



General Certificate of Secondary Education (Short Course)
June 2011

Geography A

40304H

(Specification 4031)

Unit SC1: Physical and Human Geography (Higher)

Post-Standardisation

Mark Scheme

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 events which all examiners participate in and is the scheme which was used by them in this examination. The standardisation process 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 standardisation each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, examiners encounter unusual answers which have not been raised 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 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 organization; 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 organized, 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 e.g. *Just L3, detail and balance here.*

Where an answer fails to achieve Level 1, zero marks should be given.

The following is a list of the unit-specific annotations available on the CMI+ system:

desc.	- describe	egr	- example
exp.	- explain	cs.	- case study
ben.	- benefots	ldfm	- landform
prob	- problems	Gl.	- global

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 totaled in the 'egg' 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 totaled. 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 recognize that many of the answers shown within this mark 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 creditworthy. 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

Question 1: The Restless Earth

- 1 (a)** Any 2 differences – must be differences not individual statements.. **(2 marks)**
e.g. Continental crust is lighter than oceanic crust/less dense; continental is older than oceanic crust, continental crust cannot be renewed or destroyed/subduct. Continental crust is thicker. **AO1 – 1**
2×1 **AO2 – 1**
- 1 (b)(i)** 1 mark for drawing sketch – shape should resemble that in Figure 1. **(3 marks)**
2×1 for labelling clear features of the volcano, such as crater, rim of crater, steep sides, cone shape, ash/loose material on sides, ridges on sides. **AO2 – 1**
Arrows must connect to feature labelled or labels written on top of feature. **AO3 – 2**
1 + (1+1).
- 1 (b) (ii)** There should be reference to two (continental) plates moving apart. This is the result of convection currents in the Earth’s crust that determine the direction of movement. As they pull apart, a ‘gap’ is created between the plates. This is filled by magma rising up out of the mantle to plug the gap and make the crust complete. As this occurs again and again, layers of lava solidify and build up to create volcanoes. This often happens under the oceans. **(4 marks)**
AO1 – 2
AO2 – 2

Level 1 Basic (1-2) marks

A partial explanation – may have start, end or random parts of sequence.

Sequence incomplete.

Plates move apart and a gap is left. Lava builds up in the hole. Volcanoes are found there.

CMI annotation

- **L1 Partial explanation. Incomplete sequence**

Level 2 Clear (3-4 marks)

Stages are clear and explanation is coherent and complete.

Sequence complete.

Develops and links points.

Plates pull apart due to convection currents in the mantle. A gap is created, which is plugged by rising magma. This cools to form lava. As the plates shift apart again, more magma is released from the mantle to fill the gap and the layers build up to form a volcano under the ocean.

Diagrams may be drawn to support text.

CMI annotation

- **L2 Clear and sequential. Explanation clear**

- 1 (c) (i)** There should be reference to a very large scale /a mega (colossal) eruption / where at least 1000 cubic km of material is erupted (so very large eruption). **(2 marks)**
May note caldera / not classic volcano shape – tend to be sunken surrounded by area of higher land. Flat areas. May indicate size/shape by contrasting with a volcano. **AO1 – 2**
1 mark for size, 1 mark for shape.
-

- 1 (c) (ii)** A case study is not needed but Yellowstone is likely example that would be referred to. Effects likely to refer to impact in immediate area of an eruption – many deaths (87000 predicted), large ash cloud rising 40 – 50km into atmosphere, destruction of 10000 square km of land, ash 15cm thick covering buildings within 10000km, flights suspended, livestock and farmland affected. The UK would see the arrival of the ash 5 days after the eruption; temperatures would fall between 12 and 15 degrees. Parts of Europe and America and Asia would see constant snow cover for 3 years, crops would fail, monsoon rains would fail, 40% of population could face starvation. **(6 marks)**

AO1 – 3
AO2 – 3

Level 1 Basic (1-4 marks)

Describes effects of a supervolcano eruption.

Statements are general in a random order.

Lots of people will die. There will be huge amounts of ash. People will choke to death. Buildings will collapse. Crops and animals will die. People will starve. In Yellowstone, there would be no planes.

