GradeMax



Mark Scheme (Results)

November 2023

Pearson Edexcel International GCSE

In Geography (4GE1)

Paper 02: Human Geography

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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.

Marking guidance for levels-based mark schemes

How to award marks

The indicative content provides examples of how students will meet each skill assessed in the question. The levels descriptors and indicative content reflect the relative weighting of each skill within each mark band.

Finding the right level

The first stage is to decide which level the answer should be placed in. To do this, use a 'best-fit' approach, deciding which level most closely describes the quality of the answer. Answers can display characteristics from more than one level, and where this happens, markers must use the guidance below and their professional judgement to decide which level is most appropriate.

Placing a mark within a level

After a level has been decided on, the next stage is to decide on the mark within the level. The instructions below tell you how to reward responses within a level. However, where a level has specific guidance about how to place an answer within a level, always follow that guidance. Statements relating to the treatment of students who do not fully meet the requirements of the question are also shown in the indicative content section of each levels-based mark scheme. These statements should be considered alongside the levels descriptors.

Markers should be prepared to use the full range of marks available in a level and not restrict marks to the middle. Markers should start at the middle of the level (or the uppermiddle mark if there is an even number of marks) and then move the mark up or down to find the best mark. To do this, they should take into account how far the answer meets the requirements of the level:

- if it meets the requirements fully, markers should be prepared to award full marks within the level. The top mark in the level is used for answers that are as good as can realistically be expected within that level
- if it only barely meets the requirements of the level, markers should consider awarding marks at the bottom of the level. The bottom mark in the level is used for answers that are the weakest that can be expected within that level
- the middle marks of the level are used for answers that have a reasonable match to the descriptor. This might represent a balance between some characteristics of the level that are fully met and others that are only barely met.

Question number	Answer	Mark
1(a)(i)	**AO1 (1 mark)** D Access to road network. (1) The answer cannot be A, B or C as these are not factors which affect the location of primary industry.	**(1)**

Question number	Answer	Mark
1(a)(ii)	**AO1 (1 mark)** Award 1 mark for suitable example: • Research & development / universities (1). • Artificial intelligence (1). • 3D printing (1) • Computing / ICT (1) • Robotics (1). Accept any other appropriate response.	**(1)**

Question number	Answer	Mark
1(b)	**AO1 (1 mark)** A ageing rural populations (1) It cannot be B, C or D as these are not impacts of a shift from primary secondary industries	**(1)**

Question number	Answer	Mark
1(c)	**AO2 (1 mark) / AO3 (1 mark)** Award 1 mark for basic evidence from the from the figure (AO3) and a further 1 mark for extension through explanation (AO2), up to a maximum of 2 marks. • Tertiary/services sector largest in USA (1) as industries have declined (1). • Peru has a mix of sectors with the largest being services (1) as they begun to move beyond industrialisation (1). • Large primary/agricultural sector in Zimbabwe (1) as economy relies largely on agricultural output (1). Different levels of primary sectors (1) due to different stages of industrialisation (1). Accept any other appropriate response	**(2)**

Question number	Answer	Mark
1(d)	**AO1 (1 mark)** Award 1 mark for a suitable response which related to features of the Clark-Fisher model on changing employment structure. • Change in employment/economic sector (1) • Change in employment over time (1) • Employment through industrialisation (1) Accept any other reasonable response.	**(1)**

Question number	Answer	Mark
1(e)	**AO2 (2+2 marks)** Award 1 mark for an advantage or disadvantage and a further expansion mark, up to a maximum of 2 marks each. Maximum 2 marks for an advantage or disadvantage. Range of named megacities could be chosen, for example: Delhi, Shanghai, Sao Paulo, Dhaka, Cairo, Beijing. Mexico City, Istanbul, Karachi. Advantages: • Allows people to access some form of employment (1) which can allow people to feed their families/maintain some quality of life (1). • Some employers pay well (1) because they are not paying taxes themselves (1). • Usually a closer relationship with the employer (1) which may make it easier to get time off if needed (1). Disadvantages: • Work is usually unregulated (1) which means they could be at more risk of accident or injuries (1). • Work is often low paid (1) and therefore they may not earn enough to support their families (1) • Little job security (1) as there is usually no contract (1). • Can sometimes involve child labour (1) which means they do not spend the time in education (1). Accept any other appropriate response.	**(4)**

Question number	Answer	Mark
1(f)	**AO1 (1 mark) / (AO3) 2 marks** Award 1 mark (AO1) for basic point about difference in consumption, or specific data for individual country, and a further 2 marks (AO3) for extension through use of the resource, up to a maximum of 3 marks. • Higher demand in northern Europe (1) may be due to temperatures experienced (1) so energy demand may be higher to heat business and homes (1). • Demand may be higher in eastern European countries (1) as there may be more industrial processes taking place here (1) which are energy intensive (1). Accept any other appropriate response.	**(3)**

Question number	Answer	Mark
1(g)	**AO2 (2+2 marks)** Award 1 mark for each environmental impact and a further expansion mark, up to a maximum of 2 marks each. • Using non-renewable energy source such as coal can increase carbon emissions (1) which can contribute to climate change (1). • Mining for non-renewable sources can lead to land degradation (1) which can damage habitats for local biodiversity (1). • Extraction of oil can lead to oil spills (1) which can kill local wildlife (1). • Burning fossil fuels can lead to air pollution (1) which can lead to environmental impacts such as acid rain (1). • Nuclear power plants can have leaks in earthquakes/tsunami (1) causing radiation poisoning to animals/fish in local environment (1). Accept any other appropriate response.	**(4)**

Question number	Indicative content
1 (h)	**AO3 (4 marks)/AO4 (4 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: **AO3** • Strategies to reduce an individual carbon footprint can be taken to address different activities in daily lives. • There are different types of strategies to make energy use more sustainable: • Some strategies to make energy use can involve energy conservation, reduction in energy use, or creation of green energy ○ Energy conservation and improving efficiency: through draft-proofing building to reduce heat losses through doors and windows. ○ Consumption choices in other areas of life such as food can have an impact on broader energy consumption. Choosing to buy food from local sources can reduce fuels and food miles. ○ Sustainable use of energy can also relate to the type of energy being used. Installing solar panels are an option for some households, although initial costs are relatively high so not necessarily accessible for everyone. • Some strategies have an immediate impact on sustainable energy use (i.e. reducing thermostat to save energy used in the household), compared to shopping second hand which saves energy in terms of the reduced need for new materials. **AO4** • Figure 1c shows strategies people can take to make their energy use more sustainable. • On Figure 1c it can be seen that some actions relate to the generation of renewable energy, which is more sustainable, such as solar power. • Figure 1c shows that some ways to use energy more sustainably relate to consumer choices for example choosing to buy local food (reducing transport fuels), shopping second hand (reducing production of new materials). • Figure 1c shows there are strategies that can be used to address different areas of energy consumption in peoples live (energy, transport and food).

