Mark Scheme (Results)

Summer 2023

Pearson Edexcel International GCSE in Geography (4GE1)
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 Can be used in most areas of the world. (1) The answer cannot be A (refers to wind turbines), B (refers to tidal), or D (incorrect).	**(1)**

Question number	Answer	Mark
1(a)(ii)	**AO1 (1 mark)** Award 1 mark for a suitable definition. • A renewable energy source that uses heat from underground (1). • Heat and steam from underground that is used to drive turbines (1). Accept any other appropriate response.	**(1)**

Question number	Answer	Mark
1(b)	**AO1 (1 mark)** B The difference between a country's energy demand and its ability to produce it. (1) It cannot be A, C or D as these are not the correct definitions of an energy gap.	**(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. • It is close to water (1) so boats can be used to transport raw materials or final products (1). • There are green spaces around (1) so there is room for expansion (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
1(d)	**AO1 (1 mark)** Award 1 mark for a suitable economic activity. • Farming/agriculture (1) • Mining (1) • Forestry (1) • Fishing (1) Accept other specific jobs relevant to this sector	**(1)**

Question number	Answer	Mark
1(e)	**AO1 (1 mark) / (AO3) 2 marks** Award 1 mark for identifying a change as shown in the resource. Award 1 further mark for explanation of the reason, or use of relevant data to support. • A rise in secondary sector employment e.g. Vietnam (1) due to industrialisation (1) as country becomes more developed (1). • • A decline in secondary sector (1) due to a shift in manufacturing to developing or emerging countries (1) where costs of production, particularly labour, can be lower (1). • A decline in secondary sector employment (1) due to mechanisation in some industries (1) which means that less people are needed in the factories and are forced to look for other work (1). • Decline in Germany (1) due to deindustrialisation (1) goes from 37.5% to 27% (1). Accept any other appropriate response.	**(3)**

Question number	Answer	Mark
1(f)	**AO2 (2+2 marks)** Award 1 mark for each advantage or disadvantage and a further expansion mark, up to a maximum of 2 marks each. Advantages: • For countries with large supplies of fossil fuels it is a reliable source of energy (1) which does not need new infrastructure like renewable energy (1). • Some non-renewable energy sources like oil are affordable (1) and so can be used to fuel vehicles which people need for their daily lives (1). Disadvantages: • Burning fossil fuels can lead to CO_2 emissions (1) which contribute to the enhanced greenhouse effect (1). • Buring coal can release sulphur dioxide (1) which can cause respiratory problems/contribute to acid rain (1). Accept any other appropriate response.	**(4)**

Question number	Answer	Mark

1(g)	**AO2 (2+2 marks)**
	
	Award 1 mark for each suitable way suggested and a further mark for expansion, up to a maximum of 2 marks each. Maximum 2 marks if developing/emerging country provided. If no country provided but relevant content for a developed country then award up to max marks.
	
	A range of country examples could be provided
	
	• UK:
	    ○ Investment in a sustainable energy system (1) which includes increased investment in renewable energy technology (1).
	    ○ Focus on international relations (1) to ensure it is possible to maximise access to resources of energy from outside the UK (1).
	
	Answers could focus on how different countries are trying to: improve resilience of their energy supply, encourage energy efficiency, maximise production of energy (renewable and non-renewable), but also reducing dependence on fossil fuels.
	
	Accept any other appropriate response.
		(4)

Question number	Indicative content

1 (h)

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AO3 (4 marks)/AO4 (4 marks)

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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
- Informal employment is part of the economy is that is unofficial, unregulated and untaxed and is prevalent across the globe, but with significantly higher levels in developing and emerging economies.
- Employment in the informal economy tends to be much higher in developing or emerging countries for a number of reasons:
  - High levels of rural-urban migration can mean there are not enough formal opportunities.
  - In some cases wages in formal employment are not enough to maintain a suitable quality of life so family members seek informal employment in order to supplement family income.
- In developed countries there are usually more regulations around employment, and enforcement of them which means in regions like Europe and the Americas (most likely USA & Canada) there are much lower levels of informal employment.

