

# **General Certificate of Secondary Education**

# **Geography 4035 Full Course**

Specification B

Unit 1 – Managing Places in the 21<sup>st</sup> Century Higher Tier

# **Mark Scheme**

2010 examination - January series

**Post-Standardisation** 

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

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# **General Certificate of Secondary Education**

#### **AQA GEOGRAPHY B**

### HIGHER TIER MARKING SCHEME

UNIT 1 (40351H)

#### GENERAL GUIDANCE FOR GCSE GEOGRAPHY ASSISTANT EXAMINERS -

## **Quality of Written Communication**

Where candidates are required to produce extended written material in English, they will be assessed on the quality of written communication.

Candidates will be required to:

- present relevant information in a form and style that suits its purpose;
- ensure that text is legible and that spelling, punctuation and grammar are accurate;
- use specialist vocabulary where appropriate.

# Levels Marking - General Criteria

Where answers are assessed using a level of response marking system the following general criteria should be used.

## Level 1: Basic

Knowledge of basic information

Simple understanding

Little organisation; few links; little or no detail; uses a limited range of specialist terms

Reasonable accuracy in the use of spelling, punctuation and grammar

Text is legible.

### Level 2 : Clear

Knowledge of accurate information

Clear understanding

Organised answers, with some linkages, occasional detail/exemplar; uses a good range of specialist terms where appropriate

Considerable accuracy in spelling, punctuation and grammar.

Text is legible.

# Level 3: Detailed

Knowledge of accurate information appropriately contextualised and/or at correct scale Detailed understanding, supported by relevant evidence and exemplars

Well organised, demonstrating detailed linkages and the inter-relationships between factors. Clear and fluent expression of ideas in a logical form; uses a wide range of specialist terms where appropriate

Accurate use of spelling, punctuation and grammar

Text is legible

Level 3 does not always equate to full marks, a perfect answer is not usually expected, even for full marks.

# **Annotation of Scripts**

- One tick equals one mark, except where answers are levels marked (where no ticks should be used). Each tick should be positioned in the part of the answer which is thought to be credit-worthy.
- Where an answer is levels marked the examiner should provide evidence of the level achieved by means of annotating 'L1', 'L2' or 'L3' in the left-hand margin.
- The consequent mark within this level should appear in the right-hand margin.
- Ticks must **not** be used where an answer is levels marked.
- Examiners should add their own brief justification for the mark awarded, eg *Just L3,detail and balance here*.
- Where an answer fails to achieve Level 1, zero marks should be given.

#### **General Advice**

Marks for each sub-section should be added in the right-hand margin next to the maximum mark available which is shown in brackets. All marks should then be totalled in the 'box' at the end of each question in the right-hand margin. The totals should then be transferred to the boxes on the front cover of the question paper. These should be totalled. The grand total should be added to the top right-hand corner of the front cover. No half marks should be used.

It is important to recognise that many of the answers shown within this marking scheme are only exemplars. Where possible, the range of accepted responses is indicated, but because many questions are open-ended in their nature, alternative answers may be equally credit-worthy. The degree of acceptability is clarified through the Standardisation Meeting and subsequently by telephone with the Team Leader as necessary.

Diagrams are legitimate responses to many questions and should be credited as appropriate. However contents which duplicate written material or vice versa should not be credited.

Quality of Written Communication (QWC) is part of the award of marks in levels marked answers only. In levels marked answers the quality of the geography is assessed and a level and mark awarded according to the geography. As is sometimes the case, the geography may be sound at a particular level but the examiner may not be sure as to whether there is quite enough to raise the mark within that level. In this case the examiner should consider the QWC of the answer. QWC that fulfils the criteria for the level should lead to the rise in the mark but where the QWC does not fulfil the criteria, the answer should remain at the mark first thought appropriate. In cases where QWC has been used in the award of marks, the examiner should indicate this with QWC and arrows that indicate either an upward or downward trend according to its impact on the final award of the mark.

