



Mark Scheme (Results)

Summer 2025

Pearson Edexcel International Advanced
Subsidiary Level in Geography (WGE01)
Paper 01 Global Challenges

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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.

Important 2506 Country classification / development level terminology:

The IAL Geography Specification currently uses the terms:

- Developing country
- Emerging country
- Developed country.

In answers candidates are likely to use the terminology above.

Other terminology is equally acceptable and should be credited, such as:

- Global North (referring to developed / high-income / HIC countries)
- Global South (referring to developing / low-income / LICs *and* emerging / middle-income / MIC countries)

If terminology such as LDC (Least Developed Country), NIC (Newly Industrialised Country) and other similar terms are used by candidates, credit should be given as long as the meaning is clear and their use is accurate in the context of the question.

Question Number	Answer – Identify the number of people at risk from flooding in Bangladesh. (1.3.2.1)	Mark
1(a)(i)	AO1 (2 mark) C: 94 million	(1)

Question Number	Answer – Suggest two reasons why the population at risk from flooding varies between the countries shown in Figure 1 1.3.2.1)	Mark
1(a)(ii)	A02 (1 marks) / A01 (3 marks) Award 1 mark for a generic reason not linked to a country shown in Figure 1. For 2 marks there must be reference to a specific country or countries. • India has a much larger populations/higher population density (1). This means that more people are living in flood-prone areas in these countries, especially in rapidly growing urban areas (1). • India is heavily influenced by the Himalayan Mountain range, which results in glacial melt (1), leading to increased water flow into river systems (1). • Rapid urbanisation, industrialisation, and agricultural expansion in India have led to extensive deforestation and alterations in land use patterns (1). This results in reducing natural water storage capacity and increasing surface runoff. (1) • In Bangladesh, a large portion of the country is situated in a delta region (1) meaning it is low-lying so moderate increases in river levels/rainfall intensity results in flooding (1). Accept other correct explanations.	(4)

Question Number	Answer: Explain why the impacts of tropical cyclones are often most severe in developing countries. (1.3.2.1)	Mark
1(b)	AO1 (4 marks) Award 1 mark for a basic explanation and a further mark for a development of the explanation. • Developing countries typically have inadequate infrastructure such as poorly constructed buildings/weak transportation networks/limited drainage systems (1). This makes them more vulnerable to the destructive forces of tropical storms, including flooding, landslides, and structural damage (1). • Many developing countries have poor governance (1) which leads to a lack effective disaster preparedness plans/early warning systems/governance (1). Without timely alerts and proper evacuation procedures, there are often higher casualties and greater damage to property (1). • There are a greater proportion of people who are at risk as more people live in informal settlements or slums that are particularly vulnerable to natural disasters (1). These areas often lack proper	(4)

	infrastructure (1) and are situated in high-risk zones such as floodplains or steep hillsides, increasing their susceptibility to storm-related hazards (1). - Many developing countries rely heavily on agriculture for livelihoods (1). Tropical storms can devastate crops, livestock, and agricultural infrastructure, leading to food shortages, loss of income, and economic instability (1). - Developing countries often have limited financial resources to invest in disaster preparedness, mitigation, and recovery efforts (1). The cost of rebuilding infrastructure, providing humanitarian aid can place a significant strain on already constrained budgets (1). Accept other correct explanations.	
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Question number	Answer - Explain how El Niño Southern Oscillation (ENSO) cycles can cause changes to flood and drought patterns.(1.3.1.2)	Mark
1(c)	AO1 (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: Accept other correct explanations. - During El Niño events, sea surface temperatures (SSTs) in the central and eastern Pacific Ocean become warmer than average, while La Niña events are characterised by cooler-than-average SSTs. - El Niño events typically weaken the Walker Circulation, which is the east-west atmospheric circulation over the tropical Pacific Ocean. - El Niño tends to enhance rainfall in certain regions while suppressing it in others. For example, it can lead to increased rainfall in the eastern Pacific (e.g. Peru) and parts of North and South America, resulting in flooding and landslides. On the other hand, it can bring drought conditions to regions such as Australia, Indonesia, and parts of Africa, leading to water shortages, crop failures, and wildfires. - El Niño tends to suppress tropical cyclone activity in the Atlantic basin but can enhance it in the Pacific basin, particularly in the central and eastern Pacific. This can result in an increased frequency and intensity of hurricanes, typhoons, and cyclones, posing significant risks to coastal communities through strong winds, storm surges, and heavy rainfall.	(6)