AO4
- Figure 1c shows the percentage of informal and formal employment in different global regions in 2018.
- On Figure 1c it can be seen that regions with a higher proportion of developed countries (Europe & Central Asia) have a much lower proportion of informal employment (around 20%).
- Figure 1c shows how three global regions (Africa, Arab states and Asia & the Pacific) have around 80% of employment that is informal.
- Figure 1c shows that the global pattern of informal pattern is uneven, although there is tendency for regions with more developing countries to have a higher proportion of informal 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)	A Recycling of nutrients (1) The answer cannot be B, C or D as these are all goods provided by a forest rather than services.	**(1)**

Question number	Answer	Mark
2(a)(ii)	**AO1 (1 mark)** Award 1 mark for a suitable definition. • A natural environment which includes plants and animals that interact with that environment. (1) Accept any other appropriate responses.	**(1)**

Question number	Answer	Mark
2(b)	**AO1 (1 mark)** C farming to meet the needs of the farmer and family (1) The answer cannot be A (extensive farming), B or C (commercial farming).	**(1)**

Question number	Answer	Mark
2(c)	**AO2 (1 mark) / AO3 (1 mark)** Award 1 mark for a basic evidence from the from the image (AO3) and a further 1mark for extension through explanation (AO2), up to a maximum of 2 marks. • Hazards such as cyclones can cause a lot of damage to property and goods (1) which people may not have the money to replace (1). • Hazards can damage homes (1) which means people may consider leaving the area (1). • Hazards such as cyclones may damage crop stores (1) which can lead to food insecurity for people living in rural areas (1). Accept any other appropriate responses.	**(2)**

Question number	Answer	Mark
2(d)	**AO1 (1 mark)** Award 1 mark for a suitable impact. • Unemployment (1) • Spiral of decline (1) • Rural – urban migration (1) • Closure of village schools (1) • Closure of shops (1) • Rural isolation (1) Accept any other appropriate response.	**(1)**

Question number	Answer	Mark
2(e)	**AO2 (2+2 marks)** Award 1 mark for identification of a challenge and a further expansion mark, up to a maximum of 2 marks each. Maximum 2 marks if developing/emerging country provided. If no country provided but relevant content for a developed country then award up to max marks. A range of examples could be provided. • e.g. Kenya: o Low income (1) has led some rural areas to expand tourist services to increase profits (1). o Low prices for crops (1) so farmers have diversified into cut flowers which can get higher prices (1). Creating tourist attractions (1) to allow a sustainable income (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 or use of figures from the resource to a maximum of 3 marks. • Most Polish cities have experienced an outflow of residents (1) which suggests it is experiencing suburbanisation (1) as cities have expanded and need to build on suburbs to accommodate people (1). • Only two areas of Poland have cities which are experiencing an inflow to cities (1) because most are experiencing suburbanisation (1) as residents seek a better quality of life (1). Accept any other appropriate response.	**(3)**

Question number	Answer	Mark
2(g)	**AO2 (4 marks)** Award 1 mark for identification of strategy and an additional 1 mark for development through further explanation or exemplification. Award marks for 2 strategies up to a maximum of 2 marks for each strategy. A range of strategies could be chosen. Candidate may make reference to a country but it is not required. • Improved healthcare facilities (1) to ensure people have access to medicines and treatments for illness (1). • Investment in technology (1) to support growth in agricultural production (1). • Promoting ecotourism (1) to provide a livelihood for people living in rural areas (1). • Improved infrastructure (1) allows access to services / opportunities for work (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.
- Processes of rural-urban migration mean rural areas often lose many of their economically active population, leaving rural areas underpopulated. This leaves younger, and older age groups behind in rural areas.
- There is still a relatively high proportion of young children in rural areas partly due to lack of access to healthcare services and education about family planning. A high number of children because many are too young to earn money and leave the area.

