GCE

Geography

H481/03: Geographical debates

A Level

Mark Scheme for June 2024

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This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by examiners. It does not indicate the details of the discussions which took place at an examiners' meeting before marking commenced.

All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the report on the examination.

MARKING INSTRUCTIONS

PREPARATION FOR MARKING
RM ASSESSOR

1. Make sure that you have accessed and completed the relevant training packages for on-screen marking: *RM Assessor Assessor Online Training*; *OCR Essential Guide to Marking*.

2. Make sure that you have read and understood the mark scheme and the question paper for this unit. These are posted on the RM Cambridge Assessment Support Portal http://www.rm.com/support/ca

3. Log-in to RM Assessor and mark the **required number** of practice responses ("scripts") and the **number of required** standardisation responses.

   YOU MUST MARK 10 PRACTICE AND 10 STANDARDISATION RESPONSES BEFORE YOU CAN BE APPROVED TO MARK LIVE SCRIPTS.

MARKING

1. Mark strictly to the mark scheme.

2. Marks awarded must relate directly to the marking criteria.

3. The schedule of dates is very important. It is essential that you meet the RM Assessor 50% and 100% (traditional 40% Batch 1 and 100% Batch 2) deadlines. If you experience problems, you must contact your Team Leader (Supervisor) without delay.

4. If you are in any doubt about applying the mark scheme, consult your Team Leader by telephone or the RM Assessor messaging system, or by email.

5. **Crossed Out Responses**
   Where a candidate has crossed out a response and provided a clear alternative then the crossed out response is not marked. Where no alternative response has been provided, examiners may give candidates the benefit of the doubt and mark the crossed out response where legible.

   Rubric Error Responses – Optional Questions
   Where candidates have a choice of question across a whole paper or a whole section and have provided more answers than required, then all responses are marked and the highest mark allowable within the rubric is given. Enter a mark for each question answered into RM assessor, which will select the highest mark from those awarded. *(The underlying assumption is that the candidate has penalised themselves by attempting more questions than necessary in the time allowed.)*

Multiple Choice Question Responses
When a multiple choice question has only a single, correct response and a candidate provides two responses (even if one of these responses is correct), then no mark should be awarded (as it is not possible to determine which was the first response selected by the candidate).
When a question requires candidates to select more than one option/multiple options, then local marking arrangements need to ensure consistency of approach.

Contradictory Responses
When a candidate provides contradictory responses, then no mark should be awarded, even if one of the answers is correct.

Short Answer Questions (requiring only a list by way of a response, usually worth only **one mark per response**)
Where candidates are required to provide a set number of short answer responses then only the set number of responses should be marked. The response space should be marked from left to right on each line and then line by line until the required number of responses have been considered. The remaining responses should not then be marked. Examiners will have to apply judgement as to whether a 'second response' on a line is a development of the 'first response', rather than a separate, discrete response. *(The underlying assumption is that the candidate is attempting to hedge their bets and therefore getting undue benefit rather than engaging with the question and giving the most relevant/correct responses.)*

Short Answer Questions (requiring a more developed response, worth **two or more marks**)
If the candidates are required to provide a description of, say, three items or factors and four items or factors are provided, then mark on a similar basis – that is downwards (as it is unlikely in this situation that a candidate will provide more than one response in each section of the response space.)

Longer Answer Questions (requiring a developed response)
Where candidates have provided two (or more) responses to a medium or high tariff question which only required a single (developed) response and not crossed out the first response, then only the first response should be marked. Examiners will need to apply professional judgement as to whether the second (or a subsequent) response is a 'new start' or simply a poorly expressed continuation of the first response.

6. Always check the pages (and additional objects if present) at the end of the response in case any answers have been continued there. If the candidate has continued an answer there, then add a tick to confirm that the work has been seen.

7. Award No Response (NR) if:
    - there is nothing written in the answer space

Award Zero '0' if:

- anything is written in the answer space and is not worthy of credit (this includes text and symbols).

Team Leaders must confirm the correct use of the NR button with their markers before live marking commences and should check this when reviewing scripts.

8. The RM Assessor **comments box** is used by your team leader to explain the marking of the practice responses. Please refer to these comments when checking your practice responses. **Do not use the comments box for any other reason.**
If you have any questions or comments for your team leader, use the phone, the RM Assessor messaging system, or e-mail.

9. Assistant Examiners will send a brief report on the performance of candidates to their Team Leader (Supervisor) via email by the end of the marking period. The report should contain notes on particular strengths displayed as well as common errors or weaknesses. Constructive criticism of the question paper/mark scheme is also appreciated.

10. For answers marked by levels of response:
    a. **To determine the level** – start at the highest level and work down until you reach the level that matches the answer
    b. **To determine the mark within the level**, consider the following

Descriptor	Award mark
On the borderline of this level and the one below	At bottom of level
Just enough achievement on balance for this level	Above bottom and either below middle or at middle of level (depending on number of marks available)
Meets the criteria but with some slight inconsistency	Above middle and either below top of level or at middle of level (depending on number of marks available)
Consistently meets the criteria for this level	At top of level

11. **Annotations**

Annotation	Meaning
	Highlight
	Off page comment
^	Omission mark
	Unclear or Indicates material for which there is no credit
R	Rubric error placed at start of response not being counted
L1	Level 1
L2	Level 2
L3	Level 3
L4	Level 4
S	Synoptic link
DEV	Development of a point
IRRL	Significant amount of material which doesn't answer the question
SEEN	Used to denote that points had been seen and noted but mostly where credit was given

Annotation	Meaning
NE	No place specific detail
	Highlighting an issue e.g. irrelevant paragraph. Use in conjunction with another stamp e.g. IRRL or EVAL
BP	Blank page
EVAL	Evaluation

12. **Subject Specific Marking Instructions**

INTRODUCTION

Your first task as an Examiner is to become thoroughly familiar with the material on which the examination depends. This material includes:

- the specification, especially the assessment objectives
- the question paper and its rubrics
- the mark scheme.

You should ensure that you have copies of these materials.

You should ensure also that you are familiar with the administrative procedures related to the marking process. These are set out in the OCR booklet **Instructions for Examiners**. If you are examining for the first time, please read carefully **Appendix 5 Introduction to Script Marking: Notes for New Examiners**.

Please ask for help or guidance whenever you need it. Your first point of contact is your Team Leader.

USING THE MARK SCHEME

Please study this Mark Scheme carefully. The Mark Scheme is an integral part of the process that begins with the setting of the question paper and ends with the awarding of grades. Question papers and Mark Schemes are developed in association with each other so that issues of differentiation and positive achievement can be addressed from the very start.

This Mark Scheme is a working document; it is not exhaustive; it does not provide ‘correct’ answers. The Mark Scheme can only provide ‘best guesses’ about how the question will work out, and it is subject to revision after we have looked at a wide range of scripts.

Please read carefully all the scripts in your allocation and make every effort to look positively for achievement throughout the ability range. Always be prepared to use the full range of marks.

LEVELS OF RESPONSE QUESTIONS:

The indicative content indicates the expected parameters for candidates' answers but be prepared to recognise and credit unexpected approaches where they show relevance.

Using 'best-fit', decide first which set of level descriptors best describes the overall quality of the answer. Once the level is located, adjust the mark concentrating on features of the answer which make it stronger or weaker following the guidelines for refinement.

Highest mark: If clear evidence of all the qualities in the level descriptors is shown, the HIGHEST Mark should be awarded.

Lowest mark: If the answer shows the candidate to be borderline (i.e. they have achieved all the qualities of the levels below and show limited evidence of meeting the criteria of the level in question) the LOWEST mark should be awarded.

Middle mark: This mark should be used for candidates who are secure in the level. They are not 'borderline' but they have only achieved some of the qualities in the level descriptors.

Be prepared to use the full range of marks. Do not reserve (e.g.) highest level marks 'in case' something turns up of a quality you have not yet seen. If an answer gives clear evidence of the qualities described in the level descriptors, reward appropriately.

Quality of extended response will be assessed in questions marked with an (*). Quality of extended response is not attributed to any single assessment objective but instead is assessed against the entire response for the question.

	AO1	AO2	AO3	Quality of extended response
Comprehensive	A wide range of detailed and accurate knowledge that demonstrates fully developed understanding that shows full relevance to the demands of the question. Precision in the use of question terminology.	Knowledge and understanding shown is consistently applied to the context of the question, in order to form a: Clear, developed and convincing analysis that is fully accurate. Clear, developed and convincing interpretation that is fully accurate. Detailed and substantiated evaluation that offers secure judgements leading to rational conclusions that are evidence based.	Quantitative, qualitative and/or fieldwork skills are used in a consistently appropriate and effective way and with a high degree of competence and precision.	There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.
Thorough	A range of detailed and accurate knowledge that demonstrates well developed understanding that is relevant to the demands of the question. Generally precise in the use of question terminology.	Knowledge and understanding shown is mainly applied to the context of the question, in order to form a: Clear and developed analysis that shows accuracy. Clear and developed interpretation that shows accuracy. Detailed evaluation that offers generally secure judgements, with some link between rational conclusions and evidence.	Quantitative, qualitative and/or fieldwork skills are used in a suitable way and with a good level of competence and precision.	There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.

	AO1	AO2	AO3	Quality of extended response
Reasonable	Some sound knowledge that demonstrates partially developed understanding that is relevant to the demands to the question. Awareness of the meaning of the terms in the question.	Knowledge and understanding shown is partially applied to the context of the question, in order to form a: Sound analysis that shows some accuracy. Sound interpretation that shows some accuracy. Sound evaluation that offers generalised judgments and conclusions, with limited use of evidence.	Quantitative, qualitative and/or fieldwork skills are used in a mostly suitable way with a sound level of competence but may lack precision.	There information has some relevance and is presented with limited structure. The information is supported by limited evidence.
Basic	Limited knowledge that is relevant to the topic or question with little or no development. Confusion and inability to deconstruct terminology as used in the question.	Knowledge and understanding shows limited application to the context of the question in order to form a: Simple analysis that shows limited accuracy. Simple interpretation that shows limited accuracy. Un-supported evaluation that offers simple conclusions.	Quantitative, qualitative and/or fieldwork skills are used inappropriately with limited competence and precision.	The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.

Question			Answer	Mark	Guidance
1	(a)		**Identify <u>THREE</u> limitations of Fig. 1 as a source of information about carbon trading schemes.** The map shows established and planned carbon trading schemes. Possible limitations include: ● Small scale map so little detail - no named countries or locations ● No date for the information given on the map ● No source so lacks information about what data has been used ● Unclear in terms of national or regional schemes. ● Issue of over-lapping circles – unsure about locations ● Lack of information about: • the extent of each scheme e.g. local / national / regional • the extent of each scheme e.g. types of carbon emitters (mining / manufacturing industries) • how long each scheme has been operating • degrees of success for established schemes	**3** **AO3 x3**	**AO3 – 3 marks** 3x1 (SEEN) for three limitations of the data identified through critical questioning of the resource.
1	(b)		**Explain how homes may adapt to reduce risk from increased temperatures.** **Level 3 (5-6 marks)** Demonstrates **thorough** knowledge and understanding of how homes may adapt (AO1). This will be shown by including **well-developed** ideas about how homes may adapt. **Level 2 (3-4 marks)**	**6** **AO1 x6**	**Indicative content** **AO1 – 6 marks** Knowledge and understanding of how homes may adapt to reduce risk from increased temperatures could potentially include: ● Use of heat-adaptive strategies e.g. air conditioning and fans ● Insulation reduces external heat gain ● Reduction in window size or south-facing

Question			Answer	Mark	Guidance
			Demonstrates **reasonable** knowledge and understanding of how homes may adapt (AO1). This will be shown by including **developed** ideas about how homes may adapt. **Level 1 (1–2 marks)** Demonstrates **basic** knowledge and understanding of how homes may adapt (AO1). There may be **simple** ideas about how homes may adapt. **0 marks** No response or no response worthy of credit.		windows to reduce solar gain; sun shades over windows ● White roofs to increase albedo, use of reflective roofing materials ● Improved ventilation e.g. apartments built to draw in fresh air at ground floor and release it on the top floor so all apartments have access to freely ventilated areas ● Efficient lighting that generates little heat energy ● Green roofs to reduce energy absorption by materials such as tiles or slates ● Growing vegetation over walls + planting trees to cast shade on house reduces absorption of energy ● Adaptations to consequences of ↑ temperatures e.g. flood risk from eustatic rise; rainwater harvesting to cope with drought