	• El Niño can also influence temperature patterns, leading to above-average temperatures in regions such as Australia and below-average temperatures in others. These temperature anomalies can increase heatwaves, droughts, and wildfires in some areas while potentially causing cold snaps and winter storms in others. • La Niña tends to enhance rainfall in certain regions, such as the western Pacific, parts of Southeast Asia, Australia, and parts of South America. This can lead to increased flooding, particularly in areas that are already prone to heavy rainfall events. NB: If only floods or droughts are covered candidates are unlikely to reach level 3 marks NB: Only El Nino or La Nina are required to reach full marks	
Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-2	• Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1) • Understanding addresses a narrow range of geographical ideas which lack detail. (AO1)
Level 2	3-4	• Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1) • Understanding addresses a range of geographical ideas which are not fully detailed and/or developed. (AO1)
Level 3	5-6	• Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1) • Understanding addresses a broad range of geographical ideas which are detailed and fully developed. (AO1)

Question Number	Answer - Compare global temperatures before and after the year 1980 (1.3.4.3)	Mark
2(a)(i)	AO2 (2 marks) - Global temperatures remained below the long-term average temperature (0°) before 1980 and after 1980 global surface temperatures have moved above the long-term average temperature (0°) (1) - Global temperatures were more stable/didn't fluctuate as much before 1980 when compared with after 1980 - Global temperatures show a continued increase since 1980 whereas before 1980 temperatures have been relatively stable (1) - Global temperatures show a narrower range of approx. 0.2 degrees before 1980 whereas since 1980 the range has increased to around 0.8 degrees (1) N:B The command word is compare and so candidates need to identify a difference before and after 1980 to gain credit. They should not gain credit for description of the overall trend.	(2)

Question Number	Answer - Explain one way volcanic eruptions can cause short-term climate change (1.3.4.2)	Mark
2(a)(ii)	AO1 (3 mark) - When volcanic eruptions eject large amounts of ash and sulphur dioxide into the atmosphere (1), they reduce the amount of solar radiation/sunlight reaching the Earth's surface (1), this can lead to a temporary cooling of the Earth's surface temperature (1). - Volcanoes can eject of large amounts of volcanic aerosols into the atmosphere (1) it can disrupt atmospheric circulation patterns, such as the jet stream and monsoon systems (1), this disruption can lead to changes in weather patterns and precipitation distribution across different regions (1).	(3)

Question Number	Answer Explain why some coastal cities are economically vulnerable to the impacts of rising sea levels. (1.3.5.3)	Mark
2(b)	AO1 (4 marks) Award 1 mark for each basic explanation and a further mark for a development of the explanation. - Coastal cities such as Miami have high-value real estate/infrastructure (1) which can lose value/become uninsurable (1). - Coastal cities such as New York often have dense populations which are reliant on infrastructure such as subways (1) sea level rise combined with storm surges can cause high economic costs due to repairs and economic losses (1)	(4)

	- Coastal cities such as Venice/Bangkok rely on tourism/shipping/fishing (1) sea level rises can disrupt supply chains/reduce tourism/damage marine ecosystems (1) - Developing coastal cities such as Jakarta do not have the financial capacity (1) so building sea walls/relocating vulnerable communities is not feasible (1) - Higher sea levels can lead to saltwater intrusion as into freshwater sources such as aquifers and estuaries in cities such as Miami (1). This can have significant implications for water quality, food security, and ecosystem health (1). Accept other correct explanations.	
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Question number	Answer: Explain why some countries have higher per capita greenhouse gas emissions than others. (1.3.5.1)	Mark
2(c)	AO1 (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: - Developed countries such as the USA tend to have higher levels of industrialisation and energy consumption, leading to greater emissions from industrial activities, power generation, and transportation. Conversely, developing countries may have lower emissions from these sectors but may still contribute significantly to GHG emissions from other sources, such as agriculture and land use change. - Countries such as China that rely heavily on fossil fuels such as coal, oil, and natural gas for energy generation and transportation tend to have higher emissions compared to those that utilise cleaner energy sources such as renewable energy, nuclear power, and hydropower. - Countries with high levels of urbanisation may have higher emissions from vehicles, buildings, and industry, while rural areas may have lower emissions but may contribute to GHG emissions from agricultural activities and deforestation. - Variations in employment sectors will influence greenhouse gas emissions. Industries such as manufacturing, mining, and cement production can emit large amounts of GHGs through direct emissions and energy consumption, while agricultural activities such as livestock farming, rice cultivation, and deforestation can contribute to emissions of methane (CH₄) and nitrous oxide (N₂O). - Countries with stringent emission standards, carbon pricing mechanisms, and incentives for renewable energy deployment may	(6)

