

## Mark Scheme (Results) Summer 2010

**GCSE** 

GCSE Geography (1313) Paper 2F



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## General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.
- Mark schemes will indicate within the table where, and which strands of QWC, are being assessed. The strands are as follows:
  - i) ensure that text is legible and that spelling, punctuation and grammar are accurate so that meaning is clear
  - ii) select and use a form and style of writing appropriate to purpose and to complex subject matter
  - *iii) organise information clearly and coherently, using specialist vocabulary when appropriate.*

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Question	Answer	Mark
Number		
A1(a)(i)	12 million	
		(1)

Question Number	Answer	Mark
A1(a)(ii)	В	(1)

Question	Answer	Mark
Number		
A1(a)(iii)	It has a low(er) birth rate (1) low(er) death rate (1) Birth and death rates are both low(er) (1) High(er) / long(er) life expectancy (1)  N.B. No mark for just quoting figures	(1)

Question Number	Answer	Mark
A1(a)(iv)	Country C (1)	(1)

Question Number	Answer	Mark
A1(a)(v)	Country D (1) Then a further mark for: It has the larger difference between birth and death rates (1) BR of Country D is higher than its DR, whereas they are the same in Country A (1) Credit correct calculation e.g.: Natural increase is [40.1 - 13.7 =] 26.4 (per 1000 per year) compared with zero for country A. (1)  N.B. Do NOT credit just: BR is higher than DR, or simple quote of figures.  No marks if Country A is chosen.	(2)

Question	Answer	Mark
Number		
A1(b)	No mark for <i>how</i> they vary (e.g. MEDCs have lower DR) Credit <i>reasons</i> e.g.: MEDCs = lower DR <i>because of</i> (Better) health care / medicine / hospitals (1) More doctors (1) (Better) access to these / more money for these (1) (Better) diet (1) (better) hygiene / sanitation (1) means fewer diseases (1)	
	Credit MEDCs have lower infant mortality (1) Credit reverse points e.g. LEDCs have fewer doctors BUT do not double credit	(3)
Question Number	Answer	Mark
A1(c)	There is a high birth rate (1). Lack of contraception (1) Poor education about / access to contraception (1) Religion / tradition / custom of having many children OR of marrying at an early age (1) Children needed to work (1) Children needed to care for parents in old age (1) Children needed to offset high infant mortality rate (1)	
		(3)

Question Number	Answer	Mark
A1(d)(i)	Dividing lines at 18.0 (1) and 78.0 (1) Correct and neat shading i.e. parallel diagonal lines drawn using a ruler, black shading fills the area, not scribbled (1) Credit lines and correct and neat shading if given in a different order e.g. 65 and over area at bottom, 0-15 area at top, with lines at 22% and 82%. If both dividing lines are wrong, then no mark for shading either (even if correct and neat).	(3)

Question	Answer	Mark
Number		
A1(d)(ii)	(Increased) demand for: pensions (1) health care (1) doctors / hospitals (1) bus passes (1) recreational facilities (or an e.g.) (1) sheltered accommodation / care homes / nursing homes (1) Increases (old age) dependency (1) May reduce birth rate (1) reduce workforce (1) meaning less tax revenue (1) Lack of government money for / higher taxes needed to pay for e.g. pensions /care homes (1) (Sole) occupancy of large houses which are needed for	

	families (1)	(3)
Question Number	Answer	Mark
A1(d)(iii)	Provide voluntary / cheap work force (or an e.g. such as working in CABs) (1) Some still work, providing expertise / experience (1) Contribute to the economy through spending on holidays / leisure (or an e.g.) (1) More jobs are available (to the workforce) as carers (1) Can look after grandchildren (1) OR can look after children enabling younger people to work (1)  N.B. Do NOT credit just looking after children on its own	(1)

Question Number	Answer			Mark
A1(e)(i)	A resource which can be used by people.	[	]	
	A resource which can be used only once, and will run out.	[	]	
	A resource which can be used more than once, and will not run out.	[ X	[]	
		,		(1)

Question Number	Answer	Mark
A1(e)(ii)	Credit any appropriate e.g. such as wind, water / HEP, tidal	
	power, sun / solar energy, geothermal energy, methane / biogas, wood	
	Accept nuclear.	
		(2)