CMI annotation

- **L1 Describes effects**
- **L1 Describes variety of effects**

Level 2 Clear (5-6 marks)

Effects are clearly described, in an organised way.

There is clear reference to global aspect.

Statements are linked.

One in three people will be killed within 1000km of an eruption. Buildings would collapse within this area due to the weight of the ash. This would ground planes and make road transport difficult. Livestock would die as they would choke in hot ash.

UK (England) would see the arrival of the ash about 5 days later. This will circle the Earth, changing the climate. Temperatures will fall by 10 degrees and this will make it difficult to grow food in many areas. Certain parts of northern Europe will be snow covered for 3 years, so no food will be able to be grown.

CMI annotation

- **L2 Links statements. Worldwide aspect has clear focus**

- 1 (d)** Actual content will depend on the case study being used – Andes and Alps are likely but any young fold mountain range is permissible. **(8 marks)**
Uses are likely to be farming, hep, mining and tourism. **AO1 – 4**
Farming – reference to the growing of subsistence crops, such as potatoes on terraces – steps made to create flat areas. Most crops are grown in lower parts of valleys, including some cash crops such as cotton. Llamas are used as pack animals – the males, whilst the females are used for meat. Milk and wool are used for clothes and rugs. **AO2 – 1**
H.E.P – steep, narrow valley are suitable for construction of dams and steep relief gives fast flowing water needed to turn the turbines. Peru has a number of schemes, including Yuncan project and El Platinal project that is under construction. **AO3 – 3**
Mining – the Andes is rich in minerals – tin, nickel, silver and gold are all present.
Yanacocha gold mine in Peru is the largest in the world and has led to the expansion of the town of Cajamarca from 30000 to 240000 inhabitants.
Tourism – high mountains provide spectacular scenery of high peaks, valleys, lakes and glaciers. In addition, there are ancient areas of settlement such as Macchu Picchu and the Inca Trail – a 45km trek in the mountains.

Level 1 Basic (1-4 marks)

Describes use(s) of fold mountains.

There may be general reference to the photographs – these may be described.

Statements are general in a random order.

No case study.

There are large dams and lakes. There is farming in the valley. Cattle are kept. Big areas are used for mining. There are scars on the landscape. The rock is dug out.

CMI annotation

- **L1 Describes uses – generic**
- **L1 Describes a variety of uses - generic**

Level 2 Clear (5-6 marks)

Describes uses (at least two) of fold mountains clearly.

Clues are taken regarding types of use from the photographs.

Statements are linked.

There is clear reference to the case study named – rings true for case study.

A large area is used for mining in the photograph. This is like a big quarry where it is dug out of the surface. There are many resources of gold, silver and tin in the Andes. This is blasted out. The walkers/skiers show the area is important for tourism. In the Andes, there are a number of long walks like the Inca Trail where people can view the spectacular mountains.

CMI annotation

- **L2 Clear description, links statements. Reference to case study**

Level 3 Detailed (7-8 marks)

Will describe two or more uses of fold mountains.

Photographs are used to describe uses and linked to case study.

Statements are logically ordered and linked.

Detailed reference to specific case study.

There is a large area of mining – this is like a big quarry where it is dug out of the surface. There are many resources of gold, silver and tin in the Andes.

The Yanacocha gold mine is opencast like in the picture. This led to the rapid increase in the nearby town of Cajamarca. The walkers/ skiers show how people go to enjoy the spectacular scenery. The Inca Trail in Peru attracts many walkers. This is a long distance hike of 45km and ends in the historic settlement of Machu Picchu, which is the 'Lost City of the Incas'.

