Pearson Edexcel

Mark Scheme (Results)

Summer 2023

Pearson Edexcel International GCSE in Geography (4GE1/02R)
Paper 2: 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.

How to award marks when level descriptions are used

1. Finding the right level

The first stage is to decide into 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.

For example, one stronger passage at L4 would not by itself merit a L4 mark, but it might be evidence to support a high L3 mark, unless there are substantial weaknesses in other areas. Similarly, an answer that fits best in L3 but which has some characteristics of L2 might be placed at the bottom of L3. An answer displaying some characteristics of L3 and some of L1 might be placed in L2.

2. Finding 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.

Levels containing 2 marks only

Start with the presumption that the work will be at the top of the level. Move down to the lower mark if the work only just meets the requirements of the level.

Levels containing 3 or more marks

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 upper-middle 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)** C miner. (1) The answer cannot be A, B or D as these are all tertiary and quaternary sector jobs.	**(1)**

Question number	Answer	Mark
1(a)(ii)	**AO1 (1 mark)** Award one mark for a suitable factor. • Availability of workforce/labour (1). • Proximity to natural resources (1) • Availability of land for growing crops (1) . • Flat land/relief (1) Accept any other appropriate response.	**(1)**

Question number	Answer	Mark
1(b)	**AO1 (1 mark)** D lack of unemployment benefits (1) It cannot be A, B or C as these are not characteristics of informal employment.	**(1)**

Question number	Answer	Mark
1(c)	**AO2 (1 mark) / AO3 (1 mark)** Award 1 mark for a basic evidence from the from the photograph (AO3) and a further 1 mark for extension through explanation (AO2), up to a maximum of 2 marks. • Open space (1) which means there is potential to expand at a later date. • Roads (1) to provide good access for the workforce (1). • Nice/pleasant environment (1) which is designed to act as a benefit for attracting a high quality workforce (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
1(d)	**AO1 (1 mark)** Award 1 mark for a suitable definition. • The difference between a country's demand for energy and its ability to produce that energy from its own resources (1). Accept responses that acknowledge the idea of difference between production and demand.	**(1)**

Question number	Answer	Mark
1(e)	**AO2 (4 marks)** Award 1 mark for each reason and a further expansion mark or exemplification, up to a maximum of 2 marks each. Maximum 2 marks where a developed country or no country is provided. A range of country examples could be chosen. • [China] Government investment in dams (1) to create more renewable energy through turbines (1) • [China] Multiple firms producing electric cars (1) so less fossil fuels used for transport (1). • [Morocco] Large investment from government into solar farms [1] to generate electricity from the sun that is readily available in the country. • [Morocco] Improving energy efficiency by updating technology (1) to update old solar farms with new technology (1). Accept any other appropriate response.	**(4)**

Question number	Answer	Mark
1(f)	**AO1 (1 mark) / (AO3) 2 marks** Award 1 mark (AO1) for identification of a change and a further 2 marks (AO3) for extension through use of the resource, up to a maximum of 3 marks. • A rise in the use of wind power (1) to reduce carbon emissions (1) and reliance on fossil fuel energy (1). • A decline in the use of coal (1) to maintain a more sustainable energy mix (1) which is less reliant on fossil fuels (1). • Development of other renewable energy types such as biomass (1) as country seeks to support a more sustainable energy mix (1) with a more renewable energy (1). Accept any other appropriate response.	**(3)**

Question number	Answer	Mark

1(g)	**AO2 (2+2 marks)**
	
	Award 1 mark for an advantage and a disadvantage, with a further expansion mark, up to a maximum of 2 marks each.
	
	• Advantage:
	  ○ Renewable sources such as solar do not run out (1) so can help increase energy security (1).
	  ○ Wind energy has a potentially infinite supply (1) so it can provide a complement to other energy sources (1).
	  ○ Hydroelectric energy using the movement of water can provide an infinite supply of energy (1) but can also create water reserves (dams) (1).
	
	• Disadvantage:
	  ○ Some renewable technologies can be expensive (1) so not always accessible to whole populations (1).
	  ○ Some renewable resources are not reliable (1) for example where there is no wind, wind energy would not be efficient (1).
	  ○ Some renewable energy resources such as tidal can only be located in certain places (1) so not always an option for national networks (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
	• Developed based around the changes that took place in the UK the Clark-Fisher model provides an overview of employment changes that a country could typically go through as it moved from being a pre-industrial country to a post-industrial country.
	• There are three distinct phases in the model:
	  ○ Pre-industrial phase where the primary sector dominates the economy and tends to account for over two thirds of employment. Agriculture tends to be the dominant activity.
	  ○ Industrial phase where the secondary and tertiary sectors increase in productivity. The secondary sector tends to peak in this phase but does not tend to account for mor than two thirds of employment.
	  ○ Post-industrial phase which involves a fall in primary and secondary sectors, a rise in tertiary sector employment and the emergence of the quaternary sector.
	• Reasons for the changes:
	  ○ Mechanisation of agriculture reduces requirement for labourers which can then move to other sectors (with the potential for higher wages).
	  ○ A rise in secondary sector businesses tends to dominate in cities, which can lead to increased rural-urban migration which not only fuels the secondary sector but the growth of the tertiary sector too.
	  ○ Global shift of manufacturing in some developed countries can lead to a reduced secondary sector and the rise of tertiary and quaternary.
	  ○ Advances in technology allows for reduced labour required in the secondary sector, but also the spread of service based employment in the tertiary and quaternary sectors.
	  ○
	AO4
	• Figure 1c shows the Clark-Fisher model which shows how employment structures typically change over time within a country.
	• On Figure 1c it can be seen that in pre-industrial countries there is a dominance of the primary sector.
	• On Figure 1c it can be seen that in industrial countries there is a rise initially in the secondary sector, followed by the tertiary sector.

