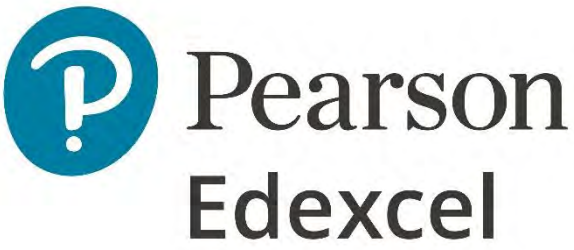

Mark Scheme (Results)

Summer 2022

Pearson Edexcel International Advanced Level
In Geography (WGE03/01)
Paper 3: 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	Answer	Mark
1 (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: • Monsoons are seasonal rainfall variations, caused by ITCZ movements and other factors such as ocean temperature, ENSO cycles can have an impact – as can global warming. • Areas with monsoons have marked wet / dry seasons, and rely on the monsoon for most annual rainfall. • About 60% of the world's population lives in areas that experience monsoons, so they are significant. • Anomalies can be positive and negative. AO2: • Variation on Figure 1 ranges from +32% in 1961 to -31% in 1979; this is 'natural' and has been linked to El Nino / La Nina changes to pressure systems and high pressure over Asia associated with El Nino. • As convection is related to surface temperature, the Indian Ocean temperature variation can affect monsoon strength; variations in the easterly sub-tropical jet-stream can affect monsoon strength/ duration. • Variations on the movement of the ITCZ: weaker (stalling) or stronger years related to ocean temperature variations; unusual timings of seasonal movements; unusually persistent high pressure leading to drought conditions. • Deforestation / landuse change reducing evapotranspiration leading to increased overall aridity in India / South Asia. • Some small anomalies of under 10% such as 2005 to 2008 are likely caused by no specific phenomenon and fall within the range of year-to-year variation. • It might be argued that the drier than normal period since 1990 on Figure 1 could be caused by global	

	warming, and changes to pressure belts leading to a longer-term monsoon weakening. • Notable positive anomalies such as 1942-1949 and 1955-1961 could have resulted in better water supply and improved crop yields (rice) but also in some years significant flooding (1961, 1994) if rainfall was excessive. • Drier periods such as 1965-1974 and 1996-2010, with a significant number of -10%+ years could have resulted in lower crop yields, pressure on water supply and extended drought and possibly food shortages; some might argue the impact of these periods is more significant than 'wet' periods. • A long-term trend towards weaker monsoons since 1990 could impact on choice of crops, groundwater levels and more significant changes to farming. • Impacts could be considered in social, economic or environmental terms – with some being more significant than others. • Widespread flooding (deaths, water-borne disease, crop failure) associated with positive anomalies. **NB**: answers need to have a balance of causes and impacts; unbalanced answers will be self-penalising.	**(10)**

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

		evidence. (AO2)
Level 3	8-10	• Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1) • Applies knowledge and understanding to geographical information logically to find fully relevant connections/relationships between stimulus material and the question. (AO2) • Applies knowledge and understanding of geographical information/ideas to produce a full and coherent interpretation that is relevant and supported by evidence. (AO2)

Question Number	Answer	Mark
1 (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: AO1 • Governance refers to how well-run a country or area is nationally or locally, and can include global governance i.e. actions at an international level. • Poor governance is linked to corruption and lack of accountability; good governance implies a stronger response to a crisis. • Drought is an extended period of below average rainfall leading to water shortages and difficulties with farming. • Tropical cyclones tend to have a shorter but sharper impact, destroying homes, infrastructure and lives. • Management – reducing the impact of hazards – can occur before, during and after a weather hazard. AO2 • Good governance might be related to level of preparedness and spending on education, planning emergency response and mitigation measures – whereas in badly governed places funds tend to be diverted and misappropriated for corrupt purposes; governments with less regard for their people may	

