

COMPONENT 1 – MARK SCHEME

Instructions for examiners of GCSE Geography when applying the marking scheme

1 Positive marking

It should be remembered that learners are writing under examination conditions and credit should be given for what the learner writes, rather than adopting the approach of penalising him/her for any omissions. It should be possible for a very good response to achieve full marks and a very poor one to achieve zero marks. Marks should not be deducted for a less than perfect answer if it satisfies the criteria of the mark scheme.

GCSE Geography marking schemes are presented in a common format as shown below:

This box contains the sub-question

The columns to the right indicate the assessment objective(s) targeted by the question and its mark tariff.

3 (a) (i) Describe the location of the island of Lefkada.		AO1	AO2.1	AO2.2	AO3	AO4	Total
Credit two simple statements based on map evidence. Credit accurate use of compass points max 1 Credit accurate use of scale line max 1	In western Greece (1) In Ionian Sea (1) north of Cephalonia (1) 275km (+/-10) from Athens (1) 280km (+/-10) from Thessaloniki (1)					2	2

This box contains the rationale i.e. it explains the principles that must be applied when marking each sub-question. The examiner must apply this rationale when applying the marking scheme to the response.

This box contains the candidates' expected responses for point-based marking. For some sub-questions, those with a closed question, this box will indicate the only response that is acceptable. For more open ended sub-questions this box will illustrate a number of likely responses that are credit worthy. It may be that this list will be extended at the examiner's conference after actual scripts have been read. For banded mark schemes this box contains indicative content. For further details see below under Banded mark schemes Stage 2.

2 Tick marking

Low tariff questions should be marked using a points-based system. Each credit worthy response should be ticked in red pen. The number of ticks must equal the mark awarded for the sub-question. The mark scheme should be applied precisely using the expected outcomes box as a guide to the responses that are acceptable. Do not use crosses to indicate answers that are incorrect. If the candidate has not attempted the question then the examiner should strike through the available dotted lines with a diagonal line.

3 Banded mark schemes

Banded mark schemes are divided so that each band has a relevant descriptor. The descriptor for the band provides a description of the performance level for that band. Each band contains marks. Examiners should first read and annotate a learner's answer to pick out the evidence that is being assessed in that question. **Do not use ticks** on the candidate's response. Once the annotation is complete, the mark scheme can be applied. This is done as a two stage process.

Stage 1 – Deciding on the band

When deciding on a band, the answer should be viewed holistically. Beginning at the lowest band, examiners should look at the learner's answer and check whether it matches the descriptor for that band. Examiners should look at the descriptor for that band and see if it matches the qualities shown in the learner's answer. If the descriptor at the lowest band is satisfied, examiners should move up to the next band and repeat this process for each band until the descriptor matches the answer.

If an answer covers different aspects of different bands within the mark scheme, a 'best fit' approach should be adopted to decide on the band and then the learner's response should be used to decide on the mark within the band. For instance if a response is mainly in band 2 but with a limited amount of band 3 content, the answer would be placed in band 2, but the mark awarded would be close to the top of band 2 as a result of the band 3 content.

Examiners should not seek to mark candidates down as a result of small omissions in minor areas of an answer.

Stage 2 – Deciding on the mark

Once the band has been decided, examiners can then assign a mark. During standardising (marking conference), detailed advice from the Principal Examiner on the qualities of each mark band will be given. Examiners will then receive examples of answers in each mark band that have been awarded a mark by the Principal Examiner. Examiners should mark the examples and compare their marks with those of the Principal Examiner.

When marking, examiners can use these examples to decide whether a learner's response is of a superior, inferior or comparable standard to the example. Examiners are reminded of the need to revisit the answer as they apply the mark scheme in order to confirm that the band and the mark allocated is appropriate to the response provided.

Indicative content is also provided for banded mark schemes. Indicative content is not exhaustive, and any other valid points must be credited. In order to reach the highest bands of the mark scheme a learner need not cover all of the points mentioned in the indicative content but must meet the requirements of the highest mark band. Where a response is not creditworthy, that is contains nothing of any significance to the mark scheme, or where no response has been provided, no marks should be awarded.