	• Figure 1c shows how post-industrial countries have high tertiary sector employment, with rising quaternary sector employment and falling primary and secondary employment.	
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 timber (1) The answer cannot be A, B or D as these are all services provided by a forest rather than goods.	(1)

Question number	Answer	Mark
2(a)(ii)	**AO1 (1 mark)** Award 1 mark for a suitable definition. • When crops and animals are produced by farmers to feed their family rather than selling goods at a market. (1) Accept any other appropriate responses.	(1)

Question number	Answer	Mark
2(b)	**AO1 (1 mark)** A temperatures below 0^{oC} most of the year (1) The answer cannot be B, C or D as these are not characteristics of a tundra ecosystem.	(1)

Question number	Answer	Mark
2(c)	**AO2 (1 mark) / AO3 (1 mark)** Award 1 mark for basic evidence from the image (AO3) and a further 1mark for extension through explanation (AO2), up to a maximum of 2 marks. • Green spaces can be taken up with houses (1) which might cause conflicts with existing residents (1). • New homes built (1) might cause a rise in house prices (1). • Development of buildings/houses (1) could cause damage to local wildlife (1). Accept any other appropriate responses.	(2)

Question number	Answer	Mark
2(d)	**AO1 (1 mark)** Award 1 mark for a suitable way: • Fertilisers (1) • GM crops (1) • High yielding varieties of crops (1) • Increase farm size (1) • Pesticides/Herbicides (1) Accept any other appropriate response.	**(1)**

Question number	Answer	Mark

2(e)	**AO2 (2+2 marks)**
	
	Award 1 mark for identification of a way farm incomes are being diversified and a further mark for development or exemplification, up to a maximum of 2 marks each.
	
	Maximum 2 marks where a developing or emerging country or no country is provided.
	
	A range of examples could be provided.
	
	• United Kingdom:
	  ○ Adding a bed and breakfast on site (1) to be able to earn money from tourism. (1).
	  ○ Changing part of the farm to pick your own (1) to attract a wider range of people to the farm.
	
	• USA:
	  ○ Allowing land to be used for wind turbines (1) to earn money for generating energy as well as growing crops (1).
	  ○ Opening a farm shop (1) so produce can be sold direct to consumers rather than just through intermediaries (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. • Most Polish cities have experienced an outflow of residents (1) which may lead to high demand for housing in suburban areas (1) which encroaches into rural areas (1). • A lot of movement to the suburbs (1) which there could be infrastructure developments (1) which could improve accessibility of some rural areas (1). Accept any other appropriate response.	**(3)**

Question number	Answer	Mark
2(g)	**AO2 (4 marks)** Award 1 mark for each strategy and an additional 1 mark for development through further explanation or exemplification. Maximum 2 marks for each strategy. A range of strategies chosen and countries referred to. • Efforts from NGOs to improve access to electricity (1) so people can run appliances from their home reliably (1). • Introducing GM crops (1) which can improve yields or be more pest resistant (1). • Reduce the use of pesticides and chemicals (1) and produce goods with certification standards which can gain a higher price from consumers (1). Accept any other appropriate response.	**(4)**

Question number	Indicative content	
2 (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** • The factors leading to change in rural areas are predominantly human in developing an emerging country. • Processes of rural-urban migration mean rural areas often lose many of their economically active population, leaving rural areas underpopulated. This leaves older age groups behind in rural areas. • Loss of economically active populations means there may be a shortage of suitable labourers in some areas. This could lead to reduced production in agriculture for example. If the country is experiencing a decline in primary sector industries such as agriculture then those remaining working in rural areas may need to consider alternative sources of income so diversification on farms may take place - this could involve developing tourist facilities, or switching to crops which gain a higher income but require less manual labour. • Globalisation often support continued economic growth in cities which means that economic development tends to focus on the urban areas supporting core-periphery theory. **AO4** • Figure 2c shows changes to the population of urban and rural populations in Brazil. • Figure 2c how in 1950 there was a total population of just over 50 million people which were around two thirds rural. • Figure 2c shows how the population of Brazil in general increased substantially over the time period to around 230 million people with the majority (around 90%) of these being urban. • Figure 2c shows how after 2000 there was a slow decline in rural populations.	
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
3(a) (i)	**AO1 (1 mark)** D – financial district (1) The answer cannot be A, B or C as these features usually associated with areas outside the city centre.	**(1)**

Question number	Answer	Mark
3(a)(ii)	**AO1 (1 mark)** Award 1 mark for any suitable reason. • Accessibility/transport links (1) • Proximity to city centre (1) • Building quality (1) • Land use (1) Accept any other appropriate response.	**(1)**

Question number	Answer	Mark
3(b)	**AO1 (1 mark)** A infrastructure (1) The answer cannot be B, C or D as these do not affect land use patterns.	**(1)**

Question number	Answer	Mark
3(c)	**AO2 (1 mark) / AO3 (1 mark)** Award 1 mark for a basic evidence from the from the photograph (AO3) and a further 1 mark for extension through explanation (AO2), up to a maximum of 2 marks. • Potential for room to expand at a later date (1) as the land is usually on the edge of a settlement (1). • Nicer environment for a business (1) which can provide greater job satisfaction for workers (1). • No need to pay for land to be cleared before building (1) so may be cheaper than building on some brownfield sites (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
3(d)	**AO1 (1 mark)** Award 1 mark for a suitable definition. • Movement of people away from cities to more rural areas or smaller towns and cities (1). Accept any other appropriate response.	**(1)**

Question number	Answer	Mark
3(e)	**AO2 (2+2 marks)** Award 1 mark for a suitable and a further development or exemplification, up to a maximum of 2 marks each. • Population growth / natural increase (1) fuelled by rural-urban migration but also natural increase of the urban population as it grows (1). • Multiplier effect (1) as more people have moved there, more people need more services, which fuels more economic growth (1). Accept any other appropriate response.	**(4)**