AO4
- Figure 2c shows a population pyramid for Nigeria in 2019.
- Figure 2c indicates overall there is a much larger proportion of the population living in urban areas rather than rural.
- Figure 2c shows the age groups most needed for labour in agriculture, are much lower in rural areas than urban. In the 20-24 age group 6% of the population are in urban areas, but only 3% in rural areas. |

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 – rural-urban fringe (1) The answer cannot be A, B, or C as these are not typically the locations associated with science parks.	**(1)**

Question number	Answer	Mark
3(a)(ii)	**AO1 (1 mark)** Award 1 mark for any suitable reason. • Desire for a larger house (1) • Need to expand a business (1) • Air pollution in cities (1) • Lower housing costs (1) Accept any other appropriate response.	**(1)**

Question number	Answer	Mark
3(b)	**AO1 (1 mark)** D transport connections (1) The answer cannot be A, B or C as these are incorrect.	**(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. • Reduces any need to destroy more green space (1) as land has already been cleared (1). • Located next to other businesses and services (1) which might be important for the new business (1). • Infrastructure is already in place (1) to there are good transport connections for workforce to access the site (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
3(d)	**AO1 (1 mark)** Award 1 mark for a suitable definition. • Separation of social classes within cities (1). • Separation of groups based on race/ethnicity/gender (1). Accept any other appropriate response, including the idea of ethnic enclaves as illustration of segregation.	**(1)**

Question number	Answer	Mark
3(e)	**AO2 (2+2 marks)** Award 1 mark for a factors and a further expansion mark, up to a maximum of 2 marks each. • Economic development in the city (1) which attracted more people to move there leading to more rural-urban migration (1). • Population growth (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). • Location on a coastline (1) leading to creation of ports to facilitate international trade (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 or use of figures from the resource, up to a maximum of 3 marks. • The percentage of urban population in the UK has been relatively stable since 1960 with only a slight increase (1) because the UK has already undergone urbanisation much earlier (1) as part of the industrial revolution (1). • Oman has experienced a rapid increase in urban population from 1960-1990 (1) as it experienced rapid urbanisation (1) as part of its economic development process (1). • Kenya has experienced more or less consistent rate of growth since 1960 (1) from around 9% to 29% by 2019 (1) as the country is still developing rural-urban migration continues to take place (1). Accept any other appropriate response.	**(3)**

