



Mark Scheme (Results)

June 2026

Pearson Edexcel International GCSE in Geography

Human Geography

4GE1/02R

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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	Identify one job that is part of the primary sector.	Mark
1(a)(i)	<p style="text-align: center;">AO1 (1 mark)</p> <p>A coal miner (1)</p> <p>The answer cannot be B, C or D as these are not jobs that are part of the tertiary sector. B (secondary), C and D (tertiary).</p>	(1)

Question Number	State one impact of an economic shift to a smaller workforce in the primary sector.	Mark
1(a)(ii)	<p style="text-align: center;">AO1 (1 mark)</p> <p>Award 1 mark for a suitable impact.</p> <ul style="list-style-type: none"> • Loss of jobs/unemployment (1) • Growth of the secondary/tertiary sector (1) • Spiral of decline / rural of decline (1). • Rural to urban migration (1). • Mechanisation of labour (1). • Importing of raw materials (1). • Less food produced (1). <p>Accept any other appropriate response.</p>	(1)

Question Number	Identify the stage according to the Clark Fisher model that would have a declining secondary sector.	Mark
1(b)	<p style="text-align: center;">AO1 (1 mark)</p> <p>C post-industrial (1)</p> <p>It cannot be A (not a stage in the Clark Fisher model), B (high secondary) or C (would not have enough secondary to decline).</p>	(1)

Question Number	Study Figure 1a in the Resource Booklet. Suggest one reason for the trend of employment in the tertiary sector.	Mark
1(c)	<p style="text-align: center;">AO2 (1 mark) / AO3 (1 mark)</p> <p>Award 1 mark for basic evidence from the figure (AO3) and a further 1 mark for extension through explanation (AO2).</p>	

	<ul style="list-style-type: none"> • Rise of tertiary sector (1) due to increased economic development/education and training opportunities (1). • Increased population require more services (1) which leads to more jobs in the tertiary sector (1). • Rise of nearly 15 million jobs in services (1) due to a shift away from manufacturing/deindustrialisation (1). <p>Accept any other appropriate response.</p>	(2)
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Question Number	State one factor that may influence the choice of site for a large retail centre.	Mark
1(d)	<p style="text-align: center;">AO1 (1 mark)</p> <p>Award 1 mark for a suitable factor.</p> <ul style="list-style-type: none"> • Cost of land (1) • Access to utilities/transport connections (1) • Access to labour supply (1) • Water supply (1) • Topography of the land (1) • Accessibility (1) • Room for expansion (1) • Proximity to Customers (1) <p>Accept any other reasonable response.</p>	(1)

Question Number	For a named megacity explain two characteristics of informal employment.	Mark
1(e)	<p style="text-align: center;">AO2 (2+2 marks)</p> <p>Award 1 mark for a characteristic identified and a further mark for development, up to a maximum of 2 marks each.</p> <p>A range of megacities could be chosen as context for this response.</p> <p>Karachi:</p> <ul style="list-style-type: none"> • Lack of formal contract / regulations of jobs (1) which means many workers are unprotected/vulnerable to job loss at short notice (1). 	

	<ul style="list-style-type: none"> Often no fixed place of work (1) so may involve selling food in the street in different locations each day (1). <p>Mexico City:</p> <ul style="list-style-type: none"> Workers do not pay tax (1) as the work is undocumented (1). Lack of regulations (1) so is unsanitary. (1) so people turn to the informal sector to make an income (1). <p>Accept any other appropriate response.</p>	(4)
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Question Number	Study Figure 1b in the Resource Booklet. Suggest one way sustainable transport can reduce the carbon footprint.	Mark
1(f)	<p>AO1 (1 mark) / (AO3) 2 marks</p> <p>Award 1 mark (AO1) for basic point and a further 2 marks (AO3) for extension through use of the resource, up to a maximum of 3 marks.</p> <ul style="list-style-type: none"> Using electric forms of transport such as cars, buses or trams (1) can reduce the CO₂ emissions (1) which are used to calculate the carbon footprint. (1) Walking can reduce carbon emissions to 0 (1) which is much lower than travelling by car (1) which means an overall decrease in fossil fuels(1). These sustainable transport do not release as many emissions (1) Electric cars releases 36.2 g/vkm whilst Diesel cars releases 183.0g/vkm (1) Therefore electric vehicles do not contribute as much to global warming (1). <p>Accept any other appropriate response.</p>	(3)

Question Number	Explain one advantage and one disadvantage of a named non-renewable energy source.	Mark
1(g)	<p>AO2 (2+2 marks)</p> <p>Award 1 mark for one advantage and one disadvantage, and a further expansion mark, up to a maximum of 2 marks each.</p> <p>Renewable energy sources could include: Fossil fuels, coal, oil, gas, nuclear.</p>	

	<p>For example:</p> <p><u>Coal</u></p> <p>Advantage:</p> <ul style="list-style-type: none"> • Large reserves available (1) which means it can be a cheaper option for some countries (1). • Existing mining infrastructure (1) which means continued mining allows supply to keep up with demand (1). • Accessible (1) so more people can have access to energy (1). <p>Disadvantage:</p> <ul style="list-style-type: none"> • Burning coal releases CO₂ (1) which contributes to the enhanced greenhouse effect/climate change (1). • Mining processes damage the landscape/cause land pollution (1) which can damage wildlife habitats/reduce biodiversity (1). • Finite (1) none will be available for future generations (1). <p>Accept any other appropriate response.</p>	(4)
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Question Number	Study Figure 1c in the Resource Booklet. Analyse reasons for differences in energy consumption
1(h)	<p style="text-align: center;">AO3 (4 marks)/AO4 (4 marks)</p> <p>Marking instructions</p> <p>Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.</p> <p>Indicative content guidance</p> <p>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:</p> <p>AO3</p> <ul style="list-style-type: none"> • The energy consumption varies a lot between countries in part due to energy resources available as well as the level of development and how that affects demand. • Some countries have large reserves of coal, gas and oil and so may be more dependent on these sources. • Countries seeking greater energy security may have a greater proportion of renewable energy sources used to reduce reliance on fossil fuels. • Some countries may have more use of renewables such as wind power in Germany due to investment in renewable energy to reduce carbon emissions to meet agreed international targets.

	<p>AO4</p> <ul style="list-style-type: none"> Figure 1c shows there are large variations in the proportion of energy consumed per person by source. Figure 1c shows how the USA is dominated by Oil (29,296kWh) and gas (26,073kWh) with much smaller proportions of renewable energy. Figure 1c shows how some countries such as Sweden have a much higher proportion of energy consumption from renewable energy sources, e.g. Sweden with 16,165 by hydropower. Figure 1c shows how the levels of energy consumption per person varies between countries from 75,571 kWh in the United States to 7,652 kWh in India.
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Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-3	<ul style="list-style-type: none"> Attempts to apply understanding to deconstruct information but understanding and connections are flawed. An unbalanced or incomplete argument that provides limited synthesis of understanding. Judgements that are supported by limited evidence. (AO3) Uses some geographical skills to obtain information with limited relevance and accuracy, which supports few aspects of the argument. (AO4)
Level 2	4-6	<ul style="list-style-type: none"> Applies understanding to deconstruct information and provide some logical connections between concepts. An imbalanced argument that synthesises mostly relevant understanding, but not entirely coherently, leading to judgements that are supported by evidence occasionally. (AO3) Uses geographical skills to obtain accurate information that supports some aspects of the argument. (AO4)
Level 3	7-8	<ul style="list-style-type: none"> Applies understanding to deconstruct information and provide logical connections between concepts throughout. A balanced, well-developed argument that synthesises relevant understanding coherently leading to judgements that are supported by evidence throughout. (AO3) Uses geographical skills to obtain accurate information that supports all aspects of the argument. (AO4)

Question Number	Identify one product of arable farming	Mark
2(a)(i)	<p>AO1 (1 mark)</p> <p>D wheat (1)</p> <p>The answer cannot be A and B (pastoral farming), C (aquaculture).</p>	(1)

Question Number	State one factor that affects the distribution of grasslands.	Mark
2(a)(ii)	<p>AO1 (1 mark)</p> <p>Award 1 mark for suitable factor.</p> <ul style="list-style-type: none"> • Temperature (1) • Rainfall/ Precipitation (1) • Altitude (1) • Latitude/ Distance from the Equator (1) • Climate change (1) • Urbanisation (1) • Agriculture/ Farming (1) <p>Accept any other appropriate responses.</p>	(1)