Theme 1, Question 1

1 (a) Markets are one example of a geographical feature of many UK towns and city centres. (i) Tick (✓) two other geographical features of central business districts (CBDs) in the table below.		AO1	AO2.1	AO2.2	AO3	AO4	Total
Credit these responses only. If three ticks are given with two of the ticks being correct, award one mark. If 4 ticks are given award zero marks.	Large covered shopping centres (1) Restaurants, theatres and cinemas (1)	2					2

(ii) Many CBDs have pedestrianised areas. Describe the features of pedestrianised areas.		AO1	AO2.1	AO2.2	AO3	AO4	Total
Credit up to two valid statements each with one mark.	No vehicles are allowed (1) except delivery vehicles / except during defined delivery times (1) Seating provided (1) Landscaping such as flower beds (1) Paving not roads (1)	2					2

(b) The O.S. map extract shows the location of a proposed new retail park on the edge of Whitby. (i) Use map evidence to complete the blank spaces below:		AO1	AO2.1	AO2.2	AO3	AO4	Total
Credit these responses only for the first and second blank spaces. Credit this response, within given tolerance, for the third blank space.	B1460 (1) south-west (1) 1.3kms-1.5kms (1)					3	3

(ii) Many large retail outlets prefer to locate new stores away from CBDs. They choose retail parks located on the edge of towns and cities. List two problems that retail outlets have in the CBD and list two attractions (for retailers) of retail parks located on the edge of towns and cities. Do not list opposites.		AO1	AO2.1	AO2.2	AO3	AO4	Total
Credit up to four valid statements each with one mark (to max 4). Do not credit opposites	<u>Problems in the CBD:</u> Insufficient / expensive parking (1) Insufficient space/no room for expansion (1) High rents (1) Supply lorries find access difficult (1) <u>Attractions of retail parks:</u> Room for large parks (1) Room to expand (1) Lower rents (1) Easy access from main roads/ring roads (1) New build allows appropriate design for modern shops (1)	4					4

(iii) Companies always need to know the <i>threshold population</i> of a store. Give one reason why this is important.		AO1	AO2.1	AO2.2	AO3	AO4	Total
Credit responses that demonstrate understanding that all stores must have a sufficient number of potential customers to make the store profitable. Credit up to two valid statements each with one mark.	They need enough customers (1) to make money/ profit (1)		2				2

(iv) The movement of retail stores from town centre locations to out of town retail parks has had a significant impact on towns and cities and on the different groups of people who use them. Discuss the impact of changing retail location on both people and the urban environment.			AO1	AO2.1	AO2.2	AO3	AO4	Total
Use the banded mark scheme. This question assesses AO2.2, the inter-relationship between the process of retail change and retail environment.					6			6
Band	Mark	Descriptor	Responses may incorporate both positive and negative impacts of change on people/the urban environment. Responses may include references to the changes in the urban environment: - traffic flow, exploring positives and negatives at different locations - land-use (e.g. the relative impacts of using Greenfield / Brownfield sites) - city centres such as the spiral of decline for retailing in some city centres. - trade areas for towns / attracting inward investment. Responses may include references to the changes for specific groups / stakeholders or individuals. The effects of change may be related to: - age (social contacts / community issues) - mobility (access issues) - living in specific locations (noise / traffic - convenience) - those affected by employment outcomes (gains and losses). - existing shop owners in the vicinity (gains and losses)					
3	5-6	A sophisticated level of understanding is shown through well-developed observations relating to both positive and negative impact on people and the urban environment.						
2	3-4	Understanding is shown through a developed response where discussion is focused on a positive or negative impact on the people and the urban environment.						
1	1-2	A basic understanding of impact on people and/or the urban environment.						
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.						