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	**1–3**	• 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**	• 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**	• 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	Answer	Mark
2(a)(i)	C Opening a farm shop (1) The answer cannot be A, B or D as these are not types of farm diversification.	**(1)**

Question number	Answer	Mark
2(a)(ii)	**AO1 (1 mark)** Award 1 mark for suitable reason. • To increase yield. (1) • To increase resistance to pests/reduce loss from pests (1) • To have crops that are more tolerant of changing climate (1). • To increase tolerance to herbicides (1) • To grow crops faster (1) Accept any other appropriate responses.	**(1)**

Question number	Answer	Mark
2(b)	**AO1 (1 mark)** A Farming which uses large amounts of resources and labour (1) The answer cannot be B, C or D as these are not definitions of intensive farming. B is organic farming and D is subsistence farming.	**(1)**

Question number	Answer	Mark
2(c)	**AO2 (1 mark) / AO3 (1 mark)** Award 1 mark for identification of reason (AO2) and a further 1 mark for extension through explanation linked to the resource (AO3), up to a maximum of 2 marks. • Temperature can affect where plants can grow (1) leading to deserts being located in areas of high temperature (1). • Latitude/distance from the equator as this affects sunlight (1) leading to lots of forests around the equator (1). Climate as this determine the type of ecosystem that can survive (1). Warm and humid climates support forest development across central Africa (1). Accept any other appropriate responses.	**(2)**

Question number	Answer	Mark
2(d)	**AO1 (1 mark)** Award 1 mark for a suitable characteristic: • High precipitation / 750-2,400mm (annual rainfall) (1) Accept within this range. • High humidity (1) • Deciduous trees (1) • Four distinct seasons (1) Accept any other appropriate response.	**(1)**

Question number	Answer	Mark
2(e)	**AO2 (2+2 marks)** Award 1 mark for identification of a service provided by natural ecosystems and a further expansion mark, up to a maximum of 2 marks each. • Pollination (1) as ecosystems such as forests, act as habitats for pollinating insects (1). • Purification of water and air (1) through photosynthesis (1). • Increased flood protection (1) as trees can intercept rainfall / roots can absorb water from rainfall (1) . • Climate regulation (1) through processes such as evapotranspiration (1). • Mangroves can protect against coastal erosion (1) by providing a natural barrier (1). Accept any other appropriate response.	**(4)**

Question number	Answer	Mark
2(f)	**AO1 (1 mark) / (AO3) 2 marks** Award 1 mark for an identification of a pattern and a further 2 marks for extension through explanation or description, up to a maximum of 3 marks. • Rise in yields is higher than the land used (1) this could be due to increased use of fertilisers (1) as the amount of land used has not grown as much, and this would lead to a higher yield of crops (1). • Yields rise faster than land use (1). This could be due to increased mechanisation in farm processes (1) as this would allow higher yields without having to use a lot more land (1). Accept any other appropriate response.	**(3)**

Question number	Answer	Mark
2(g)	**AO2 (4 marks)** Award 1 mark for initial explanation of how an NGO has tried to manage environmental challenges and an additional 1 mark for development through further explanation or exemplification, up to a maximum of 2 marks for each. A range of countries and strategies could be chosen. For example: Kenya: • NGO - Practical Action have been trying to reduce poverty through supporting agricultural programmes (1) which equip farmers with skills to increase their food production (1). • WaterAid - Using funds to improve the water infrastructure in rural areas (1) so people have clean drinking water supplies (1). Indonesia: • Jendela Desa supported poverty reduction in rural areas (1) through increasing access to education in remote areas (1). • NGO - established a project to enhance women's involvement in community development (1) this enabled greater participation of more local people in the issues that affected particular villages (1). Accept any other appropriate response.	**(4)**

<table>
<tr><th>Question number</th><th colspan="2">Indicative content</th></tr>
<tr><td>2 (h)</td><td colspan="2">AO3 (4 marks)/AO4 (4 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:

AO3
• The negative multiplier effect can occur in rural areas where there is lack of investment or a reduction in spending in a particular area.
• This kickstarts a process that leads to increased deprivation in an area, usually coupled with fewer jobs and increasing unemployment. For those with reduced income there is less money to spend in the area. While some people may be able to move out of the area, others may not have the means to do so.
• As more people leave and there is less money spent in the area this leads to further decline.
• While the extent of the decline may be affected by the size and composition of the area, the process is kickstarted by a reduction in income or investment somewhere in the area.

AO4
• Figure 2c shows some of the different components of the negative multiplier effect.
• Figure 2c indicates the downward spiral of the negative multiplier effect is prompted by lack of money in a particular area which leads to a series of knock-on effects to individuals and the places where they are located.
• Figure 2c shows how the loss of money can lead to greater unemployment, which can lead to people living the area, and this leads to reduced services, which then leads to more people leaving.</td></tr>
<tr><td>Level</td><td>Mark</td><td>Descriptor</td></tr>
<tr><td></td><td>0</td><td>No rewardable material.</td></tr>
</table>

Level 1	**1–3**	• 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**	• 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**	• 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	Answer	Mark
3(a) (i)	**AO1 (1 mark)** B - Increased network of cycle lanes (1) The answer cannot be A, C or D as these are not strategies which would make cities more sustainable. A would increase traffic and C and D relate to wider quality of life but not sustainability.	**(1)**

Question number	Answer	Mark
3(a)(ii)	**AO1 (1 mark)** Award 1 mark for any suitable reason. • They can include green spaces in their city plans(1) • They can create plans for affordable housing schemes(1). • They can support regeneration of areas (1). • Communication with law enforcement (1).	**(1)**

Question number	Answer	Mark
3(b)	**AO1 (1 mark)** D employment (1) The answer cannot be A or C as these are impacts of urbanisation, or B which is not a factor that can lead to urbanisation.	**(1)**

Question number	Answer	Mark
3(c)	**AO2 (1 mark) / AO3 (1 mark)** Award 1 mark for basic evidence from the from the resource (AO3) and a further 1mark for extension through explanation (AO2), up to a maximum of 2 marks. • There is a lot of commercial space (1) which may be due to the land values (1). • There are some residential aeras (1) as there are good transport connections via road/rail (1). • High land values (1) means only retail and offices are generally only located in the centre (1). Accept any other appropriate response	**(2)**