Question Number	Identify the correct statement about genetically modified (GM) crops.	Mark
2(b)	<p>AO1 (1 mark)</p> <p>B Crops are engineered to resistant pests (1)</p> <p>The answer cannot be A, C or D as these are not statements that are correct for genetically modified crops.</p>	(1)

Question Number	Study Figure 2a in the Resource Booklet. Suggest one potential impact a change in tourist numbers could have had on rural areas.	Mark
2(c)	<p>AO2 (1 mark) / AO3 (1 mark)</p> <p>Award 1 mark for basic evidence from the from the figure (AO3) and a further 1 mark for extension through explanation (AO2).</p>	

	<ul style="list-style-type: none"> • Overall increase in tourists visiting farms (1) could lead to places becoming overcrowded (1). • Rapid rise from 2021 to 2024 (1) could lead to habitat damage if new facilities are built to accommodate the increased tourists (1). • Fluctuations in tourist numbers (1) could lead to changing demand for jobs for local people (1). • The decrease in tourist number from 2019 to 2021 (1) can lead to a loss of income (1). <p>Accept any other appropriate responses.</p>	(2)
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Question Number	Name one biome that typically has low annual rainfall.	Mark
2(d)	<p style="text-align: center;">AO1 (1 mark)</p> <p>Award 1 mark for a suitable biome:</p> <ul style="list-style-type: none"> • Desert (Hot/Cold) (1). • Tundra (1). • Polar (1). • Savanna/Grassland (1). 	(1)

Question Number	Explain how the provision of timber and water from natural ecosystems can benefit people.	Mark
2(e)	<p style="text-align: center;">AO2 (2+2 marks)</p> <p>Award 1 mark for initial point and a further mark for development up to a maximum of 2 marks for timber or water.</p> <p>Timber</p> <ul style="list-style-type: none"> • Timber logging can create jobs (1) which increases household income (1). • Timber can be used to make other goods such as furniture (1) which can be exported / sold to increase GDP (1). • Contributes to construction industry (1) which is sustainable as trees can be replanted (1). 	

	<p>Water</p> <ul style="list-style-type: none"> • Water can be used to in HEP (1) which creates energy with less greenhouse gas emissions (1). • Can provide clean water for drinking (1) which reduces the demand on other water sources (1). • Waterways can be used as a route for transportation (1) which can facilitate the movement of goods from industry (1). <p>Accept any other appropriate response.</p>	(4)
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Question Number	Study Figure 2b in the Resource Booklet. Suggest one benefit of a named diversification strategy shown.	Mark
2(f)	<p>AO1 (1 mark) / (AO3) 2 marks</p> <p>Award 1 mark for a benefit and a further 2 marks for extension through explanation or description with references to the resource, up to a maximum of 3 marks.</p> <ul style="list-style-type: none"> • Creating tourist accommodation can increase tourist numbers (1) which can increase jobs in the industry (1) which can increase household incomes (1). • Selling goods produced on farms such as vegetables grown (1) can provide more income for the farm (1) which can lead to profits being made which can be reinvested (1). • Using some of the land for solar panels can create more renewable energy (1) which can reduce CO2 emissions (1) so can help to mitigate climate change (1). <p>Accept any other appropriate response.</p>	(3)

Question Number	For a named developed country explain two ways the negative multiplier effect can impact rural areas.	Mark
2(g)	<p>AO2 (4 marks)</p> <p>Award 1 mark for initial explanation of how the negative multiplier effect can impact rural areas and an additional 1 mark for development through further explanation or exemplification, up to a maximum of 2 marks for each.</p> <p>A range of countries could be chosen. For example:</p>	

	<p>Italy:</p> <ul style="list-style-type: none"> • Aging population (1) due to younger people leaving the area in search of work (1). • Lack of infrastructure development e.g. broadband connections (1) as investment is concentrated in towns and cities (1). <p>United Kingdom:</p> <ul style="list-style-type: none"> • Loss of local services (1) due to lack of demand after a lot of rural to urban migration (1). • Decline in agriculture (1) leads to a loss of jobs (1). <p>Accept any other appropriate response.</p>	(4)
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Question Number	<p>Study Figure 2c in the Resource Booklet. Analyse the potential for the strategies to make life in rural areas more socially sustainable.</p>
2(h)	<p style="text-align: right;">AO3 (4 marks)/AO4 (4 marks)</p> <p>Marking instructions</p> <p>Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.</p> <p>Indicative content guidance</p> <p>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:</p> <p>AO3</p> <ul style="list-style-type: none"> • Rural areas typically rely more heavily on jobs and income in the primary sector through variable forms of agricultural production. Therefore maintaining a sustainable income is important. • Rural areas face a range of challenges which have the potential to affect their production including the impacts of climate change as well as pests/diseases/pollution. • Strategies to ensure social sustainability for people working in rural areas often help improve through training schemes to support literacy more generally, as well as specific education programmes about agricultural technologies. <p>AO4</p> <ul style="list-style-type: none"> • Figure 2c shows four different strategies used to support rural areas in different countries which focus on education, training and increasing agricultural production. • Figure 2c shows how a programme is used in Indonesia to improve literacy. • Figure 2c shows how working with local communities can lead to a high number of trees being planted. • Figure 2c shows how funding can be used to grow drought resistant crops. • Figure 2c shows how medical treatments can be used with poultry.

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-3	<ul style="list-style-type: none"> Attempts to apply understanding to deconstruct information but understanding and connections are flawed. An unbalanced or incomplete argument that provides limited synthesis of understanding. Judgements that are supported by limited evidence. (AO3) Uses some geographical skills to obtain information with limited relevance and accuracy, which supports few aspects of the argument. (AO4)
Level 2	4-6	<ul style="list-style-type: none"> Applies understanding to deconstruct information and provide some logical connections between concepts. An imbalanced argument that synthesises mostly relevant understanding, but not entirely coherently, leading to judgements that are supported by evidence occasionally. (AO3) Uses geographical skills to obtain accurate information that supports some aspects of the argument. (AO4)
Level 3	7-8	<ul style="list-style-type: none"> Applies understanding to deconstruct information and provide logical connections between concepts throughout. A balanced, well-developed argument that synthesises relevant understanding coherently leading to judgements that are supported by evidence throughout. (AO3) Uses geographical skills to obtain accurate information that supports all aspects of the argument. (AO4)

Question Number	Identify the best definition of urbanisation.	Mark
3(a)	<p style="text-align: center;">AO1 (1 mark)</p> <p>B The increasing proportion of a country's population living in towns and cities. (1)</p> <p>The answer cannot be A, C or D as these are not definitions of urbanisation. A (not related to population movement), C (counter-urbanisation), D (not linked to urban areas).</p>	(1)

Question Number	State one social challenge that can be experienced in urban areas.	Mark
3(b)	<p style="text-align: center;">AO1 (1 mark)</p> <p>Award 1 mark for any suitable social challenge:</p>	

	<ul style="list-style-type: none"> • Unemployment/lack of jobs/competition for jobs (1) • Poverty (1) • Low wage jobs (1) • Poor quality housing/lack of housing/ squatter settlements (1) • Lack of food (1) • Unable to access education (1) • Overpopulation/ Overcrowding (1) • Congestion (1) • Social segregation (1) • Air pollution (1) • Lack of sanitation/ spread of disease (1) <p>Accept any other appropriate response.</p>	(1)
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Question Number	Identify one group of people who try to solve social challenges in cities.	Mark
3(c)(i)	<p style="text-align: center;">AO1 (1 mark)</p> <p>D politicians (1)</p> <p>The answer cannot be A, B, or C as these groups of people do not try to solve address social challenges in cities.</p>	(1)

Question Number	Study Figure 3a in the Resource Booklet. Suggest one reason for the distribution of the selected megacities.	Mark
3(c)(ii)	<p style="text-align: center;">AO2 (1 mark) / AO3 (1 mark)</p> <p>Award 1 mark for basic evidence from the from the figure (AO3) and a further 1 mark for a suitable reason. (AO2)</p> <ul style="list-style-type: none"> • Widespread across the south and east country (1) as rapid urbanisation across many provinces has led to the growth of megacities (1). • Some located near the coastline (1) due to potential access to ports/routes for trade (1). <p>Accept any other appropriate response.</p>	(2)

