

Mark Scheme (Results)

January 2024

Pearson Edexcel International Advanced Level In Geography (WGE03)

Paper 01: Contested Planet

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## **General Marking Guidance**

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e., if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Question Number	Using Figure 1, explain the possible impacts on people and the environment of the summer 2022 heatwave temperatures in Europe.	Mark
1	AO1 (4 marks)/AO2 (6 marks)	(10)
	Marking instructions	
	Markers must apply the descriptors in line with the general	
	marking guidance and the qualities outlined in the levels-based	
	mark scheme below.	
	Indicative content guidance	
	The indicative content below is not prescriptive and candidates	
	are not required to include all of it. Other relevant material not	
	suggested below must also be credited. Relevant points may include:	
	AO1:	
	Heatwaves are extended periods (usually several days /	
	weeks) of well-above seasonal average temperatures	
	Heat levels are deemed 'dangerous to life' or similar	
	designations	
	<ul> <li>Figure 1 shows 3 months of extremes, with multiple locations of 40C+</li> </ul>	
	Some locations on Figure 1 are repeatedly under heatwave	
	conditions: Central and Southern France, eastern Spain,	
	Central Europe	
	AO2:	
	Heatwaves can affect people directly, especially the	
	very young and very old, leading to 'excess deaths' i.e.	
	higher than normal seasonal mortality (heart	
	<ul><li>problems, breathing problems).</li><li>Indirectly heatwaves, and associated high pressure,</li></ul>	
	and increase levels of air pollution – exacerbated by	
	forest fires / wild fires – with impacts on human health	
	as environmental quality of lowered.	
	In locations on Figure 1 where heat was very unusual	
	(UK, Sweden) impacts could be harder to cope with as	
	management of heat here is not usual; better	
	prepared in Spain and Italy.	
	In places that suffered heatwaves for 3 months,	
	cumulative impacts on human health could be serious,	
	as well as impacts on businesses e.g. tourists deterred	
	(but possible increases in coastal tourism in northern	
	Europe, or cooler coasts more widely; some businesses	
	do well).	
	Heatwaves often promote wildfires, especially in areas	
	around the Mediterranean but also more rarely in	
	places such as the UK: these can damage forests and	

other ecosystems (but also regenerate them) as well as
being a risk to homes and life. Months of heatwaves
will increase risk.

- Extended heat may have led to water shortages in some places, especially as the heat lasted for months with impacts on aquatic ecosystems as well as on water supply for people.
- Widespread impacts on agriculture e.g. higher input costs (water) and lower yields; possible increases in food prices / shortages of some crops; if air-con is used costs would have risen, potentially impacting lowincome groups more; some farmers suffer major economic problems.
- High levels of air pollution (NOx, PM) under persistent high pressure, leading to health consequences.

NB: accept positive impacts, although these are relatively limited.

Level	Mark	Descriptor	
	0	No rewardable material.	
Level 1	1-4	<ul> <li>Demonstrates isolated or generic elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1)</li> <li>Applies knowledge and understanding to geographical information inconsistently. Connections/relationships between stimulus material and the question may be irrelevant. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to produce an interpretation with limited relevance and/or support. (AO2)</li> </ul>	
Level 2	5-7	<ul> <li>Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1)</li> <li>Applies knowledge and understanding to geographical information to find some relevant connections/relationships between stimulus material and the question. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to produce a partial but coherent interpretation that is mostly relevant and supported by evidence. (AO2)</li> </ul>	
Level 3	8-10	<ul> <li>Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1)</li> <li>Applies knowledge and understanding to geographical information logically to find fully relevant</li> </ul>	