Question Number	Answer	Mark
A1(e)(iii)	They are 'clean' (1) do not produce atmospheric / air pollution (1) do not release greenhouse gases / CO2 / SO2 / NOx (1) do not contribute to global warming (1) will not run out / can be used more than once (1) do not involve using fossil fuels / coal / oil / gas (1)  Do NOT allow just: good for the planet / does not harm the environment	
		(2)

Question Number	Indicative content			
A1(f)	other LE N.B. Ac N.B. Ac	N.B. Accept China, India as chosen examples, but max. 3 marks if any other LEDC example chosen.  N.B. Accept environmental effects of a specific case study  N.B. Accept coal, oil, gas, biogas, geothermal, thermo-nuclear.  Do NOT accept solar, wind, tidal.		
Level	Mark	Descriptor		
	0	No rewardable material		
Level 1	1-3	Mentions 1 - 3 impacts that thermal energy production has on the environment e.g. it produces air pollution; power stations are unsightly / cause visual pollution; can cause / contribute to global warming.		
Level 2	4-6	Describes 1 - 3 impacts that thermal energy production has on the environment e.g. it releases SO2 into the atmosphere which can cause acid rain it releases CO2 into the atmosphere which can cause global warming building power stations causes destruction of vegetation and wildlife / habitats; coal mined for power stations causes visual pollution  N.B. Do NOT credit further explanations of the effects of acid rain / global warming.  May refer explicitly to a specific case study.  QWC 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.		

Question	Answer		Mark
Number			
A2(a)	constructive plate	A	
	destructive plate	С	
	conservative plate boundary	В	
	Three correct = 2 marks	One or two correct = 1 mark	
			(2)

Question	Answer	Mark
Number		
A2(b)(i)	People left homeless / houses collapsed (1) people injured (1) people trapped (under rubble) (1) people killed (1) people could not be helped / rescued due to blocked roads (1)	
	Do NOT credit just: buildings collapsed / blocked roads without reference to the effect on people	(3)

Question Number	Answer	Mark
A2(b)(ii)	Buildings had collapsed (1) a large area had been cut off (1) there had been heavy rain (1) roads blocked by boulders / landslides (1) helicopters unable to land (due to bad weather) (1)	
	N.B. Do not credit 'bad weather' on its own.	(2)

Question	Answer	Mark
Number		
A2(b)(iii)	They cannot afford to move (1) do not have transport to move (1) have nowhere else to go (1) have lived there all their life (1) have relatives to look after (1) think they / the buildings are safe (1) OR think an earthquake will never affect them (1) have a job / work there (1) there is good farmland there (1) there may be mineral deposits (1) housing is cheap(er) In a hazardous area (1)  N.B. Do not credit 'have relatives there' on its own, or just 'do not want to move' on its own.	
		(3)

Question Number	Answer	Mark
A2(c)(i)	Sand (1)	(1)

Question	Answer	Mark
Number	Low water mark / low tide level (1)	
A2(c)(ii)	Low water mark / low tide level (1)	(1)
		(1)
Question	Answer	Mark
Number		
A2(c)(iii)	Electricity transmission line (1)	
		(1)
Question	Answer	Mark
Number	Recreation (1)	
A2(c)(iv)	Recreation (1)	(1)
		(1)
Question	Answer	Mark
Number	7 11101101	, marri
A2(d)(i)	Marine erosion (1)	
		(1)
Question	Answer	Mark
Number		
A2(d)(ii)	Weathering (1)	(4)
		(1)
Question	Answer	Mark
Number	Aliswei	IVIAI K
A2(d)(iii)	Foot / base of cliff was eroded / worn back (1) so cliff (face)	
1.2(0,)()	was undercut / undermined (1) and (unsupported) top of cliff	
	collapsed / fell down / slid down (1). This process repeats (1)	
	One mark available for development e.g. method of	
	erosion (e.g. hydraulic action), geology of cliff (e.g.	
	jointed / bedded)	
	Allow many 1 months for componentian of weath origin on the	
	Allow max. 1 mark for explanation of weathering on the cliff face plus material falling due to mass movement,	
	causing cliff face to recede	
	1x3	
		(3)
<u></u>	•	, , ,
Question	Answer	Mark
Number		
A2(e)(i)	(River) Hayle (1)	
		(1)
Ouestion	Angwar	
Question	Answer	(1) Mark
Number		
	Answer  Correct arrow pointing towards the sea (1)	