# **SECTION A – THE COASTAL ENVIRONMENT**

# Question 1

1 (a) (i)	Atlantic	1 mark
1 (a) (ii)	3	1 mark
1 (a) (iii)	1 mark – basic increase/steady, even increase / doubles 2 <sup>nd</sup> mark – use of data (not just years)/rates of increase/variations	2 marks
1 (a) (iv)	Level 1 (Basic) 1–3 marks  Straight list = max 2  2 factors = 1 mark  + 1 mark for some idea of 'multi-use' or limited development.  Shows awareness of the idea and lists different types of functions from resource.  "There are lots of different things going on in the area including oil refining, ports, lots of towns and cities and tourist developments."  Level 2 (Clear) 4–5 marks  Clear understanding of the idea of 'multi-use' with developed points from the resource (own knowledge)  The area is home to millions of people who both live and work there so there must be lots of industry. Large industry is shown by the oil refineries and ports. The area has a large tourist area which means hotels, airports and large resorts – so it is also used for recreation and leisure. There are possibly also environmental functions such as nature reserves.	5 marks

1 (b)	Level 1 (Basic) 1–2 marks Basic description of the area in the photograph with tentative ideas about problems/issues. The photograph shows lots of buildings and there is not much space left. It has totally changed the environment and there is not really any green space left.	
	Level 2 (Clear) 3–4 marks Clear understanding of pressures/issues/conflicts associated with development of coastal environments.  Development can totally change environments. The photograph shows a very developed area with high rise hotels and no real remaining space. This can be seen in many holiday areas including Spain and the Caribbean. Building high density buildings often means removing animal habitats and totally changing the environment.	
	Level 3 (Detailed) 5–6 marks  Detailed understanding of pressures/issues/conflict associated with the development of coastal environments.  Building in coastal areas can totally change the look of an environment. This can be clearly seen in the photograph where high density building has used up virtually all the space - right down to the edge of the sea. The removal of vegetation can harm wildlife habitats as well as changing water courses. There are also issues about pollution. In many areas the sea is used to get rid of both human and industrial waste, causing real problems for the marine environment. This is especially true in industrial areas where chemicals often find their way into rivers and the sea.	6 marks
1 (c) (i)	mark – breaking down/rotting/decay of rock by the action of the weather  2 <sup>nd</sup> mark – some development beyond basic definition. Might include:  – named example / rotting of rocks  – some explanation of an example  – mention of chemical processes  – In situ  – acid rain – not just rain	2 marks
	– acid rain – not just rain	∠ marks
1 (c) (ii)	1 mark – wearing away/removal of rocks by water or wind 2 <sup>nd</sup> mark – name of specific process – explanation of specific process	2 marks

# Level 1 (Basic) 1-2 marks 1 (c) (iii) Basic description of how erosion is changing the landscape. The sea bashes against the cliff and it begins to fall apart. Caves are formed where the sea hits the cliff and these get bigger and bigger, eventually the cliff collapses. Level 2 (Clear) 3-4 marks Clear understanding of processes or sequence of erosion or incomplete understanding of both. The sea hits the bottom of the cliff and this erosion wears the cliff away, forming caves. Continued erosion of caves through the cliff forms an arch which eventually collapses, leaving smaller stacks. Level 3 (Detailed) 5-6 marks Detailed understanding of processes and sequence of erosion. Use of technical language. The base of the headland is attacked by waves. The force of the waves, hydraulic action, and material being thrown against the cliff, corrasion, creates caves at the base of the cliff. As the caves become larger and break through the headland an arch is formed. Continued weathering and erosion of the arch leads to roof collapse, leaving stacks. Eventually the whole headland will be eroded away leaving the base of the original feature – a wave cut platform. 6 marks 1 (d) (i) Any three features of the spit (3 x 1) long, narrow spit, (straight) (or distance – 4-6km) – material (shingle/sand) - low lying/relief - curved end (shape) - smooth on seaward side (or different to landward side) salt marsh/mudflats human characteristics (nature reserve/National Trust/telephone box) 3 marks