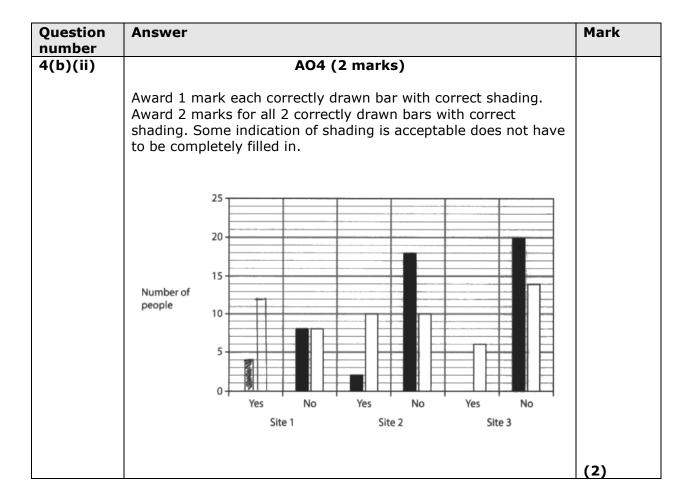| Question number	Answer	Mark
3(g)	**AO2 (4 marks)** Award 1 mark for initial explanation and an additional 1 mark for development through further explanation or exemplification for each group. Award up to two marks each group up to a maximum of 4 marks for the question. Maximum 2 marks if developing/emerging country provided. If no country provided but relevant content for a developed country then award up to max marks. Accept local /regional/national government as different groups. A range of countries and examples could be chosen, relating to environmental challenges which could include air pollution, waste, water pollution, noise pollution for example. • [UK] A congestion charge has been introduced by local government in some cities (London, Durham) (1) to try and reduce congestion and air pollution (1). • [UK] Residents are establishing community gardens in many cities (1) in order to build community cohesion, but also ensure access to fresh food (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. - The World Health Organisation air quality guidelines recommends that cities with a PM2.5 concentration should not exceed 10 μg/m³. Despite this many cities (in both developing and developed countries) exceed this level. - 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. - Rapid rural-urban migration means there is often not enough housing available and can lead to the development of squatter settlements where there are poor quality facilities, and overall a lower quality of life, creating many social challenges (from poverty, inequality, increased risk of disease and low literacy levels for example). In Dhaka for example there are around 4 million residents living in over 4,500 squatter settlements across the city. - Many of these problems are interlinked, urban areas face multiple environmental and economic challenges from ensuring reliable electricity supply through to air pollution and congestion. **AO4** - Figure 3c shows how air pollution affects cities across the globe. - Figure 3 shows how air pollution can vary within and between regions from as high as 122 micrograms of PM2.5 in Delhi to 20 in Mexico City. - Figure 3c suggests that urban air pollution is a global problem due to high levels across several continents (above 55.5 PM2.5 which is identified by WHO to be unhealthy). - Figure 3c indicates that a number of cities in South East Asia have high levels of air pollution.

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 1 or "Does your house have any renewable technology?" • Question 3 or "Do you think having renewable energy technology saves you money". • Question 4 or "Do you own an electric car?" • Question 5 or "Would you like to own an electric car?" • Accept answers that just provide a number e.g. 1 or Q1.	**(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. • Open question allow opinions to be gained (1) which can be provided in more detail than closed questions (1). • Open questions allow for responses that were not expected (1) which would not be captured by closed questions (1). • Allows you gain qualitative data (1) which means you can understand people's views (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
4(b)(i)	**AO3 (1 mark)** Award 1 mark for: Systematic sampling (1) Allow systematic on its own.	**(1)**

Question number	Answer	Mark
4(b)(ii)	**AO4 (2 marks)** Award 1 mark each correctly drawn bar with correct shading. Award 2 marks for all 2 correctly drawn bars with correct shading. Some indication of shading is acceptable does not have to be completely filled in. 	**(2)**

Question number	Answer	Mark
4(b)(iii)	**AO4 (1 mark)** Award 1 mark for: Site 3 / 3 (1)	**(1)**

Question number	Answer	Mark
4(b)(iv)	**AO4 (2 marks)** Award 1 mark for working and 1 mark for correct answer. 12+ 10+ 6 = 28 / 3 (1) Allow 12+10+6/3 (1) = 9.3 (1) They do not have to write the answer on the answer line. Credit correct answers anywhere in the space provided.	**(2)**

Question number	Answer	Mark
4(c)	**AO3 (3 marks)** Award 1 mark for a suitable method, and further 2 marks for explanation. • Environmental Quality Survey (1) which could have assessed the varied quality of areas where there are more houses with renewable technologies (1) to see if there were any correlations (1). • Environmental Quality Survey (1) provides quantitative data (1) that can aid analysis/evaluation (1). • Interview a local city council representative (1) to understand what the city council was doing about renewable technologies (1) and if they were offering incentives to local people to use them in their homes (1). Accept any other appropriate response.	**(3)**