Question	Answer	Mark
Number		
A2(e)(iii)	(Steep slopes mean) faster runoff (1)	
	Water will flow quickly (downhill into St. Erth / into the	
	river (Hayle) which flows through St. Erth) (1)	
		(1)

Question	Answer	Mark
Number		
A2(e)(iv)	River is tidal (1) between St. Erth and the sea / coast (1) St. Erth is low-lying / at sea level (1) Sea water will flow into the river at high tide (1) Sea level is rising due to global warming (1)	(2)

Question Number	Indicative content			
A2(f)	N.B. Max. 3 marks if LEDC example chosen. Accept reference to river floodplains in coastal areas which are subject to coastal flooding. In (ii), credit prevention of and responses to a flood			
Level	Mark	Descriptor		
	0	No rewardable material		
Level 1	1-3	Mentions one or two causes (physical or human) of floods e.g. heavy rainfall; snow / ice melt; houses built too close to the river.		
		Mentions one or two ways in which the flood risk was managed e.g. warnings were given; flood defences were built; people were rescued by helicopter; food was dropped to flooded areas.		
Level 2	4-6	Describes one or two causes (physical or human) of floods e.g. a period of prolonged heavy rainfall, or a thunderstorm; ground was already saturated; houses were built too close to the river.		
		Explains one or two ways in which the flood risk was managed e.g. early warnings were given on radio / TV; people were airlifted to safety by helicopter; levees have been built / strengthened to prevent river overflowing.		
		May refer explicitly to a specific case study.  QWC 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.		

Question	Answer			Mark
Number				
B3(a)	wetter [X]	less	[X]	
	drier [ ]	more	[ ]	
	along the equator	[X]	between the tropics [X]	
	near the poles	[ ]	along the Arctic Circle [ ]	
			4x1	
				(4)

Question	Answer			Mark
Number				
B3(b)				
		Store	Transfer	
	Runoff		X	
	Groundwater	Х		
	Oceans	Х		
	Ice caps	Х		
	Evaporation		X	
	Infiltration		X	
	6 correct = 3 marks 2 or 3 correct = 1 mark	4 or 5 correct	= 2 marks	
				(3)

Question	Answer	Mark
Number		
B3(c)(i-iii)	(i) Agriculture: for irrigation / watering land / crops (1)	
	(ii) Industry: for cooling (1) cleaning (1) power (1)	
	(iii) Domestic: for drinking (1) washing (1) or any	
	other appropriate use e.g. cleaning, showers etc.	
	N.B. Allow uses for tertiary industries in (ii) e.g. for filling swimming pools, watering golf courses	
	3x1	
		(3)

Question Number	Answer	Mark
B3(d)(i)	Provides HEP / power (1) (water for) irrigation (1) controls floods / river discharge (1) reservoir can be used for fishing / recreation / leisure (OR an example e.g. sailing) (1)	(1)

Question	Answer	Mark
Number		
B3(d)(ii)	Flooding / loss of farms / farmland (1)	
	flooding / loss of houses (1) roads may be cut (1)	
	loss of wildlife / vegetation / habitats (1)	
	navigation impeded (by dam) (1) fish unable to pass dam (1)	
	dam might be an eyesore (1) expensive to build / maintain	
	(1)	
	N.B. Do not credit 'loss of land' on its own, or 'risk of	
	flooding (if dam breaks)'.	
		(3)

Question Number	Indicative	e content
B3(e)		
Level	Mark	Descriptor
	0	No rewardable material
Level 1	1-3	Mentions one or two ways in which the pollution was caused e.g. an accidental discharge from an industrial plant; run-off of fertilisers from farmland.  Mentions one or two ways in which the pollution was / is to be dealt with e.g. permits for limited amounts of discharge; fines for spillages.
Level 2	4-6	Describes one or two ways in which the pollution was caused e.g. an accidental discharge containing toxic chemicals occurred from a chemical plant; raw sewage was discharged into the river from a sewage works.  Explains one or two ways in which the pollution was / is to be dealt with e.g. the government issued permits allowing only specific amounts of discharge, with fines for industries exceeding this amount.  May refer explicitly to a specific case study.

