

Mark Scheme (Results)

January 2012

GCSE Geography (5GA2F) Paper 01
NATURAL ENVIRONMENT

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Question Number	Acceptable Answers	Reject	Mark
1 (a)(i)	X – Cliff/Overhang Y – Wave-cut platform/Beach		2

Question Number	Acceptable Answers	Reject	Mark
ii	Point mark. Vertical / steep (1) Jointed (1) Soil/Vegetation topped (1) Approximately 30m high (25 to 35m) (1) Chalk (1) Above a wave - cut notch (1)	Big Explanation	2

Question Number	Acceptable Answers	Reject	Mark
iii	Point mark Likely to refer to onion skin/freeze thaw weathering/root action - named type (1) e.g. Freeze thaw weathering water enters cracks (1) it freezes (1) expands under pressure (1), then thaws. Repetition of process causes rock to break off (1)	References to erosion/chemical weathering	3

Question Number	Acceptable Answers	Reject	Mark
iv	D		1

Question Number	Acceptable Answers	Reject	Mark
v	C		1

Question Number	Acceptable Answers	Reject	Mark
vi	One mark for swash and backwash labelled correctly One mark for correct direction arrow (towards right)		2

Question Number	Acceptable Answers	Reject	Mark
bi	B		1

Question Number	Acceptable Answers	Reject	Mark
ii	Belgium has the shortest length of eroding coastline. The amount of eroding coastline in Spain is 150 km. Waves which travel from the South West to the UK have a large fetch This means that the waves are often destructive One way of protecting against these waves is to build sea walls .		5

Question Number	Acceptable Answers	Reject	Mark
iii	Point mark. Max 3 if only advantages or disadvantages 1 mark reserved for named type Advantages Cheaper (1), Environmentally friendly (1) Aesthetically pleasing (1) Disadvantages Doesn't stop erosion (1), needs to be continuously maintained (1) less effective than hard erosion (1)	Do not credit opposites	4

Question Number	Acceptable Answers	Reject	Mark
c	Point Mark Max 3 without specific points. Max 3 without reference to both prediction and prevention. Max 1 for a list Max 1 for reference to other methods (other than sea wall) related to coastal recession 1 mark reserved for specific point E.g. Methods of forecasting e.g. Met Office in UK or work of DEFRA, or planning to ensure preparation or defences, and building design e.g. houses on stilts.		4

Question Number	Acceptable Answers	Reject	Mark
2 (a)(i)	X = Levee/Embankment/Bank Y = Floodplain		2

Question Number	Acceptable Answers	Reject	Mark
ii	Point mark. Wide (1) Flat (1) Composed of fine deposits (1) Approximately 60m (accept 50 to 80) wide (1)		2

Question Number	Acceptable Answers	Reject	Mark
iii	Point mark. 1 mark reserved for named types. Mass movement is when material collapses from banks/valley sides (1). Can occur as slumping when the bank is saturated (1), causing loss of land (1). Occurs due to gravity (1)		3

Question Number	Acceptable Answers	Reject	Mark
iv	C		1

Question Number	Acceptable Answers	Reject	Mark
v	D		1

Question Number	Acceptable Answers	Reject	Mark
vi	1 mark for correct labelling of slip off slope and river cliff. 1 mark for correctly labelled directional arrow (can be up or down)		2

Question Number	Acceptable Answers	Reject	Mark
bi	D		1

Question Number	Acceptable Answers	Reject	Mark
ii	The highest cost of flood damage occurred in 2010 which was 700 million . This was a large increase in cost compared with 2006 . Cost of flood damage has generally varied since 2004. This increased flooding could be due to more rainfall caused by global warming .		5

Question Number	Acceptable Answers	Reject	Mark
iii	Point mark. Max 3 for reference to advantages / disadvantages 1 mark for a named type Advantages Cheaper to set up (1), Environmentally friendly (1) Aesthetically pleasing Disadvantages Doesn't stop erosion (1), needs to be continuously maintained (1) less effective than hard erosion (1)	Do not credit opposites Stops floods	4

Question Number	Acceptable Answers	Reject	Mark
c	Point Mark Max 3 without specific points. Max 3 without reference to both prediction and prevention. Max 1 for a list 1 mark reserved for a specific point Candidates to focus on methods of forecasting e.g. Met Office in UK or work of DEFRA, or planning to ensure preparation or defences, and building design e.g. houses on stilts.		4