		have lower emissions compared to those with lax environmental regulations and limited enforcement mechanisms. The consumption-based emissions of developed countries may not accurately reflect their true emissions footprint, as they import goods and services produced in other countries with higher emissions due to the outsourcing of manufacturing. Accept any other valid responses.	
Level	Mark	Descriptor	
	0	No rewardable material.	
Level 1	1-2	- Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1) - Understanding addresses a narrow range of geographical ideas which lack detail. (AO1)	
Level 2	3-4	- Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1) - Understanding addresses a range of geographical ideas which are not fully detailed and/or developed. (AO1)	
Level 3	5-6	- Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1) - Understanding addresses a broad range of geographical ideas which are detailed and fully developed. (AO1)	

Question Number	Answer - Identify the change in internet connectivity for Europe between 2013 and 2023.	Mark
3(a)(i)	AO2 (1 mark) B: +14.2%	(1)

Question Number	Suggest one reason for the difference in internet connectivity between Africa and Europe in 2023 (1.4.1.2)	Mark
3(a)(ii)	AO1 (1 mark) / A02 (1 marks) Award 1 mark for a correct suggestion for the differences in global internet reach and a further mark for a development of the explanation up to 2 marks. • Europe is more developed/greater wealth (1) so can invest in devices to connect to the internet/internet infrastructure (1). • Europe has widespread access to high-speed broadband services, and robust mobile network coverage in urban and rural areas of the Americas (1). Whereas Africa is reliant on mobile technology due to the lack of broadband infrastructure (1). • Historically, Europe have attracted more investment in telecommunications infrastructure and technology compared to Africa (1). The availability of these financial resources plays a significant role in expanding internet reach and accessibility (1). • Africa's vast and diverse geography, including remote and sparsely populated areas, presents challenges for internet infrastructure deployment (1). In contrast, Europe have a more concentrated population distribution, making it more cost-effective to deploy and maintain internet infrastructure (1). • In Europe, higher average incomes and literacy rates contribute to wider internet access (1) compared to many parts of Africa where socioeconomic disparities mean the internet is not accessible for all (1).	(2)

Question Number	Explain one reason why internet connections are important to Transnational Corporations (TNCs) (1.4.2.1)	Mark
3(a)(iii)	AO1 (2 marks) Award 1 mark for a basic explanation and a further mark for a development of the explanation up to 2 marks. • The internet provides TNCs with access to global markets (1), allowing them to reach customers in virtually any part of the world • TNCs can showcase their products and services to a global audience (1), expanding their customer base/ revenue opportunities (1) • The internet enables TNCs to communicate with stakeholders across different countries/time zones (1). This increases connectivity/productivity/profits (1) • The internet allows TNCs to monitor their global production networks (1) therefore allowing them to outsource to new locations (1)	(2)

	- The internet provides TNCs with data that can be collected, analysed to gain insights into consumer behaviour/market trends (1). TNCs can use this data to inform decision-making, improve marketing strategies, and enhance customer experiences (1) - The internet offers TNCs opportunities to build and manage their brands on a global scale through websites, social media platforms, and online advertising campaigns (1). TNCs can enhance brand visibility building their reputation and customer base (1). N.B – The response needs to focus on internet communications not just communications in general e.g. the telephone.	
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Question Number	Answer - Explain two costs of globalisation argued by anti-globalisation groups. (1.4.3.1)	Mark
3(b)	AO1 (4 marks) Award 1 mark for a basic explanation and a further mark for a development of the explanation up to 2 marks. - Global brands often have significant market power and dominance (1). Anti-globalisation groups argue that this stifles competition/limits consumer choice/undermines local businesses and economies (1). - Anti-globalisation groups highlight issues such as sweatshop labour/low wages/poor working conditions and lack of labour rights (1) They argue that TNCs prioritise profit over the well-being of workers (1). - The expansion of global brands can contribute to environmental degradation (1). Anti-globalisation groups highlight issues such as deforestation/pollution/resource depletion/increased carbon emissions (1). - The growth of global brands can lead to cultural homogenisation/the erosion of cultural diversity (1), which can marginalise and displace local traditions, languages, and identities (1). Mark 2+2 Accept other correct explanations.	(4)