(c) (i) Describe the location of Jembatan Besi within Jakarta.		AO1	AO2.1	AO2.2	AO3	AO4	Total
Credit one valid statement with one mark. Do not credit 'near to the CBD'. Do not credit 'in Indonesia'. No half marks.	North-west of the CBD (1) In the northern part of the city (1) Adjacent to a waterway (1) Adjacent to a main road (1)					1	1

(c) (ii) Compare the population in 1975 to that in 2015. Use the scale and the key to support your answer.		AO1	AO2.1	AO2.2	AO3	AO4	Total
						4	4
Use a banded mark scheme. Work upwards from the lowest band.		This question targets two elements of AO4: the use of techniques and the ability to communicate findings. Expected comparative statements: The population has doubled. The proportion of residents born in the city has increased (or) the proportion of the residents from rural areas has decreased. Accurate figures for the population size ascertained using the scale and key: Population 1975 was 2000 (+/-100) Population 2015 was 4000 (+/-100) Accurate figures for the origin of dwellers: 1975: 1000 from rural areas 1000 born within Jakarta 2015: 1000 born in rural areas. 3000 born within Jakarta.					
Band	Mark						
2	3 - 4						
1	1 – 2						
	0						

(c) (iii) Make use of map 1.3, figure 1.4, photograph 1.5 and table 1.6 to decide whether you agree with the following statement: 'The challenges faced in the informal settlement of Jembatan Besi are the same as those found in every global city'. Give reasons to support why you agree or disagree with the statement.			AO1	AO2.1	AO2.2	AO3	AO4	SPaG	Total
Marks for spelling, punctuation and the accurate use of grammar are allocated to this question.						8		4	12
Use a banded mark scheme. Work upwards from the lowest band.			With reference to the target elements (a, b, c and d) of AO3, responses will apply knowledge and understanding by: a) ascribing meaning to information in section c of question 1 (the maps, population data, the photograph and the table of data). b) analysing information in relation to expected norms / patterns found in informal settlements. c) evaluating the degree to which Jembatan is typical / atypical. d) making a judgement about the statement, which is supported by a rationale. Responses will make connections between the novel context (of this particular informal settlement) to other global cities (which could be NIC or HIC). Where the candidates looks to support the notion that Jembatan faces the same challenges as other global cities. Attention will be drawn to (for example): relatively poor sanitation; absence of waste disposal; inadequate building materials; unplanned development; and poor infrastructure. Where the candidates looks to support the notion that Jembatan faces different challenges to other global cities. Attention will be drawn to (for example): the relative levels of poverty experienced in HICs compared to NICs; demographic differences (origin / longevity within the settlement). Reward appraisal which identifies unknowns in terms a balanced appraisal - based on the information provided (e.g. no info on transport issues, so appraisal is compromised). Reward chains of reasoning that identify similarities and differences when analysing typicality.						
Band	Mark	Descriptor							
4	7-8	Exceptional application of knowledge and understanding: - Comprehensive chains of reasoning provide sophisticated analysis - Balanced and coherent appraisal draws together wider geographical understanding to justify decision(s).							
3	5-6	Thorough application of knowledge and understanding: - Chains of reasoning provide elaborated analysis - Balanced appraisal draws together wider geographical understanding to support decision(s).							
2	3-4	Sound application of knowledge and understanding: - Some connections provide valid but limited analysis - Limited appraisal uses wider geographical understanding to support decision(s).							
1	1-2	Some basic application of knowledge and understanding: - Basic levels of meaning ascribed to the information/issue - Limited and weak appraisal uses some wider geographical understanding to support decision(s).							
	0	Award zero marks if the answer is incorrect or wholly irrelevant.							

After awarding a level and mark for the geographical response, apply the performance descriptors for spelling, punctuation and the accurate use of grammar (SPaG) and specialist terms that follow.

Band	Marks	Performance descriptions
<i>High</i>	4	• Learners spell and punctuate with consistent accuracy • Learners use rules of grammar with effective control of meaning overall • Learners use a wide range of specialist terms as appropriate
<i>Intermediate</i>	2 - 3	• Learners spell and punctuate with considerable accuracy • Learners use rules of grammar with general control of meaning overall • Learners use a good range of specialist terms as appropriate
<i>Threshold</i>	1	• Learners spell and punctuate with reasonable accuracy • Learners use rules of grammar with some control of meaning and any errors do not significantly hinder meaning overall • Learners use a limited range of specialist terms as appropriate
	0	• The learner writes nothing • The learner's response does not relate to the question • The learner's achievement in SPaG does not reach the threshold performance level, for example errors in spelling, punctuation and grammar severely hinder meaning

