed, and more health care / hospitals / doctors, and specialist retirement provision / accommodation Mentions two solutions e.g. providing more hospitals / doctors, retirement accommodation OR explains one solution e.g. increasing taxes means more money for providing more specialist hospitals / doctors / geriatric units To reach the top mark at this level, candidates should write in sentences with a clear and structured style; they should spell, punctuate and use the rules of grammar with some accuracy.

NB Maximum 3 marks if LEDC example chosen.

A2 Planning for change

Question Number	Answer	Mark
2(a)(i)	Primary - Extracting raw materials from the earth or sea Secondary - Processing and manufacturing Tertiary - Providing services (3 x 1)	(3)

Question Number	Answer	Mark
2(a)(ii)	Primary - e.g. farmer / miner / forestry worker (1) Secondary - e.g. steelworker / carmaker / factory worker (1) Tertiary - e.g. teacher / police officer / bus driver (1) Credit any valid job in each category Accept activities rather than jobs e.g. farming but do not accept 'manufacturing' for secondary	(3)

Question Number	Answer	Mark
2(b)(i)	87 / 87.5 / 88 (%) (1) Accept any value between 87 and 88	(1)

Question Number	Answer	Mark
2(b)(ii)	60 (%) (1)	(1)

Question Number	Answer	Mark										
2(b)(iii)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">The U.K.'s population has grown</td> <td style="width: 50px;"></td> </tr> <tr> <td style="text-align: center;">More machinery is being used in primary activities</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">The U.K.'s coal reserves are too expensive and difficult to mine</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">Better farming methods are now being used</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">The U.K. is now exporting more food products</td> <td></td> </tr> </table> <p>If more than 3 boxes crossed, deduct one mark from total score for each cross in excess of 3.</p>	The U.K.'s population has grown		More machinery is being used in primary activities	X	The U.K.'s coal reserves are too expensive and difficult to mine	X	Better farming methods are now being used	X	The U.K. is now exporting more food products		(3)
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Question Number	Answer	Mark
2(c)(i)	2054 (1)	(1)

Question Number	Answer	Mark
2(c)(ii)	North East / NE or North-North-East / NNE (1)	(1)

Question Number	Answer	Mark
2(d)(i)	<p><i>Stratford-on-Avon is a long way from the motorway / M40</i> (1) which makes access difficult (1) Congestion (1) <u>air</u> / <u>noise</u> pollution (1) [NOT just pollution on its own] due to the <i>dense road network</i> (1) due to people commuting/travelling to work (in the CBD) (1) due to tourists visiting the <i>many / concentrated tourist sites / attractions OR an e.g. - Museums / Shakespeare's Birthplace / Royal Shakespeare Theatre</i> (1) Risk of accidents (1) <i>Lack of parking in the town centre</i> (1) There are <i>only a few bridges (over the river)</i> (1) <i>The old Bridge</i> is likely to be narrow (1) [NOT just roads are narrow] <i>Several A roads / A439+A422+A3400 converge (on the town)</i> (1) [NOT just there are lots of roads] NB For 4 marks, must include map evidence i.e. at least one of the points in italics above, or a grid reference</p>	(4)

Question Number	Answer	Mark
2(d)(ii)	<p>1 mark for the management type, 1 mark for the explanation: There is a park and ride scheme (1) This reduces the number of cars (in the town centre) (1) reduces <u>noise</u> / <u>air</u> pollution (1) reduces congestion (1) OR Car parks <u>on edge of town</u> (1) This reduces the number of cars / congestion <u>in the town</u> (centre) (1) reduces <u>noise</u> / <u>air</u> pollution <u>in the town</u> (centre) (1) OR Bus station (1) suggests use of public transport (1) Means using buses reduces <u>noise</u> / <u>air</u> pollution (1) Means using buses which mean less cars on roads (1) OR Cycle route (1) means using bikes reduces the number of cars (1) reduces <u>noise</u> / <u>air</u> pollution (1) reduces congestion (1) reduces accidents (1)</p>	(2)