Question number	Answer - Explain why Intergovernmental Organisations (IGOs), such as the WTO and the IMF, have a controversial role in globalisation. (1.4.2.3)	Mark
3(c)	AO1 (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: IGOs often require member countries to adhere to specific policies and regulations, which can be seen as an infringement on national sovereignty. This can lead to tensions, especially when national interests conflict with the mandates of these organisations.	(6)

		• Critics argue that IGOs tend to favour wealthier nations, which can exacerbate economic inequalities. For instance, the IMF's structural adjustment programs have been criticized for imposing austerity measures that disproportionately affect poorer populations. • The push for economic liberalisation and free trade by organisations like the WTO can sometimes lead to negative environmental and social consequences, such as increased pollution and labour exploitation. • The WTO's policies and agreements have contributed to widening global trade imbalances, favouring developed countries at the expense of developing nations. • The rules-based trading system established by the WTO has been perceived as benefiting powerful economies, while smaller and less developed countries struggle to compete on an equal footing. • The WTO's focus on liberalising trade and removing barriers has been criticised for increasing socioeconomic inequalities and marginalising vulnerable populations. • The IMF can intervene in national economies e.g. during the global financial crisis i.e. PIIGS – Portugal, Ireland, Italy, Greece and Spain • Critics argue that free trade policies have led to the exploitation of workers, environmental degradation, and the erosion of labour standards and social protections. Accept other correct explanations. NB: Candidates need to address the idea of controversy to access level 3 marks.	
Level	Mark	Descriptor	
	0	No rewardable material.	
Level 1	1-2	• Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1) • Understanding addresses a narrow range of geographical ideas which lack detail. (AO1)	
Level 2	3-4	• Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1) • Understanding addresses a range of geographical ideas which are not fully detailed and/or developed. (AO1)	
Level 3	5-6	• Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1) • Understanding addresses a broad range of geographical ideas which are detailed and fully developed. (AO1)	

Question Number	Answer - Describe the pattern of urbanisation in Africa (1.4.5.1)	Mark
4(a)(i)	AO2 (2 marks) • Urbanisation levels are highest (over 51%) in the North/ Southwest/ West coast of Africa (1) • The lowest urbanisation levels are found in central/ East Africa/ landlocked countries (1) • Urbanisation levels are lower in the east compared to the west of Africa (1). Accept other correct descriptions.	(2)

Question Number	Answer - Suggest one reason why urbanisation is increasingly rapidly in some African countries (1.4.6.1)	Mark
4(a)(ii)	AO1 (3 marks) Award 1 mark for a basic explanation and a further mark for a development of the explanation. • Economic opportunities/ industrialisation offered in cities encourages urbanisation (1) as they offer better access to jobs, education, healthcare, and other essential services compared to rural areas (1). This attracts people seeking improved living standards and economic prospects (1). • Rural-Urban Migration (1) means many people move from rural areas to cities due to factors like agricultural challenges/ lack of infrastructure/ limited economic opportunities in the countryside/ pull factors to the city (1). This has been encouraged by increased awareness of the opportunities available (1). • Natural Population Growth/ increase (1) means that high birth rates in urban areas contribute to the rapid growth of city populations (1). As cities expand, they attract even more people, creating a cycle of urban growth (1). • Foreign Direct Investment (FDI) (1) leads to increased investment in urban infrastructure and industries by foreign companies (1) can encourage urban growth by creating jobs and improving living conditions (1). Accept other correct descriptions.	(3)