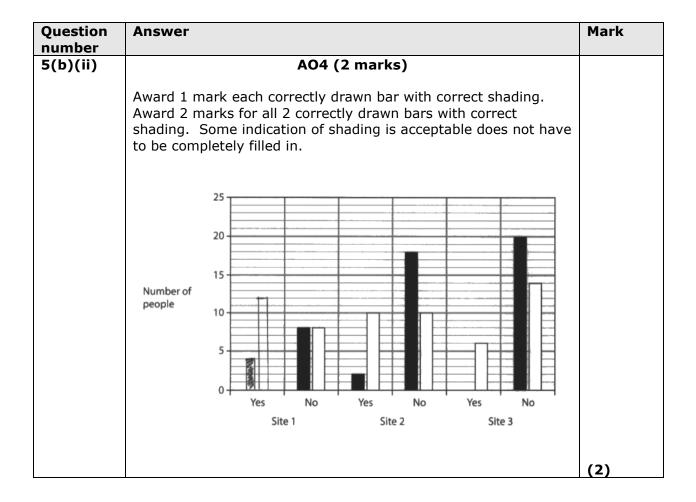| Question number	Indicative content
4(d)	**AO3 (4 marks)/AO4 (4 marks)** **Marking instructions** Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below. **Indicative content guidance** The indicative content below 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 presentation methods to strengthen argument, linked to aims. • Evaluation will most likely be linked to the evaluation of the data presentation methods as well as collection methods and fieldwork design. • Recognition of the extent to which presentation 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 presentation methods, drawing on evidence such as strengths, weaknesses, alternatives and relevant examples using data. **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 data presentation 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 1 or "Do you travel by public or private transport?" • Question 3 or "Do you think the village has good accessibility?" • Question 4 or "Would you like trains to stop here more frequently" • Question 5 or "Do you travel out of the village frequently" • Accept answers that just provide a number e.g. 1 or Q1.	**(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. • Open question allow opinions to be gained (1) which can be provided in more detail than closed questions (1). • Open questions allow for responses that were not expected (1) which would not be captured by closed questions (1). • Allows you gain qualitative data (1) which means you can understand people's views (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
5(b)(i)	**AO3 (1 mark)** Award 1 mark for: Systematic sampling (1)	**(1)**

Question number	Answer	Mark
5(b)(ii)	**AO4 (2 marks)** Award 1 mark each correctly drawn bar with correct shading. Award 2 marks for all 2 correctly drawn bars with correct shading. Some indication of shading is acceptable does not have to be completely filled in. 	**(2)**

Question number	Answer	Mark
5(b)(iii)	**AO4 (1 mark)** Award 1 mark for: Site 3 / 3 (1)	**(1)**

Question number	Answer	Mark
5(b)(iv)	**AO4 (2 marks)** Award 1 mark for working and 1 mark for correct answer. 12+ 10+ 6 = 28 / 3 (1) Allow 12+10+6/3 (1) = 9.3 (1) They do not have to write the answer on the answer line. Credit correct answers anywhere in the space provided.	**(2)**

Question number	Answer	Mark
5(c)	**AO3 (3 marks)** Award 1 mark for a suitable method, and further 2 marks for explanation. • Environmental Quality Survey (1) which could have assessed the varied quality of areas where there are more transport options (1) to see if there were any correlations (1). • Environmental Quality Survey (1) provides quantitative data (1) that can aid analysis/evaluation (1). • Interview a local council representative (1) to understand what the council was doing about accessibility (1) and if they were offering incentives to local people to use them in their homes (1).	**(3)**

Question number	Indicative content
5(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 presentation methods to strengthen argument, linked to aims. ● Evaluation will most likely be linked to the evaluation of the data presentation methods as well as collection methods and fieldwork design. ● Recognition of the extent to which presentation 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 presentation methods, drawing on evidence such as strengths, weaknesses, alternatives and relevant examples using data. **AO4** ● There is evidence of using different skills and techniques as part of primary fieldwork.

