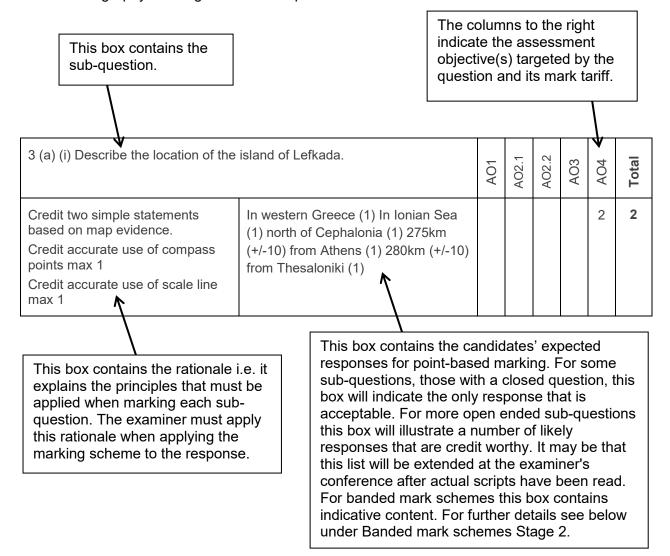
COMPONENT 1 - MARKSCHEME

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:



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 a range of 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.

Core Themes Mark both questions

Options Themes Learners are instructed to answer **one** question. If the candidate has responded to both questions then the examiner must mark both questions. Award the higher mark that has been attained.

GCSE GEOGRAPHY A Sample Assessment Materials 31

SECTION A

CORE THEMES

Core Theme 1, Question 1

(a) Study the photographs below. They show landforms and smaller scale features of the Glamorgan Heritage Coast.(i) Use Photographs 1.1 and 1.2 to name the features at A and B.		AO1	A02.1	A02.2	AO3	A04	Total	
Credit these responses only.	A. Wave-cut platform (1) B. Wave-cut notch/notch/bedding plane (1)	2					2	

(a) (ii) Feature A includes some shallow rock pools that are exposed at low tide. They have been formed by the process of abrasion. Describe the process of abrasion. Credit up to four Destructive/powerful waves (1) pick		AO1	AO2.1	AO2.2	A03	AO4	Total
Credit up to four valid statements, each for one mark.	Destructive/powerful waves (1) pick up/transport load/rocks/shingle (1) from sea bed/beach (1) roll them around in weak parts/joints of the wave-cut platform (1) eroding/wearing away a circular depression (1)	4					4

Add ann	otations a	the cliffs in photograph 1.1 and extra detail to Diagram osition of the cliffs has chai	1.3 and Diagram 1.4 to	AO1	A02.1	A02.2	AO3	AO4	Total
interrelative retreat) a landform	tionship band the eas).	gets understanding of the between process (of cliff nvironment (coastal rs below, working lowest band.	Responses should demonstrate an understanding of the link between the process of erosion and changing coastal			4			4
Band	Mark	Band Descriptor	landscapes with particular reference to the stages of cliff retreat. Responses may add detail and/or annotation to one or both diagrams to show						
3	4	Valid extra detail on one/both diagrams is supported by elaborated annotations, using a chain of reasoning.		the stages of cliff retreat. Responses may add detail and/or annotation to one or both					
2	2-3	Elaborated annotations show understanding of retreat. stages of retreat: 1. Development of wave cut notch							
1	1	Valid basic statement(s) show limited understanding.	 Development of stress in overhang Landslide and/or 						
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.							

(a) (iv) In 2015 a rock fall on the beach shown in Photograph 1.1 killed a young woman. Rock falls on this coastline also occurred in the years shown in Table 1.5. Calculate the mean frequency of the rock falls shown in Table 1.5 over the eleven year period from Jan 2004 to December 2015. Show your workings.				A02.2	AO3	AO4	Total
Credit this response only for one mark. Credit working for max two marks as shown. Award max one mark if the correct response is given but the candidate does not show working.	Frequency = 21 months (1) 12 years x 12 months = 144 (1) OR 12/7 = 1.57 years (1) 144/7 = 20.57 (1)					3	3

(b) Study the OS map extract in Map 1.6 below. It shows part of Dorset coastline in southern England.(i) Use map evidence from Map 1.6 to describe the relief in grid squares 0281, 0381 and 0481.	5	AO -	AUZ.1	A02.2	A03	A04	Total	
						4	4	

This question assesses the element of use of an OS map **and** the element of communicating finding.

Use the descriptors below, working upwards from the lowest band.