Question Number	Answer - Explain two reasons why it is difficult for countries to manage international migration. (1.4.5.3)	Mark
4(b)	AO1 (4 marks) Award 1 mark for each basic explanation and a further mark for explaining the challenge this reason creates • International migration can put strain on housing/services (1) which countries find difficult to manage due to volume of migrants/lack of investment (1) • Governments may struggle to manage the volume of refugees (1) due to the uncoordinated way that they enter the country/costs associated with refugee and asylum claims (1) • The increased interconnectedness due to globalisation has facilitated greater movement of people across borders (1). Factors such as improved transportation/communication technologies have made it easier for individuals to migrate and these are hard to manage (1). • Migration patterns have become increasingly complex, so countries are faced with a diverse range of migration flows (1). Managing these different types of migration requires flexible policies that address the specific needs and circumstances of each group e.g. refugees vs. economic migrants (1). • Conflict/political instability/environmental disasters force millions of people to flee their homes each year (1). Managing the humanitarian consequences of forced displacement and providing protection to refugees and asylum seekers pose significant challenges for countries and international organisations (1). • Migration has become a very divisive political issue in many countries (1), resulting in conflicts/divisions between groups/communities which are hard to manage (1). • Politicians and policymakers often face pressure from pro/anti-immigrant movements (1), leading to the adoption of policies which are unpopular for certain groups (1). Mark as 2+2 Accept other correct explanations. NB: The extension mark for each part of the question needs to outline the challenge created by the international migration.	(4)

Question number	Answer - Suggest why projections of the size of the global population in the future are uncertain (1.4.4.1)	Mark
4(c)	AO1 (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: • Fertility rates, can vary significantly over time and across different regions. Fertility rates can be by factors such as socio-economic development/access to family planning services/cultural norms/government policies. Small changes in fertility rates can have significant long-term impacts on population growth, making future projections uncertain. • Mortality rates, are influenced by factors such as improvements in healthcare/sanitation/nutrition/disease prevention/access to medical treatments. Advances in medical technology and public health interventions can lead to declines in mortality rates, resulting in population growth. However, unforeseen events such as pandemics, natural disasters, or conflicts can also impact mortality rates and affect population projections. • Migration, both international and internal, can have a significant impact on population size and demographic makeup of countries. However, predicting future migration patterns is challenging due to factors such as economic conditions, political instability, conflict, environmental changes, and government policies. Changes in migration patterns can result in population growth or decline in receiving and sending countries, making future population projections uncertain. • Economic and social factors, including changes in employment opportunities, education levels, urbanisation, and social norms, can influence fertility decisions and migration patterns. Rapid economic development and urbanisation tend to lead to declines in fertility rates and changes in migration patterns, but the pace and extent of these changes can vary widely between countries and regions. • Government policies related to family planning, healthcare, education, immigration, and labour force participation can also affect population dynamics and growth rates. Changes in government policies or implementation strategies can lead to unexpected shifts in population trends, making future projections uncertain.	(6)

		Candidates may include population theories such as Boserup, Malthus or Club of Rome but these need to clearly link to how they may affect the size of the population in the future.	
		Accept any valid responses	
Level	Mark	Descriptor	
	0	No rewardable material.	
Level 1	1-2	- Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1) - Understanding addresses a narrow range of geographical ideas which lack detail. (AO1)	
Level 2	3-4	- Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1) - Understanding addresses a range of geographical ideas which are not fully detailed and/or developed. (AO1)	
Level 3	5-6	- Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1) - Understanding addresses a broad range of geographical ideas which are detailed and fully developed. (AO1)	

Question number	Suggest reasons why these impacts of global warming will be uneven across the world (1.3.5.3/1.3.6.1)
5(a)	AO1 (5 marks)/AO2 (5 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: • Global warming refers to the long-term increase in Earth's average surface temperature, primarily due to human activities that release greenhouse gases into the atmosphere. • Different regions of the world are exposed to varying climate hazards and vulnerabilities based on their geographical location. • Socioeconomic factors such as income levels, access to resources, infrastructure, and healthcare services can influence a community's ability to adapt to climate change impacts. AO2: • Different regions are located at varying distances from the equator and have distinct geographical features such as coastlines, mountains, and deserts. These geographical differences influence how regions experience changes in temperature, precipitation patterns, and extreme weather events associated with global warming (glaciers/oceans). • Regions closer to the poles are generally more sensitive to changes in temperature compared to equatorial regions. As a result, polar and high-latitude areas are experiencing more pronounced warming, leading to melting ice caps, shrinking glaciers, and permafrost thaw, which have widespread implications for ecosystems and sea level rise (glaciers/oceans). • Global warming affects the distribution and availability of water resources, with some regions experiencing increased rainfall and flooding, while others face more frequent droughts and water scarcity. This disparity in water availability can impact agriculture, freshwater ecosystems, and human populations dependent on reliable water sources. • Different ecosystems have varying levels of resilience to climate change. Fragile ecosystems such as coral reefs, tropical rainforests, and Arctic tundra are particularly vulnerable to temperature increases, ocean acidification, and habitat destruction, leading to biodiversity loss and ecosystem collapse in some regions. • Highly populated urban areas are particularly susceptible to heatwaves, air pollution, and extreme weather events exacerbated by global warming (Health). Rapid urbanisation in many regions has led to increased vulnerability to climate-related hazards due to inadequate infrastructure, informal settlements, and limited access to basic services.