Question Number	State one positive impact of rapid urban growth.	Mark
3(d)	<p style="text-align: center;">AO1 (1 mark)</p> <p>Award 1 mark for a positive impact:</p> <ul style="list-style-type: none"> • Increased workforce (1) • Increased spending in urban areas (1) • More services / utilities built (1) • Attracts further investment (1). • Economic growth (1) • Increase in economic activity in different sectors (1) • More job opportunities (1) <p>Accept any other appropriate response.</p>	(1)

Question Number	For a named developing or emerging country explain two ways of making urban living more environmentally sustainable.	Mark
3(e)	<p style="text-align: center;">AO2 (2+2 marks)</p> <p>Award 1 mark for each initial point, with a further mark for expansion mark, up to a maximum of 2 marks each.</p> <p>A range of countries could be chosen. For example:</p> <ul style="list-style-type: none"> • United Arab Emirates: <ul style="list-style-type: none"> ○ In Dubai using solar energy on rooftops/energy efficient building design (1) help move towards net-zero energy consumption/reduce the need for energy generated through fossil fuels (1). ○ Water conservation systems across Dubai (1) reduce water consumption to preserve water security (1). Bangladesh: <ul style="list-style-type: none"> • Restrictions in Dhaka on some industrial processes (1) to reduce dust and some from brick kilns that could cause air pollution (1). • Increased public awareness campaigns on recycling (1) to reduce the amount of waste reaching landfill (1). <p>Accept any other appropriate response.</p>	(4)

Question Number	Study Figure 3b in the Resource Booklet. Suggest one reason for the changes in the populations living in urban areas in Poland.	Mark
3(f)	<p style="text-align: center;">AO1 (1 mark) / (AO3) 2 marks</p> <p>Award 1 mark for an identification of a trend and a further 2 marks for extension through explanation or description, up to a maximum of 3 marks.</p> <ul style="list-style-type: none"> • The urban population has increased from 1960 to 2020 (1) this is due to rural to urban migration (1) as there are more job opportunities in urban areas (1). • Slight decline in urban populations in Poland (1) due to counterurbanisation (1) as people want to live in bigger houses/in areas with less air pollution (1). • Rural population overtake urban in 1960s (1) due to rural-urban migration (1) because of job opportunities in cities (1). <p>Accept any other appropriate response.</p>	(3)

Question Number	Explain two reasons why land value varies within cities.	Mark
3(g)	<p>AO2 (4 marks)</p> <p>Award 1 mark for each reason and an additional 1 mark for development through further explanation or exemplification.</p> <ul style="list-style-type: none"> • Accessibility/transport links (1) as easy access by road and rail are make land more valuable (1). • Proximity to the CBD (1) as this is where most services are available which makes it valuable (1). • Population density (1) as areas with high densities are likely to have high demand which creates a higher value (1). • Contaminated land (1) the value decreases as it costs more to clean up and develop. (1) • Greenfield sites are more expensive than brownfield sites (1) this because the land needs to be developed as it has not been built on before (1). <p>Accept any other appropriate response.</p>	(4)

Question Number	Study Figure 3c in the Resource Booklet. Analyse the disadvantages of building on greenfield sites.
3(h)	<p>AO3 (4 marks)/AO4 (4 marks)</p> <p>Marking instructions</p> <p>Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.</p> <p>Indicative content guidance</p> <p>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:</p> <p>AO3</p> <ul style="list-style-type: none"> Greenfield sites are sites which have not previously been built on, which are usually found on the edge of towns and cities. There are a range of potential disadvantages of building on a greenfield site: <ul style="list-style-type: none"> Potential to damage local habitats, which could involve deforestation. This can impact on ecosystems and likely to reduce biodiversity. Can lead to the loss of farmland which may reduce agricultural production. Can lead to increased air/noise pollution in the area depending on the activity and how much traffic is likely to visit the new development. There are also a range of benefits of building greenfield sites including economic development of the area, but these may not be felt by local people, e.g. local residents no longer have a view of fields but a new road/railway line instead. <p>AO4</p> <ul style="list-style-type: none"> Figure 3c shows a proposed site for a greenfield development in India. Figure 3c shows how the greenfield sites currently has a range of species in the area. Figure 3c shows how there are a range of green field areas for development showing how it could have a large affect on the landscape. Figure 3c shows how there are some water bodies present which may be useful for any greenfield developments, but could lead to water pollution. Figure 3c shows the area is home to a range of wildlife including birds, moose, bears and butterflies.

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-3	<ul style="list-style-type: none"> Attempts to apply understanding to deconstruct information but understanding and connections are flawed. An unbalanced or incomplete argument that provides limited synthesis of understanding. Judgements that are supported by limited evidence. (AO3)

		<ul style="list-style-type: none"> Uses some geographical skills to obtain information with limited relevance and accuracy, which supports few aspects of the argument. (AO4)
Level 2	4-6	<ul style="list-style-type: none"> Applies understanding to deconstruct information and provide some logical connections between concepts. An imbalanced argument that synthesises mostly relevant understanding, but not entirely coherently, leading to judgements that are supported by evidence occasionally. (AO3) Uses geographical skills to obtain accurate information that supports some aspects of the argument. (AO4)
Level 3	7-8	<ul style="list-style-type: none"> Applies understanding to deconstruct information and provide logical connections between concepts throughout. A balanced, well-developed argument that synthesises relevant understanding coherently leading to judgements that are supported by evidence throughout. (AO3) Uses geographical skills to obtain accurate information that supports all aspects of the argument. (AO4)

Question Number	State one type of sampling you used to choose the sites for primary data collection.	Mark
4(a)(i)	<p style="text-align: center;">AO3 (1 mark)</p> <p>Award one mark for a suitable type of sampling:</p> <ul style="list-style-type: none"> Random (1) Systematic (1) Stratified (1) Opportunistic (1) Point (1) Strategic (1). <p>Response will vary depending on the title.</p> <p>Accept any other appropriate response.</p>	(1)

Question Number	Explain how you managed one risk before collecting your data.	Mark
4(a)(ii)	<p style="text-align: center;">AO3 (2 marks)</p> <p>Award 1 mark for suitable risk, and a further mark for explanation, up to a maximum of 2 marks.</p>	

	<ul style="list-style-type: none"> • Getting lost (1) so used a map on a mobile phone to track location (1). • Road/traffic danger (1) always crossed roads at crossings and taking care to be aware of any traffic nearby (1). • Not being able to collect enough data (1) arranged for sufficient time to allow all data collected methods to be completed. • Weather risks like sunburn (1) wear sunscreen/ check the weather forecast(1). <p>Accept any other appropriate response.</p>	(2)
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Question Number	Environmental quality surveys are a data collection method. Explain two other data collection methods you used in your fieldwork.	Mark
4(b)	<p>AO3 (4 marks)</p> <p>Award 1 mark for each data collection method identified, and a further mark for development or explanation, up to a maximum of 2 marks each.</p> <p>The data collection methods will vary on the nature and context of the fieldwork, but it must be plausibly linked to the focus: economic activity and energy.</p> <ul style="list-style-type: none"> • Field sketching (1) to be able to draw features of the area and recognise lots of detail (1). • Surveys with local residents (1) to be able to ask questions that allowed collection of data that would help support the conclusion (1). • Traffic count (1) to see how many cars pass a fixed point during a 5 minute period (1) • Pedestrian count (1) to count how many people pass a fixed point during a 1 minutes period (1). <p>Accept any other appropriate response.</p>	(4)

Question Number	Explain one way geographic information systems (GIS) was used in your enquiry.	Mark
4(c)	<p>AO3 (2 marks)</p> <p>Award 1 mark for a suitable way identified, and a further mark for explanation, up to a maximum 2 marks.</p>	