Question Number	<b>2 (a)</b> Using Figure 2, suggest the advantages and disadvantages of this management cycle for biodiversity and the environment.	Mark
2 (a)	AO1 (4 marks) /AO2 (6 marks)  Marking instructions  Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.  Indicative content guidance  The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited. Relevant points may include:  AO1:  • Forests are the most biodiverse terrestrial ecosystems, with multiple layers and complex food webs of flora and fauna. • Deforestation / change from primary to secondary forest inevitably reduced biodiversity • Forest management can promote biodiversity to some extent e.g. avoiding clear cutting, replanting • The cycle shown does view the forest as an economic resource to be exploited.  AO2:  • Overall, biodiversity is damaged by the reafforestation to secondary forest because original food-webs and nutrient cycles are disrupted / destroyed. • Replacing primary forest with 'one fast growing species' will reduce biodiversity as the food web will be simpler and all trees the same age (the species could be non-native); essentially a farmed monoculture. • The small protected areas are an advantage, but they may not support larger species at the top of the food web/ may be fragmentary and lack long term viability. • Waste products burned as biofuels could be seen as an environmental advantage i.e. recycling waste into energy; biofuels are more carbon neutral than some energy resources such as coal and gas – but CO <sup>2</sup> is still released.	(10)
	It might be argued the secondary forest will sequester the	

$CO^2$	emitted	by the	biofuels.

- Other disadvantages include deforestation causing soil erosion and increasing flood risk: perhaps offset long-term by the fact the forest does regrow in the area.
- Changes to the local hydrological cycle / water cycle, especially during the forest cutting phase: increases runoff / erosion, less infiltration with possible impacts on local water supply and flood risk.

NB a balance of adv / disadv is needed for L3. Answers should not focus on economic impacts unless linked to biodiversity / environment.

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-4	<ul> <li>Demonstrates isolated or generic elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1)</li> <li>Applies knowledge and understanding to geographical information inconsistently. Connections/relationships between stimulus material and the question may be irrelevant. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to produce an interpretation with limited relevance and/or support. (AO2)</li> </ul>
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Level 3	8-10	<ul> <li>Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1)</li> <li>Applies knowledge and understanding to geographical information logically to find fully relevant connections/relationships between stimulus material and the question. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to produce a full and coherent interpretation that is relevant and supported by evidence. (AO2)</li> </ul>

Question	2 (b) Assess the reasons why local and global ecosystem services are not	Mark		
Number	equally valued by all people.			
2 (b)	AO1 (5 marks)/AO2 (10 marks)  Marking instructions  Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.			
	Indicative content guidance The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited. Relevant points may include:			
	<ul> <li>Ecosystems services maintain planetary, and by extension, human health.</li> <li>They include provisioning (goods), regulating, supporting and cultural services; some operate at a global scale such as climate regulation whereas other support local areas (tourism, food, water cycle)</li> <li>Some, such as climate and water cycle regulation, are viewed as especially important in the context of threats such as GW</li> <li>Groups of people range from indigenous people, farmers, consumers to business owners and politicians / decision makers.</li> <li>AO2</li> <li>Some services are viewed as an economic opportunity e.g. deforestation for timber, or to create plantations such as Indonesian palm oil; local provisioning services can be exploited to make money by TNCs but also local farmers and loggers. Mining for ores / minerals removes forests simply to access other resources.</li> <li>Indigenous groups may have a more respectful and close relationship (but they are now very few in number) as forests and other ecosystems have local cultural and religious significance as well as providing people with food and other resources (globally, ecosystems lack this cultural / social significance).</li> <li>Global IGOs and NGOs campaign to save tropical forests in particular, but also oceans and reefs, arguing that their regulating services are globally significant in terms of climate regulation; other groups focus on the value of certain iconic</li> </ul>	(15)		

- Biodiversity hotspots are examples of local / regional areas of especially high value (and threat level) that environmental organisations and scientists argue are critical for global biodiversity survival.
   Decision makers and politicians have a variety of views:
   Brazil's Bolsanaro viewed forests as goods to be exploited:
- Brazil's Bolsanaro viewed forests as goods to be exploited; even Canada does this re tar sands forests; other's such as Costa Rica preserve forests in the interests of tourism and wider ecological aims.
- An Environmental Kuznet's curve approach could be taken to argue that attitudes changes over time as the relationship between economic and conservation evolve.
- Many might argue it comes down a tension between shortterm economic goods versus valuing long-term service provision that ultimately contributes to planetary health and human well-being.