		- Socio-economic factors such as wealth, infrastructure, and access to resources influence a region's capacity to adapt to and mitigate the impacts of global warming. Developed countries often have more resources and technological capabilities to invest in climate resilience measures, while developing countries may struggle to cope with the escalating costs of climate-related disasters and environmental degradation. - The effectiveness of climate change mitigation and adaptation policies varies widely across countries and regions. Differences in political priorities, government capacity, and international cooperation can result in disparities in efforts to reduce greenhouse gas emissions and implement resilience-building measures. N.B. Expect candidates to refer to Figure 5 but use this as a stimulus to consider wider issues. For Level 3 candidates should have explicitly addressed the uneven nature of the impacts.
Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-4	- Demonstrates isolated elements of geographical knowledge. (AO1) - Demonstrates isolated elements of geographical understanding, some of which may be inaccurate. (AO1) - Applies knowledge and understanding to geographical information / ideas, making limited logical connections / relationships. (AO2) - Applies knowledge and understanding to geographical information / ideas to produce an interpretation that is not relevant and / or supported by evidence. (AO2)
Level 2	5-7	- Demonstrates geographical knowledge, which is mostly relevant and may include some inaccuracies. (AO1) - Demonstrates geographical understanding, which is mostly relevant and may include some inaccuracies. (AO1) - Applies knowledge and understanding to geographical information / ideas logically, making some relevant connections / relationships. (AO2) - Applies knowledge and understanding to 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 throughout. (AO1) - Demonstrates accurate and relevant geographical understanding throughout. (AO1) - Applies knowledge and understanding to geographical information / ideas logically, making relevant connections / relationships. (AO2) - Applies knowledge and understanding to geographical information / ideas to produce a full and coherent interpretation that is relevant and supported by evidence. (AO2)

Question number	'Mega-disasters require a different scale and type of response compared to other natural disasters.' (1.3.2.3/1.3.3.3)
5(b)	AO1 (5 marks)/AO2 (15 marks) Marking instructions Markers must apply the descriptors in line with the general marking guidance (page 3) 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 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 • A mega disaster describes an exceptionally large-scale and devastating disaster that causes widespread destruction, loss of life, and significant socioeconomic impacts. • These events typically exceed the capacity of affected communities, regions, or even entire countries to cope and respond effectively. • Mega disasters can result from natural hazards such as earthquakes, tsunamis, hurricanes, typhoons, cyclones, floods, droughts, wildfires, volcanic eruptions, and landslides. • These events often occur suddenly and with little warning, leading to extensive damage to infrastructure, housing, agriculture, and ecosystems, as well as loss of life and displacement of populations. AO2 Agree: • Mega-disasters, by definition, are extreme events that exceed the coping capacity of affected regions, regardless of their economic development level. Such events can include massive earthquakes, tsunamis, hurricanes, and volcanic eruptions, which can cause widespread destruction and loss of life irrespective of a country's economic status. • Responding to mega-disasters requires significant resources in terms of personnel, equipment, supplies, and funding compared to smaller-scale disasters. The scale of the response must match the magnitude of the disaster to effectively meet the needs of affected populations and support long-term recovery efforts. • Mega-disasters present complex challenges that go beyond the capabilities of standard disaster response mechanisms. Addressing issues such as widespread displacement, breakdown of critical infrastructure, environmental contamination, and secondary hazards requires a coordinated and multi-faceted approach involving various stakeholders.