Question			Answer	Mark	Guidance
2	(a)		**Identify <u>THREE</u> limitations of Fig. 2 as a source of information about infectious and deadly diseases.** The scatter graph shows the relationship between deadliness and infectiousness of a range of diseases. Possible limitations include: ● No source therefore reliability / accuracy concerns ● Terms are subjective ● Y axis has uneven scale 0.1, 1, 10, 20% ● Is the data for one country/several/global? ● Do the figures apply to ACs, EDCs and or LIDCs equally? ● Does the data represent the situation today? ● No information about impact of treatment on deadliness	**3** **AO3 x3**	**AO3 – 3 marks** 3x1 (SEEN) for three limitations of the data identified through critical questioning of the resource.
2	(b)		**Explain how the geographical area covered by <u>ONE</u> natural hazard has influenced the risk of outbreak of <u>ONE</u> named disease.** **Level 3 (5-6 marks)** Demonstrates **thorough** knowledge and understanding of how the geographical area covered by <u>ONE</u> natural hazard influences the risk of an outbreak of <u>ONE</u> named disease (AO1). This will be shown by including **well-developed** ideas about how the geographical area covered by <u>ONE</u> natural hazard influences the risk of an outbreak of <u>ONE</u> named disease. **Level 2 (3-4 marks)** Demonstrates **reasonable** knowledge and understanding of how the geographical area covered	**6** **AO1 x6**	**Indicative content** **AO1 – 6 marks** Knowledge and understanding of how the geographical area covered by <u>ONE</u> natural hazard influences the risk of an outbreak of <u>ONE</u> named disease could potentially include: ● Answers will vary depending on geographical area, natural hazard and disease chosen all of which must be stated. ● Natural hazard e.g. earthquake, volcanic eruption, drought, flooding, mass movement ● Influence of geographical area e.g. AC / EDC / LIDC contrasts → levels of preparation / mitigation / quality + quantity of relief ● Influence of geographical area e.g. speed of onset of hazard; magnitude; how long the

Question			Answer	Mark	Guidance
			by ONE natural hazard influences the risk of an outbreak of ONE named disease (AO1). This will be shown by including **developed** ideas about how the geographical area covered by ONE natural hazard influences the risk of an outbreak of ONE named disease. **Level 1 (1–2 marks)** Demonstrates **basic** knowledge and understanding of how the geographical area covered by **one** natural hazard influences the risk of an outbreak of **one** named disease (AO1). There may be **simple** ideas about how the geographical area covered by ONE natural hazard influences the risk of an outbreak of ONE named disease. **0 marks** No response or no response worthy of credit.		event lasts ● Influence of geographical area e.g. landscape - steep rugged = delays in relief e.g. Nepal; landscape – extensive relatively flat e.g. delta = extensive flooding e.g. Bangladesh ● Influence of geographical area e.g. weather + climate e.g. hot humid favours disease spread e.g. Haiti ● Risk of outbreaks of disease e.g. flooding / damage to infrastructure (water pipes, sewers + power) → water-borne pathogens e.g. diarrhoea, typhoid, hepatitis, cholera e.g. Haiti; also vectors using water e.g. mosquitos → malaria ● Risks of outbreaks of disease e.g. crowded refugee camps → respiratory conditions TB ● Risks of outbreaks of disease e.g. contaminated food →gastro-intestinal diseases ● Risks of outbreaks of disease e.g. disruption to health care →interruption of vaccination programmes

Question			Answer	Mark	Guidance

3	(a)		**Identify <u>THREE</u> limitations of Fig. 3 as a source of information about the food web in an inter-tidal zone.**
			
			The diagram shows a food web in an inter-tidal zone. Possible limitations include:
			● No information about location (e.g. latitude) and nature (rocky, saltmarsh) of inter-tidal zone
			● No information about size of population of each species
			● Lack of information about
			  • seasonal variations
			  • diurnal and tidal variations (including which species are flooded and which are exposed)
			● Primary producers, and primary, secondary & tertiary consumers not identified
			● Not easy for a non-specialist to understand as Latin names used for some species
			● Very simplified representation in terms of types of organisms at each trophic level
			● Direction of arrows, arrows usually indicate the flow of energy from primary producers upwards.
				3
				AO3 x3
					AO3 – 3 marks
					3x1 (SEEN) for three limitations of the data identified through critical questioning of the resource.

3	(b)		**Explain how oceans spread pollution around the globe.** **Level 3 (5-6 marks)** Demonstrates **thorough** knowledge and understanding of how oceans spread pollution around the globe (AO1). This will be shown by including **well-developed** ideas about how oceans spread pollution around the globe. **Level 2 (3-4 marks)**	**6** **AO1 x6**	**Indicative content** **AO1 – 6 marks** Knowledge and understanding of how oceans spread pollution around the globe could potentially include: ● Pollution – human activity adding a substance to oceans affecting organisms adversely + at a rate greater than the substance can be rendered harmless ● Wide range of pollutants (solid, liquid, gas)

Question			Answer	Mark	Guidance
			Demonstrates **reasonable** knowledge and understanding of how oceans spread pollution around the globe (AO1). This will be shown by including **developed** ideas about how oceans spread pollution around the globe. **Level 1 (1–2 marks)** Demonstrates **basic** knowledge and understanding of how oceans spread pollution around the globe (AO1). There may be **simple** ideas about how oceans spread pollution around the globe. **0 marks** No response or no response worthy of credit.		originating inland (93% of plastic pollution from just 10 rivers), at coast or out at sea. Transported either naturally (e.g. wind + water) or by human activity (e.g. shipping + pipeline) ● Ocean currents (global, regional + local) distribute pollutants away from their source ● Gyres (systems of circular currents) formed by wind patterns + planet's rotation tend to cause accumulation of pollutants within them e.g. Great Pacific Garbage Patch ● Pollutants not just carried on the surface, but suspended several metres below the surface ● Pollution carried in bodies of migrating sea creatures No credit for information regarding impacts

Question			Answer	Mark	Guidance

4	(a)		**Identify <u>THREE</u> limitations of Fig. 4 as a source of information about trends in global food security from 2005 to 2020.**
			
			The text describes trends in global food security. Possible limitations include:
			● No source therefore reliability / accuracy concerns
			● Lack of information about:
			  • what data has been used and its geographical spread
			● Findings very generalised;
			  • 9 years (2005 to 2014) is not a *long* decline
			  • hunger eradication efforts not specified
			  • unprecedented setback in 2020 not specified
			  • trends better shown in graphical/numerical form.
			● No evidence of criteria directly related to food security (availability, access, utilisation – plus stability of these three over time)
				3
				AO3 x3
					AO3 – 3 marks
					3x1 (SEEN) for three limitations of the data identified through critical questioning of the resource.

4	(b)		**Explain the role of the World Trade Organisation (WTO) in influencing global food security.** **Level 3 (5-6 marks)** Demonstrates **thorough** knowledge and understanding of the role of the WTO in influencing global food **security** (AO1). This will be shown by including **well-developed** ideas about the role of the WTO in influencing global food **security**. **Level 2 (3-4 marks)**	**6** **AO1 x6**	**Indicative content** **AO1 – 6 marks** Knowledge and understanding of the role of the WTO in influencing global food **security** could potentially include: ● WTO = one of the key players that influences the global food system. Set up in 1995. ● Provides a forum for governments to negotiate trade agreements + settle trade disputes ● Promotes trade liberalisation – reducing barriers to trade e.g. tariffs, quotas + subsidies. This applies to the means of

Question			Answer	Mark	Guidance
			Demonstrates **reasonable** knowledge and understanding of the role of the WTO in influencing global food **security** (AO1). This will be shown by including **developed** ideas about the role of the WTO in influencing global food **security**. **Level 1 (1–2 marks)** Demonstrates **basic** knowledge and understanding of the role of the WTO in influencing global food **security** (AO1). There may be **simple** ideas about the role of the WTO in influencing global food **security**. **0 marks** No response or no response worthy of credit.		agricultural production e.g. trade in fertilisers, seeds, equipment as well as trade in agricultural commodities e.g. crops + livestock. ● WTO sees trade as improving food availability where it is scarce ● WTO sees trade as improving economic access to food by creating jobs + raising incomes ● WTO sees regulated trade as a means of stabilising flows of food thereby reducing chance of shocks to the global food system

Question			Answer	Mark	Guidance
5	(a)		**Identify <u>THREE</u> limitations of Fig. 5 as a source of information about destructive plate boundaries.** The diagram shows a destructive plate boundary. Possible limitations include: ● Only refers to oceanic – continental boundaries, oceanic – oceanic also destructive boundaries – misleading title ● Cross section can only offer simplified perspective – block or 3D image more representative ● Diagrammatic limitations • missing labels e.g. for both plates, Benioff zone, lithosphere, asthenosphere, locations of earthquake foci, fold mts, ocean trench • lack of clarity on volcano formation and ocean trenches. ● Lack of information about: ○ speed of plate movements ○ processes along subduction zone ○ rate of rising magma ○ angle of subduction ○ global locations ○ type of magma and lava ○ type of eruption ● Lack of information about: ○ Scale e.g. thickness of plates; depths below surface e.g. where melting occurring ○ Relative densities	**3** **AO3 x3**	**AO3 – 3 marks** 3x1 (SEEN) for three limitations of the data identified through critical questioning of the resource. Do not accept a lack of source/bias as this is a technical diagram.
5	(b)		**Explain how volcanic eruptions at hot spots result in distinctive landforms** **Level 3 (5-6 marks)** Demonstrates **thorough** knowledge and understanding of how volcanic eruptions at hot spots result in distinctive landforms (AO1).	**6** **AO1 x6**	**Indicative content** **AO1 – 6 marks** Knowledge and understanding of how volcanic eruptions at hot spots result in distinctive landforms could potentially include: • Small area of earth's crust where intense heat flow from mantle reaches crust

Question			Answer	Mark	Guidance
			This will be shown by including **well-developed** ideas about how volcanic eruptions at hot spots result in distinctive landforms. **Level 2 (3-4 marks)** Demonstrates **reasonable** knowledge and understanding of how volcanic eruptions at hot spots result in distinctive landforms (AO1). This will be shown by including **developed** ideas about how volcanic eruptions at hot spots result in distinctive landforms **Level 1 (1–2 marks)** Demonstrates **basic** knowledge and understanding of the how volcanic eruptions at hot spots result in distinctive landforms (AO1). There may be **simple** ideas about how volcanic eruptions at hot spots result in distinctive landforms. **0 marks** No response or no response worthy of credit.		• Most common theory suggests they form over exceptionally hot locations in the mantle. The extra-hot rock is more buoyant than its surroundings so rise up through the mantle. • Can erupt through oceanic crust (thinner than continental crust) but hot spots also exist under continents e.g. in Yellowstone NP, Wyoming, USA. • Often associated with intra-plate locations but some located at diverging plate boundaries e.g. Iceland • As an oceanic plate moves across a hot spot, lava accumulates on the ocean floor and can eventually rise above sea level. • Type of lava = basic e.g. basalt (low viscosity) → relatively free flowing → shield volcano. Different types of lava identified e.g. Pahoehoe (ropey smooth) + A'a (rubbly, rough) • Shield volcanoes - gently sloping sides rising from very extensive base. Caldera can form due to substantial emptying of magma chamber e.g. Kilauea, Hawaii + Yellowstone • As the plate continuously moves over the hot spot, trail of progressively older volcanic deposits left. Pacific plate moving on average 10cm/year → Hawaiian chain of islands. • Range of islands in chain - older islands are no longer active volcanoes, youngest undersea volcanos (e.g. Lolhi) continuing to grow – may eventually emerge above sea level – Sea mounts. • Older islands e.g. Kauai, Hawaii eroded and weathered landforms and landscape.

SECTION B – SYNOPTIC QUESTIONS

Question			Answer	Mark	Guidance

6			**Examine how the debates of climate change have been influenced by global management strategies to protect the carbon and water cycles.**
			
			Level 4 (10-12 marks)
			Demonstrates **comprehensive** knowledge and understanding of the debates of climate change and global management strategies protecting the carbon and water cycles (AO1).
			