Band	Mark	Band Descriptor				
2	3-4	Elaborated statements successfully use map evidence and specialist terminology to provide detailed description of relief. Meaning is unambiguous. The response has purpose, is organised and well structured.				
1	Valid statements use some ma evidence to provide description relief. Meaning is clear. Statem are linked by a basic structure.					
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.				

Responses will use map evidence such as the spacing and orientation of contour lines to provide a description of the relief in this part of the map.

The main focus of the response should identify a.

The scarp slope (i.e. steeper slope) faces to the south whilst the dip slope (i.e. gentler slope) faces to the north. The eastern end of the escarpment ends in steep cliffs in grid square 0481.

(b) (ii) Explain why differences in rock type and rates of coastal erosion.	d structure can affect	AO1	A02.1	A02.2	VO3	A04	Total
			6				6

This question assesses AO2.1, the concept of process and change (and specifically differential rates of erosion). Use the descriptors below, working upwards from the lowest band.

Band Mark **Band Descriptor** Thorough understanding of process 3 5-6 and the influence of rock type and structure in affecting rates of change. Understanding of process and the influence of rock type and/or structure in affecting rates of change. The 2 3-4 response lacks balance, focusing on either rock type or structure, or it lacks depth if it addresses both elements. Simple, valid statements demonstrate 1-2 basic understanding of the role of 1 geology in affecting rates of erosion. Award 0 marks if the answer is 0 incorrect or wholly irrelevant.

Responses should link rock type and/or geological structures (such as bedding planes) to the resistance of the coastline and its rate of erosion. Responses should contrast rates of erosion of two different rock types, for example, slow erosion in igneous rocks (e.g. Pembrokeshire) contrasted with rapid erosion of glacial tills (e.g. Holderness) Credit explanation of cliff shape (resistant rocks form steep sided cliffs while less resistant rocks are prone to slides and slumps so form gentler slopes) as long as differential rates of erosion of these two cliff types are explained.

	State what movement of water is shown by rows using the correct specialist terms.	A01	A02.1	A02.2	8OY	404	Total
Credit these responses only.	pink arrow – infiltration/percolation (1) blue arrow – throughflow (1)	2					2

(c) (ii) The hills to the west of the Conwy Valley are impermeable. Suggest one way that arrows on Diagram 1.8 could be altered to show how the flow of water will be affected.				A02.2	AO3	AO4	Total
Credit one valid statement with one mark. Credit reference to width or overall size of arrow.	Smaller/narrower infiltration arrow (1) OR larger/wider overland flow arrow (1) OR smaller/narrower throughflow arrow (1)					1	1

(c) (iii) Make use of Map 1.7, Diagram 1.8 and decide whether you agree with the following states 'Physical factors are more likely to cause flood human factors'. Explain your reasons.	atement.	A01	A02.1	A02.2	A03	404	Total	
					8		8	

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.

This question requires candidates to synthesise links between different areas of knowledge and understanding and apply this understanding to analyse novel information that requires a judgement. All elements of AO3 are targeted.

Candidates must apply their knowledge of and understanding of the human, climatic and geological factors that determine movement of water through drainage basins to decide which factors are largely responsible for flooding in the context of this particular upland drainage basin with its distinctive features.

Responses will ascribe specific meaning to/analyse the resources, as detailed below, before evaluating their relative importance and reaching a decision.

Physical Factors are more likely to explain flooding in this context because:

steep slopes to the west of the Conwy increase speed of overland flow/run-off, reduces time lag so exceeding channel capacity.

impermeable geology of this drainage basin increase amount of overland flow/run-off

high relief in an upland area of Wales so large amount of rainfall which exceed infiltration capacity so increases overland flow/run-off to river.

flat valley floor / floodplain which is visible in the photograph so land close to river is vulnerable /nowhere for water to drain.

<u>Human Factors may have had a lesser (but not insignificant) impact</u>

concrete/tarmac in Llanrwst are impermeable surfaces so decreased natural infiltration and increased overland flow/run-off so water reaches river rapidly / short time-lag but Llanrwst appears to be a relatively small town.

partial historical deforestation and improved drainage of upland areas (grazing identified in Photograph 1.9) so interception is not reduced as much as if all valley was forested, so increases amount of overland flow/throughflow.