	<ul style="list-style-type: none"> Plotting data on a map (1) to be able see spatial patterns in the data (1). Google maps (1) to be able to investigate sites before visiting (1). To help analyse the data (1) by being able to demonstrated where differences in the data were located (1). GIS maps were used to check our land use maps (1) to make sure our primary data was correct (1). GIS was used for the height of buildings (1) to see how they changed throughout the sites (1). <p>Accept any other appropriate response.</p>	(2)
Question Number	Explain one limitation of your conclusions.	Mark
4(d)	<p>AO3 (3 marks)</p> <p>Award 1 mark for an initial point, and further 2 marks for explanation.</p> <ul style="list-style-type: none"> Sample size was quite small (1) which meant any anomalies had a big effect on the data (1) which many mean the conclusion was not accurate (1). Only three data collection methods were used (1) if more data had been collected it may have created different results (1) which means the conclusions may not be accurate (1). Analysis was based on data collected at one point in time (1). If data had been collected over different dates (1) this may have included data with a broader range of views which would have affected the conclusion (1). <p>Accept any other appropriate response.</p>	(3)

Question Number	Study Figures 4a and 4b in the Resource Booklet. They show some data collection methods and some data collected. Evaluate the accuracy and reliability of the data collection methods used.
4(e)	<p>AO3 (4 marks)/AO4 (4 marks)</p> <p>Marking instructions</p> <p>Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.</p> <p>Indicative content guidance</p> <p>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:</p>

	<p>AO3</p> <ul style="list-style-type: none"> • Evaluation is likely to be linked to the details of the data collection methods and the choices made around when to collect data and sampling. • Evaluation will most likely be linked to how the nature of fieldwork design included comparison to a previous study. • A supported judgement should be reached about how the data might have been accurate and reliable, as there were clear decisions made about sampling, but that there were limited details on other methods which will have affect analysis and formation of conclusions. <p>AO4</p> <ul style="list-style-type: none"> • In Figure 4a there shows there is information about the students' methodology which includes data sites chosen by systematic sampling. • Figure 4a suggests data was collected at one specific point in times. • Figure 4a it suggests that different members of the group were involved in collecting the data. • In Figure 4b there is clear indication of high and low scores in the environmental quality survey. • Figure 4b shows a limited number of features were included in the environmental quality survey.
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Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-3	<ul style="list-style-type: none"> • Attempts to apply understanding to deconstruct information but understanding and connections are flawed. An unbalanced or incomplete argument that provides limited synthesis of understanding. Judgements that are supported by limited evidence. (AO3) • Uses some geographical skills to obtain information with limited relevance and accuracy, which supports few aspects of the argument. (AO4)
Level 2	4-6	<ul style="list-style-type: none"> • Applies understanding to deconstruct information and provide some logical connections between concepts. An imbalanced argument that synthesises mostly relevant understanding, but not entirely coherently, leading to judgements that are supported by evidence occasionally. (AO3) • Uses geographical skills to obtain accurate information that supports some aspects of the argument. (AO4)
Level 3	7-8	<ul style="list-style-type: none"> • Applies understanding to deconstruct information and provide logical connections between concepts throughout. A balanced, well-developed argument that synthesises relevant understanding coherently leading to judgements that are supported by evidence throughout. (AO3)

		<ul style="list-style-type: none"> • Uses geographical skills to obtain accurate information that supports all aspects of the argument. (AO4)
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Question Number	State one type of sampling you used to choose the sites for primary data collection.	Mark
5(a)(i)	<p style="text-align: center;">AO3 (1 mark)</p> <p>Award one mark for a suitable type of sampling:</p> <ul style="list-style-type: none"> • Random (1) • Systematic (1) • Stratified (1) • Opportunistic (1) • Point (1) • Strategic (1). <p>Response will vary depending on the title.</p> <p>Accept any other appropriate response.</p>	(1)

Question Number	Explain how you managed one risk before collecting your data.	Mark
5(a)(ii)	<p>AO3 (2 marks)</p> <p>Award 1 mark for suitable risk, and a further mark for explanation, up to a maximum of 2 marks.</p> <ul style="list-style-type: none"> • Getting lost (1) so used a map on a mobile phone to track location (1). • Road/traffic danger (1) always crossed roads at crossings and taking care to be aware of any traffic nearby (1). • Not being able to collect enough data (1) arranged for sufficient time to allow all data collected methods to be completed. • Weather risks like sunburn (1) wear sunscreen/ check the weather forecast(1). <p>Accept any other appropriate response.</p>	(2)

Question Number	Environmental quality surveys are a data collection method. Explain two other data collection methods you used in your fieldwork.	Mark
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5(b)	<p>AO3 (4 marks)</p> <p>Award 1 mark for each data collection method identified, and a further mark for development or explanation, up to a maximum of 2 marks each.</p> <p>The data collection techniques will vary on the nature and context of the fieldwork, but it must be plausibly linked to the focus: rural environments.</p> <ul style="list-style-type: none"> • Field sketching (1) to be able to draw features of the area and recognise lots of detail (1). • Surveys with local residents (1) to be able to ask questions that allowed collection of data that would help support the conclusion (1). • Traffic count (1) to see how many cars pass a fixed point during a 5 minute period (1) • Pedestrian count (1) to count how many people pass a fixed point during a 1 minutes period (1). <p>Accept any other appropriate response.</p>	(4)
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Question Number	Explain one way geographic information systems (GIS) was used in your enquiry.	Mark
5(c)	<p>AO3 (2 marks)</p> <p>Award 1 mark for a suitable way identified, and a further mark for explanation, up to a maximum 2 marks.</p> <ul style="list-style-type: none"> • Plotting data on a map (1) to be able see spatial patterns in the data (1). • Google maps (1) to be able to investigate sites before visiting (1). • To help analyse the data (1) by being able to demonstrated where differences in the data were located (1). • GIS maps were used to check our land use maps (1) to make sure our primary data was correct (1). • GIS was used for the height of buildings (1) to see how they changed throughout the sites (1). <p>Accept any other appropriate response.</p>	(2)

Question Number	Explain one limitation of your conclusions.	Mark
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5(d)	<p>AO3 (3 marks)</p> <p>Award 1 mark for an initial point, and further 2 marks for explanation.</p> <ul style="list-style-type: none"> • Sample size was quite small (1) which meant any anomalies had a big effect on the data (1) which many mean the conclusion was not accurate (1). • Only three data collection methods were used (1) if more data had been collected it may have created different results (1) which means the conclusions may not be accurate (1). • Analysis was based on data collected at one point in time (1). If data had been collected over different dates (1) this may have included data with a broader range of views which would have affected the conclusion (1). • <p>Accept any other appropriate response.</p>	(3)
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Question Number	Study Figures 5a and 5b in the Resource Booklet. They show some data collection methods and some data collected. Evaluate the accuracy and reliability of the data collection methods used.	
5(e)	<p style="text-align: center;">AO3 (4 marks)/AO4 (4 marks)</p> <p>Marking instructions</p> <p>Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.</p> <p>Indicative content guidance</p> <p>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:</p> <p>AO3</p> <ul style="list-style-type: none"> • Evaluation is likely to be linked to the details of the data collection methods and the choices made around when to collect data and sampling. • Evaluation will most likely be linked to how the nature of fieldwork design included comparison to a previous study. • A supported judgement should be reached about how the data might have been accurate and reliable, as there were clear decisions made about sampling, but that there were limited details on other methods which will have affect analysis and formation of conclusions. <p>AO4</p> <ul style="list-style-type: none"> • In Figure 5a there shows there is information about the students' methodology which includes data sites chosen by systematic sampling. 	

		<ul style="list-style-type: none"> • Figure 5a suggests data was collected at one specific point in times. • Figure 5a it suggests that different members of the group were involved in collecting the data. • In Figure 5b there is clear indication of high and low scores in the environmental quality survey. • Figure 5b shows a limited number of features were included in the environmental quality survey.
Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-3	<ul style="list-style-type: none"> • Attempts to apply understanding to deconstruct information but understanding and connections are flawed. An unbalanced or incomplete argument that provides limited synthesis of understanding. Judgements that are supported by limited evidence. (AO3) • Uses some geographical skills to obtain information with limited relevance and accuracy, which supports few aspects of the argument. (AO4)
Level 2	4-6	<ul style="list-style-type: none"> • Applies understanding to deconstruct information and provide some logical connections between concepts. An imbalanced argument that synthesises mostly relevant understanding, but not entirely coherently, leading to judgements that are supported by evidence occasionally. (AO3) • Uses geographical skills to obtain accurate information that supports some aspects of the argument. (AO4)
Level 3	7-8	<ul style="list-style-type: none"> • Applies understanding to deconstruct information and provide logical connections between concepts throughout. A balanced, well-developed argument that synthesises relevant understanding coherently leading to judgements that are supported by evidence throughout. (AO3) • Uses geographical skills to obtain accurate information that supports all aspects of the argument. (AO4)

Question Number	State one type of sampling you used to choose the sites for primary data collection.	Mark
6(a)(i)	<p style="text-align: center;">AO3 (1 mark)</p> <p>Award one mark for a suitable type of sampling:</p> <ul style="list-style-type: none"> • Random (1) • Systematic (1) • Stratified (1) • Opportunistic (1) • Point (1) • Strategic (1). 	