Question number	Answer	Mark
3(f)	**AO1 (1 mark) / (AO3) 2 marks** Award 1 mark for a trend and a further 2 marks for extension through explanation or description, up to a maximum of 3 marks. • Asia has developed a larger proportion of urban dwellers over recent decades (1). This is due to the growth of secondary sectors and industrialisation (1) which had lead to growth of employment in urban areas (1). • Europe has a developed lower proportion of global urban population over time (1) as it went through processes or urbanisation earlier (1) and actually experienced process of counter-urbanisation as people seek places with a better quality of life (1). Accept any other appropriate response.	**(3)**

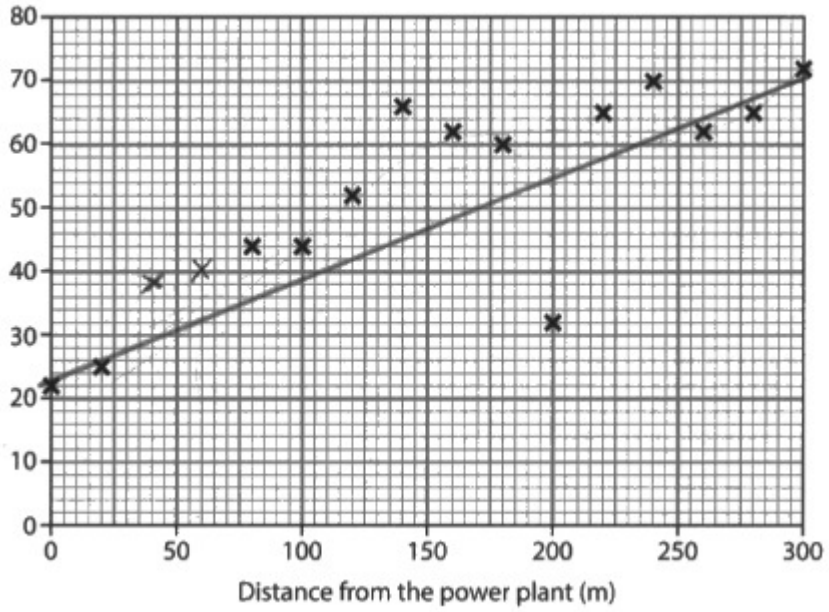
Question number	Answer	Mark
3(g)	**AO2 (4 marks)** Award 1 mark for initial explanation and an additional 1 mark for development through further explanation or exemplification. A range of countries and stakeholders examples could be chosen, relating to different environmental challenges (these could include air pollution, waste, water pollution, noise pollution). Maximum 2 marks where a developed country or no country provided. • [Brazil] In Curitiba, local government supporting sustainable transport (1) to try and reduce congestion and air pollution (1). • [Brazil] In Curitiba, planners have helped to create public transport systems that are effective (1) to reduce the number of vehicles on the road (1). • [India] In Delhi, government have been investing in waste management programmes to increase points for recycling. • [India] In India, a central pollution board was established (1) to develop programmes to reduce air pollution across different cities by finding new technologies (1). Accept any other appropriate response.	**(4)**

Question number	Indicative content	
3 (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** • There are a range of economic, social and environment problem that are associated with rapid urbanisation. • High traffic density is often associated with rapid urbanisation which can lead to congestion, but also increased air pollution. • Congestion can lead to reduced economic productivity as people cannot move effectively around urban areas. • The World Health Organisation air quality guidelines recommends that cities with a PM2.5 concentration should not exceed 10 μg/m^3. Despite this many cities (in both developing and developed countries) exceed this level, and congestion exacerbates this issue. • High levels of air pollution can lead to more respiratory health issues in residents. • Rapid urbanisation facing many cities in developing countries, such as Dhaka has led to increase pressure on many services such as education and healthcare, and not all people can access them. **AO4** • Figure 3c shows how many cities which have experience rapid urbanisation face high level of congestion – with journey times over 43% above uncongested free flow of traffic. • Figure 3c shows how this issue affects urban areas from across different continents suggesting it is a global problem. • Figure 3c indicates that Moscow, Mumbai, Bogota and Manila have the highest average congestion levels, these are all based in developing/emerging economies.	
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)

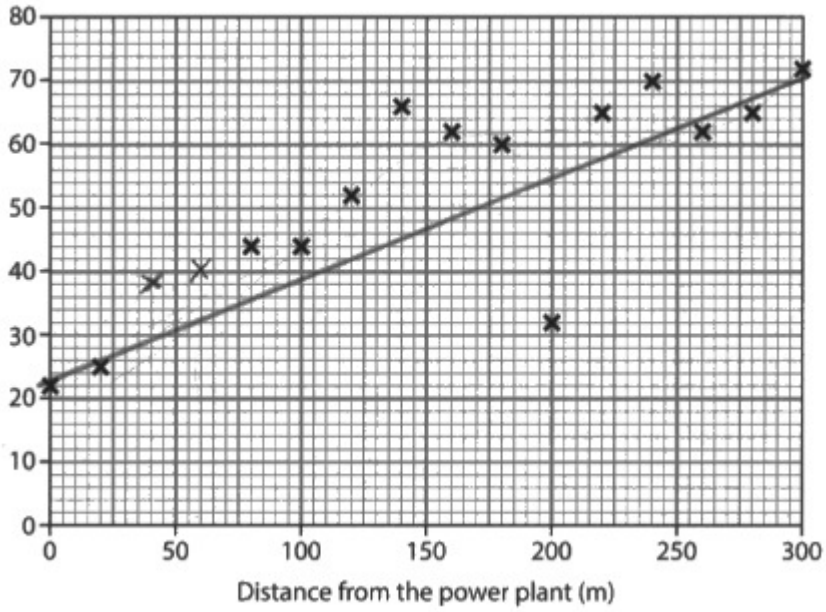
Level 2	**4–6**	• Applies understanding to deconstruct information and provide some logical connections between concepts. An imbalanced argument that synthesises mostly relevant understanding, but not entirely coherently, leading to judgements that are supported by evidence occasionally. (AO3) • Uses 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
4(a)(i)	**AO3 (1 mark)** Award one mark for any of the following: • Question 2/Q2/2 or 'What benefits does it bring?' (1) • Question 6/Q6/6 or 'What impact do you think the new power plant has had on the area? (1) .	**(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. • Closed question allow opinions to be quantified (1) which make data analysis straightforward when creating graphs and charts (1). • Closed questions are usually quicker to respond to (1) so it might be possible to get more people to answer these (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
4(b)(i)	**AO4 (2 marks)** Award 1 mark for at each point plotted correctly at 40m and 60m. Correct diagram shown below:  	**(2)**