Level	Mark	Descriptor	
	0	No rewardable material.	
Level 1	1-4	<ul> <li>Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1)</li> <li>Applies knowledge and understanding of geographical information/ideas, making limited and rarely logical connections/relationships, to produce an interpretation with limited relevance and/or support. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to produce an unsupported or generic conclusion, drawn from an argument that is unbalanced or lacks coherence. (AO2)</li> </ul>	
Level 2	5-8	<ul> <li>Demonstrates geographical knowledge and understanding, which is occasionally relevant and may include some inaccuracies. (AO1)</li> <li>Applies knowledge and understanding of geographical information/ideas with limited but logical connections/relationships to produce a partial interpretation that is supported by some evidence but has limited coherence. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to come to a conclusion, partially supported by an unbalanced argument with limited coherence. (AO2)</li> </ul>	
Level 3	9-12	Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1)	

		<ul> <li>Applies knowledge and understanding of geographical information/ideas logically, making some relevant connections/relationships. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to produce a partial but coherent interpretation that is mostly relevant and supported by evidence. (AO2)</li> </ul>
Level 4	13-15	<ul> <li>Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1)</li> <li>Applies knowledge and understanding of geographical information/ideas logically, making relevant connections/relationships. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to produce a full and coherent interpretation that is relevant and supported by evidence. (AO2)</li> </ul>

Question number	To what extent are global population trends the main factor increasing risks from weather hazards?	Mark
3	AO1 (5 marks)/AO2 (10 marks)  Marking instructions  Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.  Indicative content guidance  The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited. Relevant points may include:	(15)
	<ul> <li>Population reached 8 billion in Nov22, rising from 7 billion in just over a decade.</li> <li>Population has risen very fast in Asia (4 billion +) and is rising rapidly in Africa; it is growing slowly in Europe.</li> <li>Population tends to be highest, and rising fastest, in megacities especially coastal ones in Asia and Africa.</li> <li>Weather hazards include storms, cyclones, floods and drought – all of which have specific geographies with some places significantly more at risk than others.</li> <li>AO2:</li> <li>An argument of more people, more risk can be made – especially if it focusses on high-density coastal cities in lowlying regions e.g. Asia's megadeltas (cyclone risk) and flood</li> </ul>	

- overall numbers per se as explaining rising risks.
- However, risk may not be rising everywhere as better warning, prediction and management mean human impacts are reduced: it might be argued that economic losses are still rising; migration into some areas could be seem to increase risk.
- The economic loss risk can be related to rising affluence and level of development which means more business and property in harm's way to some extent insurance (which increases with development level) might actually offset this.
- In some places where poverty levels are high, and population is still rising (SSA, South Asia) risks may indeed be increasing from both cyclones and floods, as well as drought, with population increase a key factor i.e. overgrazing / desertification made worse by population pressure and exacerbated by GW.
- Answers could focus on types of vulnerable people (very young, older and needing care) rather than total numbers; another focus could be on quality of governance rather than number of people.
- Some might argue that global warming is a main risk factor, creating unpredictable risks and possibly increasing the range and magnitude of some weather hazards such as cyclones and drought – but this is still uncertain despite certainty over rising global temperatures.
- A more regional approach could be taken, arguing that risk is falling (or at least better managed) is some places and not related to population change (Europe, N America) but rising in others.

Level	Mark	Descriptor
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Level 1	1-4	<ul> <li>Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1)</li> <li>Applies knowledge and understanding of geographical information/ideas, making limited and rarely logical connections/relationships, to produce an interpretation with limited relevance and/or support. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to produce an unsupported or generic conclusion, drawn from an argument that is unbalanced or lacks coherence. (AO2)</li> </ul>

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Level 4	13-15	<ul> <li>Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1)</li> <li>Applies knowledge and understanding of geographical information/ideas logically, making relevant connections/relationships. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to produce a full and coherent interpretation that is relevant and supported by evidence. (AO2)</li> </ul>

Question Number	Using Figure 3, suggest the causes of changes to the global oil price between 2001 and 2021.	Mark
4(a)	AO1 (2 marks)/AO2 (3 marks)  Award 1 mark (AO1) for each relevant point and further expansion marks for reasons/explanations linked to the data shown (AO2), up to a maximum of 5 marks.  • A discernible overall rising trend, albeit fluctuating (1) might be linked to concepts such as peak oil / increasing physical rarity of oil (1); also accept rising demand due to increased world population / affluence (1).  • The highest peaks such as 2011-12 at \$110 could be linked to demand (1), such as periods of strong global economic growth (1) or tightening supply linked to the	(5)

actions of OPEC / conflict. (1).	
<ul> <li>Some low points such as \$44 in 2020 can be linked to</li> </ul>	
falling demand (1) specifically the onset of the C-19	
pandemic (1) or the GFC in 2007-09 (1).	
Switching to renewables / shift to greener energy in	
general from since 2015 lowering demand (1) so lower	
prices reflect lower demand (1).	
NB accept realistic causes even if not precisely linked to	
correct years on Figure 3.	