Question Number	Answer	Mark
2(e)(i)	<p><i>Space</i> for development / expansion (1) Cheap(er) / low value land (<i>outside the town</i>) (1) <i>Flat land</i> (1) Good access / communications / transport (1) <i>via motorway / M40 / A46 / A429</i> (1) Avoids congestion in town centre / built up area / <i>Warwick</i>(1) Close to labour supply (<i>in Warwick</i>) (1) Close to market / customers (<i>in Warwick</i>) (1) NB For 3 marks, must include map evidence i.e. at least one of the points in italics above.</p>	(3)

Question Number	Answer	Mark
2(e)(ii)	Lots of traffic / congestion (1) noise / air / visual pollution (1) [<u>not</u> just pollution on its own] Destruction of countryside / farmland / green belt (1) Not just destruction of land Destruction of habitats / ecosystems / wildlife (1) Possible negative effect on businesses in town centre / Warwick (1)	(2)

Question Number	Indicative content
2(f)	(6)

N.B. Accept reference to any urban area - city, town or part of city - MEDC or LEDC

Level	Mark	Descriptor
	0	No rewardable material
Level 1	1-3	Mentions one or two problems of household waste disposal e.g. the failure of many to recycle. Mentions one or two solutions e.g. local authority providing separate bins / bags.
Level 2	4-6 QWC	Mentions two problems of household waste disposal e.g. the failure of many to recycle and illegal tipping of waste. OR describes one problem of household waste disposal e.g. the failure of many to recycle due to laziness or an inability to take glass, paper etc. to recycling sites. Explains one or two solutions e.g. local authority providing compost bins, or selling them cheaply, to encourage / enable people to recycle organic materials; local authority providing separate bins / bags. for recyclable materials like paper, glass etc. To reach the top mark at this level, candidates should write in sentences with a clear and structured style; they should spell, punctuate and use the rules of grammar with some accuracy.

B3 Use and abuse of the environment (Water)

Question Number	Answer	Mark
3(a)(i)	<p>Photograph A = recreation Photograph B = industry Photograph C = agriculture</p> <p>1 correct = 1 mark 2 or 3 correct = 2 marks</p>	(2)

Question Number	Answer	Mark
3(a)(ii)	Watering grass / pitch (1) irrigation (1) spraying (1)	(1)

Question Number	Answer	Mark
3(b)	<p>LEDCs have low(er) living standards (than MEDCs) (1) LEDCs have a lack of money (1) LEDCs do not have piped / running water supplies OR less access to water in LEDCs (1) Water has to be obtained by hand / from wells in LEDCs (1) Which may be a long way / distance / walk (1) Less access to <u>clean</u> water in LEDCs (1) Do NOT allow just there is less water in LEDCs.</p> <p>LEDCs do not have (as many) domestic appliances/modern technology (1) e.g. dishwashers, showers (max 1 for e.g.) LEDCs use little / less water for recreation (or e.g.) (1) LEDCs have less industry and therefore use less water (1) People in LEDCs waste less water / use it sparingly (1) (Credit any vice-versa statement but do not double mark)</p>	(3)

Question Number	Answer	Mark
3(c)	<p>more domestic use - for the increased number of appliances such as dishwashers, showers etc. more industrial use - for increased amounts of cooling and processing more recreational use - for the increased number of golf courses, swimming pools etc. more agricultural use - for increased irrigation to produce higher crop yields</p> <p>(4 x 1)</p>	(4)

Question Number	Answer	Mark
3(d)(i)	<p>Chemicals / fertilisers / pesticides used on crops (1) wash into (ground)water <u>when it rains</u> (1) / <u>when irrigation is used</u> (1)</p>	(2)

Question Number	Answer	Mark
3(d)(ii)	Chemicals can harm wildlife / fish (1) and cause algae to grow (1) and lead to eutrophication (1) Chemicals may get into human water supply (1) OR make water unsafe to drink / cause disease (1)	

Question Number	Indicative content
3(e)	(6)

N.B Accept reference to physical or human factors throughout the answer, i'e in both sections

Level	Mark	Descriptor
	0	No rewardable material
Level 1	1-3	Mentions one or two physical factors e.g. a valley, rock type, rainfall Mentions one or two human factors e.g. lack of population in area of reservoir; large population to use water, land use
Level 2	4-6	Mentions at least two physical factors, or explains one simply e.g. a deep, steep sided valley is needed to collect the water for the reservoir, solid bedrock is needed to support the dam. Mentions at least two human factors, or explains one simply e.g. large population and industry / agriculture provides demand for the water. May show knowledge of a particular example/location. For 6 marks, both a physical factor and a human factor must be explained.