	be ill-prepared e.g. Myanmar's cyclone Nargis in 2008. • Democratic countries might be more likely to react quickly and / or more effectively to an emerging situation e.g. the Australian government response to the 'Big Dry' drought – although not everyone will agree with the management choices e.g. farmers whose water allocation was cut. • Good governance is likely to lead to better investment in education, health and housing which can protect people when disaster strikes, reducing vulnerability and increasing resilience. • Other factors might be considered: poverty / level of development could be seen as central as low-income countries might lack the resources to manage some events successfully; conversely Hurricane Katrina in 2005 could be viewed as an example where wealth was no substitute for good governance. • Even in low-income countries e.g. Bangladesh significant progress has been made in terms of cyclone shelters and warning systems – often with the help of foreign aid. • Some might argue that the magnitude of some events e.g. Typhoon Haiyan, is overwhelming for developing / emerging countries despite relatively good preparation – so outside help is required. • Drought often requires long-term management to improve the resilience of water supply and farming systems: NGOs often provide this support where governments lack the resources (or political will). **NB:** answers should focus on ***governance*** i.e. the processes of governing and their effectiveness: answer that focus on 'government' exclusively are unlikely to score higher than L2 = 8.	**(15)**

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–4	• Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1) • 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) • 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)
Level 2	5-8	• Demonstrates geographical knowledge and

		understanding, which is occasionally relevant and may include some inaccuracies. (AO1) • 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) • Applies knowledge and understanding of geographical information/ideas to come to a conclusion, partially supported by an unbalanced argument with limited coherence. (AO2)
Level 3	9-12	• Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1) • Applies knowledge and understanding of geographical information/ideas logically, making some relevant connections/relationships. (AO2) • Applies knowledge and understanding of geographical information/ideas to produce a partial but coherent interpretation that is mostly relevant and supported by evidence. (AO2)
Level 4	13-15	• Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1) • Applies knowledge and understanding of geographical information/ideas logically, making relevant connections/relationships. (AO2) • Applies knowledge and understanding of geographical information/ideas to produce a full and coherent interpretation that is relevant and supported by evidence. (AO2)

Question Number	Answer	Mark
2	**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: • Protected areas aim to conserve biodiversity / ecosystems and prevent their degradation / destruction. • They vary in scale, funding and aims – some could be 'paper parks' while others provide a high degree of protection. • Protection could be focussed on biomes / ecosystems e.g. tropical rainforests, or species. • All global regions protect a significant area, but the percentage varies markedly. AO2: • There is some link to income (South Asia = 7%, Africa 18%) but it is quite weak as North America has a low number of 11%; conversely Latin America's number is 24% almost as high as Europe; explanations based on ability to afford conservation are valid but the data doesn't really support this strongly. • Europe's very high percentage of 26% could be explained by wealth alongside a desire from people and government to prioritise protection and conservation – perhaps as much for leisure purposes as conservation per se. • Arguably regions with vast wilderness areas (MENA deserts, Canadian and Russian Taiga) might see no need to protect them as very few people live there and threats are minor – or they could limit protection to allow exploitation e.g. oil and timber. • Political pressure might be the reason for the high percentage of protection on South America i.e. rainforest areas, but perhaps the areas are not actively protected and illegal activities (logging) still take place; many areas in Africa could be game reserves where hunting is allowed and the income from this funds wider protection; high perceived threats e.g. poaching or illegal logging/ mining. • Very high population density in South Asia could mean there is little space for large conservation areas, although density is very high in Europe where protected areas is more than 3x that of South Asia; a focus on economic exploitation / development rather than conservation. • A 'conservation versus development' / environmental Kuznet's curve explanation might be put forward although the data don't fully support this as some emerging / developing regions are high (Latin America, Africa) and some developed ones low (North America).	**(10)**

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–4	• Demonstrates isolated or generic elements of

		geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1) • Applies knowledge and understanding to geographical information inconsistently. Connections/relationships between stimulus material and the question may be irrelevant. (AO2) • Applies knowledge and understanding of geographical information/ideas to produce an interpretation with limited relevance and/or support. (AO2)
Level 2	5-7	• Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1) • Applies knowledge and understanding to geographical information to find some relevant connections/relationships between stimulus material and the question. (AO2) • Applies knowledge and understanding of geographical information/ideas to produce a partial but coherent interpretation that is mostly relevant and supported by evidence. (AO2)
Level 3	8-10	• Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1) • Applies knowledge and understanding to geographical information logically to find fully relevant connections/relationships between stimulus material and the question. (AO2) • Applies knowledge and understanding of geographical information/ideas to produce a full and coherent interpretation that is relevant and supported by evidence. (AO2)