Question Number	Using named examples, assess the extent to which global energy use is altering the carbon cycle.	Mark
4(b)	AO1 (5 marks)/AO2 (10 marks)  Marking instructions  Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.	
	Indicative content guidance The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited. Relevant points may include:	
	<ul> <li>Around 80% of the world's energy is still carbon based (oil, coal, gas) utilising stored / fossil carbon.</li> <li>There are other energy sources that are 'carbon neutral' i.e. renewables and recyclables (nuclear, biofuel)</li> <li>The carbon cycle is a key earth system that maintains atmospheric health by transferring carbon between stores via fluxes / transfers.</li> <li>Energy 'mixes' vary significantly between countries but oil is almost universally used for transport.</li> </ul>	(15)
	<ul> <li>Fossil fuel use releases stored carbon (geological) into the atmosphere: however per unit of energy coal is worse than oil, followed by gas; carbon dioxide levels in the atmosphere have increased steadily to over 400ppm.</li> <li>Gas use has increased rapidly in the last 30 years, whereas coal use has declined in many countries; oil demand is relatively stable globally – but worldwide there has been no decline in fossil fuel use so fossil carbon is still being released into the air and absorbed by oceans, unbalancing the natural cycle.</li> <li>Many renewable energy sources have increased very rapidly in the last 20 years, notably wind and solar, and these do not emit carbon (but may have a large carbon footprint during</li> </ul>	

- manufacture) however some countries (Denmark, UK, even China) have far more renewable energy than others.
- Nuclear (France) and biofuels (USA, Brazil) have a lesser impact on the carbon cycle although the exact impact is debated: there has been a general move toward renewables but as yet this has not reduced overall fossil fuel use: CCS may prevent carbon from fossil fuels entering the atmosphere / oceans.
- Some details of specific impacts are relevant e.g. ocean acidification (increased carbon in the ocean carbon sink), rising ocean temperatures (coral bleaching), rapid Arctic Warming – largely driven by the emissions from fossil fuel use.
- Some movement towards EVs may soon reduce oil used in some forms of transport, potentially reducing carbon emissions.
- Some might argue that other human activities, such as deforestation, have a significant impact on the carbon cycle; or that ocean warning (so lower sequestration) is just as significant as fossil fuel use.
- Equally, as the carbon cycle leads to GW feedback mechanisms accelerate it which may not depend on fossil fuel use for energy e.g. Arctic melting, permafrost melt, forest die-back.

	e.g. Arctic melting, permafrost melt, forest die-back.	
Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-4	<ul> <li>Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1)</li> <li>Applies knowledge and understanding of geographical information/ideas, making limited and rarely logical connections/relationships, to produce an interpretation with limited relevance and/or support. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to produce an unsupported or generic conclusion, drawn from an argument that is unbalanced or lacks coherence. (AO2)</li> </ul>
Level 2	5-8	<ul> <li>Demonstrates geographical knowledge and understanding, which is occasionally relevant and may include some inaccuracies. (AO1)</li> <li>Applies knowledge and understanding of geographical information/ideas with limited but logical connections/relationships to produce a partial interpretation that is supported by some evidence but has limited coherence. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to come to a conclusion, partially supported by an unbalanced argument with limited coherence. (AO2)</li> </ul>

Level 3	9-12	<ul> <li>Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1)</li> <li>Applies knowledge and understanding of geographical information/ideas logically, making some relevant connections/relationships. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to produce a partial but coherent interpretation that is mostly relevant and supported by evidence. (AO2)</li> </ul>
Level 4	13-15	<ul> <li>Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1)</li> <li>Applies knowledge and understanding of geographical information/ideas logically, making relevant connections/relationships. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to produce a full and coherent interpretation that is relevant and supported by evidence. (AO2)</li> </ul>