			Demonstrates **comprehensive** application of knowledge and understanding to provide clear, developed and convincing analysis that is a fully accurate examination of how the debates of climate change have been influenced by global management strategies protecting the carbon and water cycles (AO2).
			
			This will be shown by including **well-developed** ideas about debates of climate change and global management strategies protecting the carbon and water cycles.
			
			There are clear and explicit attempts to make appropriate synoptic links between content from different parts of the course of study.
			
			Level 3 (7-9 marks)
			Demonstrates **thorough** knowledge and understanding of debates of climate change and global management strategies protecting the carbon and water cycles (AO1).
				12
				AO1 x6
				AO2 x6
					Indicative content
					AO1 – 6 marks
					
					Knowledge and understanding of the debate of climate change and global management strategies protecting the carbon and water cycle could potentially include:
					• Debates of climate change
					  • Since 1970s and creation of the IPCC in 1988 + subsequent protocols
					  • UN, EU and national governments all feed into the debate and help shape it
					  • Public image of climate change influenced by media and interest groups
					• Global management strategies to protect the carbon and water cycles
					  • Protecting the carbon cycle – wetland restoration, afforestation, improving agricultural practices + reducing GHG emissions (e.g. international agreements + carbon trading)
					  • Protecting the water cycle – improving forestry techniques, water allocations, drainage basin management
					
					AO2 – 6 marks
					Application of knowledge and understanding to analyse how the debate of climate change has been influenced by global management strategies protecting the carbon and water cycle could potentially include:
					● Positive influence through international agreements e.g. reporting successful meeting of targets e.g. UK COP26 promise of reducing

Question			Answer	Mark	Guidance
			Demonstrates **thorough** application of knowledge and understanding to provide clear and developed analysis that shows accuracy in its examination of how the debates of climate change have been influenced by global management strategies protecting the carbon and water cycles (AO2). This will be shown by including **well-developed** ideas **either** the debates of climate change **or** global management strategies protecting the carbon and water cycles and **developed** ideas for the other focus. There are clear attempts to make synoptic links between the content from different parts of the course of study but these are not always appropriate. **Level 2 (4-6 marks)** Demonstrates **reasonable** knowledge and understanding of debates of climate change and global management strategies protecting the carbon and water cycles (AO1). Demonstrates **reasonable** application of knowledge and understanding to provide sound analysis that shows some accuracy in its examination of how the debates of climate change have been influenced by global management strategies protecting the carbon and water cycles (AO2). This will be shown by including **developed** ideas about **either** the debates of climate change **or** global management strategies protecting the carbon and water cycles and **simple** ideas for the other focus.		greenhouse gas emissions by 68% by 2030, or when UK met Kyoto targets 12 years early fuelling positive debate ● Positive influence through successful wetland restoration projects at a variety of scales e.g. Canadian Prairies + Somerset Levels ● Negative influence through documentaries e.g. Planet Earth 2 - forestry programmes shown as having limited success, fuelling debate to focus on what else needs to be done and action to be taken by individuals ● Positive influence of success of projects e.g. UN's REDD scheme or China's government sponsored afforestation scheme can positively influence the debate showing the progress that has been made, however, that can fuel a further debate of the reduced need for change, reducing impact overall No need for an equal treatment of both water + carbon cycles but omission of one = max L3

Question			Answer	Mark	Guidance
			There are some attempts to make synoptic links between content from different parts of the course of study but these are not always relevant. **Level 1 (1-3 marks)** Demonstrates **basic** knowledge and understanding of debates of climate change and global management strategies protecting the carbon and water cycles (AO1). Demonstrates **basic** application of knowledge and understanding to provide simple analysis that shows limited accuracy in its examination of how the debates of climate change have been influenced by global management strategies protecting the carbon and water cycles (AO2). This will be shown by including **simple** ideas about debates of climate change and global management strategies protecting the carbon and water cycles. There are limited attempts to make synoptic links between content from different parts of the course of study. **0 marks** No response or no response worthy of credit.		

Question			Answer	Mark	Guidance
7			**Examine how patterns of diseases are affected by social inequality.** **Level 4 (10-12 marks)** Demonstrates **comprehensive** knowledge and understanding of patterns of diseases and social inequality (AO1). Demonstrates **comprehensive** application of knowledge and understanding to provide clear, developed and convincing analysis that is a fully accurate examination of how patterns of diseases are affected by social inequality (AO2). This will be shown by including **well-developed** ideas about the relationship between patterns of diseases and social inequality. There are clear and explicit attempts to make appropriate synoptic links between content from different parts of the course of study. **Level 3 (7-9 marks)** Demonstrates **thorough** knowledge and understanding of patterns of diseases and social inequality (AO1). Demonstrates **thorough** application of knowledge and understanding to provide clear and developed analysis that shows accuracy in its examination of how patterns of diseases are affected by social inequality (AO2). This will be shown by including **well-developed** ideas about **either** patterns of diseases **or** social inequality and **developed** ideas for the other focus.	**12** **AO1 x6** **AO2 x6**	**Indicative content** **AO1 – 6 marks** Knowledge and understanding of patterns of diseases and social inequality could potentially include: • Patterns of diseases – global and/or national distributions of two or more particular diseases required. Only one disease discussed = top of L2 max. • Social inequality – measured by quality of housing, education, employment, access to services. Accept at a variety of scales e.g. global, national, intra-national. • Factors that influence people's social inequality – gender, age, health, personal mobility, ethnicity, education, employment status **AO2 – 6 marks** Application of knowledge and understanding to analyse how patterns of diseases are affected by social inequality could potentially include: • Diseases can be classified by social inequality e.g. diseases of affluence (e.g. cancer) and diseases of poverty (e.g. malaria) • Outbreaks of disease linked to social inequality e.g. outbreaks of infectious disease in areas of overcrowding • Higher rates of disease in areas of lower socio-economic status e.g. cancer rates within and between urban areas e.g. Glasgow, Manchester • Role of NGOs in EDCs and LIDCs e.g. investment in research, screening, education and treatment, or investment in hospitals / medicines from national or international organisations e.g. USAID funding polio vaccine days for infants in Ghana administered through local government hospitals

Question			Answer	Mark	Guidance
			There are clear attempts to make synoptic links between the content from different parts of the course of study but these are not always appropriate. **Level 2 (4-6 marks)** Demonstrates **reasonable** knowledge and understanding of patterns of diseases and social inequality (AO1). Demonstrates **reasonable** application of knowledge and understanding to provide sound analysis that shows some accuracy in its examination of how patterns of diseases are affected by social inequality (AO2). This will be shown by including **developed** ideas about **either** patterns of diseases **or** social inequality and **simple** ideas for the other focus. There are some attempts to make synoptic links between content from different parts of the course of study but these are not always relevant. **Level 1 (1-3 marks)** Demonstrates **basic** knowledge and understanding of patterns of diseases and social inequality (AO1). Demonstrates **basic** application of knowledge and understanding to provide simple analysis that shows limited accuracy in its examination of how patterns of diseases are affected by social inequality (AO2). This will be shown by including **simple** ideas about patterns of diseases and social inequality.		• Impacts of gender inequality in some societies (e.g. discrimination against women in access to health care) • Patterns of environmental quality (e.g. inequalities in air pollution in urban areas) affect poor disproportionally more – where they live and where and what their work is • Important point – correlation is not necessarily causation – this a likely L4 indicator

Question			Answer	Mark	Guidance
			There are limited attempts to make synoptic links between content from different parts of the course of study. **0 marks** No response or no response worthy of credit		

Question			Answer	Mark	Guidance

8			**Examine how the globalisation of oceans influences issues relating to <u>EITHER</u> human rights <u>OR</u> territorial integrity.**
			
			Level 4 (10-12 marks)
			Demonstrates **comprehensive** knowledge and understanding of globalisation of oceans and issues relating to either human rights or territorial integrity (AO1).
			
			Demonstrates **comprehensive** application of knowledge and understanding to provide clear, developed and convincing analysis that is a fully accurate examination of how the globalisation of oceans and influences issues relating to either human rights or territorial integrity (AO2).
			
			This will be shown by including **well-developed** ideas about the relationship between oceans and globalisation and issues relating to either human rights or territorial integrity.
			
			There are clear and explicit attempts to make appropriate synoptic links between content from different parts of the course of study.
			
			Level 3 (7-9 marks)
			Demonstrates **thorough** knowledge and understanding of oceans and globalization and issues relating to either human rights or territorial integrity (AO1).
			
			Demonstrates **thorough** application of knowledge and understanding to provide clear and developed analysis that shows accuracy in its examination of
				12
				AO1 x6
				AO2 x6
					Indicative content
					AO1 – 6 marks
					Knowledge and understanding of globalisation of oceans and issues relating either to human rights or territorial integrity could potentially include:
					
					Oceans
					• provide space for transportation of goods and people
					• time-space compression
					  • interconnections increase so significant parts of the global economy work as an integrated production line.
					  • improvements in technology reduce journey times, and increase speed and reliability of delivery
					• globalisation of TNCs means resolution/decisions from another part of the world affect territories and people (human rights) a long way away
					
					Issues relating to human rights
					• basic rights + freedoms to which all human beings are entitled
					• forced labour - NGOs using oceans for transportation of commodities + goods which are produced using forced labour
					• migration of refugees (Aegean); economic + environmental migrants; people traffickers
					
					Issues relating to territorial integrity
					• oceans are spaces where countries challenge each other for access to resources and freedom of movement

Question			Answer	Mark	Guidance
			how the globalisation of oceans influences issues relating to either human rights or territorial integrity (AO2). This will be shown by including **well-developed** ideas about **either** oceans and globalisation **or** issues relating to either human rights or territorial integrity and **developed** ideas for the other focus. There are clear attempts to make synoptic links between the content from different parts of the course of study but these are not always appropriate. **Level 2 (4-6 marks)** Demonstrates **reasonable** knowledge and understanding of oceans and globalization and issues relating to either human rights or territorial integrity (AO1). Demonstrates **reasonable** application of knowledge and understanding to provide sound analysis that shows some accuracy in its examination of how the globalisation of oceans influences issues relating to either human rights or territorial integrity (AO2). This will be shown by including **developed** ideas about **either** oceans and globalisation **or** issues relating to either human rights or territorial integrity and **simple** ideas for the other focus. There are some attempts to make synoptic links between content from different parts of the course of study but these are not always relevant. **Level 1 (1-3 marks)**		• trading blocs influencing loss of territorial integrity through unequal trading relationships • trading blocs influencing strengthening of territorial integrity through encouragement of trade and economic activity **AO2 – 6 marks** Application of knowledge and understanding to analyse how the globalisation of oceans influences issues relating to either human rights or territorial integrity could potentially include: Human Rights • Improvements in technology help NGOs respond more effectively when providing relief – swift arrival of medical supplies and food can reduce impact of human rights issues e.g. to Sierra Leone and Mozambique • Oceans provide spaces for refugee/economic and political. People trafficking. • Piracy – ship crews held for ransom. Claim made that some piracy originates from a loss of traditional fishing due to industrial scale fishing by vessels located far away. • Conflict between NGOs and nation states regarding landing of refugees from boats e.g. Mediterranean. Territorial integrity • Trading blocs, facilitated by ease of shipping between maritime nations, can reduce sovereignty or enhance it; contrast between land-locked countries + those with access to

Question			Answer	Mark	Guidance
			Demonstrates **basic** knowledge and understanding of oceans and globalisation and issues relating to either human rights or territorial integrity (AO1). Demonstrates **basic** application of knowledge and understanding to provide simple analysis that shows limited accuracy in its examination of how the globalisation of oceans influences issues relating to either human rights or territorial integrity (AO2). This will be shown by including **simple** ideas about oceans and globalisation and issues relating to either human rights or territorial integrity. There are limited attempts to make synoptic links between content from different parts of the course of study. **0 marks** No response or no response worthy of credit.		ocean trade + resources e.g. fish, minerals • Coastal ports enable access, both political and military (Russia – Ukraine/ Black Sea warm water ports). • Maritime conflicts - disputed waters and islands that may be of strategic importance e.g. South China Sea; ocean bed exploration over oil and gas rights; port blockades e.g. during annexation of Crimea; modern piracy close to shores, in ports or at drilling rigs • Exclusive economic zones (EEZs), UNCLOS, fisheries, quotas, tensions over sovereignty between EU members. • Conflict between NGOs and nation states regarding landing of refugees from boats e.g. Mediterranean. • International agreements on conservation e.g. Whaling (IWC), Antarctic treaty, CCAMLR.