Core Theme 2, Question 2

(a) (i) How many million people (to two safe drinking water in rural areas of U		AO1	A02.1	A02.2	AO3	AO4	Total
Credit the correct answer for one mark and credit accurate working for a second mark. If only accurate working out is shown, credit one mark.	20.67 (1) 32.3 x 0.64 (1)					2	2

(a) (ii) E others.	(a) (ii) Explain why your selected technique is more appropriate than the others.						A03	A04	Total
	Use the descriptors below, working upwards from the lowest band.		Block graphs are accurate and easy to read but should be used					4	4
Band	Mark	Band Descriptor	for absolute data rather						
2	3-4	Balanced rationale comments on all techniques and considers strengths and limitations. Meaning is unambiguous. The response has purpose, is organised and well structured.	than percentages. Pie charts are used to show percentages and literacy rates are presented as percentage figures. They are simpler to construct than proportional circles. Pairs of pie charts are easy to read and compare. Proportional pie charts show both population size and proportion so they are more						
1	1-2	Valid statements with limited elaboration demonstrate some reasoning. Meaning is clear. Statements are linked by a basic structure.							
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.	sophisticated than the other options. They are the only option that represents population size as well as literacy rate. The scale of the proportional circle is difficult to construct/read with accuracy.						

capital city, Kampala. Migration I Countries (LICs).	are moving from rural areas to the like this occurs in many Low Income shed away from the rural environment and cities in LICs.	AO1	A02.1	A02.2	A03	404	Total
				6			6

This question assesses AO2.2, the inter-relationship between process (of migration) and the environment or place.

Use the descriptors below, working upwards from the lowest band.

Band	Mark	Band Descriptor
3	5-6	Thorough and elaborated understanding of a range of reasons for rural-urban migration which demonstrates depth of understanding for at least some reasons through chains of reasoning.
2	3-4	Elaborated understanding of some reasons for rural-urban migration which demonstrates breadth of understanding.
1	1-2	Simple, valid statements demonstrate basic understanding of the reasons for rural-urban migration.
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.

Credit push and/or pull factors but do not double credit unless further detail or elaboration is provided that would indicate a higher band has been achieved.

Do **not** credit direct lifting of evidence from the resources e.g. life expectancy is 45 years in rural

Responses should demonstrate understanding of a range of push or pull factors that are responsible for rural to urban migration.

Push factors

Poor harvests so lack of food leads to malnourishment / early death

Desertification so land is becoming less fertile harder to make profit from farming harder to feed family / malnourishment

Lack of education / schools so children have to walk long distances to school remain illiterate do not get employment skills

Pull factors

More education opportunities / higher education so children can complete education become fully literate gain employment skills

More job opportunities which may also be better paid so money can be sent back to rural families

areas.

(b) The migration of people into Ugandan cities has led to the growth of informal settlements or shanty towns.(i) Describe the location of one shanty town in one global city located in the economically developing world.			A02.1	A02.2	A03	A04	Total
Credit up to four valid statements, each for one mark. Reserve one mark for name of city. Credit use of compass and distance to describe location accurately.	The answer will depend on the choice of the city. The following is for illustration only: Kibera is in Nairobi (1) This shanty town is less than 3km (1) to the south (1) of the city centre (1). It is located next to a railway line (1)	4					4

(b) (ii) Describe one way in which living conditions have improved in a named shanty town you have studied.					A02.1	A02.2	AO3	AO4	Total
	•	Descriptor Elaborated statements which demonstrate detailed knowledge of how shanty town improvements have been made. Description includes detail specific to a named location.	demonstrate knowledge of one strategy that has improved the urban environment or quality of life in a shanty town. Examples might include: • a self-help scheme to build more permanent homes • the role of an NGO in improving education or health facilities • the creation of a	4					4
1	1-2	Simple statements that demonstrate general knowledge of how shanty towns may be improved. Location is named.	 the creation of a micro-credit scheme improvement in street lighting to 						
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.	improve safety for women						

 (c) A group of students used the interactive maps and graphs of a GIS to investigate future changes in the UK's population. They compared future population changes in a city (Cardiff) to a rural area (West Dorset). Study the screen shots from the GIS below. (i) Compare the trend of the two graphs in screen shots 2.4 and 2.5. 			A02.1	A02.2	AO3	AO4	Total
Credit up to two valid comparative statements each with one mark. Statements must make direct comparison. Do not credit statements that simply describe one trend.	The trend of % over 65 in Cardiff is decreasing whereas the trend in West Dorset is increasing (1) The trend of % over 65 in Cardiff starts at UK average and goes below UK average whereas in West Dorset it is always above UK average (1)					2	2