# 1 (d) (ii) Level 1 (Basic) 1-2 marks Basic descriptive understanding with limited appreciation of process. The spit is a feature which is made up of sand and gravel deposited by the sea as it moves along the coast. Level 2 (Clear) 3-4 marks Clear understanding of processes or sequence of development or incomplete understanding of both. A spit is formed by material being moved along the coast by a process called longshore drift. This happens when the sea hits the land at an angle, resulting in the material being moved along the coast. This material is deposited, forming a spit. Level 3 (Detailed) 5-6 marks Detailed understanding of processes and sequence of deposition. Use of technical language. When waves hit the beach at an angle material is pushed up the beach at the same angle as swash. In this way the material is moved along the beach as longshore drift. Where there is a curve in the coastline the material continues to move in the same direction, being deposited as a spit. The spit build up into the sea, the end being shaped by waves and tides. Credit diagrams 6 marks 1 (e) (i) Level 1 (Basic) 1-2 marks List of two points from map (nature reserve/camp site) – 1 mark List of more than two points from map – 2 marks OR simple relationship expressed "People who like the countryside might visit because of the footpaths and nature reserve." Level 2 (Clear) 3-4 marks Uses evidence from the map to develop ideas about why people might be attracted to the area. (1 idea clearly expressed – 3 marks, 2 ideas clearly expressed – 4 marks) There are a number of sheltered areas where boats can be kept and the area behind the spit is ideal for sailing. The nature reserve might attract bird watchers and also hikers might use the footpaths. 4 marks

4 ( ) (")		
1 (e) (ii)	2 x 2	
	Accept conservation organisations or method of conservation.	
	Methods might include:	
	- Nature Reserves	
	- National Trust	
	- National Parks	
	- Planning/legislation	
	- Conservation bodies	
	<ul> <li>Methods of conservation</li> </ul>	
	Two reasonable ideas.	
	1 mark – basic idea/name	
	<ul> <li>Some areas are made into nature reserves</li> </ul>	
	– National Trust protects land	
	2 <sup>nd</sup> mark for some description of how the areas are protected	
	Some areas are made into nature reserves. This means that	
	wildlife are protected and people are educated about the	
	importance of the environment.	4 marks
1 (f)	The question is about protection, there is no specific need for detailed	
	reference to erosion/flooding.	
	Locational detail can be used to determine mark within Level.	
	Level 1 (Basic) 1–4 marks	
	Max 2 marks for a list of methods with no explanation, i.e. (Sea walls,	
	groynes, gabions, rip rap etc).	
	Some explanation for 3-4 marks.	
	"In some areas concrete sea walls and gabions, which are wire	
	baskets filled with rocks, are put in front of the cliffs to stop the waves	
	hitting them. This can stop erosion."	
	Level 2 (Clear) 5–6 marks	
	Clear description of methods and/or understanding of technical ideas	
	about how they work.	
	"There are many types of coastal defences including sea walls,	
	gabions, groynes and rip rap. Sea walls are built in front of cliffs and	
	they stop the waves hitting the cliff. Some are curved and this throws	
	the breaking waves back out to sea. Rip rap or large boulders are	
	placed in front of cliffs or sea walls. They take the energy from the	
	waves so it does not damage cliffs or break down the sea wall.	
	Groynes trap sand to create a beach which protects the land.	
	Level 3 (Detailed) 7–8 marks	
	Detailed description of methods and/or understanding of technical	
	ideas about how they work.	
	In West Bay, Dorset, a hard engineering scheme has been put in	
	place. This has involved building concrete groynes to preserve the	
	beach and also a curved sea wall with rock armour in front of it. The	
	sea wall creates a barrier which holds back the sea at high tide, the	
	curved wall throws waves back and prevents overtopping. The rock	
	armour absorbs wave energy and prevents the base of the wall from	8 marks
	wave attack.	
	Total for Question 1:	50 marks