Question			Answer	Mark	Guidance

9			**Examine how global food production is influenced by patterns of <u>EITHER</u> trade <u>OR</u> migration.**
			
			Level 4 (10-12 marks)
			Demonstrates **comprehensive** knowledge and understanding of global food production and patterns of either trade or migration (AO1).
			
			Demonstrates **comprehensive** application of knowledge and understanding to provide clear, developed and convincing analysis that is a fully accurate examination of how global food production is influenced by patterns of either trade or migration (AO2).
			
			This will be shown by including **well-developed** ideas about the relationship between global food production and patterns of either trade or migration.
			
			There are clear and explicit attempts to make appropriate synoptic links between content from different parts of the course of study.
			
			Level 3 (7-9 marks)
			Demonstrates **thorough** knowledge and understanding of global food production and patterns of either trade or migration (AO1).
			
			Demonstrates **thorough** application of knowledge and understanding to provide clear and developed analysis that shows accuracy in its examination of how global food production is influenced by patterns of either trade or migration (AO2).
				12
				AO1 x6
				AO2 x6
					Indicative content
					AO1 – 6 marks
					Knowledge and understanding of global food production and patterns of either trade or migration could potentially include:
					• Global food production – an interconnected system transforming natural ecosystems through the modification of plants, animals + physical environments. Includes growing, processing, transporting + disposing of waste.
					• Methods vary e.g. intensive ↔ extensive, subsistence ↔ commercial
					• Patterns of trade
					  • Different scales from local to regional to national to international / global
					  • Changing patterns of trade
					• Patterns of migration
					  • Different scales from local to regional to national to international / global
					  • Changing patterns of migration
					
					AO2 – 6 marks
					Application of knowledge and understanding to analyse how global food production is influenced by patterns of either trade or migration could potentially include:
					
					Trade
					• Globalisation → issues such as ↑ demand for food. In turn → growth of agri-businesses dominated by TNCs → large, capital-intensive operations. Land

Question			Answer	Mark	Guidance
			This will be shown by including **well-developed** ideas about **either** global food production **or** patterns of either trade or migration and **developed** ideas for the other focus. There are clear attempts to make synoptic links between the content from different parts of the course of study but these are not always appropriate. **Level 2 (4-6 marks)** Demonstrates **reasonable** knowledge and understanding of global food production and patterns of either trade or migration (AO1). Demonstrates **reasonable** application of knowledge and understanding to provide sound analysis that shows some accuracy in its examination of how global food production is influenced by patterns of either trade or migration (AO2). This will be shown by including **developed** ideas about **either** global food production **or** patterns of either trade or migration and **simple** ideas for the other focus. There are some attempts to make synoptic links between content from different parts of the course of study but these are not always relevant. **Level 1 (1-3 marks)** Demonstrates **basic** knowledge and understanding of global food production and patterns of either trade or migration (AO1). Demonstrates **basic** application of knowledge and		formerly producing for domestic market changed to exports. Use of HYVs + GM products + ↑ use of fertilizers, pesticides • Land grabbing – displacing of indigenous farmers by agribusiness from countries seeking to secure their own food security e.g. UAE, Qatar, China, S. Korea in Sudan • Changes in trading agreements e.g. following Brexit allowing opportunities for different trade deals – may impact on UK agriculture • Changes in tastes + living standards → demand for year-round supply of certain types of food → overcoming seasonality e.g. dairy from NZ to China; asparagus from Peru to UK Migration • Migration led to increased production of labour-intensive crops e.g. seasonal employment of agricultural workers across the EU determined by international rather than local demands • Migration can affect produce available e.g. Eastern European workers returning home affects ability to produce some crops • Migration led to change in demand e.g. more exotic foods now grown in greenhouses in UK

Question			Answer	Mark	Guidance
			understanding to provide simple analysis that shows limited accuracy in its examination of how global food production is influenced by patterns of either trade or migration (AO2). This will be shown by including **simple** ideas about global food production and patterns of either trade or migration. There are limited attempts to make synoptic links between content from different parts of the course of study. **0 marks** No response or no response worthy of credit.		

Question			Answer	Mark	Guidance

10			**Examine how earthquakes could influence human activity in ONE landscape system you have studied.**
			
			Level 4 (10-12 marks)
			Demonstrates **comprehensive** knowledge and understanding of earthquakes and human activity in ONE landscape system (AO1).
			
			Demonstrates **comprehensive** application of knowledge and understanding to provide clear, developed and convincing analysis that is a fully accurate examination of how earthquakes could influence human activity in ONE landscape system (AO2).
			
			This will be shown by including **well-developed** ideas about the relationship between earthquakes and human activity in ONE landscape system.
			
			There are clear and explicit attempts to make appropriate synoptic links between content from different parts of the course of study.
			
			Level 3 (7-9 marks)
			Demonstrates **thorough** knowledge and understanding of earthquakes and human activity in ONE landscape system (AO1).
			
			Demonstrates **thorough** application of knowledge and understanding to provide clear and developed analysis that shows accuracy in its examination of how earthquakes could influence human activity in ONE landscape system (AO2).
				12
				AO1 x6
				AO2 x6
					Indicative content
					AO1 – 6 marks
					Knowledge and understanding of earthquakes and human activity in ONE landscape system could potentially include:
					• Landscape system – one of either coastal, glaciated or dryland landscapes.
					• Earthquake activity – ground shaking + displacement, liquefaction, landslides + avalanches + tsunamis
					• For the chosen landscape system
					  • Human activities may be economic (e.g. farming, settlement, industry, trade, infrastructure e.g. power, water; social (e.g. education, housing),
					  • Influence on human activity varies depending on the nature of the seismic activity.
					  • Management of human activities may result in increasing or reducing the influence of seismic activity.
					
					AO2 – 6 marks
					Application of knowledge and understanding to analyse how earthquakes could influence human activity in ONE landscape system could potentially include:
					• Influences can be positive or negative
					• Coastal landscape system
					  • Could create need for management e.g. harbours closing as liquefaction causing collapse e.g. Kobe 1995
					  • Could damage / destroy human activity e.g. groynes, sea walls overtopped or destroyed in earthquake or tsunami e.g.

Question			Answer	Mark	Guidance
			This will be shown by including **well-developed** ideas about **either** earthquakes **or** human activity in ONE landscape system and **developed** ideas for the other focus. There are clear attempts to make synoptic links between the content from different parts of the course of study but these are not always appropriate. **Level 2 (4-6 marks)** Demonstrates **reasonable** knowledge and understanding of earthquakes and human activity in ONE landscape system (AO1). Demonstrates **reasonable** application of knowledge and understanding to provide sound analysis that shows some accuracy in its examination of how earthquakes could influence human activity in ONE landscape system (AO2). This will be shown by including **developed** ideas about **either** earthquakes **or** human activity in ONE landscape system and **simple** ideas for the other focus. There are some attempts to make synoptic links between content from different parts of the course of study but these are not always relevant. **Level 1 (1-3 marks)** Demonstrates **basic** knowledge and understanding of earthquakes and human activity in ONE landscape system (AO1). Demonstrates **basic** application of knowledge and		Japan 2011 • Impact negatively on tourism • Glaciated landscape system • Could damage / destroy infrastructure e.g. water supply – dams, reservoirs + pipes; HEP; transport • Weight of water held behind dams has created concerns that this will trigger earthquakes e.g. reservoir-induced seismicity • Dryland landscape system • Could damage / destroy infrastructure e.g. water supply – dams, reservoirs + pipes; irrigation schemes; transport • Weight of water held behind dams has created concerns that this will trigger earthquakes e.g. reservoir-induced seismicity NB Bottom of L2 if not one of coastal, glaciated or dryland landscapes

Question			Answer	Mark	Guidance
			understanding to provide simple analysis that shows limited accuracy in its examination of how earthquakes could influence human activity in ONE landscape system (AO2). This will be shown by including **simple** ideas about earthquakes and human activity in ONE landscape system. There are limited attempts to make synoptic links between content from different parts of the course of study. **0 marks** No response or no response worthy of credit.		

SECTION C

Question			Answer	Mark	Guidance
11*			**'ACs and EDCs contribute to similar anthropogenic GHG emissions over different time periods' Evaluate the extent to which you agree with this statement.** **AO1** **Level 4 (7–9 marks)** Demonstrates **comprehensive** knowledge and understanding of AC and EDC anthropogenic greenhouse gas emissions. **Level 3 (5–6 marks)** Demonstrates **thorough** knowledge and understanding of AC and EDC anthropogenic greenhouse gas emissions. **Level 2 (3–4 marks)** Demonstrates **reasonable** knowledge and understanding of AC and EDC anthropogenic greenhouse gas emissions. **Level 1 (1–2 marks)** Demonstrates **basic** knowledge and understanding of AC and EDC anthropogenic greenhouse gas emissions. **0 marks** No response or no response worthy of credit. **AO2** **Level 4 (19–24 marks)** Demonstrates **comprehensive** application of knowledge and understanding to provide a clear, developed and convincing analysis that is fully	**33** **AO1 x9** **AO2 x24**	**Indicative content** **AO1 – 9 marks** Demonstrating knowledge and understanding of AC and EDC anthropogenic GHG gas emissions could potentially include: ● Contribution of anthropogenic GHGs e.g. energy mix for country, emissions from agriculture, mining, transport, electricity generation, secondary industries, tertiary energy demands e.g. computing, domestic heating + cooking ● Change of contributions over time ● Comparison of ACs and EDCs – similarities and differences **AO2 – 24 marks** Application of knowledge and understanding to analyse and evaluate the extent to which ACs and EDCs contribute to similar anthropogenic GHG emissions over different time periods could potentially include: • GHG emissions depend on factors such as, the size of country's population, rate of industrialisation, use of non-renewable/renewable. • China's emissions are significantly higher due to rapid industrialisation, larger population and high rates of urbanisation in past 40 years.UK also had considerable increase. • Both countries ↑ their GHG emissions rapidly, UK almost quadrupling emissions in 50 years (1751-1800), however China increased a thousand-fold in 60 years (1899-1950), and

Question			Answer	Mark	Guidance
			accurate in its evaluation as to the extent to which ACs and EDCs contribute similar anthropogenic GHG emissions over different time periods. Demonstrates **comprehensive** application of knowledge and understanding to provide a detailed and substantiated evaluation that offers secure judgements leading to rational conclusions that are evidence based as to the extent to which ACs and EDCs contribute similar anthropogenic GHG emissions over different time periods. Relevant concepts are authoritatively discussed. **Level 3 (13–18 marks)** Demonstrates **thorough** application of knowledge and understanding to provide a clear and developed analysis that shows accuracy in its evaluation as to the extent to which ACs and EDCs contribute similar anthropogenic GHG emissions over different time periods. Demonstrates **thorough** application of knowledge and understanding to provide a detailed evaluation that offers generally secure judgements, with some link between rational conclusions as to the extent to which ACs and EDCs contribute similar anthropogenic GHG emissions over different time periods. Relevant concepts are discussed but this may lack some authority. **Level 2 (7–12 marks)**		continued to increase dramatically – emissions increase widely different • UK GHG emission currently ↓ (c. 29% over last decade) as government, businesses, organisations + individuals seek reductions in carbon footprint. However, China from 2000-2014 more than doubled its GHG emissions. Although emissions are slowing (major investments in solar + wind) continuing heavy reliance on coal (2/3rd of China's energy) + land-use e.g. rice farming • Key evaluative point – may indicate Level 4 response – many ACs reduced domestic manufacturing when secondary sector shifted off shore. Domestic GHG emissions naturally fell as a consequence. Imported goods from EDCs therefore represent GHG emissions but these are generated overseas. • Key evaluative point – GHG emissions per capita a more secure comparative tool. 2022 China c. 9.4 tonnes CO_2/person UK c.6.3/USA 17.9/Indonesia 4.5

Question			Answer	Mark	Guidance
			Demonstrates **reasonable** application of knowledge and understanding to provide a sound analysis that shows some accuracy in its evaluation as to the extent to which ACs and EDCs contribute similar anthropogenic GHG emissions over different time periods. Demonstrates **reasonable** application of knowledge and understanding to provide a sound evaluation that offers generalised judgements and conclusions, with limited use of evidence as to the extent to which ACs and EDCs contribute similar anthropogenic GHG emissions over different time periods. Concepts are discussed but their use lacks precision. **Level 1 (1–6 marks)** Demonstrates **basic** application of knowledge and understanding to provide a simple analysis that shows limited accuracy in its evaluation as to the extent to which ACs and EDCs contribute similar anthropogenic GHG emissions over different time periods. Demonstrates **basic** application of knowledge and understanding to provide an un-supported evaluation that offers simple conclusions as to the extent to which ACs and EDCs contribute similar anthropogenic GHG emissions over different time periods. Concepts are not discussed or are so inaccurately. **0 marks**		

Question			Answer	Mark	Guidance
			No response or no response worthy of credit. **Quality of extended response Level 4** There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated. **Level 3** There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence. **Level 2** The information has some relevance and is presented with limited structure. The information is supported by limited evidence. **Level 1** The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.		