	Response will vary depending on the title. Accept any other appropriate response.	(1)
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Question Number	Explain how you managed one risk before collecting your data.	Mark
6(a)(il)	<p style="text-align: center;">AO3 (2 marks)</p> <p>Award 1 mark for suitable risk, and a further mark for explanation, up to a maximum of 2 marks.</p> <ul style="list-style-type: none"> • Getting lost (1) so used a map on a mobile phone to track location (1). • Road/traffic danger (1) always crossed roads at crossings and taking care to be aware of any traffic nearby (1). • Not being able to collect enough data (1) arranged for sufficient time to allow all data collected methods to be completed. • Weather risks like sunburn (1) wear sunscreen/ check the weather forecast(1). <p>Accept any other appropriate response.</p>	(2)

Question Number	Environmental quality surveys are a data collection method. Explain two other data collection methods you used in your fieldwork.	Mark
6(b)	<p style="text-align: center;">AO3 (4 marks)</p> <p>Award 1 mark for each data collection method identified, and a further mark for development or explanation, up to a maximum of 2 marks each.</p> <p>The data collection techniques will vary on the nature and context of the fieldwork, but it must be plausibly linked to the focus: economic activity and energy.</p> <ul style="list-style-type: none"> • Field sketching (1) to be able to draw features of the area and recognise lots of detail (1). • Surveys with local residents (1) to be able to ask questions that allowed collection of data that would help support the conclusion (1). 	

	<ul style="list-style-type: none"> Traffic count (1) to see how many cars pass a fixed point during a 5 minute period (1) <p>Accept any other appropriate response.</p>	(4)
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Question Number	Explain one way geographic information systems (GIS) was used in your enquiry.	Mark
6(c)	<p style="text-align: center;">AO3 (2 marks)</p> <p>Award 1 mark for a suitable way identified, and a further mark for explanation, up to a maximum 2 marks.</p> <ul style="list-style-type: none"> Plotting data on a map (1) to be able see spatial patterns in the data (1). Google maps (1) to be able to investigate sites before visiting (1). To help analyse the data (1) by being able to demonstrated where differences in the data were located (1). GIS maps were used to check our land use maps (1) to make sure our primary data was correct (1). GIS was used for the height of buildings (1) to see how they changed throughout the sites (1). <p>Accept any other appropriate response.</p>	(2)

Question Number	Explain one limitation of your conclusions.	Mark
6(d)	<p>AO3 (3 marks)</p> <p>Award 1 mark for an initial point, and further 2 marks for explanation.</p> <ul style="list-style-type: none"> Sample size was quite small (1) which meant any anomalies had a big effect on the data (1) which many mean the conclusion was not accurate (1). Only three data collection methods were used (1) if more data had been collected it may have created different results (1) which means the conclusions may not be accurate (1). Analysis was based on data collected at one point in time (1). If data had been collected over different dates (1) this may have included 	

	<p>data with a broader range of views which would have affected the conclusion (1).</p> <ul style="list-style-type: none"> • Pedestrian count (1) to count how many people pass a fixed point during a 1 minutes period (1). <p>Accept any other appropriate response.</p>	(3)
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Question Number	Study Figures 6a and 6b in the Resource Booklet. They show some data collection methods and some data collected. Evaluate the accuracy and reliability of the data collection methods used.
6(e)	<p>AO3 (4 marks)/AO4 (4 marks)</p> <p>Marking instructions</p> <p>Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.</p> <p>Indicative content guidance</p> <p>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:</p> <p>AO3</p> <ul style="list-style-type: none"> • Evaluation is likely to be linked to the details of the data collection methods and the choices made around when to collect data and sampling. • Evaluation will most likely be linked to how the nature of fieldwork design included comparison to a previous study. • A supported judgement should be reached about how the data might have been accurate and reliable, as there were clear decisions made about sampling, but that there were limited details on other methods which will have affect analysis and formation of conclusions. <p>AO4</p> <ul style="list-style-type: none"> • In Figure 6a there shows there is information about the students' methodology which includes data sites chosen by systematic sampling. • Figure 6a suggests data was collected at one specific point in times. • Figure 6a it suggests that different members of the group were involved in collecting the data. • In Figure 6b there is clear indication of high and low scores in the environmental quality survey. • Figure 6b shows a limited number of features were included in the environmental quality survey.

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Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-3	<ul style="list-style-type: none"> Attempts to apply understanding to deconstruct information but understanding and connections are flawed. An unbalanced or incomplete argument that provides limited synthesis of understanding. Judgements that are supported by limited evidence. (AO3) Uses some geographical skills to obtain information with limited relevance and accuracy, which supports few aspects of the argument. (AO4)
Level 2	4-6	<ul style="list-style-type: none"> Applies understanding to deconstruct information and provide some logical connections between concepts. An imbalanced argument that synthesises mostly relevant understanding, but not entirely coherently, leading to judgements that are supported by evidence occasionally. (AO3) Uses geographical skills to obtain accurate information that supports some aspects of the argument. (AO4)
Level 3	7-8	<ul style="list-style-type: none"> Applies understanding to deconstruct information and provide logical connections between concepts throughout. A balanced, well-developed argument that synthesises relevant understanding coherently leading to judgements that are supported by evidence throughout. (AO3) Uses geographical skills to obtain accurate information that supports all aspects of the argument. (AO4)

Question Number	State one reason why an environment might be considered fragile.	Mark
7(a)(i)	<p style="text-align: center;">AO1 (1 mark)</p> <p>Award 1 mark for a suitable reason identified:</p> <ul style="list-style-type: none"> Vulnerable to changes in temperature (1) Subject to damage from human activity (1) Can be easily damaged (1) May struggle to recover from any changes (1) <p>Accept any other suitable response.</p>	(1)

Question	Identify one greenhouse gas.	Mark
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Number		
7(a)(ii)	AO1 (1 mark) A carbon dioxide (1) The answer cannot be B, C, or D as these are not greenhouse gases.	(1)

Question Number	Identify the best definition of desertification.	Mark
7(b)	AO1 (2 marks) C The process where fertile lands becomes desert. (1) The answer cannot be A, B or D as these are not definitions of desertification.	(1)
Question Number	Study Figure 7a in the Resource Booklet. Identify two labelled countries with a medium rating for Climate Policy.	Mark
7(c)(i)	AO3 (2 marks) Award 1 mark for each of the following answer. <ul style="list-style-type: none"> • Brazil (1) • Pakistan (1) 	(2)

Question Number	Suggest two reasons for the differences in ratings in climate policy.	Mark
7(c)(ii)	AO2/AO3 (4 marks) Award 1 mark for identification of a difference in ratings shown on the resource, and a further mark for a reason for this pattern, up to a maximum of 2 marks per idea. <ul style="list-style-type: none"> • High ratings shown for many countries in Europe (1) as they are making a lot of effort to reduce carbon emissions to meet international targets (1). 	