CMI annotation

- **L3 Detailed description and reference to photo and case study**

Total 25 marks

Question 2: Water on the Land

- 2 (a)** Four processes are relevant – hydraulic action, abrasion, attrition and solution. **(3 marks)**
There should be reference to how these work e.g. hydraulic action is the force of the water against the bed and banks, this is most effective when the river is in high flow. **AO1 – 3**
Abrasion occurs when the load being carried hits the bed and the banks, whilst attrition is the reduction in size of the load itself as it knocks into other items of material. Solution occurs when certain rock types, such as limestone or chalk are dissolved by the slightly acidic rainwater.
May also refer to vertical, lateral and headward erosion.
Maximum 1 for list of 2 or more processes.
3×1
- 2 (b) (i)** Any valid label e.g. meander, narrow neck of meander/swan’s neck meander, contrast in how exaggerated meanders are, possible ox bow lake/area of water visible near river, flat valley floor/flood plain. **(3 marks)**
1 mark for channel – 1 mark for valley. **AO1 – 1**
3×1 **AO2 – 1**
AO3 – 1
- 2 (b) (ii)** Cross section should show asymmetrical profile and label the inside bend and the outside bend. The following characteristics are likely to be noted – gentle slip off slope on the inside bend, where the water is shallow. There is deeper water on the outside bend. A steep slope in the form of a river cliff, which is often undercut by the river is found here. **(4 marks)**
NB There is no credit for processes here. **AO1 – 1**
AO2 – 1
AO3 – 2

Level 1 Basic (1-2 marks)

Simple diagram – may be a sketch or plan.
Simple labels.
Some confusion between inside and outside bend.

CMI annotation

- **L1 Simple diagram and labels**
- **L1 Partly correct**
- **L1 One part of bend only**

Level 2 Clear (3-4 marks)

Clear cross section that shows asymmetrical shape.
Cross section has clear labels.
Contrast between inside and outside bend is clear.

CMI annotation

- **L2 Clear diagram, differences clear via labels**

- 2 (b) (iii)** There should be reference to meanders and a focus on the outside bend where the fastest flow of water is found. This results in erosion here. As a result, the outside bends move closer together as the meander neck becomes narrower. This is a swan's neck meander and as the process continues, the meanders move closer and closer together. When there is a very high discharge, the river cuts across the neck and takes a straight course. The role of subsequent deposition. The former meander is left as a horseshoe shaped ox-bow lake. **(4 marks)**

AO1 – 3
AO2 – 1

Level 1 Basic (1-2 marks)

Simple points.
Order not correct – jumps about.
Sequence may be incomplete.

CMI annotation

- **L1 Simple points, incomplete sequence**

Level 2 Clear (3-4 marks)

Complete, clear, statements.
Statements are developed and linked.
Sequence and formation of ox bow lakes is complete and clear.

CMI annotation

- **L2 Clear and complete sequence/explanation**

- 2 (c) (i)** There may be reference to what flooding is – that river flood when they burst their banks. Allow 1 for this, but emphasis should be on underlying causes such as building towns on floodplains and creating an impermeable surface so that water cannot infiltrate and thus flows quickly over surface to river, reducing lag time. There should be recognition of the factor from the information and this then needs using to explain the sequence of events that cause flooding. May refer to only one cause or two or more. **(3 marks)**

AO2 – 1
AO3 – 2

- 2 (c) (ii)** Actual content will depend on strategies selected. Can refer to advantages of selected strategy or disadvantages of one that is rejected. For example if hard engineering is selected, likely to note the effectiveness of dams holding back water to control flooding. (Three Gorges Dam has reduced risk from 1 in 10 years to 1 in 100 years), may refer to the fact that many dams and reservoirs are multi-purpose projects and so there are other advantages such as hep and water supply. This approach means that something is being done to control flooding and that people's lives and their property should be safe. It means that people do not have to live in fear of flooding or face the consequences of cleaning up or losing family and friends. It is more immediate than strategies like planting trees that take a long time to grow. Warning systems may save people's lives, but their property is damaged and their possessions and so this is not good way of managing floods. They will be able to prepare but will suffer much more than if a dam had been built. **(8 marks)**

AO1 – 4
AO2 – 4

Level 1 Basic (1-4 marks)

Describes 1 or 2 strategies.

Simple statements, may be in a random order.

Certain things are built in certain places. Next to the river, there are playing fields and car parks, housing is further away. In some areas, building is not allowed. Trees are planted to slow down to flow of water.

CMI annotation

- **L1 Describes strategy. Simple points**
- **L1 Describes strategies. Some development**

Level 2 Clear (5-6 marks)

Begins to consider why the strategy selected is better option.