# **SECTION B – THE URBAN ENVIRONMENT Question 2**

2 (a) (i)	The question is <u>not</u> about population numbers.  1 mark – makes comparison, use of data.  2nd mark – Idea of rate of change.	2 marks
	3	
2 (a) (ii)	1 mark – single point Accept points about attractions/pull factors e.g. work, jobs, education. Accept well expressed points about natural increase. North America is highly developed and already has a high % urban population.	
	2nd mark – developed idea North America has a high urban population in 2000 because it is highly developed, so the pressure to migrate may be less strong.	2 marks
2 (b) (i)	2 x 1 1 mark for each country shaded in	2 marks
2 (b) (ii)	Level 1 (Basic) 1–2 marks Basic points which list attractions or urban areas. Limited comparative observations made.  People move to get jobs and earn money. They may have family in the city so have a better life.  Level 2 (Clear) 3–4 marks Clearer idea of migration factors. This might be expressed in terms of push or pull ideas or by making relative points. "People move to the cities for a number of reasons. They may be able to get a job and earn money to support their family. Also the city may have more opportunities than rural areas, for example better housing and health / education facilities. Life in rural areas can be very poor.  If comparative points (urban/rural) are made but points are simply reversed (more jobs/money – less jobs/money).  Max – 3 marks.  Level 3 (Detailed) 5–6 marks  Detailed range of migration factors which include comparative points. Use of locational examples to make points.  There are a number of reasons why people move to urban areas in developing countries. These are usually divided into 'push' and 'pull' factors. In Brazil many people leave poor rural areas like the North East because of the poor living conditions and problems of drought. They move to the southern cities of Rio de Janeiro or Sao Paulo where there may be better opportunities for work and regular incomes.	
	Living conditions are better in urban areas where there is often better access to healthcare, education and basic facilities like water and electricity. Also, in Rio de Janeiro there are housing projects for the poor. These factors encourage people to move to urban areas.	6 marks

0 (1-) (''')		
2 (b) (iii)	2 X 2 1 mark for basic idea which identifies a problem or issue	
	<ul> <li>2<sup>nd</sup> mark for some development which picks up the idea of challenge.</li> <li>Traffic is a real problem (1). With increasing traffic congestion and pollution there is a need for more roads as alternative transport methods (1).</li> </ul>	
	- More people means the need for more houses (1). This is a real challenge, supplying housing for the urban poor (1).	4 marks
2 (b) (iv)	Level 1 (Basic) 1–3 marks Basic points about growth creating jobs and incomes and generating wealth.	
	Urban areas create a lot of jobs which people can do to earn a slightly better living and improve their lifestyle.	
	Level 2 (Clear) 4–5 marks Clear link to economic development which is expressed beyond the idea of jobs and money.	
	The increasing population provides a cheap work force which	
	encourages industry to set up. It also means that there is a large market for goods and services. Many developing areas would not	
	cope without a large supply of cheap labour.	5 marks
2 (b) (v)	Level 1 (Basic) 1–2 marks Generic ideas about how living conditions are being improved with limited exemplification.  "In many cities money is being spent on improving housing and putting in water systems. The government are helping with this in some	
	cases."	
	Level 2 (Clear) 3–4 marks Uses specific examples (place or type) to explain how living conditions are being improved.	
	In Rio de Janeiro (Brazil) both self-help schemes and government schemes are improving housing. Self-help schemes operate in some	
	of the slums where people get together and improve their homes. The government is also building some new houses and communities. They have good facilities like water and electricity and often small schools.	
	Level 3 (Detailed) 5–6 marks Detailed ideas about how conditions in cities are being improved, with	
	specific examples of how changes are improving living conditions.  In Jakarta, fresh water and sanitation schemes are being put in place I some of the poorest areas. this will improve health and reduce levels	
	of disease. Housing schemes in Curitiba (Brazil) are providing people with houses which have basic facilities and community centres. This reduces the growth of shanty towns. People live a safer and healthier	
	life with high levels of community spirit and employment opportunities.	6 marks