B4 Use and abuse of the environment (Weather and Climate)

Question Number	Answer	Mark
4(a)	Photograph D = summer holidays Photograph E = winter holidays Photograph F = farming (3 x 1)	(3)

Question Number	Answer	Mark
4(b)(i)	Lack of clouds / clear skies (1) Plenty of sunshine (1) high temperatures / warm / hot (1) plenty of dry weather (1) OR lack of rain (1)	(2)

Question Number	Answer	Mark
4(b)(ii)	low temperatures / cold weather (1) snow (1) sunshine (1) clean / unpolluted air (1) good visibility (1)	(2)

Question Number	Answer	Mark
4(c)	Irrigation - to make sure crops always have a water supply windbreaks - to stop soil blowing away glasshouses / greenhouses - to protect against frost and allow crops to ripen early cloud seeding - to increase rainfall (4 x 1)	(4)

Question Number	Answer	Mark
4(d)(i)	melting ice caps (1) rising sea level (1) (increased) flooding in low-lying / coastal areas (1) possible spread of (tropical) diseases (1) possibility of more storms/winds / damage (1) impact on [animal] habitats (1) crop failure due to drought (1)	(2)

Question Number	Answer	Mark
4(d)(ii)	reducing the use of fossil fuels (1) conserving energy (1) switching off unused appliances / lights (1) recycling materials (1) to reduce energy used in manufacturing (1) increasing the use of wind / solar / HEP / tidal power (1) reduce the use of cars (1) increases the use of public transport or use public transport instead of cars (1)	(1)

Question Number	Indicative content
4(e)	(6)

Level	Mark	Descriptor
	0	No rewardable material
Level 1	1-3	Mentions one way in which each of the two chosen possibilities produces energy e.g. sun can produce heat; rain can feed rivers for HEP; wind power can produce electricity. For 3 marks, one choice must include reference to the technology involved e.g. sun requires solar panels; rain requires a dam / turbines; wind needs wind turbines.
Level 2	4-6	Explains how one or both chosen possibilities produce energy e.g. solar panels heat water to produce heat; rain can feed rivers which drive turbines in a dam to produce HEP; wind farms harness the energy of wind to drive turbines which produce electricity. May show knowledge of a particular example / location. For 6 marks, must explain both chosen possibilities.

C5 Use and abuse of the environment (Farming)

Question Number	Answer	Mark
5(a)(i)	Orchard / Fruit (production) (1)	(1)

Question Number	Answer	Mark
5(a)(ii)	about 8 km (1)	(1)

Question Number	Answer	Mark				
5(a)(iii)	<table border="1"> <tr> <td>A farm owned and run by a family</td> <td></td> </tr> <tr> <td>A farm owned by a company and run by a manager</td> <td>x</td> </tr> </table>	A farm owned and run by a family		A farm owned by a company and run by a manager	x	(1)
A farm owned and run by a family						
A farm owned by a company and run by a manager	x					

Question Number	Answer	Mark
5(b)	hedges wind pesticides humans (4 x 1)	(4)

Question Number	Answer	Mark								
5(c)(i)	<table border="1"> <tr> <td>overcultivation</td> <td>C</td> </tr> <tr> <td>more animals reared</td> <td>B</td> </tr> <tr> <td>soil erosion</td> <td>D</td> </tr> <tr> <td>less rainfall and more droughts</td> <td>A</td> </tr> </table> (4 x 1)	overcultivation	C	more animals reared	B	soil erosion	D	less rainfall and more droughts	A	(4)
overcultivation	C									
more animals reared	B									
soil erosion	D									
less rainfall and more droughts	A									