Question Number	Using Figure 4, suggest possible causes of changes to the water level in Lake Mead between 2002 and 2022.	Mark
5(a)	<ul> <li>AO1 (2 marks)/AO2 (3 marks)</li> <li>Award 1 mark (AO1) for each relevant point and further expansion marks for reasons/explanations linked to the data shown (AO2), up to a maximum of 5 marks.</li> <li>The overall trend is downward from 94% to 85% albeit with fluctuations (1) which could be due to water demand outstripping supply (population, urbanisation, industry) (1), or could also be linked to changes in water input caused by global warming / long-term drought / higher evaporation rates. (1).</li> <li>Some years do see a recovery in capacity but these are short-term such as 2005, 2011-12, 2020 (1) which might be explained by greater inputs i.e. higher rainfall so the reservoir refills (1) or possibly due lower demand linked to economic problems (1); increased water conservation efforts / awareness might reduce demand.</li> </ul>	(5)

Question Number	Using named examples, assess how far international agreements promote the fair sharing of water resources.		
5(b)	AO1 (5 marks)/AO2 (10 marks)  Marking instructions		
	Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.		
	Indicative content guidance The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited. Relevant points may include:	(15)	
	<ul> <li>AO1:</li> <li>Agreement frameworks include the Helsinki and Berlin rules, both UN sponsored.</li> <li>Both transboundary rivers and groundwater suffer issues of</li> </ul>		
	<ul> <li>unfair / inequitable use – as do internal water systems e.g.</li> <li>California</li> <li>Agreements can be internationally sponsored / brokered and bi-lateral</li> </ul>		
	<ul> <li>Increased water demand is a global issue, especially in Asia (India) and this might make agreements more challenging; GW could make agreement harder is supplies dwindle.</li> <li>60% of the world's water supply in transboundary according to</li> </ul>		
	the UN. AO2:		
	<ul> <li>In general, agreements are more common than disagreements but where the latter do occur they can be significant involving major rivers (Ganges, Mekong, Nile) and large populations with high water dependency.</li> <li>Agreements have a long history e.g. the Nile and Colorado date back to the 1920s, but lack of updating to account for industrialisation and urbanisation makes them increasingly unfit for purpose and increase the potential for conflict.</li> </ul>		
	<ul> <li>The Berlin and Helsinki Rules frameworks can lead to equitable sharing e.g. on the Nile and Danube, but this works best when countries involved have no other economic and political conflicts i.e. EU member states / existing cooperation frameworks.</li> <li>In some cases one very powerful player can disrupt /</li> </ul>		
	<ul> <li>ignore agreements and increase risk of conflict e.g.</li> <li>China's dam building on the Mekong which has negative impacts downstream in Laos and Cambodia.</li> <li>Unilateral actions such as Ethiopia's dam construction on the Blue Nile can increase tensions (Egypt, Sudan) leading</li> </ul>		

	• E r () r s s h c a a	o greater distrust and reduced chances of an equitable esolution: the legacy of colonial-era agreements in a Nile context makes reaching agreement even harder. External factors such as existing political conflict, rapidly ising demand, disruption caused by global warming shrinking Himalaya glaciers), increasing pollution levels educing water quality (Ganges) make water sharing cituations more complex and less likely to be resolved. One might argue that the frameworks (Berlin, Helsinki) have potential but lack legal enforcement i.e. they depend on trust and honesty, and this may be lacking; plus old agreement become out of date but all parties may not agree to renegotiate.	
Level	Mark	Descriptor	
	0	No rewardable material.	
Level 1	1-4	<ul> <li>Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1)</li> <li>Applies knowledge and understanding of geographical information/ideas, making limited and rarely logical connections/relationships, to produce an interpretation with limited relevance and/or support. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to produce an unsupported or generic conclusion, drawn from an argument that is unbalanced or lacks coherence. (AO2)</li> </ul>	
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Level 3	9-12	<ul> <li>Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1)</li> <li>Applies knowledge and understanding of geographical information/ideas logically, making some relevant connections/relationships. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to produce a partial but coherent</li> </ul>	

		interpretation that is mostly relevant and supported by evidence. (AO2)
Level 4	13-15	<ul> <li>Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1)</li> <li>Applies knowledge and understanding of geographical information/ideas logically, making relevant connections/relationships. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to produce a full and coherent interpretation that is relevant and supported by evidence. (AO2)</li> </ul>