Question number	Answer	Mark
3(d)	**AO1 (1 mark)** Award 1 mark for a suitable area identified. • Rural-urban fringe (1) • Urban fringe (1) • Suburban fringe (1) • Edge of the city (1)	**(1)**

Question number	Answer	Mark
3(e)	**AO2 (2+2 marks)** Award 1 mark for an advantage and a disadvantage, with a further mark for expansion mark, up to a maximum of 2 marks each. Advantage • There is often more land available (1) which would allow for a better-quality house to be built (1). • There may be better access to major roads for residents (1) which may support their ability to travel to other areas (1). • Improved quality of life for residents (1) due to lower levels of air pollution (1). • Reduces housing pressure on the city centre (1) supporting growth of the population for local jobs (1). Disadvantage • This can lead to building on greenfield sites (1) which can damage local biodiversity (1). • There may be resistance from local residents (1) which may lead to conflicts (1). • May lead to urban sprawl (1) as housing estates expand the amount of land used for residential purposes (1). • Loss of agricultural land (1) which can lead to loss of jobs (1). • Long way from CBD where many people work (1) inconvenient to commute therefore/doesn't match sustainability principles of new builds (1). Accept any other appropriate response.	**(4)**

Question number	Answer	Mark
3(f)	**AO1 (1 mark) / (AO3) 2 marks** 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. • There has been a significant increase in the percentage of urban populations (1) this could have been driven by availability of jobs in the cities (1) which caused rural-urban migration (1). • There has been a rapid increase in urban populations since 1900 (1) caused by rural-urban migration (1) which has been driven by industrialisation in many countries during this time period (1). Accept any other appropriate response.	**(3)**

Question number	Answer	Mark
3(g)	**AO2 (4 marks)** Award 1 mark for initial explanation and an additional 1 mark for development through further explanation or exemplification. Maximum of 2 marks when no named developed. A range of countries and examples could be chosen, relating to a range of challenges which could include: congestion, transport, employment, or environmental issues. • Nigeria: ○ Lagos experiences high level of congestion (1) due to a rapid increase in the number of personal vehicles (1). ○ In Lagos there have been shortages in drinking water (1) due to rapid increase in demand which the existing infrastructure cannot manage (1). • Bangladesh: ○ Lack of waste management supplies in Dhaka (1) have led to disposal of waste into local water bodies which can led to contamination (1). ○ Shortage of housing in cities like Dhaka (1) can lead to the growth of informal settlements (1). Accept any other appropriate response.	**(4)**

<table>
<tr><th>Question number</th><th colspan="2">Indicative content</th></tr>
<tr><td>3 (h)</td><td colspan="2">AO3 (4 marks)/AO4 (4 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:

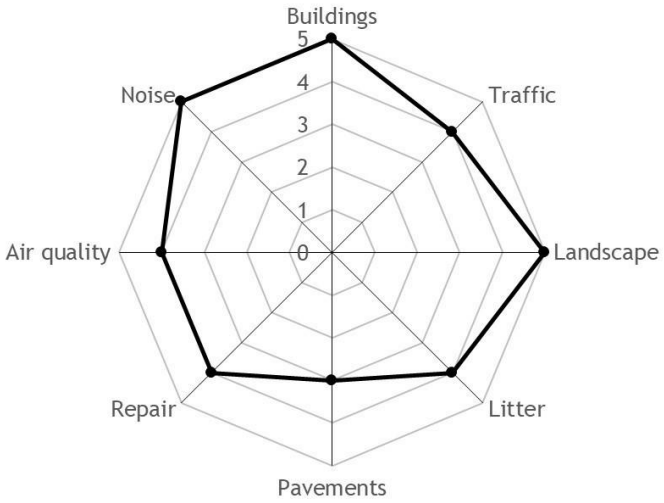
AO3
• Development of brownfield sites is common in many cities due to shortages of space, and the need to redevelop areas for different purposes. E.g. decline of motor industry in the US has led to many cities needing to regenerate areas which have experienced decline.
• Brownfield sites are typically associated with reduced loss of the countryside, and land use that would be used for other purposes such as agriculture.
• Benefits of building on brownfield sites include that it can lead to regeneration and revival of urban areas (as seen in the London Docklands). This also reduced the need to build on greenfield sites, which can reduce urban sprawl.
• There are however drawbacks of building on brownfield sites. If the site is contaminated for example, then it can be expensive to treat the land to make it suitable for construction for new purposes.

AO4
• Figure 3c shows how different brownfield sites have been developed into new sites in the United States.
• Figure 3 shows how there is potential for transformation for sites such as old houses, abandoned factories and polluted sites into new buildings, gardens or leisure areas.
• Figure 3c shows how brownfield sites can be repurposed for various commercial and leisure purposes.
• Figure 3c shows how the use of brownfield sites has the potential to have economic, social and environmental impacts.</td></tr>
<tr><td>Level</td><td>Mark</td><td>Descriptor</td></tr>
<tr><td></td><td>0</td><td>No rewardable material.</td></tr>
<tr><td>Level 1</td><td>1–3</td><td>• 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)</td></tr>
</table>

Level 2	**4–6**	• 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**	• 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	Answer	Mark
4(a)(i)	**AO3 (1 mark)** Award one mark for a suitable type of secondary data. • Data on local population demographics (1). • Local planning reports (1). • Local newspaper articles (on energy issues) (1) • Data from social media (1). • Maps (1) • Data from previous fieldwork (1) Do not allow general data sources such as 'the internet' or 'textbooks'.	**(1)**

Question number	Answer	Mark
4(a)(ii)	**AO3 (2 marks)** Award 1 mark for initial point, and a further mark for explanation, up to a maximum of 2 marks. • It can be used to find out more features of the enquiry area (1) which can provide the context for the enquiry (1). • It can be used to confirm findings from primary data (1) and support conclusions (1). • It can be used to compare to historical patterns (1) to understand where changes have taken place (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
4(b)(i)	**AO4 (2 marks)** Award 1 mark for: Plotting points correctly (1) Connecting lines correctly (1). This should look like the diagram below:  	**(2)**

Question number	Answer	Mark
4(b)(ii)	**AO4 (1 mark)** Award 1 mark for a suitable observation. • The site has a good/positive environmental quality. (1) • The high scores suggest a high environmental quality. (1) • The area might not be set up for pedestrians. (1) • There is a lot of traffic in the area. (1)	**(1)**