Question number	Answer	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:	

	AO1: • Globalisation is the increasing number, type and strength of global connections in trade, culture, politics and many other areas of life. • Biodiversity is the variation in species in a given area (genetic, species, ecosystem) • Biodiversity, and the ecosystems / biomes that support it, face many threats although these vary spatially. • Threats can degrade ecosystem functioning, as well as lead to overall destruction if the threat is severe. AO2: • Globalisation's increasing number of connections could be seen as enabling people (tourists, visitors) to access isolated places and spread threats (alien species) as well as degrade once pristine locations leading to biodiversity loss; on the other hand exposure to natural systems could promote a desire to conserve biodiversity. • Global trade has grown hugely since the 1960s and the demand for resources such as oil, gas, timber and ores might be seen as directly contributing to biodiversity loss e.g. Niger Delta, Amazonian iron ore and gold mines; countries like Brazil are major exporters of crops and beef which has contributed to rainforest destruction (also palm oil in Indonesia; coltan in DRC). • On the other hand the key issue could be seen as population numbers driving resources demand, rather than globalisation itself: population expansion has led to ecosystem loss to feed and house national populations as much as being caused by globalisation. • Globalisation could be viewed as positive: spreading the message of the need for protection (Sky's ocean plastics appeal), icons of conservation such as David Attenborough and awareness of the plights of some species (elephants, tuna, amur leopards) and awareness leads to pressure to protect and reach agreements with global reach (CITES, Paris 2015, COP36, RAMSAR Convention on wetlands). • Some might see globalisation as having a relatively minor contribution in terms of threat in the face of the much larger threat from global warming (emissions can be linked to globalisation and other causes i.e. rising incomes) which has the potential to degrade whole biomes (tundra) and regions; other localised threats such as water pollution of illegal hunting might be viewed as more significant than globalisation. **NB:** expect a spectrum of answers / foci and credit as appropriate.	**(15)**

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–4	• Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1) • 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) • 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)
Level 2	5-8	• Demonstrates geographical knowledge and understanding, which is occasionally relevant and may include some inaccuracies. (AO1) • 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) • Applies knowledge and understanding of geographical information/ideas to come to a conclusion, partially supported by an unbalanced argument with limited coherence. (AO2)
Level 3	9-12	• Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1) • Applies knowledge and understanding of geographical information/ideas logically, making some relevant connections/relationships. (AO2) • Applies knowledge and understanding of geographical information/ideas to produce a partial but coherent interpretation that is mostly relevant and supported by evidence. (AO2)
Level 4	13-15	• Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1) • Applies knowledge and understanding of geographical information/ideas logically, making relevant connections/relationships. (AO2) • Applies knowledge and understanding of geographical information/ideas to produce a full and coherent interpretation that is relevant and supported by evidence. (AO2)

Question Number	Answer	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. • Gas use has increased by 25 PJ (1) which could be due to a shift to cleaner fossil fuels as a result of local air pollution concerns (particulates) (1) / new sources of gas supply e.g. pipelines from the east. • Renewables have increased from 30 PJ to 170 PJ making up most of the total increase since 1990 (1) which represents a shift toward lower carbon emission energy due to concerns about global warming / meeting climate agreement obligations (1). • Wind has increased the most (relatively) from around 1 PJ in 1990 to 45 PJ in 2020 (1) which could be the result of better technology being available / lower cost than in 1990 (1). • Energy demand has increased overall by 120 PJ (1) which could be linked to economic and population growth, so people on average consume more energy (1). NB oil use does not change. Credit other reasons.	**(5)**

Question Number	Answer	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: AO1: • Energy pathways include pipelines, road, rail, shipping routes as well as electricity transmission systems; international pathways cross national borders. • Fossil fuels move along pathways, many of which are international e.g. European gas pipeline network or oil tanker shipping routes.	