Question number	Answer	Mark
4(b)(ii)	**AO4 (1 marks)** Award 1 mark for: 200m (1) Accept 200.	**(2)**

Question number	Answer	Mark
4(b)(iii)	**AO4 (1 mark)** Award 1 mark for a suitable line drawn, similar to below:  Line of best fit needs to be within the first and last plots but angle and height can vary slightly from the example shown above.	**(1)**

Question number	Answer	Mark
4(b)(iv)	**AO4 (2 marks)** Award 1 mark for working and 1 mark for correct answer. • (52+60) /2 (1) • 56/56.0 (1)	**(2)**

Question number	Answer	Mark
4(c)	**AO3 (3 marks)** Award 1 mark for a suitable type of secondary, and further 2 marks for explanation. • Local newspaper articles (1) can be used to find out views of local people on the new power plant (1) and compare to those from a questionnaire (1). • Reports from local council on biodiversity and wildlife (1) to consider potential impacts on the local environment (1) and if anything is being done to reduce impact (1). Accept any other appropriate response. Do not credit 'internet' on its own.	**(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 use of a range of data collection methods to strengthen argument, linked to aims. • Evaluation will most likely be linked to the evaluation of the data collection methods as well as fieldwork design and the techniques used to analyse and present data. • Recognition of the extent to which data collection methods chosen were suitable for the data types collected e.g. doesn't allow for presentation of qualitative data effectively. • A supported judgement is reached about the data collection methods, drawing on evidence such as strengths, weaknesses, alternatives and relevant examples using data. **AO4** • There is evidence of using different data collection methods and thought about the design of these methods as part of primary fieldwork. • There is evidence of using different skills and techniques relevant to design of the methodology stage of the enquiry.

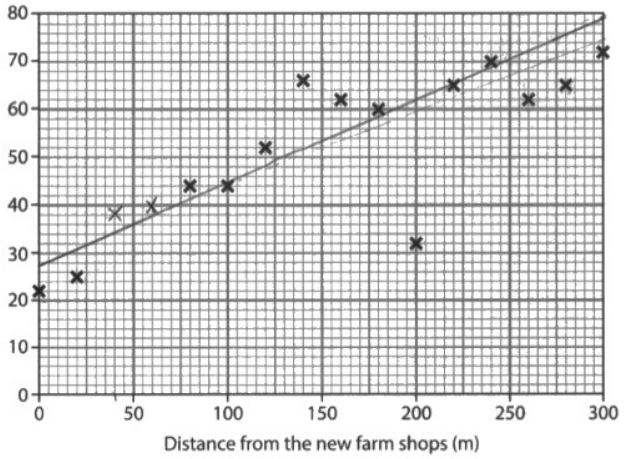
	• There is evidence of using different skills and techniques to investigate aspects of economic activity and energy. • There is evidence of own fieldwork data (and design) i.e. reference to the field data collected by the student.	
Level	**Mark**	**Descriptor**
	0	No acceptable response.
Level 1	1–3	• 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 enquiry-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 any of the following: • Question 2/Q2/2 or 'What benefits does it bring?' (1) • Question 6/Q6/6 or 'What impact do you think the new farm shop has had on the area? (1) .	**(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. • Closed question allow opinions to be quantified (1) which make data analysis straightforward when creating graphs and charts (1). • Closed questions are usually quicker to respond to (1) so it might be possible to get more people to answer these (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
5(b)(i)	**AO4 (2 marks)** Award 1 mark each correctly plotted point at 40m and 60m. Correct diagram shown below: 	**(2)**

Question number	Answer	Mark
5(b)(ii)	**AO4 (1 marks)** Award 1 mark for: 200m (1) Accept 200.	**(2)**

Question number	Answer	Mark
5(b)(iii)	**AO4 (1 mark)** Award 1 mark for a suitable line drawn, similar to below:  Line of best fit needs to be within the first and last plots but angle and height can vary slightly from the example shown above.	**(1)**

Question number	Answer	Mark
5(b)(iv)	**AO4 (2 marks)** Award 1 mark for working and 1 mark for correct answer. • (52+60) /2 (1) • 56/56.0 (1)	**(2)**

Question number	Answer	Mark
5(c)	**AO3 (3 marks)** Award 1 mark for a suitable method, and further 2 marks for explanation. • Local newspaper articles (1) can be used to find out views of local people on the new collection of farm shops (1) and compare to views from questionnaire (1) . • Reports from local council on rural commerce / tourism (1) to consider potential impacts of the new collection of farm shops (1) and what is being done to minimise impacts (1). Accept any other appropriate response. Do not credit 'internet' on its own.	**(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 use of a range of data collection methods to strengthen argument, linked to aims.
- Evaluation will most likely be linked to the evaluation of the data collection methods as well as fieldwork design and the techniques used to analyse and present data.
- Recognition of the extent to which data collection methods chosen were suitable for the data types collected e.g. doesn't allow for presentation of qualitative data effectively.
- A supported judgement is reached about the data collection methods, drawing on evidence such as strengths, weaknesses, alternatives and relevant examples using data.