Question Number	Acceptable Answers	Reject	Mark
3 (a)(i)	X – Arête/Ridge Y – U-shaped valley/Glacial Trough/Valley floor /Moraine		2

Question Number	Acceptable Answers	Reject	Mark
ii	Point mark. Steep walled (1) Moraine on valley floor (1) Flat bottomed (1) U- shaped (1) Approximately 220m wide (allow 150-300m) (1) Height 200m (accept 150-250)		2

Question Number	Acceptable Answers	Reject	Mark
iii	Point mark. Water freezes (1) and expands in crack (1) by 9% (1) It thaws during the day (1) Repetition of processes (1) It breaks off rock (1)		3

Question Number	Acceptable Answers	Reject	Mark
Iv	D		1

Question Number	Acceptable Answers	Reject	Mark
v	C		1

Question Number	Acceptable Answers	Reject	Mark
vi	1 mark abrasion and plucking labelled in the correct place. 1 mark for correct label of rock lip (box 3)		2

Question Number	Acceptable Answers	Reject	Mark
B i	D		1

Question Number	Acceptable Answers	Reject	Mark
ii	<p>The highest number of deaths occurred in 2006. In 5 different years the number of deaths was over 20. The difference between the number of deaths in 2006 and 2007 is 37. When layers of snow sit loosely on top of each other avalanches can occur. Avalanches can also be caused by loud noise.</p>		5

Question Number	Acceptable Answers	Reject	Mark
iii	<p>Point mark. Must refer to people and environment for max. Can get to 3 marks through one extended point Allow 1 mark for specific point e.g. Avalanches can bury towns (1), leading to a large number of deaths and injuries (1) The force of the avalanche can knock trees down (1). This can make the area more vulnerable to further avalanches (1)</p>		4

Question Number	Acceptable Answers	Reject	Mark
iv	<p>Point mark. Max 3 without specific points 1 mark is available for a specific point Max 3 with reference to prediction or prevention Candidates should refer to prediction (forecasting) and prevention to reduce effects of avalanches. Prediction includes weather forecasting and slope analysis, and prevention relates to building structures, land-use zoning and controlled explosions.</p>		4

Question Number	Acceptable Answers	Reject	Mark
4 (a)(i)	Krakatoa (1883)		1

Question Number	Acceptable Answers	Reject	Mark
ii	Point mark Max 2 without map evidence. In chains/lines (1) On plate boundaries (1) Grouped/Clustered (1) Exception of mid plate e.g. Hawaii (1) Evidence can be volcanic eruptions/dates, plate names, continents/countries. In sea / ocean	Reference to "past volcanic" "active volcanos" as map evidence	3

Question Number	Acceptable Answers	Reject	Mark
iii	B		1

Question Number	Acceptable Answers	Reject	Mark
iv	Point mark. Plates move towards each other (1) One plate subducts (1) Melting of plate (1) Rising magma (1) Explosive eruptions (1) Credit points on diagram if given	Divergent plate boundaries	3

Question Number	Acceptable Answers	Reject	Mark
v	1 mark per correct label		3

Question Number	Acceptable Answers	Reject	Mark
bi	B		1

Question Number	Acceptable Answers	Reject	Mark
ii	The year with the lowest number of earthquakes was 2010 . There are 5 years with fewer than 14 earthquakes. The difference between the number of earthquakes in 2009 and 2010 is 9 . Earthquakes can lead to buildings collapsing. Scientists cannot accurately predict when earthquakes will occur.		5

Question Number	Acceptable Answers	Reject	Mark
iii	Point mark. Credit specific places / cities/ regions Earthquake proof buildings so people feel safe (1) Public awareness as there are high frequency of EQ(1) Public practise of drills therefore feel safe (1) Inability to move, as too poor (1) Good job which pays well therefore take the risk (1) Family and friends have lived there whole life (1)	Reference to volcanic reasons such as scenic area or tourism.	4

Question Number	Acceptable Answers	Reject	Mark
C	Point mark. Max 3 without specific points/examples. 1 mark is available for a specific point. Max 3 without reference to prediction + prevention E.g. Prediction refers to measurements taken via tiltmeters, seismology, gas analysis and historic data. Prevention is likely to refer to exclusion zones, emergency service readiness and warnings. Building design and reference to land use planning are relevant.		4

Question Number	Acceptable Answers	Reject	Mark
5ai	One mark for each completed section (lines to match or correct width apart).	Hand-drawn lines/inaccurate lines	2