End of Question 1

Theme 2, Question 2

(a) Study the diagram below which shows the greenhouse effect. (i) Describe how the greenhouse effect works by adding letters from the box to label diagram 2.1 above. Two have been done for you.		AO1	AO2.1	AO2.2	AO3	AO4	Total
Credit these responses only. Do not credit if the same letter is used more than once.	From left to right: B (1) C (1) D (1) F (1)	4					4

(ii) Name two greenhouse gases.		AO1	AO2.1	AO2.2	AO3	AO4	Total
Credit up to two valid names each with one mark.	Carbon dioxide (1) Carbon monoxide (1) Methane (1) Nitrous oxide (1) Chlorofluorocarbons /CFCs (1) Hydro-fluorocarbons / HFCs (1) Perfluorocarbons / PF's (1)	2					2

(iii) Coal-fired power stations are one source of greenhouse gases. Give two other human activities which are a source of greenhouse gases.		AO1	AO2.1	AO2.2	AO3	AO4	Total
Credit up to two valid statements each with one mark.	Car and aircraft emissions (1) Landfill sites (1) Farming livestock (1)	2					2

(b) Study the graph below. Describe the changes in average global land surface temperature since 1850. Use figures from graph 2.2 in your answer.		AO1	AO2.1	AO2.2	AO3	AO4	Total
The key elements are use of the graph to communicate findings. Reserve one mark for overall trend. Credit valid description of changes over shorter periods or accurate quantification or qualification, each for one mark to max 2 marks.	overall trend: fluctuates / overall increase (1) changes over shorter periods / accurate quantification or qualification: below average until 1980 (1) or above average since 1980 (1) overall increase from -0.4 in 1850 to +0.5 in 2010 (1) lowest figure -0.5 in 1910 (1) highest figure +0.5 in 2005-10 (1) steep rise after 1970 (1) Steep rise between 1910 and 1940 (1)					3	3

(c) Study the map and the table below. The Environment Agency has estimated the impact of a 2 metre rise in sea level across the UK. (i) Describe the pattern of coastal areas at risk from a 2 metre rise in sea level. Use map 2.3 only in your answer.		AO1	AO2.1	AO2.2	AO3	AO4	Total
Credit up to two valid statements each with one mark. Credit information taken from the map only. Credit statements about the pattern revealed. Do not credit “all the areas threatened are on the coast”.	Nearly all areas of the UK are at risk (1) east coast is more vulnerable (1) much of the west coast of Scotland / N Ireland is not at risk (1)					2	2

(ii) Select one appropriate style of graph to represent the data shown in Table 2.4.		AO1	AO2.1	AO2.2	AO3	AO4	Total
Credit this response only.	A series of block graphs, one for each location in Table 2.4.					1	1

(iii) Give one reason why the graph style you selected is appropriate to represent the data in Table 2.4.		AO1	AO2.1	AO2.2	AO3	AO4	Total
Credit one valid statement (for 1 mark) and a valid <i>explanation/reason</i> for the second mark. You may credit reasons for not selecting the scatter graph or pie charts.	Block graphs are easy to compare (1) <i>so it is clear to see which of the locations has the greatest number of properties at risk</i> (1) Block graphs are used to represent actual / whole numbers (1) <i>which is what is given in the table</i> (1) Scatter graphs are not appropriate because they are used to show relationships between two variables (1) <i>and only one variable is presented in the table</i> (1) Pie charts are not appropriate because they are used to show percentages (1) <i>whereas the data in the table is actual/absolute numbers</i> (1)					2	2

(iv) Give one reason why it is difficult for individuals to reduce the threat of climate change in the UK.		AO1	AO2.1	AO2.2	AO3	AO4	Total
This question assesses AO2.1, the concept of mitigating risk. Credit one valid statement for one mark <i>and its explanation</i> with one mark. Responses must refer to individuals in the UK. The focus must be on why individuals find it difficult to reduce the threat.	Individuals cannot make a difference given the scale of the issue (1) <i>whereas emissions from industry are largely to blame (1)</i> Many individuals are ignorant of the causes of climate change (1) <i>so they do not do enough to tackle poor energy management / conservation (1)</i> Many individuals do not accept that they have a role in reducing climate change (1) <i>because they may not be affected by sea level rise or wild weather events/may not care about the effects in other parts of the world (1)</i>		2				2