AO4

- There is evidence of using different data collection methods and thought about the design of these methods as part of primary fieldwork.
- There is evidence of using different skills and techniques relevant to design of the methodology 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)

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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)

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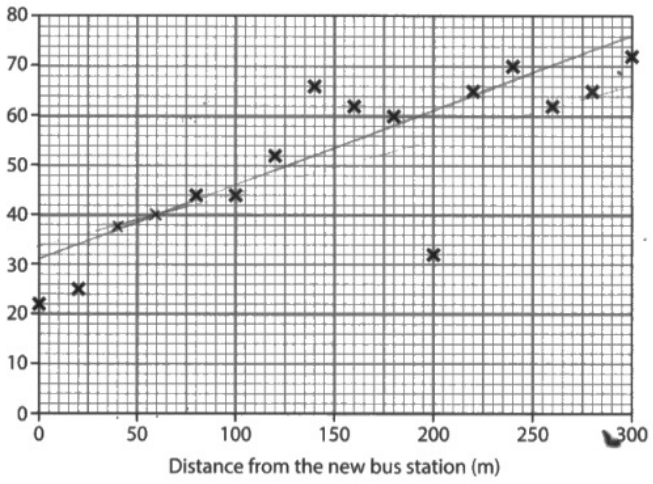
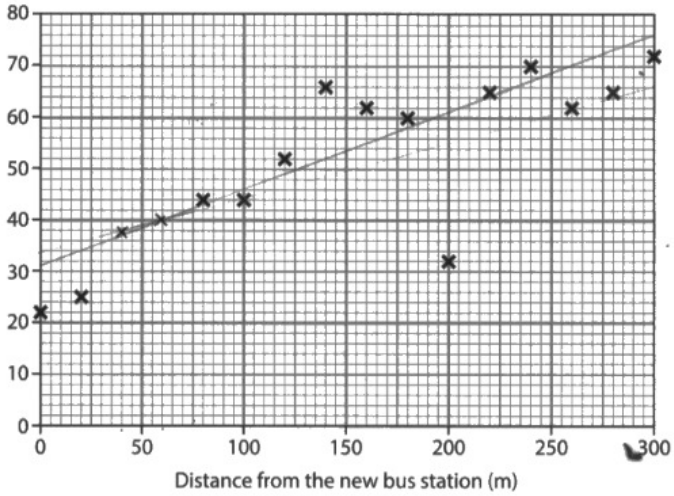
Question number	Answer	Mark
6(a)(i)	**AO3 (1 mark)** Award one mark for any of the following: • Question 2/Q2/2 or 'What benefits does it bring?' (1) • Question 6/Q6/6 or 'What impact do you think the new bus station has had on the area? (1) .	**(1)**

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. • Closed question allow opinions to be quantified (1) which make data analysis straightforward when creating graphs and charts (1). • Closed questions are usually quicker to respond to (1) so it might be possible to get more people to answer these (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
6(b)(i)	**AO4 (2 marks)** Award 1 mark for correctly plotted point at 40 and 60m. Correct diagram shown below:  	**(2)**

Question number	Answer	Mark
6(b)(ii)	**AO4 (1 marks)** Award 1 mark for: 200m (1) Accept 200.	**(2)**

Question number	Answer	Mark
6(b)(iii)	**AO4 (1 mark)** Award 1 mark for a suitable line drawn, similar to below:  Line of best fit needs to be within the first and last plots but angle and height can vary slightly from the example shown above.	**(1)**

Question number	Answer	Mark
6(b)(iv)	**AO4 (2 marks)** Award 1 mark for working and 1 mark for correct answer. • (52+60) /2 (1) • 56/56.0 (1)	**(2)**

Question number	Answer	Mark
6(c)	**AO3 (3 marks)** Award 1 mark for a suitable method, and further 2 marks for explanation. • Local newspaper articles (1) can be used to find out views of local people on the new bus station (1) and compare these to answer from a questionnaire (1). • Reports from local council on regeneration (1) to consider potential value of new bus station to local community (1). Accept any other appropriate response. Do not credit 'internet' on its own.	**(3)**

Question number	Indicative content
6(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 use of a range of data collection methods to strengthen argument, linked to aims. ● Evaluation will most likely be linked to the evaluation of the data collection methods as well as fieldwork design and the techniques used to analyse and present data. ● Recognition of the extent to which data collection methods chosen were suitable for the data types collected e.g. doesn't allow for presentation of qualitative data effectively. ● A supported judgement is reached about the data collection methods, drawing on evidence such as strengths, weaknesses, alternatives and relevant examples using data. **AO4** ● There is evidence of using different data collection methods and thought about the design of these methods as part of primary fieldwork. ● There is evidence of using different skills and techniques relevant to design of the methodology 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.