Advantages of option clear and/or disadvantages of alternative are included.

Statements are developed and linked.

Land use zoning means that land next to the river may be used as farmland or recreational use, but buildings are not allowed. This reduces the impact of flooding.

It costs nothing and does not have any negative impact on the environment – the river floods in a natural way. Planting trees slows down the speed of the water and reduces flooding. It can improve the environment, but works with the natural environment.

CMI annotation

- **L2 Begins to explain reasons for chosen option. Statements begin to be developed and linked**

Level 3 Detailed (7-8 marks)

Clearly focused on why the strategy selected is better option.

Advantages of option clear and/or disadvantages of alternative in a discussion.

Statements are developed and linked.

Land use zoning means that land next to the river may be used as farmland or recreational use, but buildings are not allowed. This reduces the impact of flooding.

It costs little, just the need to plan and does not have any negative impact on the environment – the river floods in a natural way. This is a much cheaper option than building up banks and creating dams and reservoirs, which have a bad effect on the environment. They interfere with the rivers natural processes, causing erosion after a dam. Over time, the lake behind the dam will silt up as the water is not flowing as it would in the river. Planting trees slows down the speed of the water and reduces flooding. This tries to help slow down the water cycle in a natural way, rather than controlling a river with a dam which is also very expensive. It works with the natural environment.

Warning people of floods is useful as they can prepare, taking their possessions to higher floors – floods can still happen with dams and people may not be prepared if they are not warned.

CMI annotation

L3 Clear focus on why strategy selected. Explains clearly why it is better option

Total: 25 marks

Question 3: Coastal Zone

- 3 (a) (i)** Diagram should show land/coast, beach, sea and direction of prevailing wind. Particle should be shown with movement up the beach at an angle and labelled swash; down the beach at right angles to the coast and labelled the backwash; and movement overall of the material along the beach labelled as direction or longshore drift. **(3 marks)**
AO1 – 1
AO2 – 1
AO3 – 1
1 for sketch and 2 x 1 for labels.
3×1
- 3 (a) (ii)** Deposition occurs when there is too little energy to transport material and so it is left behind. This occurs where the coast is sheltered and so waves are not very powerful; where constructive waves are present it can occur when too much material is being carried – where there is a large supply of sediment being brought down by rivers; where there is high coastal erosion nearby; where groynes are placed on the beach. **(3 marks)**
AO1 – 3
3×1 or 1+(1+1)
- 3 (b) (i)** Any valid statement relating to landforms. 1 only for list of 2 or more as description is required. There are steep, almost vertical cliffs in the foreground. These seem to be undercut as the top part overhangs. A cave can clearly be seen to the left and further back a wave-cut platform emerges from the sea. Headlands and bays; reference to uneven coastline. **(3 marks)**
AO2 – 1
AO3 – 2
3×1
- 3 (b) (ii)** There are alternating bands of hard and soft rock at right angles to the coast. The hard rock erodes slower than the soft rock – so erosion occurs at different rates. This means that the areas of hard rock stick out into the sea as headlands and the soft rock areas are set back as inlets, often with beaches. The softer rock is more susceptible to the force of the waves and abrasion is more effective. **(4 marks)**
AO1 – 3
AO2 – 1

Level 1 Basic (1-2 marks)

Simple points – will have partial explanation.

Sequence is partial.

There are headlands that stick out. These are eroded slower than the bays that are set back from the rest of the coastline.

CMI annotation

- **L1 Partial sequence. Separate statements. Description – begins to explain**

Level 2 Clear (3-4 marks)

Points are developed and linked.

Geographical terminology used.

Complete sequence and reference to process as explanation is to the fore.

The coast is composed of two different rock types. Bands of alternating hard and soft rock are found at right angles to the coast. The hard rock is more resistant to erosion and so sticks out from the line of the coast to form headlands. In contrast, the softer rock is more easily eroded by hydraulic action – the sheer force of the water and abrasion – where pebbles are thrown at the coast. These areas form bays that are set back from the coast.