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Question			Answer	Mark	Guidance
12*			**Evaluate the relative strengths of different types of physical evidence that suggest the world has become warmer.** **AO1** **Level 4 (7–9 marks)** Demonstrates **comprehensive** knowledge and understanding of evidence that the world has warmed. **Level 3 (5–6 marks)** Demonstrates **thorough** knowledge and understanding of evidence that the world has warmed. **Level 2 (3–4 marks)** Demonstrates **reasonable** knowledge and understanding of evidence that the world has warmed. **Level 1 (1–2 marks)** Demonstrates **basic** knowledge and understanding of evidence that the world has warmed. **0 marks** No response or no response worthy of credit. **AO2** **Level 4 (19–24 marks)** Demonstrates **comprehensive** application of knowledge and understanding to provide a clear, developed and convincing analysis that is a fully accurate evaluation of the relative strengths of different types of physical evidence that suggest the world has warmed.	**33** **AO1 x9** **AO2 x24**	**Indicative content** **AO1 – 9 marks** Demonstrating knowledge and understanding of different types of evidence that suggest the world has warmed could potentially include: ● Increases in global temperature – records since 1800, (reference to surface, atmospheric and ocean temperatures) ● Shrinking glaciers – both mass balance and areal extent have been decreasing. Rate of decrease has been increasing. ● Rising sea level – since 1900 average rise 1-2.5mm/yr, recent records show increase to 3mm/yr. ● Decreasing sea ice – Arctic declined markedly since 1979 both in areal extent and ice thickness, Antarctic despite some record minimum extents of sea ice, large year on year variability so no clear long-term trend. ● Increasing atmospheric water vapour – a GHG. Levels directly related to temperature + evaporation rates ● Snow cover records showing a decline in spring snow cover of 2% per decade since 1966 in the northern hemisphere ● Pollen analysis e.g. in lakebed sediments; analysis of relative proportions of different species of trees indicates changing climates ● Dendro-chronology – analysis indicates growth rates which relate to temperatures **Answers may consider any time scale.**

Question			Answer	Mark	Guidance
			Demonstrates **comprehensive** application of knowledge and understanding to provide a detailed and substantiated evaluation that offers secure judgements leading to rational conclusions that are evidence based as to the relative strengths of different types of physical evidence that suggest the world has warmed. Relevant concepts are authoritatively discussed. **Level 3 (13–18 marks)** Demonstrates **thorough** application of knowledge and understanding to provide a clear and developed analysis that shows accuracy in its evaluation of the relative strengths of different types of physical evidence that suggest the world has warmed. . Demonstrates **thorough** application of knowledge and understanding to provide a detailed evaluation that offers generally secure judgements, with some link between rational conclusions as to the relative strengths of different types of physical evidence that suggest the world has warmed. Relevant concepts are discussed but this may lack some authority. **Level 2 (7–12 marks)** Demonstrates **reasonable** application of knowledge and understanding to provide a sound analysis that shows some accuracy in its evaluation of the relative strengths of different types of physical evidence that suggest the world has warmed.		**AO2 – 24 marks** Application of knowledge and understanding to analyse and evaluate the relative strengths of different types of physical evidence that suggest the world has become warmer could potentially include: • Expect wide range of evaluation of 'relative strengths' e.g. temporally, spatially, public acceptance etc • Valley glaciers only affect a small spatial area; however, the decrease has been undisputable and clearly seen in photographic evidence • Temperature records are very strong evidence as records accurately show over 200 years of change. • Rising sea levels - recent rises have increased, and there is clear evidence for over 100 years. However, evidence only felt by coastal communities and low-lying lands, which limits public awareness. Also, rates of rise have been very low, which may reduce the strength as the public are unlikely to notice unless in very low-lying areas • Sea ice change is dramatic, however as very few populations are affected by this, it is not perceived to be strong evidence by many – Arctic is too far away • Snow cover has been more accepted in recent years with increased demand for ski holidays which have been dramatically impacted by global warming (despite the low (2%) decrease). • Extreme weather events – increasing number of events e.g. tropical storms, heatwaves.

Question			Answer	Mark	Guidance
			. Demonstrates **reasonable** application of knowledge and understanding to provide a sound evaluation that offers generalised judgements and conclusions, with limited use of evidence as to the relative strengths different types of physical evidence that suggest the world has warmed. Concepts are discussed but their use lacks precision. **Level 1 (1–6 marks)** Demonstrates **basic** application of knowledge and understanding to provide a simple analysis that shows limited accuracy in its evaluation of the relative strengths of different types of physical evidence that suggest the world has warmed. . Demonstrates **basic** application of knowledge and understanding to provide an un-supported evaluation that offers simple conclusions as to the relative strengths different types of physical evidence that suggest the world has warmed. Concepts are not discussed or are so inaccurately. **0 marks** No response or no response worthy of credit. **Quality of extended response Level 4**		Expect a broad discussion of a range of factors. Correlation does not = causation.

Question			Answer	Mark	Guidance
			There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated. **Level 3** There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence. **Level 2** The information has some relevance and is presented with limited structure. The information is supported by limited evidence. **Level 1** The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.		

Question			Answer	Mark	Guidance
13*			**Evaluate the extent to which cultural factors increase the risk of non-communicable disease.** **AO1** **Level 4 (7–9 marks)** Demonstrates **comprehensive** knowledge and understanding of factors increasing the risk of non-communicable disease. **Level 3 (5–6 marks)** Demonstrates **thorough** knowledge and understanding of factors increasing the risk of non-communicable disease. **Level 2 (3–4 marks)** Demonstrates **reasonable** knowledge and understanding of factors increasing the risk of non-communicable disease. **Level 1 (1–2 marks)** Demonstrates **basic** knowledge and understanding of factors increasing the risk of non-communicable disease. **0 marks** No response or no response worthy of credit. **AO2** **Level 4 (19–24 marks)** Demonstrates **comprehensive** application of knowledge and understanding to provide a clear, developed and convincing analysis that is fully accurate in its evaluation as to the extent to which cultural factors increase the risk of non-communicable disease.	**33** **AO1 x9** **AO2 x24**	**Indicative content** **AO1 – 9 marks** Demonstrating knowledge and understanding of factors that increase the risk of non-communicable disease could potentially include: ● Non-communicable disease e.g. cancers, CVD, diabetes, Alzheimer's / dementia ● Cultural factors – many and varied across every society. Best to think of them as 'influences' on behaviours, perceptions, values, beliefs. Examples include beliefs about causes of disease; attitudes towards different types of health care e.g. traditional or modern; attitudes towards diet; lifestyle choices e.g. smoking / exercise / tanning ● Other factors affecting risks of non-communicable disease include, economic (e.g. availability and distribution of wealth; ability of governments to fund health care); political (e.g. attitudes towards provision of health care and health education; regulations); environmental (e.g. air quality → lung cancers; **AO2 – 24 marks** Application of knowledge and understanding to analyse and evaluate the extent to which cultural factors ***increase the risk*** of non-communicable disease could potentially include: • Responses likely largely to agree that cultural factors play a significant role in increasing the risk of non-communicable diseases. But higher-level responses will acknowledge that cultural factors can reduce risk. Also, that

Question			Answer	Mark	Guidance
			Demonstrates **comprehensive** application of knowledge and understanding to provide a detailed and substantiated evaluation that offers secure judgements leading to rational conclusions that are evidence based as to the extent to which cultural factors increase the risk of non-communicable disease. Relevant concepts are authoritatively discussed. **Level 3 (13–18 marks)** Demonstrates **thorough** application of knowledge and understanding to provide a clear and developed analysis that shows accuracy in its evaluation as to the extent to which cultural factors increase the risk of non-communicable disease. Demonstrates **thorough** application of knowledge and understanding to provide a detailed evaluation that offers generally secure judgements, with some link between rational conclusions as to the extent to which cultural factors increase the risk of non-communicable disease. Relevant concepts are discussed but this may lack some authority. **Level 2 (7–12 marks)** Demonstrates **reasonable** application of knowledge and understanding to provide a sound analysis that shows some accuracy in its evaluation as to the extent to which cultural factors increase the risk of non-communicable disease		other factors can have important roles. Cultural factors increasing risks • Diet - ↑ wealth → preference for dairy + meat → ↑ in some cancers e.g. bowel, CVDs • Diet - ↑ wealth → more 'fast food' + ready prepared meals which tend to include more salt / sugar for example → ↑ in n-c disease such as diabetes, high blood pressure • Lifestyle e.g. smoking – where a widespread acceptance → ↑ in lung cancers + CVDs; alcohol consumption - where a widespread acceptance → ↑ in oral, oesophageal + liver cancers; sunbathing + artificial tanning → skin cancers; • Lifestyle e.g. attitudes towards banned substances e.g. heroin, amphetamine, cannabis, ketamine, → various diseases e.g. liver, kidney, heart disease • Attitudes / perceptions – traditionally men less likely to seek medical advice / help so disease can be more of an impact e.g. cancers more advanced before treatment Cultural factors decreasing risks • Attitudes – with changes in these to the factors above, risks decrease. • Attitudes – encouraging evaluation would come from recognising that deprivation increases the likelihood of contracting NCDs. This applies globally (ACs – EDCs – LIDCs) as well as regionally within a country and at more local scales e.g. within an urban area.

Question			Answer	Mark	Guidance
			Demonstrates **reasonable** application of knowledge and understanding to provide a sound evaluation that offers generalised judgements and conclusions, with limited use of evidence as to the extent to which cultural factors increase the risk of non-communicable disease. Concepts are discussed but their use lacks precision. **Level 1 (1–6 marks)** Demonstrates **basic** application of knowledge and understanding to provide a simple analysis that shows limited accuracy in its evaluation as to the extent to which cultural factors increase the risk of non-communicable disease. Demonstrates **basic** application of knowledge and understanding to provide an un-supported evaluation that offers simple conclusions as to the extent to which cultural factors increase the risk of non-communicable disease. Concepts are not discussed or are so inaccurately. **0 marks** No response or no response worthy of credit. **Quality of extended response Level 4** There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated. **Level 3**		Role of other factors • Political – direct intervention e.g. legislation controlling use of sun-beds (age limits); taxing tobacco + alcohol to control use; investments in medical technology e.g. screening programmes (breast + bowel); research programmes; • Political – indirect intervention e.g. education programmes + health campaigns; support of grass root sport + leisure facilities • Environmental – direct intervention usually from government to reduce air pollution for example e.g. congestion zone • Economic – linked to government + individuals in terms of attitudes. Important to note that lifestyle 'choices' are strongly influenced by socio-economic status and constrained by poverty, therefore not choices. LIDC governments have very limited resources, poor families likewise. A response focussed on communicable disease is level 1 in AO1 and AO2.

Question			Answer	Mark	Guidance
			There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence. **Level 2** The information has some relevance and is presented with limited structure. The information is supported by limited evidence. **Level 1** The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.		