	- Past mega-disasters such as the 2011 Tohoku earthquake and tsunami in Japan, Hurricane Katrina in the United States, the 2004 Indian Ocean tsunami, and the 2010 Haiti earthquake reveals significant impacts on both developed and developing countries, despite differences in economic development. Disagree: - While mega-disasters may require a larger scale of response, the fundamental principles of disaster response remain the same regardless of the scale of the disaster. These principles include rapid assessment, coordination, resource mobilisation, and meeting the immediate needs of affected populations. The same response framework can often be adapted and scaled up to address mega-disasters. - Effective disaster preparedness measures can help mitigate the impact of mega-disasters and ensure a more efficient response. By investing in risk reduction strategies, early warning systems, and community resilience-building initiatives, the severity of mega-disasters can be minimised, and response efforts can be more effectively managed. - While the initial response to mega-disasters may require a larger scale of resources, the long-term recovery process may not necessarily differ significantly from that of smaller-scale disasters. Both require sustained efforts to rebuild infrastructure, restore livelihoods, enhance resilience, and address underlying vulnerabilities to reduce the risk of future disasters. - Depending on the definition of a mega disaster, Haiti could be seen as not a mega disaster as it only affected one country, but still required international response. Assessment: The scale, scope, and challenges associated with mega-disasters often require a response that is tailored to their magnitude. However, effective disaster preparedness, coordination, and resilience-building efforts can help mitigate the impact of mega-disasters and ensure a more efficient response. N.B – Answers that don't differentiate between mega disasters and normal disasters are likely to self-penalise
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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	Suggest possible reasons for the differences in the 2021 KOF Globalisation Index scores. (1.4.1.1/1.4.1.3)
6(a)	AO1 (5 marks)/AO2 (5 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 • The KOF Index of Globalisation aims to measure the rate of globalisation in countries around the world. It is based on three dimensions; economic, social and political. • Globalisation integrates national economies, cultures, technologies and governance. • Countries with high levels of economic integration, characterised by significant trade flows, foreign direct investment (FDI), and participation in global supply chains, may rank higher in the Globalisation Index. • Economic indicators such as trade openness, export/import ratios, FDI inflows/outflows, and the presence of multinational corporations can influence a country's ranking. AO2 • Countries such as the Netherlands score high due to the extent of technological connectivity and digital infrastructure. Indicators such as internet penetration rates, mobile phone subscriptions, broadband connectivity, and innovation capacity may contribute to its high score, reflecting its level of integration into the global digital economy. • The USA has high levels of political engagement and diplomatic relations with other countries. Factors such as membership in international organisations, participation in multilateral agreements, diplomatic missions abroad, and foreign aid contributions could result in high scoring in this area for the USA. However, the USA's anti-migration policy could have led to it not appearing higher in the ranking. • The extent of migration flows, both inbound and outbound, as well as policies related to immigration and emigration, can impact a country's ranking in the Globalisation Index. Indicators such as immigrant population share, remittance inflows, visa facilitation, and labour mobility agreements may be considered in evaluating a country's openness to migration and mobility. • Countries that prioritise environmental sustainability and participate in global efforts to address climate change and environmental challenges. The USA's poor record at tackling climate change could explain why it is ranked at only 25, compared with countries such as the Netherlands which would score highly for indicators such as renewable energy production, carbon emissions per capita,

		environmental regulations, and participation in international environmental agreements. - India has integrated with the global economy, but still faces challenges such as trade barriers, regulatory hurdles, and infrastructure deficits that can limit its economic globalisation score. The social globalisation is also limited in some areas due to limited internet penetration in rural areas and varying levels of access to global media and communication. - Chad has relatively low levels of economic integration with the global market. This includes limited trade volumes, low foreign direct investment (FDI), and minimal participation in international financial markets. While Chad does participate in international organisations and treaties, its overall political globalisation score is impacted by factors such as political instability and limited diplomatic influence on the global stage. N.B: Some candidates may address this question by country, others by factor. Both approaches are acceptable.
Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-4	- Demonstrates isolated elements of geographical knowledge. (AO1) - Demonstrates isolated elements of geographical understanding, some of which may be inaccurate. (AO1) - Applies knowledge and understanding to geographical information / ideas, making limited logical connections/relationships. (AO2) - Applies knowledge and understanding to geographical information / ideas to produce an interpretation that is not relevant and/or supported by evidence. (AO2)
Level 2	5-7	- Demonstrates geographical knowledge, which is mostly relevant and may include some inaccuracies. (AO1) - Demonstrates geographical understanding, which is mostly relevant and may include some inaccuracies. (AO1) - Applies knowledge and understanding to geographical information / ideas logically, making some relevant connections / relationships. (AO2) - Applies knowledge and understanding to 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 throughout. (AO1) - Demonstrates accurate and relevant geographical understanding throughout. (AO1) - Applies knowledge and understanding to geographical information / ideas logically, making relevant connections/relationships. (AO2) - Applies knowledge and understanding to geographical information / ideas to produce a full and coherent interpretation that is relevant and supported by evidence. (AO2)