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 enquiry-specific fieldwork findings with clarity and uses relevant geographical terminology consistently. (AO4)

Question number	Answer	Mark
7(a)	**AO1 (1 mark)** D logging industry (1) The answer cannot be A, B or C as they are not causes of deforestation.	**(1)**

Question number	Answer	Mark
7(b)	**AO1 (1 mark)** C increased soil erosion (1) The answer cannot be A, B or D as these are not impacts of deforestation.	**(1)**

Question number	Answer	Mark
7(c)	**AO1 (2 marks)** Award 1 mark for each suitable cause up to a max of 2 marks. • Climate change/global warming (1) • Overgrazing (1) • Soil erosion (1) • Population growth (1) • Removal of wood for cooking (1) • Drought (1) • Deforestation (1) If makes reference to rainfall, it needs to be extended periods of low rainfall, not low rainfall or changing rainfall. Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
7(d) (i)	**AO3 (1 mark)** Award 1 mark for: . • Kenya (1)	**(1)**

Question number	Answer	Mark
7(d)(ii)	**AO4 (2 marks)** Award 1 mark for initial comparative statement, and a further mark for development or use of suitable data, up to a maximum of 2 marks per idea. • South America for significant variation in crop yield (1) while Europe is predicted to mainly experience -3 to -1% change (1). • Both South America and Europe have some countries which have the potential to change -3 to -1 %(1) although there are some counties in South America which may experience some increases (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
7(d)(iii)	**AO2 (2 marks)** Award 1 mark for identification of reason, and a further mark for an explanation or development, up to a maximum of 2 marks. • Climate change will lead to widespread changes in temperatures (1) which will affect growing seasons and therefore crop yields (1). • There are some countries in the northern hemisphere which may experience increases in temperatures (1) which could lead to some increases in the ability to grow some crops (1). Accept any other appropriate response.	**(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. • The map does not show the different potential crop yields for different crops (1) which may have different impacts to climate change (1). • The data only provides patterns at a large scale (1) when crop yields are often affected at the local level depending on different human and physical factors (1). • The predictions might not be accurate as the impacts of climate change may be more severe (1) meaning the potential increases in yields that are predicted for some countries will not happen (1).	**(2)**

Question number	Answer	Mark

7(e)	**AO1 (2 marks)**
	
	Award 1 mark for each factor associated with a suitable fragile environment identified, up a maximum of 2 marks:
	• [Coral reefs]:
	  ○ Warm water temperature (23-29^{oC})(1)
	  ○ Latitude 30N and 30S (1)
	• [Mangrove]:
	  ○ Intertidal zone / saline water (1)
	  ○ Warm water (1)
	
	Accept any other appropriate response. Credit any plausible fragile environment from arctic through to tropical rainforests.
		(2)

Question number	Answer	Mark
7(f)	**AO1 (2 marks)/ AO2 (2 marks)** Award 1 mark for each identification of suitable way to resolve water-resource shortage, and 1 mark for further detail through explanation, up to a maximum of 2 marks for each way. • Water conservation such as collecting rainwater (1) in order to not reduce the use of groundwater supplies (1). • Water-spreading weirs (1) which can help store and distribute water for agriculture to grow crops all year (1). • Construction of dams (1) to store water in a reservoir and control its release to other areas (1). Accept any other appropriate response.	**(4)**

Question number	Indicative content	

7(g)	**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 a range of strategies used to prevent loss of tropical rainforests, that operate at a range of scales.
	• Sustainable rainforest management is based around the key concepts of respecting the environment and the cultures of local people, using appropriate technology, generate income for local communities as well as protect diversity.
	• Sustainable rainforest management can include:
	  ○ Protection of forests (sometimes via National Parks or reserves) to limit development.
	  ○ Planned and controlled logging, as well as restricting licences.
	  ○ Selective logging, leaving some trees untouched.
	  ○ Reafforestation to try and restore areas of forest.
	• There are a range of national and international programmes to try and protect forest. For example the Forest Code in Brazil which restricts activity in the rainforest, or the Amazon Region Protected Areas programmes which led to 45 million hectares of forest being made into parks and reserves. International programmes that try to support sustainable forest management include the UN-REDD and United Nations Forum on Forests.
	AO4
	• Figure 7b shows three different strategies used as part of sustainable rainforest management.
	• Figure 7b shows how a range of stakeholders can be involved in strategies to deal with sustainable rainforest management.
	• Figure 7b shows how strategies to deal with deforestation can be at different scales from local/regional reafforestation programmes to international agreements.	

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)

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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** • Climate change has both natural and human causes, but it is widely acknowledged that human activities have led to the enhanced greenhouse effect and climate change with global surface temperatures rising faster since 1970 than any other 50 year period in the past 2,000 years. It is predicted for temperatures to rise 1.5oc by 2040 in all scenarios. • The 2021 IPCC report highlighted that climate change has the potential to be a catastrophe for the entire planet, but that working together could avoid a climate catastrophe. • Raised awareness is often done better at local level – challenges to get the connect between international and local level. • COP26 **AO3** • Figure 7a shows how the scale of potential changes are global, although varied across different continents, suggesting the potential impacts of climate change will be varied too.

Question number	Indicative content	
	• Climate change is primarily driven by human activities, often related to economic development, either as part of fuelling the economy or urbanisation. Given the ties with economic development, governments should take responsibility to address threats to these fragile environments, and should work together through international organisations to coordinate activities. • The nature of the threats to fragile environments from climate change span across national borders so often requires co-operation with international organisations such as the World Bank or UN organisations, or with smaller scale NGOs who can tackle issues on the ground. • Successful examples of projects to tackle deforestation and desertification (impacts of climate change) have relied on collaboration between international organisations, governments, companies and NGOs. For example, the Elion Resource Group have successfully restored areas of land experiencing desertification in the northern China. Such examples suggest that while international examples are important, it is important to have actions taking place at different scales. **AO4** • Figure 7a shows how there is the potential for many areas of the world to have serious declines in crop yields by 2050 due to climate change. • Figure 7a shows how the changes to crop yields will be uneven across the globe, significant declines in the global south, with some potential increases in the global north. • Figure 7b shows three different strategies used as part of sustainable rainforest management. • Figure 7b shows how a range of stakeholders can be involved in strategies to deal with sustainable rainforest management. • Figure 7b shows how strategies to deal with can be at different scales from local/regional reafforestation programmes to international agreements.	
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
8(a)(i)	**AO1 (1 mark)** C moving to another country due to war (1) The answer cannot be A, B or D as these are all examples of voluntary migration.	**(1)**