Question			Answer	Mark	Guidance
14*			**'Mitigation strategies to combat global pandemics will always be compromised by physical barriers.' Discuss.** **AO1** **Level 4 (7–9 marks)** Demonstrates **comprehensive** knowledge and understanding of mitigation strategies to combat global pandemics and physical barriers. **Level 3 (5–6 marks)** Demonstrates **thorough** knowledge and understanding of mitigation strategies to combat global pandemics and physical barriers. **Level 2 (3–4 marks)** Demonstrates **reasonable** knowledge and understanding of mitigation strategies to combat global pandemics and physical barriers. **Level 1 (1–2 marks)** Demonstrates **basic** knowledge and understanding of mitigation strategies to combat global pandemics and physical barriers. **0 marks** No response or no response worthy of credit. **AO2** **Level 4 (19–24 marks)** Demonstrates **comprehensive** application of knowledge and understanding to provide a clear, developed and convincing analysis that is fully accurate in its discussion of how mitigation strategies	**33** **AO1 x9** **AO2 x24**	**Indicative content** **AO1 – 9 marks** Demonstrating knowledge and understanding of mitigation strategies to combat global pandemics and physical barriers could potentially include: ● Mitigation strategies to combat global pandemics – could be preventive medicine (e.g. vaccines), treatment, screening, availability and funding of treatment, education programmes ● Physical barriers e.g. mountains + inaccessible remote locations, oceans, deserts, excess water i.e. floods, natural hazards ● Pandemic – an epidemic that has spread over several countries or continents usually affecting large number of people (CDC) e.g. Zika, Ebola, Swine flu, Covid 19, Sars/Mers, HIV/Aids. **AO2 – 24 marks** Application of knowledge and understanding to analyse and evaluate the extent to which mitigation strategies to combat global pandemics will always be compromised by physical barriers could potentially include: • Responses likely to agree in general with the question's assertion. Analysis + evaluation likely to make points regarding AC – EDC – LIDC contrasts in terms of resources to overcome physical barriers. Also, that remoteness can be an advantage – reduces chance of disease spread. • Recent e.g. of C19 showed that human

Question			Answer	Mark	Guidance
			to combat global pandemics will always be compromised by physical barriers. Demonstrates **comprehensive** application of knowledge and understanding to provide a detailed and substantiated evaluation that offers secure judgements leading to rational conclusions that are evidence based as to the extent to which mitigation strategies to combat global pandemics will always be compromised by physical barriers. Relevant concepts are authoritatively discussed. **Level 3 (13–18 marks)** Demonstrates **thorough** application of knowledge and understanding to provide a clear and developed analysis that shows accuracy in its discussion of how mitigation strategies to combat global pandemics will always be compromised by physical barriers. Demonstrates **thorough** application of knowledge and understanding to provide a detailed evaluation that offers generally secure judgements, with some link between rational conclusions as to the extent to which mitigation strategies to combat global pandemics will always be compromised by physical barriers. Relevant concepts are discussed but this may lack some authority. **Level 2 (7–12 marks)** Demonstrates **reasonable** application of knowledge and understanding to provide a sound analysis that shows some accuracy in its discussion of how		activity to reinforce physical barriers i.e. suspension of travel between locations, can be successful. • However, same e.g. showed that even though physical barriers were not an obstacle (i.e. use of air freight), distributing vaccines to EDCs and LIDCs from ACs was more an issue of human factors compromising mitigation. • Globalisation reduced physical barriers with increased trade and industry in remote areas e.g. Amazonian rainforest which has given local tribes greater exposure to western mitigation practices, increased access to education which can reduce impact of disease. • Relief - steep slopes + high altitudes create challenging conditions for access. Infrastructural improvements too costly for governments e.g. in rural mountainous regions of Kashmir + Nepal. While communities remain small and governments lack funds, this barrier likely to remain insurmountable • Treating cholera outbreaks after natural disasters compromised by additional needs of local community after destruction of hazard e.g. Gorkha, Nepal earthquake (2015), or Haiti earthquake (2010) healthcare administration limited - so many other needs e.g. housing, search and rescue • With greater education in the isolated population, improved awareness of diet, mitigation strategies could reduce impact of diseases such as cholera e.g. being able to

Question			Answer	Mark	Guidance
			mitigation strategies to combat global pandemics will always be compromised by physical barriers. Demonstrates **reasonable** application of knowledge and understanding to provide a sound evaluation that offers generalised judgements and conclusions, with limited use of evidence as to the extent to which mitigation strategies to combat global pandemics will always be compromised by physical barriers. Concepts are discussed but their use lacks precision. **Level 1 (1–6 marks)** Demonstrates **basic** application of knowledge and understanding to provide a simple analysis that shows limited accuracy in its discussion of how mitigation strategies to combat global pandemics will always be compromised by physical barriers. Demonstrates **basic** application of knowledge and understanding to provide an un-supported evaluation that offers simple conclusions as to the extent to which mitigation strategies to combat global pandemics will always be compromised by physical barriers. Concepts are not discussed or are so inaccurately. **0 marks** No response or no response worthy of credit. **Quality of extended response Level 4**		administer salt and sugar solution could save lives, however access to clean water essential + not necessarily available in remote areas struggling with physical barriers • Likelihood of remote rural communities being given better access to screening and treatment facilities remains an economic issue for governments with physical barriers to overcome. Low population densities make investments hard to justify compromising healthcare

Question			Answer	Mark	Guidance
			There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated. **Level 3** There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence. **Level 2** The information has some relevance and is presented with limited structure. The information is supported by limited evidence. **Level 1** The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.		

Question			Answer	Mark	Guidance

15*			**'The impacts of climate change on oceans create greater threats for tropical island communities than Arctic indigenous peoples.' To what extent do you agree?**
			
			AO1
			Level 4 (7–9 marks)
			Demonstrates **comprehensive** knowledge and understanding of impacts of climate change on oceans and the effects of threats for tropical island communities and Arctic indigenous peoples.
			
			Level 3 (5–6 marks)
			Demonstrates **thorough** knowledge and understanding of impacts of climate change on oceans and the effects of threats for tropical island communities and Arctic indigenous peoples.
			
			Level 2 (3–4 marks)
			Demonstrates **reasonable** knowledge and understanding of impacts of climate change on oceans and the effects of threats for tropical island communities and Arctic indigenous peoples.
			
			Level 1 (1–2 marks)
			Demonstrates **basic** knowledge and understanding of impacts of climate change on oceans and the effects of threats for tropical island communities and Arctic indigenous peoples.
			
			0 marks
			No response or no response worthy of credit.
			
			AO2
			Level 4 (19–24 marks)
				33
				AO1 x9
				AO2 x24
					Indicative content
					AO1 – 9 marks
					Demonstrating knowledge and understanding of impacts of climate change on oceans and the effects of threats for tropical island communities and Arctic indigenous peoples could potentially include:
					• The impacts of climate change on oceans e.g. ocean acidification, warming oceans, coral reefs, recent sea level change reduction in sea ice.
					• Tropical island communities
					  • threats e.g. changes in diet, changes in employment as tourism reduces, fish stocks reduce, culture at risk, groundwater sources + soils polluted by saline water
					• Arctic indigenous peoples
					  • Threats e.g. decline in sea ice threatening traditional food sources e.g. mussels, seals, whales, reindeer + caribou; increasing wildfires threaten caribou and salmon breeding locations risking food sources and culture as well as infrastructure, travel routes changing as sea ice no longer thick enough, reindeer herders seeing diminishing stocks and risk of livelihoods
					
					AO2 – 24 marks
					Application of knowledge and understanding to analyse and evaluate the extent to which the impacts of climate change on oceans create threats for

Question			Answer	Mark	Guidance
			Demonstrates **comprehensive** application of knowledge and understanding to provide a clear, developed and convincing analysis that is fully accurate in discussing the extent to which the impacts of climate change on oceans create greater threats for tropical island communities and Arctic indigenous peoples. Demonstrates **comprehensive** application of knowledge and understanding to provide a detailed and substantiated evaluation that offers secure judgements leading to rational conclusions that are evidence based as to the extent to which the impacts of climate change on oceans create threats for tropical island communities and Arctic indigenous peoples. Relevant concepts are authoritatively discussed. **Level 3 (13–18 marks)** Demonstrates **thorough** application of knowledge and understanding to provide a clear and developed analysis that shows accuracy in discussing the extent to which the impacts of climate change on oceans create threats for tropical island communities and Arctic indigenous peoples. Demonstrates **thorough** application of knowledge and understanding to provide a detailed evaluation that offers generally secure judgements, with some link between rational conclusions as to the extent to which the impacts of climate change on oceans create threats for tropical island communities and Arctic indigenous peoples.		tropical island communities and Arctic indigenous peoples could potentially include: • Tropical island communities likely to be based within Indian Ocean or Pacific Ocean or Caribbean Sea • Evaluation will be determined by case study exemplification. Expect greater and fewer to be used in terms of scale, time, populations affected, cost • Local effects in Maldives catastrophic with 70% employed in services and tourism under threat from rising sea level threatening 30% of GDP. Challenging for local government to manage especially with many future leaders emigrating for better employment opportunities whereas the thinning and depletion of Arctic Sea ice is potentially irreversible now • Local melting exposing/increasing accessibility to mining enabling future developments for Arctic indigenous peoples posing great threat to environment on a larger scale than the flooding faced by the Maldives • Decreasing sea ice → more access for shipping + mineral exploitation → ↑ threat to local species e.g. noise and water pollution. 3 species of moth and several other land invertebrates will be lost if Maldives flood completely • In the Arctic local culture, food supply and employment opportunities are being threatened as populations of caribou, reindeer, seal, polar bear and narwhal are dwindling in comparison Maldivian culture

Question			Answer	Mark	Guidance
			Relevant concepts are discussed but this may lack some authority. **Level 2 (7–12 marks)** Demonstrates **reasonable** application of knowledge and understanding to provide a sound analysis that shows some accuracy in discussing the extent to which the impacts of climate change on oceans create threats for tropical island communities and Arctic indigenous peoples. Demonstrates **reasonable** application of knowledge and understanding to provide a sound evaluation that offers generalised judgements and conclusions, with limited use of evidence as to the extent to which the impacts of climate change on oceans create threats for tropical island communities and Arctic indigenous peoples. Concepts are discussed but their use lacks precision. **Level 1 (1–6 marks)** Demonstrates **basic** application of knowledge and understanding to provide a simple analysis that shows limited accuracy in discussing the extent to which the impacts of climate change on oceans create threats for island communities and Arctic communities. Demonstrates **basic** application of knowledge and understanding to provide an un-supported evaluation that offers simple conclusions as to the extent to which the impacts of climate change on oceans		maybe preserved in another local as people flee flooding and lack of drinking water Some candidates might evaluate extent of threats by comparing with opportunities – accept, but answer must stay focused on comparison in the question

Question			Answer	Mark	Guidance
			create threats for island communities and Arctic communities. Concepts are not discussed or are so inaccurately. **0 marks** No response or no response worthy of credit. **Quality of extended response Level 4** There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated. **Level 3** There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence. **Level 2** The information has some relevance and is presented with limited structure. The information is supported by limited evidence. **Level 1** The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.		

Question			Answer	Mark	Guidance
16*			**'The use of ocean resources will never be sustainable.' How far do you agree?** **AO1** **Level 4 (7–9 marks)** Demonstrates **comprehensive** knowledge and understanding of the use of ocean resources and sustainability. **Level 3 (5–6 marks)** Demonstrates **thorough** knowledge and understanding of the use of ocean resources and sustainability. **Level 2 (3–4 marks)** Demonstrates **reasonable** knowledge and understanding of the use of ocean resources and sustainability. **Level 1 (1–2 marks)** Demonstrates **basic** knowledge and understanding of impacts of the use of ocean resources and sustainability. **0 marks** No response or no response worthy of credit. **AO2** **Level 4 (19–24 marks)** Demonstrates **comprehensive** application of knowledge and understanding to provide a clear, developed and convincing analysis that is a fully accurate evaluation of the statement 'The use of ocean resources will never be sustainable'..	**33** **AO1 x9** **AO2 x24**	**Indicative content** **AO1 – 9 marks** Demonstrating knowledge and understanding of the use of ocean resources and sustainability could potentially include: ● Renewable and non-renewable ocean resources ● Biological, energy and mineral resources, including sea-bed minerals ● Sustainability – 'meeting the needs of the present without compromising the ability of future generations to meet their own needs' – but this is a contested concept **AO2 – 24 marks** Application of knowledge and understanding to analyse and evaluate the extent to which the use of ocean resources will never be sustainable could potentially include: • Key issue is one of policing use of oceans – difficult enough in near-shore territorial waters but very difficult on high seas. Potential in use of satellites but issue of who monitors and funds this. • Frameworks such as the United Nations Convention on the Law of the Sea (UNCLOS) and marine reserves contribute to sustainability of the use of ocean resources. Some nations not signatories e.g. USA • Controlled extraction e.g. krill – despite CCAMLR sustainable approach, sustainable extraction of krill can be challenging – difficulty of monitoring.