Question number	Answer	Mark
4(b)(iii)	**AO4 (1 mark)** Award 1 mark for a suitable advantage: • A lot of different features can be plotted on one graph. (1) • It is clear to see the environmental quality of the area. (1) • Easy to compare different factors (1)	**(1)**

Question number	Answer	Mark
4(b)(iv)	**AO4 (2 marks)** Award 1 mark for working and 1 mark for correct answer. 5,4,5,4,3,4,4,5 or 3,4,4,4,4,5,5,5 (1) = 4 (1)	**(2)**

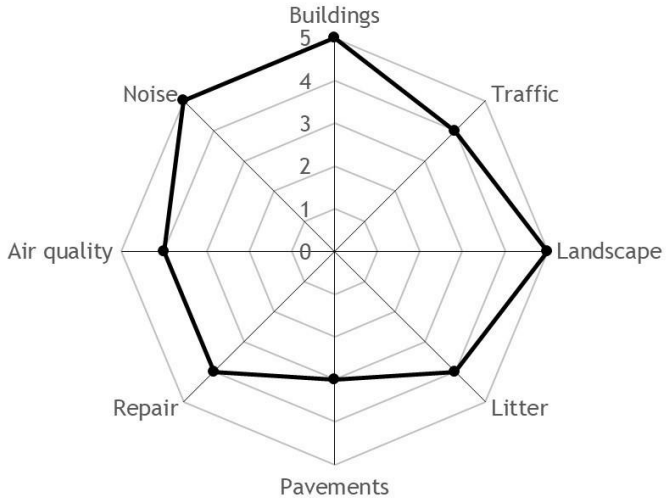
Question number	Answer	Mark
4(c)	**AO3 (3 marks)** Award 1 mark for an initial point, and further 2 marks for explanation. • Photographs can be used to record features of the area (1) which can be annotated in the data presentation stage (1) and demonstrate findings such as evidence of poor pavements (1). • Photographs can be used as an alternative for field sketches (1) and can be more accurate (1) to allow the student to look back after leaving the fieldwork site (1). • Photographs can be used for rephotography (1) so the current features could be compared with the past (1) to create an accurate understanding of changes (1).	**(3)**

Question number	Indicative content
4(d)	**AO3 (4 marks)/AO4 (4 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: **AO3** • Evaluation is likely to be linked to the conclusions made and how these linked to the aims for the enquiry. • Evaluation will most likely be linked to the methods used that led to these conclusions and how the nature of fieldwork design led to the creation of the conclusions. • Recognition of the extent to which aim was met and how the methods chosen to allow these conclusions to be reached. • A supported judgement should be reached about how the aim was met drawing on evidence from the conclusions, such as the strength and weaknesses of the findings, using relevant examples from either the data or the conclusions that they led to. **AO4** • There is evidence of using different skills and techniques as part of primary fieldwork. • There is evidence of using different skills and techniques relevant to the conclusion stage of the enquiry. • There is evidence of using different skills and techniques to investigate aspects of economic activity and energy. • There is evidence of own fieldwork data (and design) i.e. reference to the field data collected by the student.

Level	Mark	Descriptor
	0	No acceptable response.
Level 1	1–3	• 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) • Few aspects of the enquiry process are supported by the use of geographical skills to obtain information, which has limited relevance and accuracy. Communicates generic fieldwork findings and uses limited relevant geographical terminology. (AO4)
Level 2	4–6	• 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) • Some aspects of the enquiry process are supported by the use of geographical skills. Communicates fieldwork findings with some clarity, using relevant geographical terminology occasionally. (AO4)
Level 3	7–8	• 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) All aspects of the enquiry process are supported by the use of geographical skills. Communicates enquire-specific fieldwork findings with clarity and uses relevant geographical terminology consistently. (AO4)

Question number	Answer	Mark
5(a)(i)	**AO3 (1 mark)** Award one mark for a suitable type of secondary data • Data on local population demographics(1) • Local planning reports (1). • Local newspaper articles on energy issues (1). • Data from social media (1). Accept any other appropriate response.	**(1)**

Question number	Answer	Mark
5(a)(ii)	**AO3 (2 marks)** Award 1 mark for initial point, and a further mark for explanation, up to a maximum of 2 marks. • It can be used to find out more features of the enquiry area (1) which can provide the context for the enquiry (1). • It can be used to confirm findings from primary data (1) and support conclusions (1). • It can be used to compare to historical patterns (1) to understand where changes have taken place (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
5(b)(i)	**AO4 (2 marks)** Award 1 mark for: Plotting points correctly (1) Connecting lines correctly (1). This should look like the diagram below:  	**(2)**

Question number	Answer	Mark
5(b)(ii)	**AO4 (1 mark)** Award 1 mark for a suitable observation. • The site has a good/positive environmental quality. (1) • The high scores suggest a high environmental quality. (1) • The area might not be set up for pedestrians. (1) • There is a lot of traffic in the area. (1)	**(1)**

Question number	Answer	Mark
5(b)(iii)	**AO4 (1 mark)** Award 1 mark for a suitable advantage: • A lot of different features can be plotted on one graph. (1) • It is clear to see the environmental quality of the area. (1) • Easy to compare different factors (1)	**(1)**

Question number	Answer	Mark
5(b)(iv)	**AO4 (2 marks)** Award 1 mark for working and 1 mark for correct answer. 5,4,5,4,3,4,4,5 or 3,4,4,4,4,5,5,5 (1) = 4 (1)	**(2)**

Question number	Answer	Mark
5(c)	**AO3 (3 marks)** Award 1 mark for an initial point, and further 2 marks for explanation. • Photographs can be used to record features of the area (1) which can be annotated in the data presentation stage (1) and demonstrate findings such as evidence of poor pavements (1). • Photographs can be used as an alternative for field sketches (1) and can be more accurate (1) to allow the student to look back after leaving the fieldwork site (1). Photographs can be used for rephotography (1) so the current features could be compared with the past (1).	**(3)**

<table>
<tr><th>Question number</th><th colspan="2">Indicative content</th></tr>
<tr><td>5(d)</td><td colspan="2">AO3 (4 marks)/AO4 (4 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:

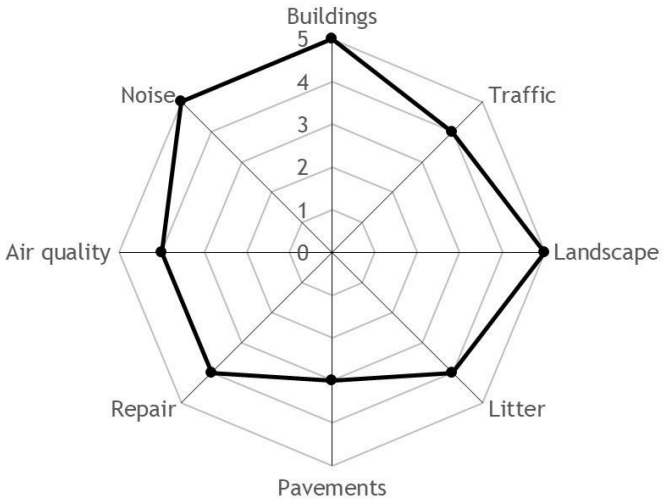
AO3
● Evaluation is likely to be linked to the conclusions made and how these linked to the aims for the enquiry.
● Evaluation will most likely be linked to the methods used that led to these conclusions and how the nature of fieldwork design led to the creation of the conclusions.
● Recognition of the extent to which aim was met and how the methods chosen to allow these conclusions to be reached.
● A supported judgement should be reached about how the aim was met drawing on evidence from the conclusions, such as the strength and weaknesses of the findings, using relevant examples from either the data or the conclusions that they led to.

AO4
● There is evidence of using different skills and techniques as part of primary fieldwork.
● There is evidence of using different skills and techniques relevant to conclusion stage of the enquiry.
● There is evidence of using different skills and techniques to investigate aspects of rural environments.
● There is evidence of own fieldwork data (and design) i.e. reference to the field data collected by the student.</td></tr>
<tr><th>Level</th><th>Mark</th><th>Descriptor</th></tr>
<tr><td></td><td>0</td><td>No acceptable response.</td></tr>
<tr><td>Level 1</td><td>1–3</td><td>● 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)
● Few aspects of the enquiry process are supported by the use of geographical skills to obtain information, which has limited relevance and accuracy. Communicates generic fieldwork findings and uses limited relevant geographical terminology. (AO4)</td></tr>
</table>

Level 2	4–6	• 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) • Some aspects of the enquiry process are supported by the use of geographical skills. Communicates fieldwork findings with some clarity, using relevant geographical terminology occasionally. (AO4)
Level 3	7–8	• 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) • All aspects of the enquiry process are supported by the use of geographical skills. Communicates enquiry-specific fieldwork findings with clarity and uses relevant geographical terminology consistently. (AO4)

Question number	Answer	Mark
6(a)(i)	**AO3 (1 mark)** Award one mark for a suitable type of secondary data. • Data on local population demographics (1). • Local planning reports (1). • Local newspaper articles on energy issues (1). • Data from social media (1) Do not allow general data sources such as 'the internet' or 'textbooks'.	**(1)**

Question number	Answer	Mark
6(a)(ii)	**AO3 (2 marks)** Award 1 mark for initial point, and a further mark for explanation, up to a maximum of 2 marks. • It can be used to find out more features of the enquiry area (1) which can provide the context for the enquiry (1). • It can be used to confirm findings from primary data (1) and support conclusions (1). • It can be used to compare to historical patterns (1) to understand where changes have taken place (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
6(b)(i)	**AO4 (2 marks)** Award 1 mark for: Plotting points correctly (1) Connecting lines correctly (1). This should look like the diagram below:  	**(2)**

Question number	Answer	Mark
6(b)(ii)	**AO4 (1 marks)** Award 2 marks for a suitable observation. • The site has a good/positive environmental quality. (1) • The high scores suggest a high environmental quality. (1) • The area might not be set up for pedestrians. (1) • There is a lot of traffic in the area. (1)	**(2)**

Question number	Answer	Mark
6(b)(iii)	**AO4 (1 mark)** Award 1 mark for a suitable advantage: • A lot of different features can be plotted on one graph. (1) • It is clear to see the environmental quality of the area. (1) • Easy to compare different factors (1)	**(1)**

Question number	Answer	Mark
6(b)(iv)	**AO4 (2 marks)** Award 1 mark for working and 1 mark for correct answer. 5,4,5,4,3,4,4,5 or 3,4,4,4,4,5,5,5 (1) = 4 (1)	**(2)**

Question number	Answer	Mark
6(c)	**AO3 (3 marks)** Award 1 mark for an initial point, and further 2 marks for explanation. • Photographs can be used to record features of the area (1) which can be annotated in the data presentation stage (1) and demonstrate findings such as evidence of poor pavements (1). • Photographs can be used as an alternative for field sketches (1) and can be more accurate (1) to allow the student to look back after leaving the fieldwork site (1). Photographs can be used for rephotography (1) so the current features could be compared with the past (1).	**(3)**

<table>
<tr><th>Question number</th><th colspan="2">Indicative content</th></tr>
<tr><td>6(d)</td><td colspan="2">AO3 (4 marks)/AO4 (4 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:

AO3
● Evaluation is likely to be linked to the conclusions made and how these linked to the aims for the enquiry.
● Evaluation will most likely be linked to the methods used that led to these conclusions and how the nature of fieldwork design led to the creation of the conclusions.
● Recognition of the extent to which aim was met and how the methods chosen to allow these conclusions to be reached.
● A supported judgement should be reached about how the aim was met drawing on evidence from the conclusions, such as the strength and weaknesses of the findings, using relevant examples from either the data or the conclusions that they led to.

AO4
● There is evidence of using different skills and techniques as part of primary fieldwork.
● There is evidence of using different skills and techniques relevant to conclusion stage of the enquiry.
● There is evidence of using different skills and techniques to investigate aspects of urban environments.
● There is evidence of own fieldwork data (and design) i.e. reference to the field data collected by the student.</td></tr>
<tr><td>Level</td><td>Mark</td><td>Descriptor</td></tr>
<tr><td></td><td>0</td><td>No acceptable response.</td></tr>
<tr><td>Level 1</td><td>1–3</td><td>● Attempts to apply understanding to deconstruct information but understanding and connections are flawed. An unbalanced or incomplete argument that</td></tr>
<tr><td></td><td></td><td>provides limited synthesis of understanding. Judgements are supported by limited evidence. (AO3)

● Few aspects of the enquiry process are supported by the use of geographical skills to obtain information, which has limited relevance and accuracy. Communicates generic fieldwork findings and uses limited relevant geographical terminology. (AO4)</td></tr>
</table>