	<ul style="list-style-type: none"> • Low ratings for countries like US and China (1) as they do not necessarily participate in all international agreements on climate change (1) • Variable ratings (1) as some countries such as Iran and China do not have the capacity to make commitments to reduce carbon emissions as they are still industrialising (1). • Developed countries have high ratings (1) as they have the economic ability to fund renewable energy projects. <p>Accept any other appropriate response.</p>	(4)
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Question Number	Explain two impacts of climate change.	Mark
7(d)	<p>AO2 (4 marks)</p> <p>Award 1 mark for identification of an impact of climate change and a further mark for an explanation or development, up to a maximum of 2 marks.</p> <ul style="list-style-type: none"> • Increased CO₂ emissions (1) which can contribute to the enhanced greenhouse effect/lead to increased temperatures (1). • Increased temperatures (1) can lead to glacial melt (which causes flooding)/which can cause heatwaves/wildfires. • Increased extreme weather events (1) due to changes in temperatures (1) • Changed in ability to grow crops in certain areas (1) as the temperatures may no longer be suitable/or areas become flooded too frequently (1). <p>Accept any other appropriate response.</p>	(4)

Question Number	Study Figure 7b in the Resource Booklet. Calculate the range in per capita CO ₂ emissions from China between 1983 and 2003.	Mark
7(e)(i)	<p>AO4 2 marks</p> <p>Award 1 mark for correct answer, and 1 mark for method.</p> <ul style="list-style-type: none"> • 3.7-1.6 (1) • 2.1 (1) 	

	Award 2 mark for correct answer only 2.1 (2)	(2)
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Question Number	Describe one other change in CO ₂ emissions shown in Figure 7b.	Mark
7(e)(ii)	<p>AO2 (1 mark) /AO3 (1 mark)</p> <p>Award 1 mark for initial change, and further mark for further description which could include the use of data, up to a maximum of 2 marks.</p> <ul style="list-style-type: none"> • United States has experienced an increased to 2003 (1) but a decline between 2003-2023 (1) • India has experienced an increase (1) with 2023 emissions over four times that experienced in 1983 (1). • World capita emissions have increased slightly in the time range (1) by 0.7 (1). • UK's emissions have reduced (1) from 9.7 to 4.4 tonnes (1) <p>Accept any other appropriate response.</p>	(2)

Question Number	Study Figure 7c in the Resource Booklet. Assess the importance of different strategies to manage deforestation.
7(f)	<p>AO3 (3 marks)/AO4 (3 marks)</p> <p>Marking instructions</p> <p>Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.</p> <p>Indicative content guidance</p> <p>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:</p> <p>AO3</p> <ul style="list-style-type: none"> • Deforestation is the process of clearing forested land, often for forestry, agriculture, mining, settlement or transport route building. • There are a range of strategies that can be used to manage deforestation. • Some strategies will try to stop deforestation in particular areas through laws and regulations. For example through creating national parks and protected areas where logging would be prohibited. • Others will recognise that some deforestation may still happen but try to limit the rate and ensure it is more sustainable by ensuring more trees are planted. • International agreements such as REDD+ that try to sustainable manage forests and increase awareness of the issues through education campaigns.

	<p>AO4</p> <ul style="list-style-type: none"> • Figure 7c shows a range of strategies used to reduce deforestation. • Figure 7c shows how some strategies may involve educational campaigns. • Figure 7c shows how reforestation may be used. • Figure 7c suggest rules and regulations may be important. • Figure 7c suggests how some indirect activities may reduce deforestation including using renewable forest resources, reducing paper consumption and eco-friendly products.
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Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-3	<ul style="list-style-type: none"> • Attempts to apply understanding to deconstruct information but understanding and connections are flawed. An unbalanced or incomplete argument that provides limited synthesis of understanding. Judgements that are supported by limited evidence. (AO3) • Uses some geographical skills to obtain information with limited relevance and accuracy, which supports few aspects of the argument. (AO4)
Level 2	4-6	<ul style="list-style-type: none"> • Applies understanding to deconstruct information and provide some logical connections between concepts. An imbalanced argument that synthesises mostly relevant understanding, but not entirely coherently, leading to judgements that are supported by evidence occasionally. (AO3) • Uses geographical skills to obtain accurate information that supports some aspects of the argument. (AO4)

Question Number	<p>Discuss the view: “It is possible to manage the threats to fragile environments through international cooperation.” Use Figures 7b and 7c from the Resource Booklet, and your own knowledge and understanding to support your answer.</p>
7(g)	<p>AO2 (4 marks), AO3 (4 marks), AO4 (4 marks)</p> <p>Marking instructions</p> <p>Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.</p> <p>Indicative content guidance</p> <p>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:</p>

AO2

- Fragile environments including tropical rainforests, coral reefs and mangroves.
- Different fragile environments face different threats: coral reefs from tourism and overfishing, tropical rainforests from deforestation, deserts from overgrazing and deforestation. Climate change affects all fragile environments.
- For example: over the last decade the world has lost around half of its coral reefs due to destructive fishing practices, increased water pollution, coastal development and tourism, increased shipping, and changes in ocean temperature.

AO3

- Climate change is a global issue with varying impacts in different locations and will exacerbate many of the threats to fragile environments.
- Efforts to manage threats to fragile environments will have varying levels of success, and often depends on the scale.
- Local efforts to protect fragile environments can be effective e.g. Oddar Meanchey forest protection project in Cambodia which involved working with local communities and Forestry Administration of Cambodia to protect the forest and prevent illegal logging in the area.
- Climate change is a global issue which to mitigate requires global cooperation and in turn reduce the threats to fragile environments. Oceans are already experiencing changes in temperatures which may affect coral reefs causing coral bleaching.

AO4

- Figure 7b shows there have been significant changes in per capita CO₂ emissions from several countries between 1983 and 2023.
- Figure 7b shows how for some countries like the USA the CO₂ emissions have increased by 4.4 tonnes per person.
- Figure 7b shows how the world has increased its emissions gradually between 1983 and 2023 (by 0.7 tonnes per person).
- Figure 7b shows how some countries have reduced their emissions, such as the UK which has reduced by 5.2 between 2003 and 2023.
- Figure 7c shows a range of strategies used to reduce deforestation.
- Figure 7c shows how some strategies may involve educational campaigns.
- Figure 7c shows how reforestation may be used.
- Figure 7c suggest rules and regulations may be important.
- Figure 7c suggests how some indirect activities may reduce deforestation including using renewable forest resources, reducing paper consumption and eco-friendly products.

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-4	<ul style="list-style-type: none"> • Demonstrates isolated elements of understanding of concepts and the interrelationship between places, environments and processes. (AO2) • Attempts to apply understanding to deconstruct information but understanding and connections are flawed. An unbalanced or incomplete argument that provides limited synthesis of understanding. Judgements are supported by limited evidence. (AO3) • Uses some geographical skills to obtain information with limited relevance and accuracy, which supports few aspects of the argument. (AO4)
Level 2	5-8	<ul style="list-style-type: none"> • Demonstrates elements of understanding of concepts and the interrelationship between places, environments and processes. (AO2) • Applies understanding to deconstruct information and provide some logical connections between concepts. An imbalanced argument that synthesises mostly relevant understanding, but not entirely coherently, leading to judgements that are supported by evidence occasionally. (AO3) • Uses geographical skills to obtain accurate information that supports some aspects of the argument. (AO4)
Level 3	9-12	<ul style="list-style-type: none"> • Demonstrates accurate understanding of concepts and the interrelationship of places, environment and processes. (AO2) • Applies understanding to deconstruct information and provides logical connections between concepts throughout. A balanced, well-developed argument that synthesises relevant understanding coherently, leading to judgements that are supported by evidence throughout. (AO3) • Uses geographical skills to obtain accurate information that supports all aspects of the argument. (AO4)

Question Number	Identify the correct definition of globalisation.	Mark
8(a)	<p style="text-align: center;">AO1 (1 mark)</p> <p>D A process by where the world is becomes more Interconnected.</p> <p>The answer cannot be A, B or C as these are not definitions of globalisation.</p>	(1)

Question Number	Identify one pull factor for migration.	Mark
8(b)(i)	AO1 (1 mark)	

	C many job vacancies (1)	
	The answer cannot be A, B or D as these are not pull factors for migration.	(1)

Question Number	State one impact of forced migration.	Mark
8(b)(ii)	<p>AO1 (1 mark)</p> <p>Award one mark for a suitable impact:</p> <ul style="list-style-type: none"> • Refugees (1) • International migration (1) • Loss of homes/livelihoods (1) • Separated from family (1) • Emotional trauma (1) • Discrimination (1) • Overpopulation (1) <p>Accept any other appropriate response.</p>	(1)

Question Number	Study Figure 8a in the Resource Booklet. Identify two labelled countries that have the highest number of international tourist trips.	Mark
8(c)(i)	<p>AO3 (2 marks)</p> <p>Award 1 mark for each of the following:</p> <ul style="list-style-type: none"> • Türkiye (1) • USA (1) 	(1)

Question Number	Suggest two reasons for the pattern shown.	Mark
8(c)(ii)	<p>AO2/AO3 (4 marks)</p> <p>Award 1 mark for initial reason, and a further mark for development with reference to the resource, up to a maximum of 2 marks per idea.</p> <ul style="list-style-type: none"> • High numbers of tourists in Europe and North America (1) as these are countries with well established tourism industries (1). 	