Question			Answer	Mark	Guidance
			Demonstrates **comprehensive** application of knowledge and understanding to provide a detailed and substantiated evaluation that offers secure judgements leading to rational conclusions that are evidence based as to the extent to which the use of ocean resources will never be sustainable. Relevant concepts are authoritatively discussed. **Level 3 (13–18 marks)** Demonstrates **thorough** application of knowledge and understanding to provide a clear and developed analysis that shows accuracy in its evaluation of the statement 'The use of ocean resources will never be sustainable'. Demonstrates **thorough** application of knowledge and understanding to provide a detailed evaluation that offers generally secure judgements, with some link between rational conclusions as to the extent to which the use of ocean resources will never be sustainable. Relevant concepts are discussed but this may lack some authority. **Level 2 (7–12 marks)** Demonstrates **reasonable** application of knowledge and understanding to provide a sound analysis that shows some accuracy in its evaluation of the statement 'The use of ocean resources will never be sustainable'. Demonstrates **reasonable** application of knowledge and understanding to provide a sound evaluation that		• Designation of Marine Conservation Zones – 91 around England as part of a Blue Belt e.g. Dart estuary, Cumbria coast + Runswick Bay • Marine Protected Areas (MPAs) e.g. Ross Sea, Pitcairn Islands, Tristan da Cunha – but only c. 8% of oceans has some level of protection and in some MPAs harmful activities still allowed e.g. fishing. MPAs tend to be isolated regions of the oceans. • Rate of extraction of oil and gas can be sustainable as provides both socially and economically for local populations as well as providing local environments with artificial reefs increasing local populations of some species, sustainability cannot be guaranteed because of the unpredictability of oil spills. These resources are also finite so eventually extraction rates will increase so it won't be sustainable. • Renewable energy e.g. tidal power in France creating 500GWh annually can be sustainable if installation is not a waste of resources – this was built in 1962, so reusing / recycling in installation probably limited • Sea-floor mining of REEs is not sustainable politically since is it dominated by China, it is also unsustainable environmentally especially as so little of the deep ocean has been researched, tailings also create cloudy or turbid water – unsustainability likely to grow as technology makes this more accessible in future • Examples of success – ban on whaling appears to be having a beneficial impact of

Question			Answer	Mark	Guidance
			offers generalised judgements and conclusions, with limited use of evidence as to the extent to which the use of ocean resources will never be sustainable. Concepts are discussed but their use lacks precision. **Level 1 (1–6 marks)** Demonstrates **basic** application of knowledge and understanding to provide a simple analysis that shows limited accuracy in its evaluation of the statement 'The use of ocean resources will never be sustainable' Demonstrates **basic** application of knowledge and understanding to provide an un-supported evaluation that offers simple conclusions as to the extent to which the use of ocean resources will never be sustainable. Concepts are not discussed or are so inaccurately. **0 marks** No response or no response worthy of credit. **Quality of extended response Level 4** There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated. **Level 3** There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.		whale numbers e.g. recent counts of blue whales in South Atlantic also fin + humpback species in some regions

Question			Answer	Mark	Guidance
			Level 2 The information has some relevance and is presented with limited structure. The information is supported by limited evidence. **Level 1** The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.		

Question			Answer	Mark	Guidance
17*			**'Physical threats to food security in dryland areas are greater than human threats.' Discuss.** **AO1** **Level 4 (7–9 marks)** Demonstrates **comprehensive** knowledge and understanding of threats to food security in dryland areas. **Level 3 (5–6 marks)** Demonstrates **thorough** knowledge and understanding of threats to food security in dryland areas. **Level 2 (3–4 marks)** Demonstrates **reasonable** knowledge and understanding of threats to food security in dryland areas. **Level 1 (1–2 marks)** Demonstrates **basic** knowledge and understanding of threats to food security in dryland areas. **0 marks** No response or no response worthy of credit. **AO2** **Level 4 (19–24 marks)** Demonstrates **comprehensive** application of knowledge and understanding to provide a clear, developed and convincing analysis that is a fully accurate discussion of physical and human threats to food security in dryland areas.	**33** **AO1 x9** **AO2 x24**	**Indicative content** **AO1 – 9 marks** Demonstrating knowledge and understanding of threats to food security in dryland areas could potentially include: ● Threats to food security – anything that puts availability and access to food at risk leading to ultimately malnutrition and starvation ● Physical threats e.g. ecosystem, climate, hydrology ● Human threats e.g. population change, land grabbing, climate change, overcultivation and overgrazing. ● Dryland areas – places with an aridity index less than 0.65 (UNEP) **AO2 – 24 marks** Application of knowledge and understanding to analyse and evaluate the extent to which physical threats to food security in dryland areas are greater than human threats could potentially include: • Evaluation could include: socially (changes in behaviours / farming practices to limit threats), environmentally (drought that cannot be managed locally), politically (changes in regulations or political encouragement e.g. anti natal policies), economically (e.g. cost), ease of management / mitigation, duration of threat, spatial variation in threat etc. • Appropriate technology – can manage many physical threats locally e.g. re-greening projects to reduce exposure to high winds, infertile soils and changes in surface albedo

Question			Answer	Mark	Guidance
			Demonstrates **comprehensive** application of knowledge and understanding to provide a detailed and substantiated evaluation that offers secure judgements leading to rational conclusions that are evidence based as to the extent to which physical threats to food security in dryland areas are greater than human threats. Relevant concepts are authoritatively discussed. **Level 3 (13–18 marks)** Demonstrates **thorough** application of knowledge and understanding to provide a clear and developed analysis that shows accuracy in its discussion of physical and human threats to food security in dryland areas. Demonstrates **thorough** application of knowledge and understanding to provide a detailed evaluation that offers generally secure judgements, with some link between rational conclusions as to the extent to which physical threats to food security in dryland areas are greater than human threats. Relevant concepts are discussed but this may lack some authority. **Level 2 (7–12 marks)** Demonstrates **reasonable** application of knowledge and understanding to provide a sound analysis that shows some accuracy in its discussion of physical and human threats to food security in dryland areas. Demonstrates **reasonable** application of knowledge and understanding to provide a sound evaluation that		and contour stone barriers or education e.g. Sahel • Political responses e.g. land grabbing agreements (Sudan, Ethiopia, UAE, Saudi, China, Kuwait). • Political responses e.g. instability in governments: rise of insurgencies (Mali, Northern Nigeria) • Political responses e.g. land used for export crops as opposed to domestic food (Avocadoes instead of Maize). • Funding – with money many threats can be reduced e.g. simple irrigation systems, access to contraception or afforestation projects • Climate change – particularly in LIDCs e.g. physical threats such as desertification, are exacerbated by climate change which cannot be reduced locally – international efforts are required to reduce global warming

Question			Answer	Mark	Guidance
			offers generalised judgements and conclusions, with limited use of evidence as to the extent to which physical threats to food security in dryland areas are greater than human threats. Concepts are discussed but their use lacks precision. **Level 1 (1–6 marks)** Demonstrates **basic** application of knowledge and understanding to provide a simple analysis that shows limited accuracy in its discussion of physical and human threats to food security in dryland areas. Demonstrates **basic** application of knowledge and understanding to provide an un-supported evaluation that offers simple conclusions as to the extent to which physical threats to food security in dryland areas are greater than human threats. Concepts are not discussed or are so inaccurately. **0 marks** No response or no response worthy of credit. **Quality of extended response Level 4** There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated. **Level 3** There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.		

Question			Answer	Mark	Guidance
			Level 2 The information has some relevance and is presented with limited structure. The information is supported by limited evidence. **Level 1** The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.		

Question			Answer	Mark	Guidance
18*			**'The issues created by globalisation of the food industry are greater than the opportunities.' To what extent do you agree with this statement?** **AO1** **Level 4 (7–9 marks)** Demonstrates **comprehensive** knowledge and understanding of issues and opportunities created by the globalisation of the food industry. **Level 3 (5–6 marks)** Demonstrates **thorough** knowledge and understanding of issues and opportunities created by the globalisation of the food industry. **Level 2 (3–4 marks)** Demonstrates **reasonable** knowledge and understanding of issues and opportunities created by the globalisation of the food industry. **Level 1 (1–2 marks)** Demonstrates **basic** knowledge and understanding of issues and opportunities created by the globalisation of the food industry. **0 marks** No response or no response worthy of credit. **AO2** **Level 4 (19–24 marks)** Demonstrates **comprehensive** application of knowledge and understanding to provide a clear, developed and convincing analysis that is a fully accurate evaluation of the statement 'The issues	**33** **AO1 x9** **AO2 x24**	**Indicative content** **AO1 – 9 marks** Demonstrating knowledge and understanding of issues and opportunities created by the globalisation of the food industry could potentially include: ● Globalisation of the food industry – the growing integration and interdependence within all stages of the food industry ● Challenges created by globalisation e.g. food miles increasing, inequality between TNCs and small producers, role of WTO and trade blocs, obesity and ultra-processed foods, price crisis, new ingredients, choke points, impact of natural hazards. ● Opportunities created by globalisation e.g. technological innovation e.g. mobile apps, GM crops, nitrogen efficient crops, diffusion of veterinary care, short-term food relief, consumer choice, role of WTO and trade blocs. **AO2 – 24 marks** Application of knowledge and understanding to analyse and evaluate the extent to which the issues created by globalisation of the food industry are greater than the opportunities could potentially include: • Expect wide range of evaluation of "greater" e.g. socially, environmentally, politically, economically, management, temporally or spatially. • Challenges are greater e.g. price crises will never be eradicated because of vulnerability to the weather which is more unpredictable

Question			Answer	Mark	Guidance
			created by globalisation of the food industry are greater than the opportunities'. Demonstrates **comprehensive** application of knowledge and understanding to provide a detailed and substantiated evaluation that offers secure judgements leading to rational conclusions that are evidence based as to the extent to which the issues created by globalisation of the food industry are greater than the opportunities. Relevant concepts are authoritatively discussed. **Level 3 (13–18 marks)** Demonstrates **thorough** application of knowledge and understanding to provide a clear and developed analysis that shows accuracy in its evaluation of the statement 'The issues created by globalisation of the food industry are greater than the opportunities' Demonstrates **thorough** application of knowledge and understanding to provide a detailed evaluation that offers generally secure judgements, with some link between rational conclusions as to the extent to which the issues created by globalisation of the food industry are greater than the opportunities. Relevant concepts are discussed but this may lack some authority. **Level 2 (7–12 marks)** Demonstrates **reasonable** application of knowledge and understanding to provide a sound analysis that shows some accuracy in its evaluation of the		because of climate change, nations which generally suffer are LIDCs, so risk of political instability is high. • Challenges are greater e.g. rising obesity linked to sedentary lifestyles, availability and affordability of ultra-processed foods, and long-term dietary changes in EDCs e.g. increased consumption of meat which are going to increase as development across LIDCs also increases providing greater spread of these issues as more than 50% of the world live on less than $5.50/day • Challenges - global flows e.g. fertiliser, machinery, food stuffs, effected by pinch points/choke points e.g. Panama and Suez canals. • Opportunities – global hunger continues to reduce (Global Hunger Index 2023 = 18.3 moderate c.f. 2000 28.0) More people are managing to eat improved quantity and quality of food. However, progress has stalled recently – Covid-19 pandemic + Russia's invasion of Ukraine + impacts of climate change. • Opportunities – global indexes mask considerable regional (e.g. Africa south of the Sahara _ South Asia), national (DRC, Lesotho, Yemen) concerns. • Opportunities are greater e.g. use of smart phones to manage cattle, crops, vets is significant with more populations having online access with ongoing roll out of mobile phone + internet capacities. Covid 19 pandemic encouraged this.