Level 2	4–6	• 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) • Some aspects of the enquiry process are supported by the use of geographical skills. Communicates fieldwork findings with some clarity, using relevant geographical terminology occasionally. (AO4)
Level 3	7–8	• 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) • All aspects of the enquiry process are supported by the use of geographical skills. Communicates enquiry-specific fieldwork findings with clarity and uses relevant geographical terminology consistently. (AO4)

Question number	Answer	Mark
7(a)	**AO1 (1 mark)** D solar variations (1) The answer cannot be A, B or C as they are not natural causes of climate change.	**(1)**

Question number	Answer	Mark
7(b)	**AO1 (1 mark)** A eruptions release greenhouse gases (1) The answer cannot be B, C or D as these are not considered contributors to climate change.	**(1)**

Question number	Answer	Mark
7(c)	**AO1 (2 marks)** Award 1 mark for each cause up to a maximum of 2 marks**.** • Burning fossil fuels (1) • Increased greenhouse gases (1) • Commercial livestock farming (1) • Deforestation (1) • Industrialisation (1) • High amounts of traffic (1) Accept any other valid response.	**(2)**

Question number	Answer	Mark
7(d) (i)	**AO3 (1 mark)** Award 1 mark for the following answer. • Venezuela (1)	**(1)**

Question number	Answer	Mark
7(d)(ii)	**AO4 (2 marks)** Award 1 mark for initial point of difference identified, and a further mark for development which could be further description or the use of data to support, up to a maximum of 2 marks per idea. • There is a greater variation in CO2 emissions in Africa (1). Many countries in Africa have positive change of between 1-5% (1). • There are more countries in Africa that have negative change than North America (1) Just 3 in North American but over 6 in Africa (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
7(d)(iii)	**AO2 (1 mark) /AO3 1 mark** Award 1 mark for an initial reason, and further mark for explanation or development, up to a maximum of 2 marks. • Reductions of CO2 in Europe (1) due to government policies to reduce carbon emissions to combat climate change (1). • Countries at different stages of industrialisation can lead to different abilities to reduce carbon emissions (1). Whereas countries in the post-industrial stage may have more ability/resources to reduce carbon emissions (1). • Variation in carbon emission reduction in many continents (1) due to different government commitments to achieve carbon reduction targets (1).	**(2)**

Question number	Answer	Mark
7(d)(iv)	**AO2 (1 mark) /AO3 1 mark** Award 1 mark for initial point, and further mark for explanation or development, up to a maximum of 2 marks. • Carbon emissions over time (1) so if a country has been a big contributor to carbon emissions compared to other countries (1). • Rates of deforestation (1) as this reduces the ability for carbon to be absorbed by trees (1). • Analysis of gas composition from ice cores (1) to be able to monitor CO2 levels (1). • Emissions of volcanic eruptions (1) and impacts on global temperatures (1).	**(2)**

Question number	Answer	Mark
7(e)	**AO1 (2 marks)** Award 1 mark for each characteristic identified, up a maximum of 2 marks: • Arid / dry / little rain/ less than 25cm of rain a year (1) • Hot temperatures (1) • Temperatures fall rapidly/cold during the night (1) • Little /sparse vegetation (1) • Sandy (soil) (1) Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
7(f)	**AO1 (2 marks)/ AO2 (2 marks)** Award 1 mark for the identification of each cause and 1 mark for further detail through explanation, up to a maximum of 2 marks for each impact. • Deforestation (1) which means soils can be exposed and lead to erosion (1) • Drought (1) due to significant lack of rainfall (1). • Intensive agriculture (1) which reduces the quality of the soil (1) • Overgrazing (1) which can lead to soil being more easily eroded (1). • Climate change (1) as higher temperatures can lead to more areas being at risk of desertification (1). • Over population (1) leading to exploitation of resources on the edge of deserts such as wood for fires (1). Accept any other appropriate response.	**(4)**

<table>
<tr><th>Question number</th><th colspan="2">Indicative content</th></tr>
<tr><td>7(g)</td><td colspan="2">AO3 (3 marks)/AO4 (3 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:
AO3
• There are various strategies that can be used to resolve water shortages some which can be addressed at the household level, while other require greater investment.
• The idea for water conservation can be effective if lots of people are involved. But given levels of rainfall are low in areas experiencing desertification, rainwater harvesting may not be effective in addressing water shortages.
• Given many of the causes of desertification are made worse by farming practices, it could be more effective to tackle some of these issues. Technology to make more efficient use of the limited water supplies, and reduced water, through irrigation could be more effective.
• While some strategies can be actioned at the local level, others are at a much larger scale and need large sums of investment to be effective.

AO4
• Figure 7b shows six different strategies that are used as part of efforts to save water.
• Figure 7b shows how some of these strategies can involve basic changes in behaviour (taking shorter showers).
• Figure 7b shows how some strategies involve investments to make changes to how water is used (systems for collecting rainwater, eradicating leaks, investing in sustainable energy).</td></tr>
<tr><td>Level</td><td>Mark</td><td>Descriptor</td></tr>
<tr><td></td><td>0</td><td>No rewardable material.</td></tr>
<tr><td>Level 1</td><td>1–3</td><td>• 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)</td></tr>
</table>

Level 2	4–6	• 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	Indicative content
7 (h)	**AO2 (4 marks), AO3 (4 marks), AO4 (4 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: **AO2** • Fragile environments such as forests and deserts are at risk of damage and destruction through a range of human and natural causes. • Climate change has the potential to increase desertification, as well as deforestation (through changes in growing conditions but also wildfires). • Strategies to address threats and to protect forests/deserts include: sustainable forestry/farming programmes; afforestation; regulation to stop illegal logging as well as international agreements to address these issues, but more generally to address climate change. • International agreements such as the Paris agreement provided legally binding targets for many countries, and this prompted many countries to make changes to try and reach these targets. **AO3** • Figure 7b shows how in many areas of the world there have been significant reductions in carbon emissions, which have often been driven by the targets set by international agreements. • To protect fragile environments more localised responses may be needed. For example an area experiencing increased desertification on the edge of the Sahel may benefit more from a tree planting program than an international agreement about deforestation more generally. This suggests that to protect fragile environments more generally there needs to be approaches taking place at different scales. • Successful examples of projects to tackle deforestation and desertification have relied on collaboration between international

Question number	Indicative content
	organisations, governments, companies and NGOs. This may sometimes require international agreements, but more often may rely on local investment and action. • The scale of efforts to protect fragile environments varies. While international agreements can often feel unsuccessful their targets are often much higher i.e. reducing sea level rise, compared to smaller scale desertification reclamation projects which have a smaller area as focus. **AO4** • Figure 7a shows how there is a varied global pattern of reductions in carbon emissions in 2019. • Figure 7a how there is significant variation in reductions across the development stages with economic development not necessarily corresponding to particular levels of carbon emission reduction. • Figure 7b indicates how the rates of carbon emission reduction have varied from to over 10% increases to -10% decreases. • Figure 7b shows how some of these strategies can involve basic changes in behaviour (taking shorter showers). • Figure 7b shows how some strategies involve investments to make changes to how water is used (systems for collecting rainwater, eradicating leaks, investing in sustainable energy).