	• Some countries rely on international pathways for their energy supply, but many countries have a large domestic supply. • Oil might be seen as the most 'vulnerable' energy source due to the mismatch between locations of excess supply (Middle East) and main areas of demand (Europe, N America, Asia). AO2: • Pathways can be vulnerable, especially when they are heavily relied upon e.g. 2006 / 2009 / 2022 Ukraine gas crisis which affected many countries in E Europe; Germany sponsored new pipelines that 'bypass' Ukraine to increase security of gas supply from Russia (on'-hold) ; the UK is less vulnerable having its own supply plus pipelines from 'friendly' Norway. • Oil supplies can be interrupted by war, conflict and sanctions (Russia, 2022) , the closure of maritime choke points, piracy and even by the impact of hurricanes on oil drilling and supply; however the international market in oil and gas tends to operate very smoothly – with only price being a major issue (although that can affect energy security); prices have in the past been manipulated by OPEC. • There are numerous examples on international electricity links or 'interconnectors' that in Europe for instance, balance supply and demand between nations and lead to greater security; where major electricity infrastructure fails (India, South Africa) it is often due to a lack of national resilience within domestic pathways. • It can be argued that domestic energy resources and pathways are more secure than reliance on international ones, which is why 'fracking' has taken off in the USA to increase domestic oil and gas production; renewable energy is almost always domestic and so long as a reliable mix is used it can lead to low-cost, secure supply. • Some countries, such as France with its extensive nuclear programme, have gone to great lengths to ensure domestic supply of at least some energy resources. • Many other factors could be assessed, such as public perceptions (nuclear power in Germany, Japan) or reliance on foreign investment / technology (potential reliance on China for the UK's new nuclear power stations) as having a greater impact than pathways. • Very high international market prices for oil and gas (2007-08, 2022) can reduce security even when supplies are reasonable – at least for some groups with low incomes.	**(15)**

Level	Mark	Descriptor
	0	No rewardable material.

Level 1	1–4	• Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1) • 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) • 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)
Level 2	5-8	• Demonstrates geographical knowledge and understanding, which is occasionally relevant and may include some inaccuracies. (AO1) • 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) • Applies knowledge and understanding of geographical information/ideas to come to a conclusion, partially supported by an unbalanced argument with limited coherence. (AO2)
Level 3	9-12	• Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1) • Applies knowledge and understanding of geographical information/ideas logically, making some relevant connections/relationships. (AO2) • Applies knowledge and understanding of geographical information/ideas to produce a partial but coherent interpretation that is mostly relevant and supported by evidence. (AO2)
Level 4	13-15	• Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1) • Applies knowledge and understanding of geographical information/ideas logically, making relevant connections/relationships. (AO2) • Applies knowledge and understanding of geographical information/ideas to produce a full and coherent interpretation that is relevant and supported by evidence. (AO2)

Question	Answer	Mark

Number		
5(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. • Water imports from Malaysia have fallen by about 10m/m^3 (1) possibly as a result of a wish to rely less on a foreign country in terms of water security (1). • A major change is the appearance of desalination by 2020 although as a small 30m/m^3 (1) because the costs of the technology have fallen / there may be no other option (local catchment supply has barely increased at all) (1). • Recycled water now makes up 25% of supply, from 0% in 1990 (1); this can be seen as a 'green' approach to increasing water supply possibly reflecting a desire to improve environmental credentials / increase supply at a lower cost than more desalination (1). • Overall water supply has increased from 310 to 500m/m^3 per year (1) as a result of rising population and economic growth (Asian Tiger economy) (1). • Very small increase in local catchment water sources of 50m/m^3 (1), probably because the majority of sources were already used by 1990 (1). Credit other reasons.	**(5)**

Question Number	Answer	Mark
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: AO1: • Major engineering schemes include dams, reservoirs, water transfers, desalination and pipeline networks to store and transfer water; large scale aquifer exploitation. • Most major engineering schemes are high cost, and many are controversial – in developing / emerging countries they generally supply urban areas not rural ones.	