Question	Answer	Mark
Number		
B4(a)	more [ ] more [X]	
, ,	less [X] less [ ]	
	north [X] more [ ] south [ ] less [X]	
	4x1	
		(4)

Question Number	Answer			Mark
B4(b)				
		True	False	
	One of the best places to produce wind power is at sea.	[ X ]	[ ]	
	Water in rivers is used to produce Hydro Electric Power.	[ X ]	[ ]	
	Wind power can only be produced if the wind is over 40 kms per hour	[ ]	[ X ]	
	Hydro Electric Power cannot be produced in areas with very little rainfall.	[ ]	[ X ]	
		4×	(1	(4)

Question	Answer	Mark
Number		
B4(c)(i)	Temperatures are higher in the town centre than in the countryside (1) by 1.7 °C / over 1°C / nearly 2 °C (1) Max 1 mark if no data given, or the values are simply quoted.	(2)
		(2)

Question Number	Answer	Mark
B4(c)(ii)	There is an urban heat island (effect) (1) heat is released by buildings (1) and traffic (1) artificial surfaces / tarmac / concrete absorb / retain heat (1) and release it at night (1)	(2)

Question Number	Answer	Mark
B4(c)(iii)	4.5 kph (1) Allow wind speed is double in the nearby countryside (1)	
		(1)

Question	Answer	Mark
Number		
B4(c)(iv)	Buildings shelter areas in the town centre (1)	
	More friction / rougher surface in the town centre (1)	
	Credit vice-versa statement about the countryside.	
		(1)

Question Number	Indicative content		
B4(d)			
Level	Mark	Descriptor	
	0	No rewardable material	
Level 1	1-3	Mentions up to three possible impacts of global warming e.g. an increase in sea level; flooding of coastal areas; flooding of low lying areas.	
Level 2	4-6	Describes up to three possible impacts of global warming e.g. an increase in sea level due to melting of ice caps; flooding of coastal areas risk of more storms; new / different crops may be grown; spread of insects / diseases into different areas.  May refer to both benefits as well as detrimental effects.  May refer explicitly to a specific case study.	

Question Number	Answer	Mark
C5(a)	Photo A: Flat (1) muddy (1) no crops / little vegetation (1) pastoral (1) pigs / sheep (1) (metal) sheds / shelters / huts (for animals) (1) trees / woods in background (1)  Photo B: Flat (1) arable / crops (1) wheat / straw/ hay(1) harvested (1) (rolled into) bales (1) or rolled into bundles (1) trees / woods in background (1)  N.B. Do NOT credit reference to buildings /church in photo B.	
	2+2 1+3 or 3+1	(4)

Question	Answer	Mark
Number		
C5(b)(i)	Ploughing / spraying / use of machinery / tractor (1)	
	Burning (stubble) (1)	(0)
		(2)

Question	Answer	Mark
Number		
C5(b)(ii)	Ploughing destroys soil structure (1) and encourages soil erosion (by wind) (1) may destroy (soil) animals/ habitats (1) Using machinery/tractors causes noise (1) + air pollution (1) by releasing exhaust fumes / greenhouse gases / CO2 (1) Burning causes smoke / air pollution (1) These may contribute to global warming (1) Fires may spread to destroy trees / vegetation (1) N.B. 3 marks may be gained by explaining the effect of just one of the farming methods.	
		(3)

Question	Answer	Mark
Number		
C5(c)(i)	Genetically modified	
		(1)

Question	Answer			Mark
Number				
C5(c)(ii)		Adv	Disadv	
	GM crops may be grown more quickly	[ X ]	[ ]	
	GM crops may help to provide more food in poor countries	[ X ]	[ ]	
	GM crops may cause other plants and animals to be affected or changed by accident	[ ]	[X]	
	GM crops can resist pests and diseases	[ X ]	[ ]	
			4x1	
				(4)

Question Number	Indicative content		
C5(d)	DESERTIFICATION  NB Max. 3 marks if MEDC example chosen.		
Level	Mark	Descriptor	
	0	No rewardable material	
Level 1	1-3	Mentions one or two ways in which damage is being done e.g. desertification is caused by: keeping too many cattle; clearing vegetation to allow crops to be grown.  Mentions one or two measures being taken to reduce / prevent damage in the future e.g. the number of cattle is being reduced / controlled; some vegetation is being left.	
Level 2	4-6	Describes one or two ways in which damage is being done e.g. overgrazing causes desertification; removal of vegetation exposes soil to wind / rain; soil may be eroded away by wind / rain.  Describes one or two measures being taken to reduce / prevent damage in the future e.g. cattle are moved around more frequently; vegetation is given time to recover / grow back; terraces are used to retain water.  May refer explicitly to a specific case study.	