Question	To what extent are tensions between superpowers and emerging powers, over	Mark
number	natural resources and territory, inevitable?	
6	AO1 (5 marks)/AO2 (15 marks)	
	Marking instructions	
	Markers must apply the descriptors in line with the general marking	
	guidance and the qualities outlined in the levels-based mark scheme	
	below.	
	Responses that demonstrate <b>only</b> AO1 without any AO2 should be	
	awarded marks as follows:	
	Level 1 AO1 performance: 1 mark	
	Level 2 AO1 performance: 2 marks	
	Level 3 AO1 performance: 3 marks	
	Level 4 AO1 performance: 4–5 marks	
	Indicative content guidance	
	The indicative content below is not prescriptive and candidates are	
	not required to include all of it. Other relevant material not suggested	
	below must also be credited. Relevant points may include:	
	AO1:	
	Superpowers are countries with global reach and influence	
	with multiple strengths in terms of the 'pillars of power' (USA, China, arguably the EU)	(20)
	Emerging powers are usually gaining power, but have	
	strengths and weaknesses	
	Natural resources include land, EEZs (territory) in the oceans	
	and physical resources such as fossil fuels and ores; even	
	access such as Arctic sea-routes; spheres of influence concept.	
	<ul> <li>Mechanisms do exist for dispute resolution at the UN, should</li> </ul>	
	all parties agree to it e.g. UNCLOS	
	AO2:	
	<ul> <li>It could be argued that tensions are not inevitable because the</li> </ul>	
	UN, and other organisations such as the EU, have systems and	
	frameworks to reduce tension and reach agreement – such as	
	making decisions about EEZs in the oceans; these can work but	

- only when all parties agree.
- On the other hand recent history suggests some superpowers act in ways to increase their territory at the expense of others (China's island building in the South China Sea) with little interest in reducing tensions with others (Taiwan, Philippines, Indonesia)
- Russia's actions in Georgia (2008), Crimea (2014) and Ukraine (2022) suggest an expansionist Russia with little interest in negotiation and therefore an inevitability that tensions will increase – repeated attempts at negotiation (Turkey, France) and strong economic sanctions have not deterred territorial expansion.
- Spheres of Influence, e.g. eastern Europe, the Middle East, South China Sea might be used as a concept to argue why some superpowers are involved in 'distant' places, possibly linked to colonial legacies / colonial economic ties.
- Some might argue a more populous world, with greater resource demands but in some cases dwindling resources (oil, gas, rare earths) increases the risk of tensions as powerful countries try to 'stake their claim' to territory and its resources e.g. the Arctic, ocean flood areas (EEZs) and land (Ukraine).
- On the other hand a 'green' shift towards renewable energy could reduce tensions over oil / fossil fuels if they become less significant; it's possible that environmental concerns could lead to countries abandoning plans to exploit areas such as the Arctic / Antarctic.
- Many territorial disputes are very long running e.g. India /
  Pakistan over Kashmir, which might suggest that resolutions
  are very hard to come by or that parties sometimes have no
  interest in resolving tensions.
- Natural resources are not the only source of tension: trade, cultural influence, geopolitical blocs, political ideology could all lead to tension between superpowers.

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-5	<ul> <li>Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1)</li> <li>Applies knowledge and understanding of geographical ideas, making limited and rarely logical connections/relationships. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to produce an interpretation with limited coherence and support from evidence. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to produce an unsupported or generic</li> </ul>