(v) Explain why government in the UK may wish to reduce the threat of climate change.			AO1	AO2.1	AO2.2	AO3	AO4	Total															
This question assesses AO2.1, the concept of mitigating risk. Use the descriptors in the banded mark scheme below. Work upwards from the lowest band. <table><tr><th>Band</th><th>Mark</th><th>Descriptor</th></tr><tr><td>3</td><td>5-6</td><td>A sophisticated response where the candidate shows a very clear understanding through a chain of reasoning.</td></tr><tr><td>2</td><td>3-4</td><td>Elaboration in the response shows a clear understanding.</td></tr><tr><td>1</td><td>1-2</td><td>Valid but basic points are made with no elaboration.</td></tr><tr><td></td><td>0</td><td>Award 0 marks if the answer is incorrect or wholly irrelevant.</td></tr></table>			Band	Mark	Descriptor	3	5-6	A sophisticated response where the candidate shows a very clear understanding through a chain of reasoning.	2	3-4	Elaboration in the response shows a clear understanding.	1	1-2	Valid but basic points are made with no elaboration.		0	Award 0 marks if the answer is incorrect or wholly irrelevant.		6				6
Band	Mark	Descriptor																					
3	5-6	A sophisticated response where the candidate shows a very clear understanding through a chain of reasoning.																					
2	3-4	Elaboration in the response shows a clear understanding.																					
1	1-2	Valid but basic points are made with no elaboration.																					
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.																					
Responses may make reference to the national UK government and/or local government within the UK. The explanation could be based around: * a commitment to global target setting and/or international agreements (Kyoto/Copenhagen Accord) * economics and practicalities of dealing with sea level rise and/or wild weather events at a local or national scale * a political dimension of appearing to be 'green'.																							

(d) People have different views on the issue of climate change. Make use of these views to decide whether you agree with the following statement: 'The need to create economic growth in NICs such as India far outweighs any concerns about climate change'. Explain your reasons.			AO1	AO2.1	AO2.2	AO3	AO4	Total
						8		8
Use the banded mark scheme below. Work upwards from the lowest band.			With reference to the target elements (a, b, c and d) of AO3, responses will apply knowledge and understanding by: a) ascribing meaning to the views provided b) analysing information in to find connections between economic growth and climate change, thus allowing chains of reasoning to be developed. c) evaluating the extent to which NICs should be able to foster economic growth without being concerned about climate change. d) making a judgement about the statement, which is supported by a rationale. Popular starting points for those who support the statement will stem from one of the three viewpoints provided, e.g. they may be given from the perspective of NICs who wish to rapidly develop by exploiting carbon resources for electricity. Evaluation will be strengthened when candidates draw on their wider geography. They might, for example, draw upon the views of politicians within NICs about the need to create wealth to support a growing population (to develop education and health services). An alternative stance, again starting with one of the three viewpoints provided, is to argue about the negative impacts of climate change such as the drowning of low-lying coastal communities in Bangladesh. Evaluation will be strengthened when candidates draw on their wider geography. They might, for example draw upon the critical situation for small island states such as Tuvalu. The most sophisticated responses will weigh up and evaluate before making the final decision. Balance and a coherent appraisal will draw together a wide range of views disparate views. The judgement will draw on a wide spectrum of geographical information in terms of costs and benefits of economic growth (in NICs), and the links to climate change.					
Band	Mark	Descriptor						
4	7-8	Exceptional application of knowledge and understanding: - Comprehensive chains of reasoning provide sophisticated analysis - Balanced and coherent appraisal draws together wider geographical understanding to justify decision(s).						
3	5-6	Thorough application of knowledge and understanding: - Chains of reasoning provide elaborated analysis - Balanced appraisal draws together wider geographical understanding to support decision(s).						
2	3-4	Sound application of knowledge and understanding: - Some connections provide valid but limited analysis - Limited appraisal uses wider geographical understanding to support decision(s).						
1	1-2	Some basic application of knowledge and understanding: - Basic levels of meaning ascribed to the information/issue - Limited and weak appraisal uses some wider geographical understanding to support decision(s).						
	0	Award zero marks if the answer is incorrect or wholly irrelevant.						