Question Number	Indicative content		
C5(d)	DEFORESTATION  NB Max. 3 marks if MEDC example chosen.		
Level	Mark	Descriptor	
	0	No rewardable material	
Level 1	1-3	Mentions one or two ways in which damage is being done e.g. forests have been cleared by burning/ during slash and burn farming soil is eroded; flood risk is increased.  Mentions one or two measures being taken to reduce / prevent damage in the future e.g. use of irrigation or fertilisers; replanting the area with new trees.	
Level 2	4-6	Describes one or two ways in which damage is being done e.g. trees no longer there to intercept rain; soil is exposed to rain and eroded; minerals are washed out / leached.  Describes one or two measures being taken to reduce / prevent damage in the future e.g. Irrigation and fertilisers are used to improve crop yields; crop rotation is used to prevent soil exhaustion.  May refer explicitly to a specific case study.	

Question	Answer	Mark
Number		
C6(a)	Photo D: (wide/sandy) beach(1) (blue) sea (1) fine/sunny/warm weather (1) (attractive coastal) village/town (1) Credit activities related to the beach or sea for max. 1 mark e.g. swimming, surfing, sunbathing  Photo E: mountains/hills 1) fine/sunny weather (1) (pleasant/spectacular) scenery (1) Credit activities related to the mountains / hills for max. 1 mark e.g. walking, hiking, sightseeing, climbing, mountain biking, bird watching, photography  2+2 1+3 or 3+1	(4)

Question Number	Answer	Mark
C6(b)	They may leave litter (1) which creates visual pollution / eyesore (1) They may trample vegetation (1) and / or erode footpaths (1) They may scare away / harm animals / wildlife (1) due to noise (1) Habitats / ecosystems disrupted / destroyed (1) Tourists' cars produce air pollution / fumes / noise (1)  N.B. Do not credit just air pollution, noise pollution, pollution or noise on their own. Do not credit the same point more than once e.g.	
	noise from tourists cars and noise scaring away animals.	(3)

Question Number	Answer	Mark
C6(c)	Greater wealth: people have more disposable income / more spare money (1) can afford more / (frequent) holidays (1) can afford to travel more (1) there is higher car ownership (1) more people have / can afford second homes in the countryside (1) N.B. Do NOT accept people have higher wages / salaries / income on its own Increased leisure time: people have longer holidays from work (1) can take more holidays (1) More people take early retirement (1) More people can visit in low season (1) NB Do NOT accept have more time off work.	(2)

Question	Answer	Mark
Number		
C6(d)(i)	A place that many tourists visit (1)	
		(1)

Question	Answer			Mark
Number				
C6(d)(ii)				
	Effect	Good	Bad	
	Tourists spend money in local shops.	[ X ]	[ ]	
	Tourists need better roads which local	[X]	гі	
	residents can use	[ ^ ]		
	Tourists need more facilities, which	[ X ]	гі	
	residents can also use.	[ ^ ]	LJ	
	Tourists' cars may block residents'	гі	[X]	
	driveways	L J	[ \ \ ]	
	Tourists may create more traffic congestion	гі	[X]	
	for local residents	L J	[ \ \ ]	
	Tourists need more cafes, hotels etc.,	[ X ]	гы	
	which residents can work in.	[ \	L J	
	6 correct = 4 marks 4 or 5 correct = 3 m			
	3 correct = 2 marks 1 or 2 correct = 1 m	nark		
				(4)

Question Number	Indicative content		
C6(e)	NB Max. 3 marks if MEDC example chosen.		
Level	Mark	Descriptor	
	0	No rewardable material	
Level 1	1-3	Mentions one or two ways in which eco-tourism has affected the local community e.g. provides them with jobs; provides them with income.  Mentions one or two ways in which eco-tourism has affected the environment e.g. wildlife is protected from large numbers of tourists; scenery is protected from large numbers of tourists.	
Level 2	4-6	Describes one or two ways in which eco-tourism has affected the local community e.g. tourists buy local crafts providing them with jobs tourists buy local foods providing them with income locals maintain traditions in entertaining tourists  Describes one or two ways in which eco-tourism has affected the environment e.g. wildlife is protected because tourists visit areas in small, organised groups; vegetation is less likely to be destroyed because tourists are kept to certain areas.  May refer explicitly to a specific case study.	

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Order Code Summer 2010

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