		conclusion, drawn from an argument that is unbalanced or lacks coherence. (AO2)
Level 2	6-10	<ul> <li>Demonstrates geographical knowledge and understanding, which is occasionally relevant and may include some inaccuracies. (AO1)</li> <li>Applies knowledge and understanding of geographical information/ideas with limited but logical connections/relationships. (AO2)</li> <li>Applies knowledge and understanding of geographical ideas in order to produce a partial interpretation that is supported by some evidence but has limited coherence. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to come to a conclusion, partially supported by an unbalanced argument with limited coherence. (AO2)</li> </ul>
Level 3	11-15	<ul> <li>Demonstrates geographical knowledge and understanding, which is mostly relevant and accurate. (AO1)</li> <li>Applies knowledge and understanding of geographical information/ideas to find some logical and relevant connections/relationships. (AO2)</li> <li>Applies knowledge and understanding of geographical ideas in order to produce a partial but coherent interpretation that is supported by some evidence. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to come to a conclusion, largely supported by an argument that may be unbalanced or partially coherent. (AO2)</li> </ul>
Level 4	16-20	<ul> <li>Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1)</li> <li>Applies knowledge and understanding of geographical information/ideas to find fully logical and relevant connections/relationships. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to produce a full and coherent interpretation that is supported by evidence. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to come to a rational, substantiated conclusion, fully supported by a balanced argument that is drawn together coherently. (AO2)</li> </ul>

Question	To what extent is it inevitable that some developing countries will always rely	Mark	
Number	on aid from developed countries and other organisations?		
7	AO1 (5 marks)/AO2 (15 marks)		
	Marking instructions		
	Markers must apply the descriptors in line with the general marking		
	guidance and the qualities outlined in the levels-based mark scheme		
	below.		
	Responses that demonstrate <b>only</b> AO1 without any AO2 should be		
	awarded marks as follows:		
	Level 1 AO1 performance: 1 mark     Level 2 AO1 performance: 2 marks		
	Level 2 AO1 performance: 2 marks     Level 3 AO1 performance: 3 marks		
	Level 3 AO1 performance: 3 marks     Level 4 AO1 performance: 4 F marks		
	Level 4 AO1 performance: 4–5 marks		
	Indicative content guidance		
	The indicative content below is not prescriptive and candidates are		
	not required to include all of it. Other relevant material not suggested		
	below must also be credited. Relevant points may include:	(20)	
		(20)	
	AO1:		
	<ul> <li>Developing countries are those with low HDI / income and are</li> </ul>		
	concentrated in SSA and South Asia, with a few elsewhere		
	(Haiti)		
	<ul> <li>Aid (ODA, development aid) comes in many forms such as</li> </ul>		
	multilateral from IGOs (UN, WB) and can be in the form of		
	loans, grants or technical help		
	Some aid is bilateral i.e. directly from one country to another		
	(this has increase in significance in the last few decades)		
	Some developing countries rely on aid for a significant		
	proportion of their national income (5-20% is common in SSA).		
	AO2		
	Aid is crucial in some countries: CAR, Liberia, Sierra Leane all		
	have aid as more than 20% of national income: arguably		
	these are 'failed states' / countries with complex problems		
	(and usually conflict) with limited chances of escaping a cycle		
	of poverty, corruption and degradation of governance		
	systems any time soon – they will likely need aid for decades.		
	<ul> <li>On the other hand, many developing countries have seen</li> </ul>		
	strong economic growth (Nigeria, Kenya, India) and their		
	need for aid may be reducing (however, social conditions		
	may have improved much more slowly than headline		
	economics); on the other hand some countries enter crises		
	(Sri Lanka in 2022) and their need for aid increases.		
	Globally, the number of emerging countries that have reduced poverty and made the developing to emerging		

- transition is high this might suggest that over time countries are less likely to require aid (Rostow) and in fact might become sources of ODA.
- Nevertheless dependency is still high in many places, and some might argue that Dependency Theory suggest some countries will always be trapped in a cycle of poverty – exporting low value raw materials – and that poverty, illhealth, water and food insecurity will mean they rely on aid for years; external debts and an inability to service then might be argued as a 'debt trap' that ties highly indebted countries into aid dependency (SAPs / HIPC could be a counter-argument).
- Some might argue that the existence of the SDGs is a
  positive way that developing countries continue to rely on
  aid i.e. the aid is targeted at specific issues like maternal
  health, education but that come 2030 some countries
  might need less aid assuming the SDG targets have been
  met
- There might be alternatives such as Fairtrade and FDI, that overtime can reduce reliance on aid; schemes like China's BRI investment could be viewed in this way – although others might argue it is one type of dependency replacing another.
- Accept the argument that some developing countries may need long term aid to adapt to GW and / or change their energy systems to renewable ones (COP27 Egypt 2022).

	CITCI	gy systems to renewable ones (eor 27 Egypt 2022).
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