	• There are smaller, more local schemes which are often lower cost but perhaps less reliable; many areas rely on groundwater which tends to be more ad hoc. • Water supply is critical as there is no alternative to water, and it is relied on for food production as well as human health. AO2: • There are many examples of costly, large-scale schemes some of which are stand-alone (Aswan Dam) and others which are more integrated systems (Turkey's GAP project, China's South-North scheme); these can increase water security by increasing supply (they are often multi-purpose) and even out seasonal variations in supply; all schemes come with costs in terms of relocation and environmental impacts – and in some cases these costs are significant. • Some schemes 'fail' or have unintended consequences an example being the Aral Sea and Amu Darya / Syr Darya rivers calling into question their success at improving water supply; other schemes potentially cause conflict such as Ethiopia's Grand Renaissance Dam (and other dams) which could reduce supply to Sudan and Egypt; foreign funding (China) could increase economic dependency / debt. • Many major engineering schemes are very high cost, and have cost over-runs, so the price of water is higher than expected – possibly at the expense of the poor; in many developing world urban slums and rural areas the benefits of major schemes fail to reach those with a poor water supply / economic water scarcity. • Large scale schemes may be vulnerable to climate change longer-term, with the risk of falling reservoir levels (Hoover Dam) and lack of alternative supply. • It could be argued that, given the millions of people that need to be supplied with water, large engineering schemes are really the only available option. • Alternative small scale intermediate technology schemes might be seen as more useful, at least in some settings such as isolated rural areas where water need is highly dispersed; small-scale schemes usually have significant socio-economic benefits but may fail to reach many people.	**(15)**

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–4	• Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or

		irrelevant. (AO1) • 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) • 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)
Level 2	5-8	• Demonstrates geographical knowledge and understanding, which is occasionally relevant and may include some inaccuracies. (AO1) • 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) • Applies knowledge and understanding of geographical information/ideas to come to a conclusion, partially supported by an unbalanced argument with limited coherence. (AO2)
Level 3	9-12	• Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1) • Applies knowledge and understanding of geographical information/ideas logically, making some relevant connections/relationships. (AO2) • Applies knowledge and understanding of geographical information/ideas to produce a partial but coherent interpretation that is mostly relevant and supported by evidence. (AO2)
Level 4	13-15	• Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1) • Applies knowledge and understanding of geographical information/ideas logically, making relevant connections/relationships. (AO2) • Applies knowledge and understanding of geographical information/ideas to produce a full and coherent interpretation that is relevant and supported by evidence. (AO2)

Question number	Answer	Mark
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 **only** 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: • Spheres of influence are geographical areas that superpowers / emerging powers consider as 'their back yard' over which they have exclusive influence. • They can be land areas, or maritime areas (EEZs and wider areas), contiguous or non-contiguous. • In some cases spheres of influence may overlap or be contested e.g. Eastern Europe. • Tensions include disagreement over access to resources and / or political influence, in terms of diplomatic fall-outs or in some cases actual conflict; historic / accidental tensions e.g. lack of Kurdish state, Sykes-Picot line on the Middle East. • Geopolitical stability refers to the safe, normal operation of the world economy and political system – governed by a rules-based order and involving organisations such as the UN and WTO. AO2: • During a period of change from the post-Cold War unipolar world order, to a new bi- or multi-polar one it could be argued that spheres of influence are less stable / in a state of flux due to the rise of China and other emerging powers – so tension and conflict is more likely now than it has been. • There are significant risks in the South China Sea / Nine dash line area as China has exerted its claimed sovereignty in locations such as the Paracels and Spratleys – areas claimed by other SE Asian states and in an area the USA considers its sphere due to allies Taiwan, Japan, SK and Philippines; as China expands its search for resources this in an area of increasing concern; it may be related to China wider BRI initiative across Asia towards Europe. • Of perhaps less concern is China's movement into Africa, as traditional colonial influence has been in long retreat – but there are issues with oil exploitation on particular and	