	<ul style="list-style-type: none"> Quite high numbers (10–20 million) in Middle Eastern countries such as Egypt (1) due to a rise in package holidays to resorts (1). <p>Accept any other appropriate response.</p>	(4)
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Question Number	Explain two ways transnational corporations (TNCs) can impact economic development.	Mark
8(d)	<p style="text-align: center;">AO1/AO2 (4 marks)</p> <p>Award 1 mark (AO1) for identification of suitable way TNC investment can lead to economic development a further mark (AO2) for an explanation of the impact, up to a maximum of 2 marks.</p> <ul style="list-style-type: none"> Job creation (1) which increases GDP (1). Skilled jobs (1) can lead to a more skilled workforce which can benefit the wider economy (1). Multiplier effect (1) if a TNC becomes successful, others may also then invest in the country increasing GDP (1). Taxes paid by the TNC (1) can be used by the government to support economic development projects such as infrastructure development (1). Can establish new trade networks (1) which many boost exports (1). <p>Accept any other appropriate response.</p>	(4)

Question Number	Study Figure 8b in the Resource Booklet. Calculate the range in exports for Brazil between 1993 and 2003.	Mark
8(e)(i)	<p>AO4 (2 marks)</p> <p>Award 1 mark a suitable correct answer and 1 mark for correct method.</p> <p>18.1–10.5 (1) 7.6 (1)</p> <p>Award 2 marks for correct answer only</p>	(2)

Question Number	Describe one other change shown in Figure 8b.	Mark
8(e)(ii)	<p>AO3 (2 marks)</p> <p>Award 1 mark for a suitable trend identified, and a further mark for description which could include the use of data.</p> <ul style="list-style-type: none"> • Most countries have experienced an increase (1) for example Brazil has increased from 10.5 to 18.1% (1). • Some countries experienced a peak in 2008 (1) for example Ghana reached 40.7 but declined to 34 by 2023 (1). <p>Accept any other appropriate response.</p>	(2)

Question Number	Study Figure 8c in the Resource Booklet. Assess the importance of international institutions, such as the World Bank, in creating a more globalised economy.
8(f)	<p>AO3 (3 marks)/AO4 (3 marks)</p> <p>Marking instructions</p> <p>Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.</p> <p>Indicative content guidance</p> <p>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:</p> <p>Increase in global tourism</p> <p>AO3</p> <ul style="list-style-type: none"> • International institutions are an important part of the global economy as they often support economic development through promotion of trade, collaboration and financial assistance. The main international institutions are the World Bank, International Monetary Fund (IMF) and World Trade Organisation (WTO). • While these organisations play an important role in economic development there are others such as the United Nations that has many branches that span many different areas that can affect economic development; from United Nations Environment Programme (UNEP) to World Health Organisation (WHO). • While economic development, trade and it's components are important for a globalised economy it is also fuelled by the movement of people. It is estimated that in 2024 there were around 304 million international migrants.

	<ul style="list-style-type: none"> The globalised economy is also driven by the rise in technology that has facilitated international activity, including the use of the internet and mobile phones. <p>AO4</p> <ul style="list-style-type: none"> Figure 8c shows how the World Bank is involved in financing development projects. Figure 8c shows how the World Bank is involved in technical assistance and knowledge sharing. Figure 8c shows how the World Bank is involved in providing policy advice. Figure 8c shows how the World Bank is involved in global partnerships and collaboration. Figure 8c shows how the World Bank is involved in monitoring and evaluation.
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Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	<ul style="list-style-type: none"> Attempts to apply understanding to deconstruct information but understanding and connections are flawed. An unbalanced or incomplete argument that provides limited synthesis of understanding. Judgements that are supported by limited evidence. (AO3) Uses some geographical skills to obtain information with limited relevance and accuracy, which supports few aspects of the argument. (AO4)
Level 2	4–6	<ul style="list-style-type: none"> Applies understanding to deconstruct information and provide some logical connections between concepts. An imbalanced argument that synthesises mostly relevant understanding, but not entirely coherently, leading to judgements that are supported by evidence occasionally. (AO3) Uses geographical skills to obtain accurate information that supports some aspects of the argument. (AO4)

Question Number	<p>Discuss the view: “Globalisation has more impacts on people than it does on the global economy.” Use Figures 8b and 8c from the Resource Booklet, and your own knowledge and understanding to support your answer.</p>
8(g)	<p style="text-align: center;">AO2 (4 marks), AO3 (4 marks), AO4 (4 marks)</p> <p>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.</p> <p>Indicative content guidance</p>

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:

AO2

- Globalisation is the process of increasing integration of national markets into a single global system.
- Globalisation can lead to greater economic and social integration of countries and people which can support greater international collaboration through international organisations as well as businesses.
- Global GDP has grown from US\$34.7 trillion in 1980 to \$108 trillion by 2020 demonstrating that significant economic growth has taken place globally.

AO3

- Many of the impacts of globalisation are intertwined between people and the economy. As people moved around the world for work, tourism, medical treatments etc they are engaging in economic transactions that affect different economies.
- The impacts of globalisation depend on the position of people within the country in terms of income and freedom to move. Those who are low paid workers working for a TNC will feel more negative impacts than those in managerial roles in the TNC working in the headquarters.
- Globalization has led to increased cultural exchange and the spread of different cultures, through the movement of people and the expansion of international brands such as McDonalds. But this can lead to erosion of cultures. This can impact the sense of place rather than just the economy.

AO4

- Figure 8b shows exports have all increased from 1993 to 2008.
- Figure 8a shows exports decreased from 2008 to 2023 for all countries apart from France.
- Figure 8c shows how the World Bank is involved in financing development projects.
- Figure 8c shows how the World Bank is involved in technical assistance and knowledge sharing.
- Figure 8c shows how the World Bank is involved in providing policy advice.
- Figure 8c shows how the World Bank is involved in global partnerships and collaboration.
- Figure 8c shows how the World Bank is involved in monitoring and evaluation.

Level	Mark	Descriptor
	0	No rewardable material.

Level 1	1-4	<ul style="list-style-type: none"> • Demonstrates isolated elements of understanding of concepts and the interrelationship between places, environments and processes. (AO2) • Attempts to apply understanding to deconstruct information but understanding and connections are flawed. An unbalanced or incomplete argument that provides limited synthesis of understanding. Judgements are supported by limited evidence. (AO3) • Uses some geographical skills to obtain information with limited relevance and accuracy, which supports few aspects of the argument. (AO4)
Level 2	5-8	<ul style="list-style-type: none"> • Demonstrates elements of understanding of concepts and the interrelationship between places, environments and processes. (AO2) • Applies understanding to deconstruct information and provide some logical connections between concepts. An imbalanced argument that synthesises mostly relevant understanding, but not entirely coherently, leading to judgements that are supported by evidence occasionally. (AO3) • Uses geographical skills to obtain accurate information that supports some aspects of the argument. (AO4)
Level 3	9-12	<ul style="list-style-type: none"> • Demonstrates accurate understanding of concepts and the interrelationship of places, environment and processes. (AO2) • Applies understanding to deconstruct information and provides logical connections between concepts throughout. A balanced, well-developed argument that synthesises relevant understanding coherently, leading to judgements that are supported by evidence throughout. (AO3) • Uses geographical skills to obtain accurate information that supports all aspects of the argument. (AO4)

Question Number	Identify one bottom-up development project.	Mark
9(a)(i)	<p>AO1 (1 mark)</p> <p>B building a small water well (1)</p> <p>The answer cannot be A, C or D as these are all top down development projects.</p>	(1)

Question Number	Identify one advantage of top-down development projects.	Mark
9(a)(ii)	<p>AO1 (1 mark)</p> <p>A can lead to further investment (1).</p>	

	The answer cannot be B, C or D as these are not advantages of top-down development projects.	(1)
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Question Number	State one way intergovernmental agreements may reduce uneven development.	Mark
9(b)	<p>AO1 (1 mark)</p> <p>Award 1 mark for a suitable way.</p> <ul style="list-style-type: none"> Resources or money provided by one country or organization to another (1) Help provided from one country to another (1) Increase trade opportunities (1) Give aid (1) <p>Accept any other appropriate response.</p>	(1)

Question Number	Study Figure 9a in the Resource Booklet. Identify two labelled countries with international aid of US\$101 – 500 million.	Mark
9(c)(i)	<p>AO3 (1 mark)</p> <p>Award 1 mark for each of the following states.</p> <ul style="list-style-type: none"> Egypt Mexico 	(2)

Question Number	Suggest two reasons for the pattern shown in Figure 9a.	Mark
9(c)(ii)	<p>AO2/AO3 (4 marks)</p> <p>Award 1 mark for identification of a reason, with a further mark for development with reference to the resource, up to a maximum of 2 marks.</p> <ul style="list-style-type: none"> There is significant variation in levels of international aid globally (1) due to differences in economic development and the support required (1). 	