CMI annotation

- **L2 Develops and links points. Clear complete sequence - explains**

3 (c)

Content will depend on case study used. Expect reference to Norfolk coast such as Happisburgh, Barmston, Mableton in Holderness and Barton-on-Sea, Hampshire which is example in endorsed textbook. Effects are likely to refer to people's houses being threatened by collapse; their loss in value; difficulty in selling them and getting them insured; the stress of this and the uncertain future is also valid. Many people make a living out of tourism and their livelihood is threatened. Caravan parks and camp sites have been moved back in a rollback policy in some areas. People believe the coast should be defended, whilst the government may not and there are vigorous campaigns to try to get a change in policy or develop local strategies. The effect on the environment is the retreat of the coastline – at often rapid rates during storms e.g. 30 metres lost at Happisburgh in 2002, landslides become more common.

(8 marks)

**AO1 – 4
AO2 – 4**

Level 1 Basic (1-4 marks)

Simple points, may be list like.

Generalised, applicable to anywhere where cliff collapse is an issue.

May refer only to people's lives or the environment.

Statements may be in a random order. Ideas are separate.

Land is lost when cliffs collapse. People's homes will go into the water.

Some may lose their jobs. People will be stressed. Their houses will not be worth much. Landslides will occur.

CMI annotation

- **L1 Describes effects – basic, simple points. Peoples lives/environment only**
- **L1 Some development of points, variety of effects**

Level 2 Clear (5-6 marks)

Point are developed and linked.

Refers to case study – points relate to case study quoted.

Refers to both effects on people's lives and the environment.

Begins to be discursive.

In Happisburgh Norfolk, many metres of land can be lost to the sea. 30 metres was lost in 2002. This has a real impact on people, as their houses may be threatened or even lost to the sea. This means that people lose the value of their home and may get nothing for it – may not be able to get it insured which isn't fair. It is very stressful, not knowing whether your house is safe. People may lose their businesses as well as their homes as cliff top cafes are threatened.

CMI annotation

- **L2 Begins to develop and link points. Some reference to both people and environment and refers to case study**

Level 3 Detailed (7-8 marks)

Fully developed statements

Purposeful description of a variety of effects.

Specific, detailed reference is made to the case study.

Discusses points.

The continued erosion of areas of Holderness at a rate of 10 metres a year in some places has a real effect on people. People's homes are threatened and many cannot sell their homes for anything worthwhile – often people cannot get insurance and end up losing everything. This occurs even though when they bought the house, there was no immediate danger. Some lose businesses such as Sue Earle who lost her farm – and had to pay demolition costs. This is very stressful. Caravan parks at Barmston are being moved back from the cliffs, but in the long term there is no certainty that they will be safe.

CMI annotation

- **L3 Discusses effects on people and environment. Specific detailed reference to case study**

3 (d)

The coast will change from its smooth shape today to having a number of bays. There are 5 expected to form. The bays will not all be the same size – the largest one will be south of Mablethorpe and the smallest to the north of Mablethorpe. The reason for the changing shape lies in the coastal protection – with the ends of the bays being the areas that have been protected. Thus, areas such as Hornsea with a sea wall and rock armour and Mablethorpe with rock armour and groynes will have slower rates of erosion. The power of the waves will be concentrated between these points.

(4 marks)

AO1 – 1

AO2 – 1

AO3 – 2

Level 1 Basic (1-2 marks)

Describes changes, erosion or protection.

Statement may be in a random order.

Ideas are separate.

Bays will form on the coast. There will be 5. Some will be bigger than other. The biggest one is near Mappleton.

CMI annotation

- ***L1 Description of changes. Simple separate statements.***

Level 2 Clear (3-4 marks)

May begin to explain.

Describes changes clearly.

Clear sequence, statements are linked.

Explanation is clear.