End of Question 2

Theme 3 Question 3

3 (a) Study the maps and the photograph below. They show information about The Wildfowl & Wetlands Trust (WWT). This organisation conserves small scale wetland ecosystems throughout the UK. (i) Describe the location of the Martin Mere wetland ecosystem. Use map 3.1 or map 3.2 in your answer.		AO1	AO2.1	AO2.2	AO3	AO4	Total
Credit up to two valid statements each with one mark. Credit accurate use of scale/compass to the visitor centre if map 3.2 is used. Do not credit 'near to'.	In north-west (1) England (1) 3km from Rufford (1) west south west of Rufford (1) less than 1km from Tarlscough (1)					2	2

(ii) Complete the table below by giving the correct four figure and six figure grid references. Use map 3.2		AO1	AO2.1	AO2.2	AO3	AO4	Total
Credit this response only for Rufford (no mark for the use of a 6 fig GR).	4515 (1)					2	2
Credit this response for the visitor centre. Allow some tolerance in the third and sixth figure as shown (no mark for a 4 figure GR).	42[8/9]14[3/4] (1)						

(iii) Describe the relief of the land shown in map 3.2 and photograph 3.3.		AO1	AO2.1	AO2.2	AO3	AO4	Total
Credit up to two valid statements each with one mark. For consistent marking, please use this definition for 'relief': <i>The physical shape, configuration or general unevenness of a part of the Earth's surface, considered with reference to variation of height and slope or to irregularities of the land surface; the elevation or difference in elevation, considered collectively, of a land surface.</i> Do not credit description of landscape features such as small lakes / dykes etc.	The land is flat / undulating (1) low lying (1) The land is around 10 metres above sea level / between 4 and 14 metres high (1)					2	2

(b) The world map below shows the location of the major biomes across the world. (i) Tick (✓) the correct definition of a biome from the three available in the table.		AO1	AO2.1	AO2.2	AO3	AO4	Total
Credit this response only.	A biome is a global land area that is characterised by the plants, animals and climate in that area (1)	1					1

(ii) Describe the distribution of the Tropical Rainforest biome. Use map 3.4.		AO1	AO2.1	AO2.2	AO3	AO4	Total
Credit up to two valid statements each with one mark. Do not credit responses that describe the location of areas of Tropical Rainforest within a continent, as the question asks for distribution. Do not credit 'All of the Rainforest is found within the Tropics.'	Most of the Rainforest is found within the tropics (1) The rainforest is found mostly in three continents, South America, Africa and Asia (1) The largest area of rainforest is in South America/Asia (1) There are small areas of Rainforest in Australasia / Central America / North America (1) (allow one reference)					2	2

(c) The diagram below shows the links which exist in all ecosystems.		AO1	AO2.1	AO2.2	AO3	AO4	Total
(i) Name an ecosystem you have studied. Complete the table below, giving the names of specific plants or animals found in your chosen ecosystem.							
Credit up to four valid names each with one mark. No mark should be awarded for the ecosystem named. Max 1 mark for each of the 4 rows in the table. Allow any ecosystem. The indicative content uses the hot semi-arid grasslands.	Tertiary Consumer: lion (1) hyena (1) vulture (1) Secondary Consumer: meerkat (1) mongoose (1) anteater (1) Primary Consumer: zebra (1) mouse (1) grasshopper (1) Producer: grass (1) acacia tree (1) baobab tree (1)	4					4

(ii) Describe three characteristics of the climate for the ecosystem you named above.		AO1	AO2.1	AO2.2	AO3	AO4	Total
Credit up to three valid statements each with one mark. Credit responses that refer to: - precipitation, amounts and pattern throughout the year - temperatures and temperature patterns throughout the year - the inter-relationship of temperature and precipitation - diurnal range - distinct seasons. There is no need for candidates to quote climate figures but these should be credited if accurate.	Named ecosystem for example Savanna distinct wet and dry seasons (1) the dry season can last for 4 to 6 months (1) annual rainfall figures are relatively low / below 600mm (1) daytime temperatures remain high throughout the year (1) range is between 24°C and 35°C (1) Named ecosystem for example tropical rainforest There are distinct wet and drier seasons (1) annual rainfall figures are relatively high / above 2,500mm (1) daytime temperatures remain high throughout the year (1) range is very small (1).	3					3