(c) (ii) Screen shots 2.2 and 2.3 show that there is a higher proportion of people aged 65 and over in West Dorset than in Cardiff. Give two reasons why rural areas of the UK tend to have more people aged 65 and over.			A02.1	A02.2	403	404	Total
This question assesses AO2.1, the concept of population change. Credit up to two valid statements each with one mark (to max 2). For each valid statement, credit a valid explanation for the second mark.	People move to rural areas when they retire (1) because they want a tranquil life / perceive rural areas to be safer / quieter (1) because they can afford higher house prices (1) Younger people / young families tend to leave rural areas (1) because there are too few jobs / more jobs in cities (1) Young adults move because of lack of higher education / more higher education in cities (1) so there are relatively more retired people left in the rural area (1)		4				4

(c) (iii) The ageing population will create future challenges for individuals and organisations in the UK. Make use of screen shots 2.2 – 2.5 to decide whether these challenges will be greater in rural or urban areas of the UK. You will need to justify your decision by considering the consequences for rural and urban communities. Your ability to spell, punctuate and use grammar and specialist terms accurately will be assessed in your answer to this question.	AO1	A02.1	A02.2	AO3	A04	SPaG	Total
				8		4	12

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.

This question requires candidates to synthesise links between different areas of knowledge and understanding and apply this understanding to analyse novel information that requires a decision. All elements of AO3 are targeted.

Responses will apply knowledge and understanding of the issues created by the UK's ageing population and draw together (synthesise) separate strands of their understanding about urban-rural links, access to services and the ageing of the UK population to address this specific question about the relative strength of the challenges faced by urban communities as opposed to rural communities.

They may argue that:

- urban areas contain populations that are larger so the number of elderly people who require care will be greater as an absolute number
- rural areas contain a larger proportion of elderly people so represent a bigger pro rata problem
- rural communities will be more isolated and, therefore, further from the health, retail, banking and social services that are required and therefore more likely to suffer issues of multiple deprivation than urban communities
- rural areas are less well connected with broadband than urban communities so elderly residents will feel more isolated and lack access to information and services than elderly residents in urban areas
- rural areas are more socially cohesive and provide better voluntary support for elderly residents than urban communities.

Responses will analyse information provided in the screen shots to demonstrate that these challenges are getting greater in the future / will be greater in rural areas.

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
High	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
Intermediate	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
Threshold	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 nothingThe 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 2

SECTION B OPTIONS

Theme 3, Question 3

		3 (a) Study Map 3.1 below. The Solomon Islands are a group of slands in the Pacific Ocean. Jse map 3.1. Give the distance and direction to the centre of the Solomon Islands from Wellington, New Zealand. Underline each correct answer.							Total
	Credit these responses only. 3900km (1) NNW (1)							2	2
3 (b) In 2013 the islands were affected by an earthquake of magnitude 8 on the Richter scale. It created a tsunami that killed at least 5 people in the Solomon Islands. Tick (✓) two correct statements below.							A03	A04	Total
Credit these responses only. Magnitude is a measure of the amount of energy released by an earthquake (1) Magnitude 8 is ten times greater than magnitude 7 (1)									2
3 (c) Explain why an earthquake sometimes creates a tsunami.						AO2.2	AO3	AO4	Total
etween p se the de	process and e	the inter-relationship nvironment. w, working upwards	Responses should make connections between the vertical movement of the sea bed during the			4			4
Band	Mark Band	l Descriptor	earthquake and the						
3	4 unde	ough and elaborated rstanding is onstrated through s of reasoning.	column of water above.						
2		orated understanding use and effect.							
Simple, valid statements demonstrate basic understanding.									
Award 0 marks if the 0 answer is incorrect or wholly irrelevant.									
(c) Explains quest etween pase the department of the local state of th	tion assesses process and e escriptors belowest band. Mark Band Thorunded demochain 2-3 Elabor of car Simple demounded Awar 0 Awar answ	Magnitude 8 is ten to magnitude 7 (1) thquake sometimes created the inter-relationship nation ment. The working upwards I Descriptor Sough and elaborated restanding is constrated through as of reasoning. The provided the provided that is incorrect or the magnitude of the provided that is incorrect or the magnitude of the provided that is incorrect or the magnitude of the provided that is incorrect or the magnitude of the m	Responses should make connections between the vertical movement of the sea bed during the earthquake and the displacement of the column of water	AO1	A02.1		AO3	AO4	

3 (d) Make use of the information about the Solo decide whether you agree with the following star		7 2			3	4	al
'Remote islands are more vulnerable to tectonic hazards than any other location.' Explain your answer.				AO2	AC	AC	Total
					8		8

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.