CMI annotation

- ***L2 Links statements. Focus on explanation. Linked to management***

Total: 25 marks

SECTION B

Question 4: Changing Urban Environments

- 4 (a)** 2×2 or 3+1 **(4 marks)**
- Improving council estates built near the edge of the city* – because they were built quickly and cheaply with few shops and services when people were moved because of slum clearance. **AO1 – 2**
AO2 – 2
- Building new suburban estates* – because more people are buying their own home and the average family size is getting smaller so more houses are required. People are more mobile with increasing car ownership so they can live in the suburbs and get into the city for work.
- Renovating terraced housing* – (because they were built in the nineteenth century and may not have modern facilities) like central heating and bathrooms. Can have a good community spirit so people want to stay living in the area.
- Opening up places to live above shops* – makes use of the unused space so people who work in the city centre can also live there / stop city centre becoming dead at night.
- Subdividing large Victorian houses near the centre of the city* – this may provide a plentiful supply of cheaper flats and bedsits/suited to single people/students.
-
- 4 (b)** The question can be answered in terms of a sustainable city or as sustainable urban living. The candidates' own knowledge must be based on the features shown on the figure so no credit for public transport. **(6 marks)**
- AO2 – 1**
AO3 – 5
- Level 1 (Basic) 1-4 marks**
Simple statements largely lifts from the figure without relating the features to sustainable urban living.
There is an equestrian park. There is a farming/agriculture area. There is a protected area for birds. There is a place for wastewater. They use renewable energy.
- CMI annotation**
- **L1 Simple lifts from the figure**
- Level 2 (Clear) 5-6 marks**
Linked statements showing relationship between the features on the figure and sustainable urban living.
The protected bird habitat would preserve the natural environment. The waste water infrastructure would dispose of waste safely. Having a farming area in the city means the city could grow much of its own food. The equestrian park would provide open space for the inhabitants.
- CMI annotation**
- **L2 Linked statements showing how features contribute to sustainable urban living**
- 4 (c) (i)** The increasing proportion/percentage of people living in an urban area. **(1 mark)**
- AO1 – 1**
-

- 4 (c) (ii)** There needs to be some reasons for the different rates of urbanisation in order to reach Level 2. **(8 marks)**

AO1 – 6

AO2 – 2

Level 1 (Basic) 1-4 marks

Simple statements indicating why urbanisation is increasing but little attempt to indicate its rapid nature or its occurrence in particular parts of the world.

People are moving to the towns from the country. There is a high rate of natural increase. There is rural-urban migration.

CMI annotation

- **L1 Simple statements**
- **L1 Reasons for increasing urbanisation**

Level 2 (Clear) 5-6 marks

Linked statements emphasising that rapid urbanisation indicates a change in the proportion of people living in towns compared to the countryside. Some attempt to emphasise the different rates in the rich and the poor world.

In the poor world push factors are leading to people leaving the countryside to live in the towns because of the greater chance of finding employment. The difficulty of earning a living in the countryside means that people are moving into the towns.

CMI annotation

- **L2 Clear recognition that rate of urbanisation differs in different parts of world**

Level 3 (Detailed) 7-8 marks

Linked statements showing an appreciation of the different rates of urbanisation in the different parts of the world.

Urbanisation is happening most rapidly in the poor world. There is rural-urban migration with people moving from the countryside to the towns. The proportion of people living in the countryside is decreasing because the migrants feel that there are more opportunities for work and improved welfare facilities in urban areas. In the richer world, counter-urbanisation is taking place because people are more mobile and they can afford to leave the city and live in the countryside and travel back each day for work.

CMI annotation

- **L3 Detailed explanation of why rates of urbanisation differ**

- 4 (d)** Accept positive as well as negative effects on peoples' lives, e.g. their increased ability to gain employment/earn money in the city and the prospect of improved living conditions with self help etc. **(6 marks)**

AO1 – 3
AO2 – 3

Level 1 (Basic) 1-4 marks

Simple statements largely concerned with the situation in the squatter settlements with limited attempt to show how these conditions impact on the lives of the inhabitants.

They make their houses out of waste materials. There is not a sewage system. There is limited electricity. Many are unemployed.

CMI annotation

- **L1 Simple points – generic**
- **L1 Description of conditions**

Level 2 (Clear) 5-6 marks

Linked statements, which show the relationship between the living conditions and the lives of the people.

There is not a proper sewage system. This can lead to the spread of diseases among the people. The settlement is located on the outskirts of the city and so it is difficult for people to get into the city for work and so many are unemployed. There is no proper police service so there is much crime in the squatter settlements.