Question Number	Answer	Mark
5(c)(ii)	more _____ reduce _____ X hold water _____ X fewer X increase _____ reduce wind _____ (3 x 1)	(3)

Question Number	Indicative content
5(d)	(6)

Level	Mark	Descriptor
	0	No rewardable material
Level 1	1-3	Describes briefly what the chosen method involves e.g. genetic modification uses genes from one plant in another; organic farming is natural / does not use any chemicals. Explains the impact simply e.g. genetic modification can produce bigger or better crops; organic farming does not cause any pollution of the environment.
Level 2	4-6	Describes what the chosen method involves e.g. genetic modification uses genes from one plant in another to produce hybrids / plants with particular qualities; organic farming does not use any chemical fertilisers / pesticides. Explains the impact e.g. genetic modification can produce higher yielding crops / crops resistant to disease; organic farming does not cause any pollution of the environment which can kill insects / animals.

C6 Use and abuse of the environment (Recreation and Tourism)

Question Number	Answer	Mark
6(a)	Nature Reserve, Golf Course or Club House (1) NOT accept woods, lake or pond	(1)

Question Number	Answer	Mark
6(b)	Concentration of tourist sites / attractions (in a small area) (1) Museum(s) (1) Castle (1) Racecourse (1) Cave (1) caravan site (1) Canal Centre (1) Golf Course (1) Castle Park (1) Grand Union Canal (1) picnic sites (1) ornamental ground (1) National Cycle route (1) Tourist information centre (1) National Trail (etc. - see key to map) (1) NOT allow Sports Centre , Woodloes Park, woods, river or just 'parks' on its own or just 'canal' on its own Good access / communications (1) via A roads / A46 / motorway / M40 (1)	(2)

Question Number	Answer	Mark															
6(c)	<table border="1"> <thead> <tr> <th></th> <th>True</th> <th>False</th> </tr> </thead> <tbody> <tr> <td>Places are easier to reach because there are more motorways</td> <td>X</td> <td></td> </tr> <tr> <td>People have more leisure time</td> <td>X</td> <td></td> </tr> <tr> <td>People have higher paid jobs so can afford more holidays</td> <td>X</td> <td></td> </tr> <tr> <td>There is a greater awareness of attractions due to more adverts</td> <td>X</td> <td></td> </tr> </tbody> </table> <p style="text-align: right;">(4x1)</p>		True	False	Places are easier to reach because there are more motorways	X		People have more leisure time	X		People have higher paid jobs so can afford more holidays	X		There is a greater awareness of attractions due to more adverts	X		(4)
	True	False															
Places are easier to reach because there are more motorways	X																
People have more leisure time	X																
People have higher paid jobs so can afford more holidays	X																
There is a greater awareness of attractions due to more adverts	X																

Question Number	Answer	Mark
6(d)	crops roads tractors <p style="text-align: right;">(3 x 1)</p>	(3)

Question Number	Answer	Mark
6(e)	Wildlife and vegetation is protected from damage	C
	Impact on the environment	A
	Local people gain an income so do not need to take advantage of the environment	D
	Local people provide accommodation for tourists	B
	(4 x 1)	
		(4)

Question Number	Indicative content
6(f)	(6)

N.B Accept references to scenic attractions and wildlife throughout the answer, i.e in both sections

Level	Mark	Descriptor
	0	No rewardable material
Level 1	1-3	Mentions one or two problems for scenic attractions e.g. trampling vegetation, eroding footpaths. Mentions one or two problems for wildlife e.g. habitats destroyed, animals frightened.
Level 2	4-6	Describes two or more problems for scenic attractions e.g. trampling vegetation leading to footpath erosion; cars causing noise; campsites causing visual pollution. OR explains one problem simply e.g. tourists all use the same footpath which erodes and destroys vegetation, creating an eyesore. Describes two or more problems for wildlife e.g. animals frightened by noise; animals may be killed because their habitat is destroyed; animals may be injured litter. OR explains one problem simply e.g. tourists destroy habitats by trampling so animals lose their homes and may die; litter can be eaten by animals which may injure or kill them; campfires may burn vegetation destroying animals homes / habitat.