Question number	'Negative impacts of urbanisation are experienced by people in megacities in countries at all levels of economic development.' (1.4.6.1/1.4.6.2/1.4.6.3)
6(b)	AO1 (5 marks)/AO2 (15 marks) Marking instructions Markers must apply the descriptors in line with the general marking guidance (page 3) 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 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 • Urbanisation is the process by which an increasing proportion of a country's population becomes concentrated in urban areas. • Urbanisation leads to the growth and expansion of cities and towns. • Urbanisation is results in changes in land use, infrastructure development, economic activities, social changes, and environmental conditions within urban areas. • Megacities can be found in developing, emerging and developed countries. AO2 Agree: • Rapid urbanisation can strain a country's infrastructure, including transportation, housing, water supply, sanitation, and waste management systems. This is of particular concern in developing countries where 40% of the urban population lack access to piped water for example. • Economically developed countries may struggle to keep pace with the demands of rapid urban growth, leading to congestion, inadequate housing, water shortages, and environmental pollution. For example, traffic congestion costs the U.S. economy around \$166 billion annually in lost productivity and fuel costs. • Rapid urbanisation can exacerbate social inequality and marginalisation, with vulnerable populations such as informal settlers, migrant workers, and low-income households facing greater challenges in accessing basic services and opportunities. Economic development may not address systemic issues of poverty, exclusion, and discrimination that contribute to social disparities in urban areas. • Rapid urbanisation often leads to environmental degradation, including deforestation, air and water pollution, habitat loss, and depletion of natural resources. Economic development may increase environmental pressures

	through rising consumption, industrialisation, and urban sprawl, further contributing to ecological degradation and climate change impacts. • Rapid urbanisation can pose significant public health risks, including higher rates of communicable diseases, inadequate healthcare access, and exposure to environmental hazards. Economic development may not necessarily improve access to healthcare services or address underlying determinants of health such as poverty, overcrowding, and unsafe living conditions in rapidly growing urban areas. Disagree: • Effective urban planning and governance can mitigate the impacts of rapid urbanisation, regardless of a country's level of economic development. Well-designed policies and regulations, supported by national government planning and stakeholder participation, can ensure sustainable urban development, efficient resource allocation, and equitable access to services and opportunities. • Economic development provides countries with greater resources and capacity to invest in critical infrastructure projects to support urban growth. Investment in transportation, housing, water supply, sanitation, and green spaces can improve urban liveability, enhance resilience to natural disasters, and reduce environmental impacts associated with rapid urbanisation. • Economic development creates innovation and technological advancements that can help address the challenges of rapid urbanisation. Smart city technologies, renewable energy solutions, green building practices, and sustainable transportation systems offer opportunities to improve urban efficiency, reduce resource consumption, and enhance quality of life in rapidly growing cities. • Engaging communities in urban planning and decision-making processes can empower residents to engage in their urban environments and address local priorities and concerns. Including communities in urban development can result in greater social cohesion. • Negative impacts of urbanisation are unevenly felt by a range of players depending on their economic status and ability to overcome these. Assessment Candidates may argue that yes there are negative impacts in megacities at all levels of economic development, but the impacts vary, and some are more easily managed in developed megacities. They may also consider that the positive impacts urbanisation outweighs the negative impacts explaining why megacity growth continues particularly in the developed world. N.B: Candidates that fail to focus on megacities but instead take a country level approach will be self-penalising.
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