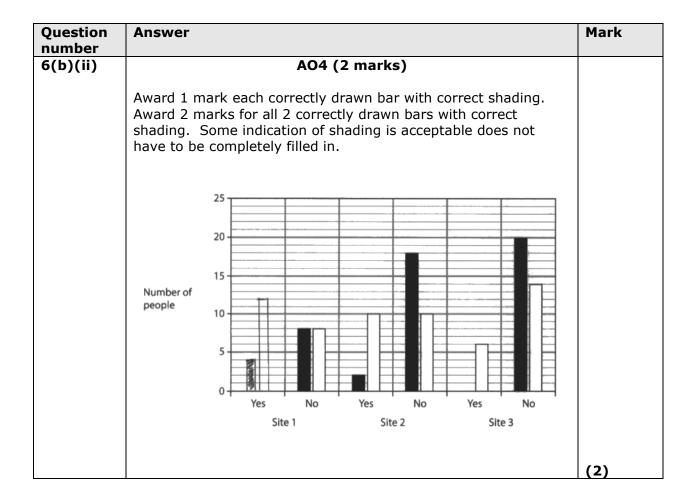|		
	- There is evidence of using different skills and techniques relevant to data presentation stage of the enquiry. - There is evidence of using different skills and techniques to investigate aspects of rural environments. - There is evidence of own fieldwork data (and design) i.e. reference to the field data collected by the student.	
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
6(a)(i)	**AO3 (1 mark)** Award one mark for any of the following: • Question 1 or "Do you recycle your rubbish when you are in the city?" • Question 3 or "Do you think recycling is the responsibility of the city council?" • Question 4 or "Do you own a reusable coffee cup?" • Question 5 or "Would you like to recycle more?" • Accept answers that just provide a number e.g. 1 or Q1.	**(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. • Open question allow opinions to be gained (1) which can be provided in more detail than closed questions (1). • Open questions allow for responses that were not expected (1) which would not be captured by closed questions (1). • Allows you gain qualitative data (1) which means you can understand people's views (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
6(b)(i)	**AO3 (1 marks)** Award 1 mark for: Systematic sampling (1)	**(1)**

Question number	Answer	Mark
6(b)(ii)	**AO4 (2 marks)** Award 1 mark each correctly drawn bar with correct shading. Award 2 marks for all 2 correctly drawn bars with correct shading. Some indication of shading is acceptable does not have to be completely filled in. 	**(2)**

Question number	Answer	Mark
6(b)(iii)	**AO4 (1 mark)** Award 1 mark for: Site 3 (1)	**(1)**

Question number	Answer	Mark
6(b)(iv)	**AO4 (2 marks)** Award 1 mark for working and 1 mark for correct answer. 12+ 10+ 6 = 28 / 3 (1) Allow 12+10+6/3 (1) = 9.3 (1) They do not have to write the answer on the answer line. Credit correct answers anywhere in the space provided.	**(2)**

Question number	Answer	Mark
6(c)	**AO3 (3 marks)** Award 1 mark for a suitable method, and further 2 marks for explanation. • Environmental Quality Survey (1) which could have assessed the varied quality of areas where there are recycling facilities (1) to see if there were any correlations (1). • Environmental Quality Survey (1) provides quantitative data (1) that can aid analysis/evaluation (1). • Interview a local city council representative (1) to understand what the city council was doing about sustainable behaviours (1) and if they were offering incentives to local people to use them e.g. an app (1).	**(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 presentation methods to strengthen argument, linked to aims. ● Evaluation will most likely be linked to the evaluation of the data presentation methods as well as collection methods and fieldwork design. ● Recognition of the extent to which presentation 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 presentation methods, drawing on evidence such as strengths, weaknesses, alternatives and relevant examples using data. **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 data presentation 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 overgrazing (1) The answer cannot be A, B or C as they are not causes of desertification.	**(1)**

Question number	Answer	Mark
7(b)	**AO1 (1 mark)** C reduced crop yields (1) The answer cannot be A, B or D as these are not impacts of desertification.	**(1)**