	<ul style="list-style-type: none"> Central Africa has several countries which require a high level of international aid, as much as US\$5 billion (1) as they are emerging economies and require support to reduce inequalities (1). <p>Accept any other appropriate response.</p>	(4)
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Question Number	Explain two reasons for variations in development within a country.	Mark
9(d)	<p>AO1/AO2 (4 marks)</p> <p>Award 1 mark for identification of suitable reason, with a further mark for development or explanation, up to a maximum of 2 marks.</p> <ul style="list-style-type: none"> Investment from government (1) can lead to greater development in urban areas compared to rural areas (1). Topography (1) as it is difficult to build roads and settlements in mountainous areas/desert areas (1). Fertility of the soil (1) as this would have supported agriculture to support livelihoods (1). Lack locked countries (1) may have more development near the borders where there is access to more resources/transport networks (1). <p>Accept any other appropriate response.</p>	(4)

Question Number	Study Figure 9b in the Resource Booklet. Calculate the range in the daily supply of calories per person in Bangladesh between 1982 and 2022.	Mark
9(e)(i)	<p>AO4 (2 marks)</p> <p>Award 1 mark a suitable correct answer and 1 mark for correct method.</p> <ul style="list-style-type: none"> 2608-1904 (1) 704 (1) <p>Award 2 marks if correct answer only is seen. 704 (2).</p>	(2)

Question Number	Describe one other change shown in Figure 9b.	Mark
9(e)(ii)	AO4 (2 marks)	

	<p>Award 1 mark for the identification of suitable change and a further mark for description, which could include the use of data, up to a maximum of 2 marks.</p> <ul style="list-style-type: none"> • Most countries experienced an increase in daily supply of calories (1) except Japan which experienced a decrease (1). • Ghana had a significant increase (1) of 1,778 (1). • Some countries experienced a larger increase in 1982 to 2002 such as the USA (1) and then a smaller increase in 2002–2022, just 50 calories in the USA (1). <p>Accept any other appropriate response.</p>	(2)
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Question Number	<p>Study Figure 9c in the Resource Booklet.</p> <p>Assess the factors that could affect the relationship between birth rate and gross domestic product (GDP).</p>
9(f)	<p style="text-align: center;">AO3 (3 marks)/AO4 (3 marks)</p> <p>Marking instructions</p> <p>Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.</p> <p>Indicative content guidance</p> <p>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:</p> <p>Assess the factors that could affect the relationship between GDP and life expectancy.</p> <p>AO3</p> <ul style="list-style-type: none"> • There are a range of factors that can affect GDP and births per woman: <ul style="list-style-type: none"> ◦ Economic development as this may impact finances available to dedicated to healthcare by the governments. ◦ Population growth as increases can lead to pressure on healthcare services. ◦ Availability of education and work opportunities can impact family choices related to family planning and the choices related to family size. • Many of these factors are interlinked, for example the ability to be involved in family planning may also be linked to the prevalence of skilled and higher paid jobs for women in society. <p>AO4</p> <ul style="list-style-type: none"> • Figure 9c shows how there is a weak negative correlation between births per woman and GDP per capita.

	<ul style="list-style-type: none"> Figure 9c shows how the range in births per woman is quite high for some continents; ranging between 2 and 6.5 in Africa. Figure 9c shows how some of the larger populations such as China and India have births per woman between 1-2 and GDPs per capita between US\$5,000-\$20,000.
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Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-3	<ul style="list-style-type: none"> Attempts to apply understanding to deconstruct information but understanding and connections are flawed. An unbalanced or incomplete argument that provides limited synthesis of understanding. Judgements that are supported by limited evidence. (AO3) Uses some geographical skills to obtain information with limited relevance and accuracy, which supports few aspects of the argument. (AO4)
Level 2	4-6	<ul style="list-style-type: none"> Applies understanding to deconstruct information and provide some logical connections between concepts. An imbalanced argument that synthesises mostly relevant understanding, but not entirely coherently, leading to judgements that are supported by evidence occasionally. (AO3) Uses geographical skills to obtain accurate information that supports some aspects of the argument. (AO4)
Question Number	Discuss the view: "Food security is the most important factor in human welfare." Use Figures 9b and 9c from the Resource Booklet, and your own knowledge and understanding to support your answer.	
9(g)	AO2 (4 marks), AO3 (4 marks), AO4 (4 marks) Marking instructions <p>Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.</p> Indicative content guidance <p>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:</p> AO2 <ul style="list-style-type: none"> Human welfare is the overall well-being or quality of life of people in a particular country. Human welfare can be measured through a number of different single indicators including GDP, births per woman, life expectancy, literacy rates, and Gini equality index, as well as composite indicators such as HDI. 	

	<ul style="list-style-type: none"> Human welfare typically is considered to be higher in more developed countries. The different dimensions of human welfare will require different measurements for example the United Nations considers the health dimension through life expectancy. Food security is an important issue affecting human welfare as it affects the ability of humans to take part in daily life. According to the World Health Organisation around 2.3 billion people globally faced moderate or severe food insecurity in 2023. <p>AO3</p> <ul style="list-style-type: none"> Variations in human welfare can be affected by a range of factors including economic, demographic, social, cultural, environmental and political. Poverty and inequality which can include lack of food, access to services or suitable housing will have a direct impact on human welfare. In 2024 around 8.8% of the world was living in extreme poverty. This will have an impact on water security in terms of being able to afford clean water, but it is part of a wider mix of issues that contribute to overall welfare. Food security issues are being made worse by issues such as climate change. There is a complex interplay of issues which affect human welfare. If there are increased temperatures this can lead to water shortages, which can impact on the ability to produce food. <p>AO4</p> <ul style="list-style-type: none"> Figure 9b shows how many countries have experienced a significant increase in daily supply of calories per person between 1982 and 2002. Figure 9b shows how not all countries have experienced a rise in calories, such as Japan, although there are no reasons provided for this. Figure 9b suggests how some countries have managed to increase their food security during this time period, signalled by increases in calories. Figure 9c shows how there is a weak negative correlation between births per woman and GDP per capita. Figure 9c shows how the range in births per woman is quite high for some continents; ranging between 2 and 6.5 in Africa. Figure 9c shows how some of the larger populations such as China and India have births per woman between 1-2 and GDPs per capita between US\$5,000-\$20,000.
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Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-4	<ul style="list-style-type: none"> Demonstrates isolated elements of understanding of concepts and the interrelationship between places, environments and processes. (AO2) Attempts to apply understanding to deconstruct information but understanding and connections are flawed. An unbalanced or incomplete

		<p>argument that provides limited synthesis of understanding. Judgements are supported by limited evidence. (AO3)</p> <ul style="list-style-type: none"> • Uses some geographical skills to obtain information with limited relevance and accuracy, which supports few aspects of the argument. (AO4)
Level 2	5-8	<ul style="list-style-type: none"> • Demonstrates elements of understanding of concepts and the interrelationship between places, environments and processes. (AO2) • Applies understanding to deconstruct information and provide some logical connections between concepts. An imbalanced argument that synthesises mostly relevant understanding, but not entirely coherently, leading to judgements that are supported by evidence occasionally. (AO3) • Uses geographical skills to obtain accurate information that supports some aspects of the argument. (AO4)
Level 3	9-12	<ul style="list-style-type: none"> • Demonstrates accurate understanding of concepts and the interrelationship of places, environment and processes. (AO2) • Applies understanding to deconstruct information and provides logical connections between concepts throughout. A balanced, well-developed argument that synthesises relevant understanding coherently, leading to judgements that are supported by evidence throughout. (AO3) • Uses geographical skills to obtain accurate information that supports all aspects of the argument. (AO4)