Question number	Answer	Mark
8(a)(ii)	**AO1 (1 mark)** A – more job opportunities (1) The answer cannot be B, C or D as these are all push factors.	**(1)**

Question number	Answer	Mark
8(b)	**AO1 (2 marks)** Award one mark for a suitable reason and a further mark for development. • To create jobs in the tourist sector (1) which can support economic development but without damaging the environment (1). • To limit the number of tourists (1) which can reduce damage from mass tourism (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
8(c)(i)	**AO3 (1 mark)** Award 1 mark for: . • China (1)	**(1)**

Question number	Answer	Mark
8(c)(ii)	**AO4 (2 marks)** Award 1 mark for comparative statement, and a further mark for development or use of relevant data, up to a maximum of 2 marks per idea. • There are more countries in North America with a higher amount of foreign direct investment than in Africa(1). There are no countries in Africa with FDI in the highest bracket shown (1). • There is information on FDI for most of North America, whereas there are many countries in Africa with no data (1), particularly most countries in the centre of Africa (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
8(c)(iii)	**AO2 (2 marks)** Award 1 mark for identification of suitable reason and a further mark for an explanation of the impact, up to a maximum of 2 marks. • More developed countries tend to have higher levels of FDI (1) as they have advanced economies which attract investment (1). • Countries with high levels of FDI may have governments which have policies to support FDI (1) e.g. the UK had a Global Entrepreneur Programme to attract FDI. • Countries with a highly skilled workforce may have higher FDI (1) because business and organisations want to invest where they have the workers to create their products or deliver their services (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
8(c)(iv)	**AO2 (1 mark) / AO3 (1 mark)** Award 1 mark for a suitable reason, and a further mark for explanation or development. • The data only shows the contribution of FDI (1) which is only a portion of the economy rather than the trade relationships established (1). • There are many countries without any data (1) and therefore does not show a global picture as many of the countries without any data are embedded into the global economy (1).	**(2)**

Question number	Answer	Mark
8(d)	**AO1 (2 marks)** Award 1 mark for each way provided up to a maximum of marks. • Visas (1) • Quota systems (1) • Requirement of certain qualifications (1) • Border controls (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
8(e)	**AO1 (2 marks) / AO2 (2 marks)** Award 1 mark for each suitable impact, and a further mark for development, up to a maximum of 2 marks per idea. Answers may focus on different types of migration (voluntary, forced, temporary). • Migration can lead to a loss of skilled workers (1) so a donor country may experience higher levels of employment opportunities (1). • Where migrants send money home as remittances (1) this can improve the quality of life for some people who are back in the donor countries (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** • Transnational corporations (TNCs) are present in multiple countries so facilitate communication, production and movement of goods, people and revenue between countries. • TNCS can be involved in the spread of culture in host countries for example McDonalds is one of the largest fast-food chain TNCs with over 34,000 restaurants in 119 countries and in doing so has spread fast food culture across the globe. • The presence of TNCs in a host country can attract additional inward investment from other TNCs so can facilitate further international links driving globalisation. • Some TNCs locate parts of their company (e.g. manufacturing) in developing countries where wages are lower. This can encourage the movement of manufacturing away from developed countries into a greater range of countries fuelling globalisation through the expansion of supply chains, and contributing the global shift of industry. • TNCS can support globalisation as they can support economic development in different countries through introduction of advances in technology and transport. • TNCs can also have negative impacts, damaging environments and exploiting local workers. • It is possible for the positive economic impacts of TNCs to be limited where a significant proportion of profits are sent back to countries where the headquarters are based. **AO4** • Figure 8b shows how some TNCs have a large global footprint in terms of the number of countries they are present in. • Figure 8b shows how TNCs have the potential to impact a large number of people through employment, and the sale of goods and services in different countries. • Figure 8b shows how the headquarters for TNCs are often in developed countries (USA and UK). • Figure 8b indicates that there are negative impacts of TNC activity and that the overall benefits may not be global.	
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 and the global economy has been driven by a number of factors including trade, foreign investment, aid, labour, modern transport and information technology. • Trade blocs have been established to facilitated trade relationships between groups of countries, such blocs have led to wider agreements which can also involve the movement of people (for example the European Union). • Advances in technology such as telecommunications and the internet have facilitated rapid growth of global trade (but also contributed to a global shift). • In 2019 global trade value exported throughout the world was around US$19 trillion (up from US$ 6.45 trillion in 2000). • According to the United Nations there were 272 million international migrants in 2019 (an increase of 51 million since 2010). International migrants represent about 3.5% of the world

Question number	Indicative content	
	population, and three out of every four international migrants are of working age (20-64 years). **AO3** • Global institutions such as the WTO, IMF have been instrumental in shaping trading and political relationships between countries. The WTO focuses on promoting free trade, and the IMF focuses on supporting a system of international payments. The World Bank has been involved in providing loans and development programmes to many countries. • The movement of people has been an important component of driving the global economy, because many workers move for study and work. Many countries rely on skilled workers moving to support their economies. **AO4** • Figure 8a shows how there is an uneven pattern of FDI across the globe. Europe and North America have a lot of countries with high levels of FDI, while Africa, Asia, and South America have a much higher variation in FDI levels. • Figure 8a shows how there is an incomplete picture of international trade and economic activity by looking just at FDI as much of Africa does not have any available data. • Figure 8b shows how TNC have the potential to have a positive impact through creation of large number of jobs across the world. • Figure 8b shows how the headquarters of TNCs tend to be in developed countries (UK and USA). • Figure 8b shows how TNCs have the potential to have impacts, through poor working conditions of workers and causing environmental damage.	
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