CMI annotation

- **L2 Clear link between living conditions and lives of the people**

Question 5: Changing Rural Environments

5 (a) (i) The city will grow out into the countryside. **(1 mark)**

AO3 – 1

5 (a) (ii) Consideration should be given to economic, social and environmental factors. **(6 marks)**

Level 1 (Basic) 1-4 marks

AO1 – 3

Simple statements often not related to the advantages of locating in the urban-rural fringe.

AO2 – 3

They need large areas of land. They are accessible to people. They contain many shops. They are next to a main road. The land is cheaper.

CMI annotation

- **L1 Simple points – generic**
- **L1 Description of rural-urban fringe**

Level 2 (Clear) 5-6 marks

Linked statements showing the advantages of the rural-urban fringe for the development of out-of-town retail outlets.

People travel to these shopping centres by car so they need large amounts of land for car parking and the land is cheaper than in the centre of the city. They need good road access and the main through routes like motorways are found on the edge of the city so people can travel there easily from a wide area.

CMI annotation

- **L2 Clear link between needs of retail outlets and advantages of rural-urban fringe**

5 (b) 2×2 or 3+1 **(4 marks)**

There has been an increase in agribusiness – because smaller farms have been amalgamated into one larger unit to gain economies of scale. This means it is more profitable to invest in expensive capital plant and machinery. Larger farms often mean larger fields, which allow the use of larger machinery. A company rather than an individual often owns agribusinesses and they can afford to invest more in technological advances.

AO1 – 2

AO2 – 2

Organic farming has become more important – because people are becoming concerned about the amount of chemicals that may be getting into the food chain. They are also concerned about the effect of these chemicals on the environment.

There has been an introduction of new crops – because the country wants to become more self-sufficient and cut down on imports from abroad. Oil seed rape and linseed are grown as an alternative to imported tropical vegetable oil seeds.

Diversification has happened on some farms – because there has been a reduction in the subsidies paid to farmers and the guarantee of fixed prices so agriculture has become less profitable. Farmers are looking for other sources of income including providing non-agricultural activities for tourists or holiday accommodation.

Government and EU policies aim to reduce the environmental impact of farming – because there has been the loss of habitats due to hedge removal and eutrophication where chemical fertilizers have got into water courses.

- 5 (c) Use of a case study is clearly identified in the specification so there should be an appropriate amount of place evidence. The factors can be physical and/or human but there is no need for a balance if both are covered. (8 marks)

AO1 – 2
AO2 – 2
AO3 – 4

Level 1 (Basic) 1-4 marks

Simple statements with no reference to a specific named area.

Loss of jobs. Remoteness. People moving away to look for employment. Farming becomes unprofitable. Harsh climate. Infertile soil. Lack of entertainment/services.

CMI annotation

- **L1 Simple generic statements**

Level 2 (Clear) 5-6 marks

Linked statements with at least a name of a specific remote area in the UK but reasons largely generic.

In the Lake District the farming is becoming unprofitable so people are moving away to look for work. The very high rainfall in the Lake District means only sheep farming is possible and this does not make much money. The soil is thin and infertile and so is not good for growing crops. The roads are inadequate for the growth of industry in the Lake District.

CMI annotation

- **L2 Named area with some specific reference**

Level 3 (Detailed) 7-8 marks

Linked statements with specific case study exemplification.

The granite soils of the Lake District get easily waterlogged and so it is difficult to grow crops making farming difficult. Hill sheep farming is the main form of agriculture but since subsidies have been dropped many of the farms have become uneconomic and so people have moved out of farming to look for work elsewhere. People from outside the Lake District are buying up houses as second homes. They can afford higher prices so the prices go up and are beyond the reach of the local people who have jobs which pay low wages. This means they have to move away from the Lake District if they want to buy a house.

CMI annotation

- **L3 Detailed explanation specific to named area**

5 (d) **Level 1 (Basic) 1-2 marks** **(4 marks)**

Simple statements largely answered on the advantages of irrigation with limited reference to changes to tropical agriculture.

AO1 – 4

Provides water all the year. Brings more land to cultivation. Greater range of crops.

CMI annotation

- **L1 Simple points – generic**
- **L1 Advantages of irrigation**

Level 2 (Clear) 3-4 marks

Linked statements with reference to changes to tropical agriculture.