2 (c)	Level 1 (Basic) 1–2 marks  Tends to repeat data in comparison with the average for London or make simple points. Tentative development/summary.  All the data suggest that the survey area is very poor. Health and education data suggest general low levels of health and poor qualifications which mean fewer opportunities.  Level 2 (Clear) 3–4 marks  Use of data and some development to suggest that the survey area is an area of deprivation.	
	All the data suggests that the area is much poorer than London as an average. The differences are often quite large – with nearly half of the population having no qualifications. Lack of opportunities and high unemployment appear to be leading to increased crime. The general sense of what people feel is negative, suggesting that the area is very run down.	4 marks
2 (d) (i)	2 x 1 (Any employment possibility x 2)  – supermarket/nursery/building etc OR 2 marks for developed idea: The supermarket will provide a range of different employment opportunities.	2 marks
2 (d) (ii)	2 x 1 Any two ideas which are clearly identified: - more open space - cleaner/less vandalism - less traffic so less pollution (not just 'less pollution') - less heavy industry (visual/pollution idea) - more vegetation/trees - General point about attractiveness of the area - safer - improved services - play areas for children - quieter OR 2 marks for developed idea: Getting rid of the factory will improve the environment for people and	
	wildlife.	2 marks

2 (e) (i)	Level 1 (Basic) 1–3 marks Identifies either travel initiatives or the idea of a 'community' development being increasingly self-sufficient. Because it is a community development, people will not only live in the area they will also work nearby so fewer people will need to travel to the city centre for work.  Level 2 (Clear) 4–5 marks	
	Clear awareness of transport initiatives and the idea of a 'community' development.  There are direct links to the city centre via a cycletrack and walkway so this should mean that fewer people will use a car. Shared car using facilities might encourage people to share journeys which would reduce car use. Also, the idea of community development means that fewer people work outside the area so fewer have to travel to work.	5 marks
2 (e) (ii)	Buildings and transport	1 mark
2 (e) (iii)	'Does not add to carbon levels / no effect on carbon levels / carbon levels remain constant / carbon levels stay the same / sustainable amount of carbon' NOT – produces no carbon / reduces carbon	1 mark

# 2 (f) Level 1 (Basic) 1–4 marks

General descriptive understanding of what is meant by an ecosettlement OR use of environmentally sustainable elements of existing urban areas. Limited use of example(s).

In some urban areas there are recycling facilities and renewable energy programmes. Also transport systems may use less fuel and reduce the number of cars. Green areas have been built with waste water collection systems. All of these things make a town sustainable and can be seen in a number of American cities such as Chicago.

Largely copied from Figure 10 'Greenways' – max 2 marks.

## Level 2 (Clear) 5-6 marks

Shows clear awareness of what is meant by 'eco-settlements' and an appreciation of why they are considered sustainable. Some use of example(s).

Eco-settlements are designed to be carbon neutral and not add to levels of pollution. They use renewable energy and recycle as much waste as possible. They are community based so attempt to fit in with the environment as much as possible. Because of this they do not damage environments and can exist in the long term without harming the area.

# Level 3 (Detailed) 7-8 marks

Detailed understanding of why eco-settlements are considered sustainable and the factors that need to be considered for a settlement to be sustainable. Uses example(s) to express ideas.

For a settlement to be sustainable it must be able to exist over a long period without damaging the environment. Because of this it has to use resources very efficiently and create limited pollution. Recycling water, waste and sewage is therefore important. The newly developed eco-city in China, Dontang aims to do all of these things, as well as using renewable energy and keeping car journeys to a minimum. The city also aims to produce a lot of its own food and be increasingly self-sufficient.

8 marks

**Total for Question 2: 50 marks**