	concerns that China's economic influence in Africa comes at the expense of local people and businesses. • The example of Russian expansionism in Georgia (2008) and Ukraine (2014, 2022) might be used as evidence that Russia will fight hard to secure its Central Asian and eastern European sphere of influence; tensions between Russia and the 'west' have led to sanctions in some cases and possibly reduced economic prosperity in Russia (at least for some); details of the ongoing situation in 2022. • It might be argued that disagreements between powerful countries (USA, China, EU) over trade are actually much more significant in terms of economic prosperity than sphere of influence disputes e.g. collapse of trade talks and agreements. • Equally, IGOs such as the UN and WTO work hard to reduce the impact on tensions and disputes over EEZs and other claims – so tensions often amount to sabre-rattling rather than conflict that has a direct impact on people (but not in all cases e.g. Ukraine in 2014, 2022). • As the question is open, other threats might be considered such as global climate change, or even Covid -19; this style of answer is acceptable so long as it is rooted in a discussion of spheres of influence. • Accept colonial spheres of influence, as well as economic and cultural ones within a wider discussion of geographical spheres.	**(20)**

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

Level 2	6-10	• Demonstrates geographical knowledge and understanding, which is occasionally relevant and may include some inaccuracies. (AO1) • Applies knowledge and understanding of geographical information/ideas with limited but logical connections/relationships. (AO2) • 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) • Applies knowledge and understanding of geographical information/ideas to come to a conclusion, partially supported by an unbalanced argument with limited coherence. (AO2)
Level 3	11-15	• Demonstrates geographical knowledge and understanding, which is mostly relevant and accurate. (AO1) • Applies knowledge and understanding of geographical information/ideas to find some logical and relevant connections/relationships. (AO2) • Applies knowledge and understanding of geographical ideas in order to produce a partial but coherent interpretation that is supported by some evidence. (AO2) • 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)
Level 4	16-20	• Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1) • Applies knowledge and understanding of geographical information/ideas to find fully logical and relevant connections/relationships. (AO2) • Applies knowledge and understanding of geographical information/ideas to produce a full and coherent interpretation that is supported by evidence. (AO2) • 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)

Question Number	Answer	Mark
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 **only** 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: • The MDGs ran from 2000-2015 with 8 goals designed to reduce hunger, poverty and inequality. • The SDGS from 2015-2030 are more wide-ranging but with similar overall aims. • These agendas are implemented at national level, supported by global IGOs and NGOs and with funding targeted through the ODA system and WB lending. • The development gap represents the widening gap between the rich, middle class and roughly 1 billion that live on less than $1.90 PPP per day. • Whilst most of the world's population have made progress, a large number in Africa and South Asia have not. AO2: • Answers might reflect on the MDGs, which reached completion some time ago; there were overall successes in terms of poverty reduction, hunger reduction and improved access to education – but less progress in some areas such as maternal health. • Spatially, progress was most clear in China and other parts of Asia, and some areas in Latin America – but weaker in Africa; towards the end of the period conflict in the MENA area and some parts of Africa undid some progress. • The MDGs and SDGs do provide clear goals and targets to aim for i.e. measurable progress can be made, and large increases in ODA / aid were provided in support – however, in poorly governed places, failed states, and places affected by war or natural disaster (Haiti) progress was limited and easily halted or reversed. • Development Agendas might be argued as being too 'top-down' to focus on the basic needs problems that many in the bottom billion face – or that NGOs are best placed to put in place the type of support needed by the very poor. • Economic development post-2000 in China, Vietnam, India,	

	Kenya, Nigeria and many other countries might be argued as a more significant contributor to poverty and hunger reduction than the agendas i.e. better at narrowing the gap. • It is early in the process to assess the SDGs: they have the benefit of a greater focus on resilience building and environmentally sustainable solutions, but perhaps the world in less willing to fund the required programmes than in the 2000-2010 period; some argue the many goals and targets of the SDGs are too complex compared to the simpler MDG message. • Arguments that consider other options (FairTrade, industrialisation, intermediate technology) as better / worse in comparison to the agendas are acceptable; Covid-19 (or other threats) might be argued as undoing some progress.	**(20)**

Level	Mark	Descriptor
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