(d) Study the map below. The line A – B shows a cross-section across three biomes in Africa. Describe how the changes in the vegetation from A to B are influenced by climate.		AO1	AO2.1	AO2.2	AO3	AO4	Total
Credit up to two valid statements each with one mark. Candidates may include reference to tropical (high) temperatures. Please accept this inference.	Rainfall all year promotes lush / dense / thick vegetation (1) Where there is no rain (dry all year), vegetation is non-existent (1) Where it is both hot and wet, rainforest trees grow (1) The more rain there is, the more vegetation there is (1)			2			2

(e) (i) Explain why human activities lead to damage of ecosystems.			AO1	AO2.1	AO2.2	AO3	AO4	Total
Use the banded mark scheme for AO2.2 – an understanding of the inter-relationship between human activity and damage within ecosystems. Work upwards from the lowest band.					6			6
Band	Mark	Descriptor						
3	5-6	A clear understanding is shown by linking human activity to specified damage in the ecosystem. The links are accurate, well developed and pertinent to named locations.						
2	3-4	A sound understanding is shown by making some links between human activity and damage to ecosystems. Responses relate to generic locations / activities.						
1	1-2	A basic understanding is given. Candidates use simplistic and generic ideas to link human activity to damage in unspecified terms and locations.						
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.						
Candidates may initially explore ways that people exploit ecosystems and then link the exploitation to damage processes. Alternatively, they may focus on a damaged ecosystem and then explain how the exploitation caused the damage.								
Accept a range of entry points, e.g. tourist exploitation within coral reefs / deforestation for mining or timber products/ drowning through HEP / water schemes / clearance for farming (for example, subsistence or large scale oil palm plantations).								
Responses may link damage within the ecosystem to interruption to processes operating within the ecosystem: - a break in / damage to the nutrient cycle - energy flows - atmospheric change.								

(ii) Name one ecosystem which it is being managed for a sustainable future. Predict how successful the management scheme is likely to be in creating a sustainable future for the ecosystem. Justify your reasoning.			AO1	AO2.1	AO2.2	AO3	AO4	Total
						8		8
Use the banded mark scheme. Work upwards from the lowest band.			With reference to the target elements (c and d) of AO3, responses will apply knowledge and understanding by: c) evaluating the degree to which an existing sustainable management scheme is showing signs of success (and possibly failure). d) making a judgement about the likely degree of success in the longer term, i.e. predicting the outcome. The prediction must be supported by a clear rationale. Responses will vary depending on the location chosen and the scale of the ecosystem. An appreciation of the degree to which the management assures a sustainable future is the key for the rationale. Analysis should incorporate chains of reasoning focused upon the way management is more likely / unlikely to facilitate a sustainable future. Balance and a coherent appraisal will be facilitated when candidates consider the positives and negatives of the scheme. The judgement will draw on a wide spectrum of geographical information in terms of ecosystem function, exploitation and preservation. Popular responses will include an evaluation of management schemes employed in, for example: Tropical rain forests, such as protected areas / selective logging / eco-tourism / tree planting programmes / agroforestry. Semi-arid grasslands, such as multi-national approaches like the Great Green Wall of trees / changing agricultural practice (drought resistant crops) / NGO projects e.g. irrigation schemes / contour ploughing.					
Band	Mark	Descriptor						
4	7-8	Exceptional application of knowledge and understanding. Balanced and coherent appraisal draws together wider geographical understanding to justify decision(s).						
3	5-6	Thorough application of knowledge and understanding. Balanced appraisal draws together wider geographical understanding to support decision(s).						
2	3-4	Sound application of knowledge and understanding. Valid but limited appraisal uses wider geographical understanding to support decision(s).						
1	1-2	Some basic application of knowledge and understanding. Limited and weak appraisal uses some wider geographical understanding to support decision(s).						
	0	Award zero marks if the answer is incorrect or wholly irrelevant.						

End of Question 3