This question requires candidates to synthesise links between different areas of knowledge and understanding and apply this understanding to analyse novel information that requires a judgement. All elements of AO3 are targeted.

Responses should **apply** knowledge and understanding of the factors (which may be economic, social, cultural or physical) that increase the vulnerability to tectonic hazards in the novel context of the Solomon Islands or other, similar, remote island communities.

Responses will move beyond a demonstration of pure understanding by ascribing specific meaning to/analysing the resources, as detailed below, before evaluating the relative vulnerability of remote islands and reaching a decision.

They may argue that:

The remote location of the islands in relation to larger, more economically developed nations who could provide assistance, such as New Zealand and Australia means that assistance could be slower to arrive/more difficult to coordinate than if a similar disaster occurred in a more accessible location.

The relative poverty of the islands compared to other nations that are susceptible to earthquakes/tsunami such as Japan means that economic recovery will take longer.

The relative vulnerability of poor coastal communities where building technologies are not hazard resistant and where the poorest members of the community are at greatest risk means that these communities are more vulnerable to both primary and secondary hazards such as disease and food/water insecurity than wealthier communities.

Other factors, that determine vulnerability, may be presented to balance the argument. It may be argued that other factors, such as density of population or proximity to a plate boundary are more important when considering vulnerability.

End of Question 3

Theme 4, Question 4

4 (a) Study Map 4.1 below. Tuvalu is a group of islands in the Pacific Ocean. Use Map 4.1. Give the distance and direction to the centre of Tuvalu from Cairns, Australia. Underline each correct answer.		AO1	A02.1	A02.2	AO3	A04	Total
Credit these responses only.	3800km (1) ENE (1)					2	2

4 (b) The islands are vulnerable to the effects of cyclones. In 2015 the islands were hit by Cyclone Pam which was a Category 5 hurricane. During this event a storm surge flooded the islands with sea water, damaging fresh water drinking supplies. Tick (\$\sigma\$) two correct statements below.			A02.1	A02.2	AO3	A04	Total
Credit these responses only.	The category of a hurricane is a measure of the intensity of wind speeds (1) Category 5 hurricanes have higher wind speeds than Category 4 hurricanes (1)	2					2

4 (c) Explain why hurricanes create a storm surge.					AO1	A02.1	A02.2	AO3	AO4	Total
This question assesses the inter-relationship between process and environment. Use the descriptors below, working upwards from the lowest band.			and environment. rs below, working upwards	Responses should make connections between the causes (extreme low air pressure and strong			4			4
	Band	Mark	Band Descriptor	winds) and the						
	3	4	Thorough and elaborated understanding is demonstrated through chains of reasoning.	effects (the bulge in sea level due to low air pressure that is then driven by the wind and which rises						
	2	2-3	Elaborated understanding of cause and effect.	more steeply as the storm surge enters shallow water) valid statements trate basic						
	1	1	Simple, valid statements demonstrate basic understanding.							
		0	Award 0 marks if the answer is incorrect or wholly irrelevant.							

4 (d) Make use of the information about Tuvaluagree with the following statement. 'Remote islands are more vulnerable to coasta other location.' Explain your answer.	·	AO1	A02.1	A02.2	KO3	404	Total	
					8		8	

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.

This question requires candidates to synthesise links between different areas of knowledge and understanding and apply this understanding to analyse novel information that requires a judgement. All elements of AO3 are targeted.

Responses should **apply** knowledge and understanding of the factors (which may be economic, social, cultural or physical) that increase the vulnerability to tectonic hazards in the novel context of Tuvalu or other, similar, remote island communities.

Responses will move beyond a demonstration of pure understanding by ascribing specific meaning to/analysing the resources, as detailed below, before evaluating the relative vulnerability of remote islands and reaching a decision.

They may argue that:

The remote location of the islands in relation to larger, more economically developed nations who could provide assistance, such as New Zealand and Australia means that assistance could be slower to arrive/more difficult to coordinate than if a similar disaster occurred in a more accessible location.

The relative poverty of the islands compared to other nations that are susceptible to earthquakes/tsunami such as Japan means that economic recovery will take longer.

The relative vulnerability of poor coastal communities where building technologies are not hazard resistant and where the poorest members of the community are at greatest risk means that these communities are more vulnerable to both primary and secondary hazards such as disease and food/water insecurity than wealthier communities.

Other factors, that determine vulnerability, may be presented to balance the argument. It may be argued that other factors, such as density of population or the effectiveness of coastal management strategies are more important when considering vulnerability to coastal hazards.

End of Question 4