Question Number	Acceptable Answers	Reject	Mark
ii	A		1

Question Number	Acceptable Answers	Reject	Mark
iii	A		1

Question Number	Acceptable Answers	Reject	Mark
iv	C		1

Question Number	Acceptable Answers	Reject	Mark
v	B		1

Question Number	Acceptable Answers	Reject	Mark
vi	Point mark Max 3 for descriptive statement E.g. Install double glazing (1) so less heat escapes (1) Energy saving light bulbs (1) to reduce energy output (1) Walking to school (1) to reduce on car emissions (1) Grassed roofs (1) to act as insulation (1) Not leaving things on standby eg smarboards (1) Direct energy use reference only	Renewables	4

Question Number	Acceptable Answers	Reject	Mark
bi	C		1

Question Number	Acceptable Answers	Reject	Mark
ii	LICs and MICs generally produce less waste than HICs. The exception to this is Morocco . People in HICs throw-away waste material. People in LICs generally re-use waste materials. Recycling is now more widely in HICs to reduce waste.		5

Question Number	Acceptable Answers	Reject	Mark
iii	<p>Max 2 without explanation.</p> <p>HICs more materialistic (1) as they have more disposable income (1) More disposable waste (1) as products come with more packaging (1) More in landfill (1) as fewer people care/aware about recycling (1) General suggestion - 'we throw more away' = 1 mark</p>	Mirror /opposite statements	3

Question Number	Indicative content	
5(c)	<p>Scale must be local not national. Likely to focus on domestic waste recycling with outline of this process. Max 2 for reference to recycling on a national scale, eg Germany.</p>	
Level	Mark	Descriptor
	0	No rewardable material
Level 1	1-2	<p>A basic answer Simple descriptive statements about recycling.</p>
Level 2	3-4	<p>A clear answer Level two is reached by there being a clear link to recycling at a local scale. The points will still be descriptive in nature. The top of the level is reached by there being a number of clear statements about recycling on a local scale. There will be no specific points, or explanation.</p>
Level 3	5-6	<p>An explicit answer For Level 3 there will be a specific point about recycling and other descriptive points, or an explanation about recycling in a local area. For the top of Level 3, there should be good explanation and a specific point of a local scale recycling scheme.</p>

Question Number	Acceptable Answers	Reject	Mark
6ai	One mark for each correct shading	Hand-drawn lines/inaccurate lines.	2

Question Number	Acceptable Answers	Reject	Mark
ii	D		1

Question Number	Acceptable Answers	Reject	Mark
iii	<p>In HICs over 71% of the population have safe drinking water.</p> <p>A MIC/LIC where over 71% of the population have safe drinking water is Egypt.</p> <p>Many people in LICs have to travel long distances to get clean water.</p> <p>This is because few villages have piped water.</p> <p>Some water is contaminated leading to people getting cholera.</p>		5

Question Number	Acceptable Answers	Reject	Mark
iv	<p>Max 2 without explanation.</p> <p>E.g. Good access to water (1) therefore use of many labour saving devices (1). Sanitation is a high priority (1) therefore shower/wash every day (1)</p> <p>Allow comparison with LIC</p>	Mirror /opposite statements	3

Question Number	Acceptable Answers	Reject	Mark
bi	B and D		2

Question Number	Acceptable Answers	Reject	Mark
ii	D		1

Question Number	Acceptable Answers	Reject	Mark
iii	C		1

Question Number	Acceptable Answers	Reject	Mark
iv	Point mark Credit a correctly named method to one mark. Max 3 for reference to one method E.g. Borehole (1) sunk into local rocks to gain water from geology (1) Small scale dam (1) built and managed by locals for needs of locals – provides for irrigation (1)		4

Question Number	Indicative content	
6(d)	Reference to Colorado or Tigris likely. Conflict related to water transfer scheme – can be political/local/national Max 2 if reference to conflict over a water scheme	
Level	Mark	Descriptor
	0	No rewardable material
Level 1	1-2	A basic answer Simple descriptive statements about water transfer.
Level 2	3-4	A clear answer Level two is reached by there being a clear link to conflict relating to a water scheme. The points will still be descriptive in nature. The top of the level is reached by there being a number of clear statements about conflict relating to a water scheme. There will be no specific points or explanation
Level 3	5-6	An explicit answer For Level 3 there will be a specific point about conflict relating to a water transfer scheme and other descriptive points, or an explanation about a water transfer conflict. For the top of Level 3, there should be good explanation and a specific point of a water transfer conflict.

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