Level	Mark	Descriptor
	0	No acceptable response.
Level 1	1–4	• 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. (A04)

Level 2	5–8	• 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	• Demonstrates accurate understanding of concepts and the interrelationship of places, environments 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	Answer	Mark
8(a)(i)	**AO1 (1 mark)** B More disposable income. (1) The answer cannot be A, C or D as these are not reasons for the growth of mass tourism.	**(1)**

Question number	Answer	Mark
8(a)(ii)	**AO1 (1 mark)** A Employing local people at tourist resorts (1) The answer cannot be B, C or D as these are not strategies which would encourage more sustainable tourism.	**(1)**

Question number	Answer	Mark
8(b)	**AO1 (2 marks)** Award one mark for a suitable factor. • Trade (restrictions/agreements) (1) • Conflict/war (1) • Energy prices (1) • International agreements (1) • Natural disasters (1) • Uncertainty about land ownership (1) Do not accept 'land availability'. Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
8(c)(i)	**AO3 (1 mark)** Award 1 mark for: . • Highest = Viet Nam (1)	**(1)**

Question number	Answer	Mark
8(c)(ii)	**AO4 (2 marks)** Award 1 mark for initial point of difference identified, and a further mark for development, up to a maximum of 2 marks per idea. • There is much greater variation in the percentage of trade as a share of GDP in Africa than in South America (1) with some countries such as Sudan having less than 20% compared to Mozambique as high as 500% (1). • The majority of countries in South America have 2050% compared to Africa where the majority are 50100% (1) There are no countries in South America with more than 100% (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
8(c)(iii)	**AO2 (2 marks)** Award 1 mark (AO1) for identification of suitable impact and a further mark (AO2) for an explanation of the impact, up to a maximum of 2 marks. • Different levels of economic development (1) may lead to type of trade such as industrial exports being more important for some economies than others (1). • International relations/interconnectedness (1) may affect the amount of imports and exports that a country can be engaged in (1). • High availability of primary resources (1) leading to high exports (1). • Historical ties (1) that have been maintained as trade links (1). • Access to trading blocs (1) which encourage/prevent trade (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
8(c)(iv)	**AO2 (1 mark) / AO3 (1 mark)** Award 1 mark a suitable reason, and a further mark for explanation or development. • The data shows that nearly all countries have a significant percentage of their GDP as trade (1) which indicates they are engaged in a lot of imports and exports (1). • Trade is an important element of globalisation processes (1) and this map shows that for some countries this is an extremely high proportion of their GDP (1).	**(2)**

Question number	Answer	Mark
8(d)	**AO1 (2 marks)** Award 1 mark for each suitable push factor. • Poor job opportunities (1) • Lack of healthcare (1) • Lack of education facilities (1) • Conflict/war (1) • Poor quality of life (1). • Famine/food shortage (1) Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
8(e)	**AO1 (2 marks) / AO2 (2 marks)** Award 1 mark for each approach, and a further mark for development or explanation, up to a maximum of 2 marks for each point. • Strict immigration laws like in Australia (1) ensure people migrating to the country have the right skills that are needed in the country (1) • Physical borders and crossing points (1) restrict the movement of people into the country, as seen in the USA/Mexico border (1). Accept any other appropriate response.	**(4)**

Question number	Indicative content		
8(f)	**AO3 (3 marks)/AO4 (3 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: **AO3** • International institutions play an important role in a global economy. • The actions of these international institutions can affect geopolitical relationships. Sometimes it creates issues of different levels of power in the global economy. For example if a country requires an IMF loan it then creates a dependence for that country on others. Or if the WTO places restrictions on certain countries this can lead to some reductions in the global economy. Although it is the goal of the WTO to reduce trade barriers through negotiations with respective countries, and if successful could lead to greater trade. • The World Bank supports countries to achieve sustainable growth through investment as well as providing advisory services to businesses and governments. • The IMF has three core objectives: to support more international monetary cooperation, encourage trade, and discourage policies that would harm prosperity. • In additional to international institutions as shown in Figure 8b there are processes which can create a more globalised economy, such as the role of trading blocs like the North American Free Trade Agreement or the EU. **AO4** • Figure 8b shows information about four global institutions that are involved in global affairs. • Figure 8b shows how different international institutions have different roles, from those that are designed to focus on ensuring smooth trading systems (WTO) to those that are designed to promote peace (UN). • Figure 8b shows how many of these institutions are designed to tackle issues of economic challenges such as financial stability or poverty (IMF/WB).		
Level	**Mark**	**Descriptor**	
	0	No rewardable material.	

Level 1	1–3	• 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	• 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	Indicative content
8 (g)	**AO2 (4 marks), AO3 (4 marks), AO4 (4 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: **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** The benefits of globalisation can include: • ○ Building trade links with other countries ○ Job creation and more formal job opportunities (and more skilled jobs) ○ Development of infrastructure ○ Foreign exchange increase through exports

	○ Investment in new technologies. • The disadvantages of globalisation include: ○ The profit driven nature of enterprises in the global economy (e.g. TNCs) ○ Profits from TNCs often do not benefit host countries as much as they are sent back to where the headquarters is based. ○ There is the potential for exploitation of workers. ○ It can lead to exploitation of the environment. ○ New jobs may not always be given to local people but may lead to greater migration of workers from developed countries to support TNC development. • It should also be recognised that the benefits and disadvantages that relate to globalisation are often uneven with much of the economic benefit being centred in developed countries, often where TNC headquarters are located, but with more disadvantages experienced by developing/emerging countries. **AO4** • Figure 8a shows how there is significant global variation in the dependence on trade as a percentage of GDP. • Figure 8a shows how the majority of Europe trade represents 100200% as a share of GDP, whereas in South America the percentage is much lower from 50-100%. • Figure 8a shows in Africa and Asia there is significant variability in trade as a share of GDP. • Figure 8b shows information about four global institutions that are involved in global affairs. • Figure 8b shows how different international institutions have different roles, from those that are designed to focus on ensuring smooth trading systems (WTO) to those that are designed to promote peace (UN). • Figure 8b shows how many of these institutions are designed to tackle issues of economic challenges such as financial stability or poverty (IMF/WB).