Aras of desert can be cultivated so producing more income for tropical farmers.

Irrigation can lead to a change from subsistence to commercial farming so farmers get an income from selling crops.

CMI annotation

- **L1 Clear link between advantages of irrigation for tropical agriculture**

Question 6: Tourism

- 6 (a)** 2×2 or 3+1 **(4 marks)**
Maximum of 3 on either physical or human. **AO3 – 4**
Physical – playing on the beach. Watching the wildlife in the Montrose basin.
Human – Play golf on the Links of Montrose. Visit the museum, leisure centre.
Go shopping in the town.
Maximum 1 if no reference to O.S map.
- 6 (b) (i)** Candidates are allowed to go beyond the photograph but there must be evidence **(6 marks)**
of its use in their answer. **AO1 – 3**
Max 2 if no photographic evidence. **AO2 – 2**
AO3 – 1
Level 1 (Basic) 1-4 marks
Simple statements largely evidence from the photograph.
There is a road. There is a row of huts. There may be rubbish. There is visual pollution.
CMI annotation
 - **L1 Simple descriptive points from photograph****Level 2 (Clear) 5-6 marks**
Linked statement showing evidence from the photograph and of the candidate's own knowledge.
Huts built to house the people who are selling souvenirs/pictures to tourists. The creation of a roadway/track, which is not natural to the area. Spoils the untouched wilderness and causes visual pollution. The temporary buildings set up to house the local people who are selling souvenirs to the tourists is likely to create rubbish and pollution as well as causing visual pollution in this unspoilt wilderness. The presence of large numbers of tourists will destroy the delicate tundra ecosystem of mosses, lichens and low berry bearing bushes.
CMI annotation
 - **L2 Development of points from photo to show link with negative impact**
- 6 (b) (ii)** Able to sell souvenirs and make money from the tourists. **(1 mark)**
AO1 – 1

6 (b) (iii) The specification requires a case study here so look for some specific place evidence. **(6 marks)**

Level 1 (Basic) 1-4 marks

Simple statements without any attempt how the suggested action may have an effect of reducing the impact of tourists on the environment.

Restrict the number of tourists. Maintain no-go areas. Strict controls on waste. Make holidays more expensive. Make charges for entry to more sensitive areas.

CMI annotation

- **L1 Simple points – generic**
- **L1 Description of strategies**

Level 2 (Clear) 5-6 marks

Linked statements with indication of how the suggested actions will reduce tourists' impact on the environment and with at least the name of an area with an extreme environment.

In Antarctica they have a quota system, which only allows a specified number of tourists at one time so the impact is kept manageable. The area has strict controls on removal of waste, which would reduce the danger of it entering the food chain or impacting on the ecosystem.

CMI annotation

- **L2 Clear reference to case study**
- **L2 Clear link between strategy and impact on environment**

6 (c) **Level 1 (Basic) 1-4 marks** **(8 marks)**

Simple statements showing the main features of ecotourism with limited reference to its effect on the lives of the people.

Ecotourism does not use up natural resources. It does not destroy the environment. The wild life is protected.

CMI annotation

- **L1 Simple descriptive points**

Level 2 (Clear) 5-6 marks

Linked statements with at least some reference to a named example.

At Alta Floresta in the Amazon Jungle of Brazil, people stay in a wooden lodge and are taught about the rainforest. Few trees are cut down and all the food and resources used are from the local area so the local people may earn some money. As little of the forest is cut down as possible, so leaving resources for the local people.

CMI annotation

- **L2 Reference to named example with some specific reference to lives of people**

Level 3 (Detailed) 7-8 marks

Detailed statements with case study exemplification.

The money raised at the Alta Floresta is used to educate tourists on rainforest ecology and the threats to the jungle. The awareness of conservation is raised. It provides job opportunities for the local people. Tourist spending has helped to finance the research centre, which helps the protection of natural habits and endangered species and ensures long-term source of income. The community hospital and the education of the farmers in sustainable farming are helped by money from tourism.

CMI annotation

- **L3 Detailed explanation specific to named area**

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