Question			Answer	Mark	Guidance
			statement 'The issues created by globalisation of the food industry are greater than the opportunities' Demonstrates **reasonable** application of knowledge and understanding to provide a sound evaluation that offers generalised judgements and conclusions, with limited use of evidence as to the extent to which the issues created by globalisation of the food industry are greater than the opportunities. Concepts are discussed but their use lacks precision. **Level 1 (1–6 marks)** Demonstrates **basic** application of knowledge and understanding to provide a simple analysis that shows limited accuracy in its evaluation of the statement 'The issues created by globalisation of the food industry are greater than the opportunities' Demonstrates **basic** application of knowledge and understanding to provide an un-supported evaluation that offers simple conclusions as to the extent to which the issues created by globalisation of the food industry are greater than the opportunities. Concepts are not discussed or are so inaccurately. **0 marks** No response or no response worthy of credit. **Quality of extended response Level 4**		• Opportunities are greater e.g. as food markets grow more international so short-term food relief is easier to formulate as co-operation is already happening through a number of trading or communication routes made possible through globalisation e.g. the response to the Syrian civil war enabling Syrian refugees whether in Syria or neighbouring countries to be supported

Question			Answer	Mark	Guidance
			There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated. **Level 3** There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence. **Level 2** The information has some relevance and is presented with limited structure. The information is supported by limited evidence. **Level 1** The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.		

Question			Answer	Mark	Guidance
19*			**'The impacts of tectonic activity on a country are mainly environmental.' Discuss** **AO1** **Level 4 (7–9 marks)** Demonstrates **comprehensive** knowledge and understanding of impacts of tectonic activity. **Level 3 (5–6 marks)** Demonstrates **thorough** knowledge and understanding of impacts of tectonic activity. **Level 2 (3–4 marks)** Demonstrates **reasonable** knowledge and understanding of impacts of tectonic activity. **Level 1 (1–2 marks)** Demonstrates **basic** knowledge and understanding of impacts of tectonic activity. **0 marks** No response or no response worthy of credit. **AO2** **Level 4 (19–24 marks)** Demonstrates **comprehensive** application of knowledge and understanding to provide a clear, developed and convincing analysis that is fully accurate of how the impacts of tectonic activity on a country are mainly environmental. Demonstrates **comprehensive** application of knowledge and understanding to provide a detailed and substantiated evaluation that offers secure judgements leading to rational conclusions that are	**33** **AO1 x9** **AO2 x24**	**Indicative content** **AO1 – 9 marks** Demonstrating knowledge and understanding of impacts of tectonic activity could potentially include: ● Impacts of tectonic activity ● Volcanic activity - environment impacts – tephra (e.g. ash, volcanic bombs), pyroclastic flows, lahars, toxic gases, floods e.g. ice melt, tsunami ● Seismic activity – ground shaking + ground displacement, liquefaction, landslides + avalanches, tsunami ● Economic impacts – deployment of search and rescue, loss of economic activity (e.g. tourism, livestock and crop damage, factories + offices damaged / destroyed), infrastructure damaged / destroyed, promotion of economic activity e.g. use of fertile soils, geothermal energy, tourism ● Social impacts – deaths, injury, wider health impacts e.g. water borne disease due to contaminated water, food shortages, psychological, homelessness, ● Political impacts – diversion of resources and funds to disaster zone, military to assist with search and rescue, refugees, instability in governance

Question			Answer	Mark	Guidance
			evidence based as to the extent to which the impacts of tectonic activity on a country are mainly environmental. Relevant concepts are authoritatively discussed. **Level 3 (13–18 marks)** Demonstrates **thorough** application of knowledge and understanding to provide a clear and developed analysis that shows accuracy of how the impacts of tectonic activity on a country are mainly environmental. Demonstrates **thorough** application of knowledge and understanding to provide a detailed evaluation that offers generally secure judgements, with some link between rational conclusions as to the extent to which the impacts of tectonic activity on a country are mainly environmental. Relevant concepts are discussed but this may lack some authority. **Level 2 (7–12 marks)** Demonstrates **reasonable** application of knowledge and understanding to provide a sound analysis that shows some accuracy of how the impacts of tectonic activity on a country are mainly environmental. Demonstrates **reasonable** application of knowledge and understanding to provide a sound evaluation that offers generalised judgements and conclusions, with limited use of evidence as to the extent to which the impacts of tectonic activity on a country are mainly environmental.		**AO2 – 24 marks** Application of knowledge and understanding to analyse and evaluate the extent to which the impacts of tectonic activity on a country are mainly environmental could potentially include: ● Impacts could be measured by size, area, time or cost required for relief, rehabilitation and or reconstruction ● Magnitude of event very significant – the greater the VEI or Mw then the greater the impacts of all sorts e.g. Great East Japanese 'quake 2011 + Volcán de Fuego, Guatemala 2018 ● Volcanic eruption – can spread ash high into atmosphere → dispersal over wide area e.g. Eyjafjallajökull 2010. Other hazards tend to be more localised but can still be devastating e.g. pyroclastic flows. Montserrat eruptions, 1995, have devastated the island's environment. ● Earthquake – tsunami can impact a wide area e.g. Boxing Day 2004 Indian Ocean. Generally, 'quakes affect regional to local areas but can still be devastating e.g. Haiti 2010. ● Timing of event can be significant e.g. time of year, time of day. ● Impacts other than environmental also affected by magnitude e.g. economic impact of Kobe 1995 was severe on both Japan and global trade as port largely destroyed; island of Montserrat undergone substantial out-migration – social + economic impacts. ● Impacts can be indirect e.g. damage to nuclear power plant after Great East

Question			Answer	Mark	Guidance
			Concepts are discussed but their use lacks precision. **Level 1 (1–6 marks)** Demonstrates **basic** application of knowledge and understanding to provide a simple analysis that shows limited accuracy of how the impacts of tectonic activity on a country are mainly environmental. Demonstrates **basic** application of knowledge and understanding to provide an un-supported evaluation that offers simple conclusions as to the extent to which the impacts of tectonic activity on a country are mainly environmental. Concepts are not discussed or are so inaccurately. **0 marks** No response or no response worthy of credit. **Quality of extended response Level 4** There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated. **Level 3** There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence. **Level 2**		Japanese 'quake 2011 influenced debate regarding nuclear power in Japan and further afield e.g. Germany. ● Impacts can be positive – essentially through environmental factors e.g. weathered volcanic deposits tend to be very fertile → agriculture; geothermal activity → energy generation; tourism

Question			Answer	Mark	Guidance
			The information has some relevance and is presented with limited structure. The information is supported by limited evidence. **Level 1** The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.		

Question			Answer	Mark	Guidance
20*			**'Human factors contribute more than physical factors to the risk posed by severe tectonic hazards.' How far do you agree?** **AO1** **Level 4 (7–9 marks)** Demonstrates **comprehensive** knowledge and understanding of risk posed by tectonic hazards, physical and human factors. **Level 3 (5–6 marks)** Demonstrates **thorough** knowledge and understanding of risk posed by tectonic hazards, physical and human factors. **Level 2 (3–4 marks)** Demonstrates **reasonable** knowledge and understanding of risk posed by tectonic hazards, physical and human factors. **Level 1 (1–2 marks)** Demonstrates **basic** knowledge and understanding of risk posed by tectonic hazards, physical and human factors. **0 marks** No response or no response worthy of credit. **AO2** **Level 4 (19–24 marks)** Demonstrates **comprehensive** application of knowledge and understanding to provide a clear, developed and convincing analysis that is fully accurate in its discussion of the contribution of human	**33** **AO1 x9** **AO2 x24**	**Indicative content** **AO1 – 9 marks** Demonstrating knowledge and understanding of risk posed by tectonic hazards, physical and human factors could potentially include: ● Tectonic hazards - earthquakes and/or volcanic eruptions (magnitude, duration, frequency, nature of/type of hazard e.g. lava flow, pyroclastic flow). ● Physical factors e.g. location at plate boundaries, crustal movements, atmospheric influences e.g. wind direction ● Human factors e.g. population density, vulnerability + mitigation, AC, EDC, LIDC contrasts: risk changes according to time of year, time of day. **AO2 – 24 marks** Application of knowledge and understanding to analyse and evaluate the extent to which human factors contribute more than physical factors to the risk posed by severe tectonic hazards could potentially include: • Geophysical events become hazards when risks threaten populations. Greater numbers of people are living in areas that puts themselves at risk from earthquakes + volcanic eruptions. • Physical factors • Frequency • Magnitude • Types of hazards in a particular area e.g. ash c.f. lava; uplift of sea floor c.f. horizontal movement

Question			Answer	Mark	Guidance
			and physical factors to the risk posed by severe tectonic hazards. Demonstrates **comprehensive** application of knowledge and understanding to provide a detailed and substantiated evaluation that offers secure judgements leading to rational conclusions that are evidence based as to the extent to which human factors contribute more than physical factors to the risk posed by severe tectonic hazards. Relevant concepts are authoritatively discussed. **Level 3 (13–18 marks)** Demonstrates **thorough** application of knowledge and understanding to provide a clear and developed analysis that shows accuracy in its discussion of the contribution of human and physical factors to the risk posed by severe tectonic hazards. Demonstrates **thorough** application of knowledge and understanding to provide a detailed evaluation that offers generally secure judgements, with some link between rational conclusions as to the extent to which human factors contribute more than physical factors to the risk posed by severe tectonic hazards. Relevant concepts are discussed but this may lack some authority. **Level 2 (7–12 marks)** Demonstrates **reasonable** application of knowledge and understanding to provide a sound analysis that shows some accuracy in its discussion of the		• High magnitude events tend to occur less frequently but when they do, can overwhelm even the best prepared and resourced society • Human factors • Humans cannot control hazards – so physical is greater, however we can ***manage risk*** • Population density can reduce severity of the impact of the hazard e.g. 2001 Kunlun earthquake China (7.8 Richter scale) no casualties due to low population density • Many have little or no choice as to where to live e.g. use of fertile volcanic soils in EDCs (Indonesia / Central America) or LIDCs (DRC / Rwanda) Also in some ACs volcanic slopes cultivated e.g. Japan + Italy • Use of other resources produced by tectonic activities attract people e.g. minerals (sulphur Indonesia) geothermal energy (Iceland) • Vulnerability – linked closely to socio-economic factors – AC/EDC/LIDC contrasts. But also, inequalities within communities who are all at risk → the poorest are the most vulnerable • Resilience – linked to vulnerability. Different degrees of preparation (e.g. monitoring), warning systems, search and rescue resources, building design (e.g. buildings designed to withstand ground shaking + displacement e.g. California 2003 0 fatalities, Bam Iran 2003 >20,000 fatalities both ‘quakes c. 6.7 Mw, political stability to

Question			Answer	Mark	Guidance
			contribution of human and physical factors to the risk posed by severe tectonic hazards. Demonstrates **reasonable** application of knowledge and understanding to provide a sound evaluation that offers generalised judgements and conclusions, with limited use of evidence as to the extent to which human factors contribute more than physical factors to the risk posed by severe tectonic hazards. Concepts are discussed but their use lacks precision. **Level 1 (1–6 marks)** Demonstrates **basic** application of knowledge and understanding to provide a simple analysis that shows limited accuracy in its discussion of the contribution of human and physical factors to the risk posed by severe tectonic hazards. Demonstrates **basic** application of knowledge and understanding to provide an un-supported evaluation that offers simple conclusions as to the extent to which human factors contribute more than physical factors to the risk posed by severe tectonic hazards. Concepts are not discussed or are so inaccurately. **0 marks** No response or no response worthy of credit. **Quality of extended response Level 4**		cope with and recover from tectonic events Level 4 responses may also discuss how that risk is affected by the probability / likelihood / frequency of occurrence of a hazard

Question			Answer	Mark	Guidance
			There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated. **Level 3** There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence. **Level 2** The information has some relevance and is presented with limited structure. The information is supported by limited evidence. **Level 1** The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.		

Assessment Objectives (AO) grid

Candidates answer **two** of questions 1 to 5, **two** of questions 6 to 10 and **two** of questions 11 to 15. This has been considered in the totals indicated below.

Question	AO1	AO2	AO3	Marks
1a	0	0	3	3
1b	6	0	0	6
2a	0	0	3	3
2b	6	0	0	6
3a	0	0	3	3
3b	6	0	0	6
4a	0	0	3	3
4b	6	0	0	6
5a	0	0	3	3
5b	6	0	0	6
6	6	6	0	12
7	6	6	0	12
8	6	6	0	12
9	6	6	0	12
10	6	6	0	12
11*	9	24	0	33
12*	9	24	0	33
13*	9	24	0	33
14*	9	24	0	33
15*	9	24	0	33
16*	9	24	0	33
17*	9	24	0	33
18*	9	24	0	33
19*	9	24	0	33
20*	9	24	0	33
Total	42	60	6	108

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