Question number	Indicative content	
		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)** D Human Development Index (1) The answer cannot be A, B or C as they cannot be used to measure development.	**(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 mortality rate in a developing country.	**(1)**

Question number	Answer	Mark
9(b)	**AO1 (2 marks)** Award 1 mark for a suitable reason, and a further mark for development or explanation, up to a maximum of 2 marks. • Some measures of development only focus on one element of development (1) e.g. GDP provides an economic measure.(1) • Some composite indices such as HDI are made up of different measurements (1) such as years of schooling and GNP per capita (1). • Development is complex (1) and can be measured using different ways such as GDP or literacy rate (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
9(c)(i)	**AO3 (1 mark)** Award 1 mark for: • Chad (1)	**(1)**

Question number	Answer	Mark
9(c)(ii)	**AO4 (2 marks)** Award 1 mark for initial comparative statement, and a further mark for development or use of suitable data, up to a maximum of 2 marks per idea. • Europe has more countries with a higher GDP per capita than South America (1). Most countries in Europe are US$25,000 or more (1). • There is a greater range in GDP in South America than in Europe (1), ranging from under US$500 up to 10-25,000 (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. • Developing or emerging economies are more likely to have lower GDP per capita (1) as they tend to have had historically lower growth. (1). • The pattern displays global patterns of economic development (1) where many developing and emerging countries have lower economic development indicators (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. • Development can be measured by more than just economic indicators (1) for example literacy rate, or composite indices such as the HDI (1).	

	• GNP per capita does not provide information about spread of income across society (1) so some countries may be more developed in terms of inequality than others but it would not be shown with this indicator (1). • Data does include all countries (1) which may hide different patterns of development (1).	**(2)**

Question number	Answer	Mark
9(d)	**AO1 (2 marks)** Award 1 mark for the identification of each suitable quality of life indicator, up to a maximum of two marks. • Literacy rate (1) • Employment rate (1) • Infant mortality rate (1) • Life expectancy (1) • Physical quality of life index (1) • Corruption index (1). • Human Development Index (HDI) (1) Allow GNI or GNI per capita, but do not credit GDP or GDP per capita 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 impact of uneven development within a country, up to a maximum of 2 marks for each point. Award marks for up to two different ways. • Uneven development of a country's infrastructure means that some areas remain undeveloped (1) and people may not have access to basic services such as healthcare (1). • Development focused in cities can lead to more rural to urban migration (1) leading to rural isolation and poverty (1). • Core-periphery theory suggests economic development and wealth generation are focused in a particular region (1) which leads other regions poor by comparison because there is less investment and they have to wait for wealth to trickle down from the core (1).	**(4)**

	Accept any other appropriate response.	

Question number	Indicative content

9(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
	• There are different approaches to tackling 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. They can be prone to over-run in time and costs, and sometimes susceptible to corruption so the benefits don't reach those intended.
	  ○ 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.
	• Bottom-up projects tend not to be as expensive as they operate on a smaller scale and tend to use more locally appropriate technologies.
	• Bottom-up development projects often focus on develop skills and capabilities within local communities so they can continue the development process once the initial project has finished for example training in sustainable agriculture techniques, or methods for developing micro-hydro schemes.
	• While bottom-up schemes may support local communities effectively than top-down approaches they are unlikely to change wider systemic issues that are affecting the development of the country such as inequality or lack of infrastructure to support economic development.
	• Top-down approaches typically involve large investments from government or international institutions designed to support infrastructure or institutions which can in turn foster development.
	
	AO4
	• Figure 9b show three views about strategies for tackling the development gap (from government, intergovernmental agencies and an NGO).

	• Figure 9b indicates how strategies to tackle the development gap can take place at different scales. • Figure 9b provides examples of the types of activities bottom-up approaches (to provide access to lighting) as well as top down (investment and financial support).	
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)

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Question number	Indicative content
9 (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: International strategies to address uneven development are the most effective **AO2** • International strategies to address uneven global development can include bilateral aid, multilateral aid, or aid co-ordinated through organisations such as the World Bank or IMF (most commonly loans). • Often governments have their own economic development strategies, e.g. Bangladesh has made a series of 5-year plans on its own economic development support by plans for different issues within its country. • NGO usually take a bottom-up approach to reducing uneven development focusing on small communities and a particular element of quality of life such as water, food, housing or education. **AO3** • Many would argue that patterns of, and factors affecting global uneven development are too complex to be addressed by one type of strategy and that collaboration between international, national and local stakeholders is necessary to support development. • International strategies such as financing large scale infrastructure projects such as cross-national highways or international airports or ports can act as a catalyst for economic development through the creation of jobs and the attraction of inward investment which can lead to economic growth. • International strategies such as financial aid in the form of loans from the IMF have exacerbated issues of uneven development as it can lead to dependency on financial support, can lead to exploitation of natural resources, or lead to some development projects costing more than necessary. Infrastructure projects don't necessarily lead to benefits for all people. • International strategies in the form of aid (and investment) can also be susceptible to corruption so the money does not necessarily benefit those it was intended to and therefore does not improve uneven development.

Question number	Indicative content	
	AO4 • Figure 9a shows how the global distribution of GDP per capita is uneven. • Figure 9a shows how countries considered developed tend to have higher GDP per capita with much of Europe, North America and Oceania with US$25,000 or more. • Figure 9a shows how some regions have much larger range in GDP too, with Asia including high GDP for countries like Japan but much lower in South East Asia. • Figure 9b show three views about strategies for tackling the development gap (from government, intergovernmental agencies and an NGO). • Figure 9b indicates how strategies to tackle the development gap can take place at different scales. • Figure 9b provides examples of the types of activities bottom-up approaches (to provide access to lighting) as well as top down (investment and financial support).	
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)

Question number	Indicative content	
		• 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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