Level	**Mark**	**Descriptor**
	0	No acceptable response.
Level 1	1–4	• 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)

Question number	**Indicative content**

		• Uses some geographical skills to obtain information with limited relevance and accuracy, which supports few aspects of the argument. (A04)
Level 2	5–8	• 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	• Demonstrates accurate understanding of concepts and the interrelationship of places, environments 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	Answer	Mark
9(a)(i)	**AO1 (1 mark)** A adult literacy rate (1) The answer cannot be B. C or D as these are all economic indicators..	**(1)**

Question number	Answer	Mark
9(a)(ii)	**AO1 (1 mark)** B improved access to healthcare services (1). The answer cannot be A, C or D as these are not suitable reasons for a falling death.	**(1)**

Question number	Answer	Mark
9(b)	**AO1 (2 marks)** Award 1 mark for any of the following indicators identified, up to a maximum of 2 marks. • GDP per capita/ income per capita (1) • Life expectancy (1) • Years of schooling /literacy rate (1) Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
9(c)(i)	**AO3 (1 mark)** Award 1 mark for any the following country. • South Africa (1)	**(1)**

Question number	Answer	Mark
9(c)(ii)	**AO4 (2 marks)** Award 1 mark for identification of a difference, with a further mark for development, up to a maximum of 2 marks. • There is greater variation in Gini index scores in Africa than in Asia (1), with the highest scores experienced in southern Africa (1). • Asia does not have any countries with an index score more than 0.5 (1) whereas there are countries towards the south of Africa which have scores as high as 0.65 (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
9(c)(iii)	**AO2 (2 marks)** Award 1 mark (AO1) for identification of suitable reason, with a further mark for development or explanation, up to a maximum of 2 marks. • Different levels of economic development (1) with more advanced economies generally experiencing lower levels of inequality (1). • Histories of colonialism (1) leading to persisting levels of inequality in some countries (1). • Type of governance (1) which could lead to high levels of inequality (1). • Conflict/war (1) which can lead to regional variations in inequality (1). • Resource distribution (1) which contributes to development of some areas leading to inequality (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
9(c)(iv)	**AO2 (1 mark) / AO3 (1 mark)** Award 1 mark for a suitable reason, and a further mark for development or explanation, up to a maximum of 2 marks. • The data demonstrates how there are differences in patterns of global inequality (1) highlighting where some countries need greater support (1). • The data demonstrates differences in development that are not purely economic (1) and therefore highlighting that the development process if multifaceted (1).	**(2)**

Question number	Answer	Mark
9(d)	**AO1 (2 marks)** Award 1 mark for the identification of suitable advantage and 1 mark for a suitable disadvantage, up to a maximum or 2 marks. Advantage: • Often involve large investments (1) • Often on larger/national scale (1) • Can lead to improved infrastructure (1) • Can lead to job creation (1). Disadvantages: • May not recognise the needs of local people (1) • Money may not reach the people who need it most (1). • Can lead to debts (1). • Inappropriate use of funds/corruption (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
9(e)	**AO1 (2 marks) / AO2 (2 marks)** Award 1 mark for the identification of a suitable factor that can lead to uneven development within a country up to a maximum of 2 marks for each point. • Government and business investment focused on urban areas, particular large cities (1) which means that more remote rural areas can lack access to basic services/infrastructure (1). • Location of industries (1) as this can often lead to greater economic development in those areas due to the multiplier effect related to investment and jobs (1). • Physical factors such as presence of mountain areas (1) which means physical access/provision of services/development of industry is more difficult (1). • Climatic features (1) can make living difficult/easier depending on conditions e.g. hot in a desert (1). • Presence of natural resources (1) which can lead to investment and growth of settlements (1). Accept any other appropriate response.	**(4)**

<table>
<tr><th>Question number</th><th colspan="2">Indicative content</th></tr>
<tr><td>9(f)</td><td colspan="2">AO3 (3 marks)/AO4 (3 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:

AO3
• There are different approaches to reducing the development gap: ○ Top-down approaches are usually government (or international organisation) led and usually have little involvement of local people with the focus on major financial investment often in infrastructure or services. International aid usually falls into the category of top-down approaches. ○ Bottom-up approaches are usually much more locally focused and often ran by NGOs in collaboration with local people to support their needs at a smaller scale.
• International aid can be in the form of loans through the IMF. These loans can lead to financial dependence, and they can lead to growth in national debts.
• International aid can be used in a diverse set of ways from alleviating national debts more generally, through to more focused uses which target different areas of society from education and health through to responding to natural disasters.
• International Aid can come 'with strings attached' which could be economic or political - access to ports, purchase of goods from doner country, access to home markets for different firms.

AO4
• Figure 9b show how international aid is distributed across many different sectors.
• Figure 9b demonstrated that international aid can be targeted towards social and economic aspects of society but also be part of a humanitarian aid effort.
• Figure 9b shows how social and economic infrastructure as well as humanitarian aid have a range of different components, highlighting the complex nature of international aid.
• Figure 9b demonstrates how the largest sector for international aid is focused on social infrastructure and services including: education, health, and utilities.</td></tr>
<tr><th>Level</th><th>Mark</th><th>Descriptor</th></tr>
<tr><td></td><td>0</td><td>No rewardable material.</td></tr>
</table>

Level 1	1–3	• 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	• 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	Indicative content	
9(g)	• Greater level of equality are important for the development process to ensure all members of society experience improved quality of life. • Uneven development patterns are also being exacerbated by the increasing impacts of climate change which at present are affecting some countries more severely than others (such as the extreme heat waves and floods in Pakistan, 2022). **AO4** • Figure 9a shows variations in global inequality through the Gini equality index scores. • Figure 9a shows how developing and emerging countries often have lower inequality index scores. • Figure 9a shows how there is significant variations of inequality within continents. • Figure 9b show how international aid is distributed across many different sectors. • Figure 9b demonstrated that international aid can be targeted towards social and economic aspects of society but also be part of a humanitarian aid effort. • Figure 9b demonstrates how the largest sector for international aid is focused on social infrastructure and services including: • education, health, and utilities.	
Level	**Mark**	**Descriptor**
	0	No acceptable response.
Level 1	1–4	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. (A04)

Level 2	5–8	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	Demonstrates accurate understanding of concepts and the interrelationship of places, environments 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)

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