Question number	Answer	Mark
7(c)	**AO1 (2 marks)** Award one mark for a suitable natural cause, and a further mark for development. • Milankovitch cycles/earth's tilt (1) which leads to natural warming and cooling periods of the earth (1). • Volcanic activity (1) with large eruptions causing ash/dust clouds which can warm or cool the earth's surface (1). • Changes in solar output (1) where increases in the sun's output lead to higher temperatures (1). • Natural greenhouse effect (1) where heat is trapped by greenhouse gases and radiate heat back toward earth (1). Accept any other appropriate response.	**(2)**

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

Question number	Answer	Mark
7(d)(ii)	**AO4 (2 marks)** Award 1 mark for comparative statement, and a further mark for development, up to a maximum of 2 marks per idea. - Risk is greater in Asia than in North America (1) there are several countries where the number of people that are expected to be under sea level of between 10-50 million (1). - There are more countries with 10-50 million people at risk of the impacts of sea level rise in Asia (1) whereas only 1 country in North America has 1-9 million people at risk (1). - Lower risk in North America than in Asia (1) e.g. more countries with 1-9.9million compared to more with 10-50 million (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. - Large number of coastal cities in China (1) lead to high populations at risk from sea level rise caused by climate change (1). - Low lying coastlines in South East Asia (1) mean they will be more heavily affected by sea level rise caused by climate change (1). - Countries that are not low lying (1) such as South Africa and New Zealand which are under <100,000 people at risk (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. • Map demonstrates how huge numbers of people will be affected by sea level rise (1), which may prompt international action to respond to climate change (1). • Data suggests there will be global impacts of climate change (1) and gives an indication of amount of people it will affect (1).	**(2)**

Question number	Answer	Mark
7(e)	**AO1 (2 marks)** Award 1 mark for each cause identified, up a maximum of 2 marks: • Cattle ranching (1) • Farming/agriculture/palm oil plantations (1) • Population growth (1) • Logging (1) • Urbanisation (1) • Forests fires/wildfires (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 impact and 1 mark for further detail through explanation, up to a maximum of 2 marks for each impact. • Loss of plants and animals/biodiversity (1) due to clearing of forests destroying habitats (1). • Loss of soil/soil nutrients (1) due to removal trees which leaves soil bare (1). • Increased CO_2 in the atmosphere (1) which contributes to climate change (1). • Increased flooding (1) due to less trees to intercept rainfall (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** - The impacts of desertification will vary in severity by location, and as a consequence the strategies used will vary. - Countries around the Sahel region in Africa have been experiencing increased desertification for decades which has led to increased drought and crop failures since the 1970s, and over 1 million people have died. A combination of government led, international organisation led, and NGO led strategies have been used. - Strategies can include: - Education around sustainable farming practices. - Reducing soil erosion through planting trees and perennial plants. - Water conservation techniques such as water spreading weirs. - Technology plays a key role in monitoring desertification the impacts of any strategies used to deal with it. - 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 three different strategies used to deal with desertification. - Figure 7b shows how a range of stakeholders can be involved in strategies to deal with desertification. - Figure 7b shows how strategies to deal with desertification can be at different scales from building small wells to large scale afforestation programmes.

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
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 sea level rise lend themselves to governmental and inter-government action such as the Paris Accord.
	• Strategies to address expanding deserts including: afforestation; sustainable farming practices; water spreading weirs.
	AO3
	• The nature of the threats to fragile environments spans 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.
	• Strategies to tackle these threats are often very expensive, for example land reclamation to tackle desertification can cost millions, and so many NGOs alone cannot fund this work, so require the financial backing of governments.
	• Successful examples of projects to tackle deforestation and desertification 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.
	AO4
	• Figure 7a indicates that large populations are at risk of sea level rise by 2100.
	• Figure 7a indicates that the highest number of people likely to be at risk of sea level rise are in South East Asia.

Question number	Indicative content	
	• Figure 7b shows three different strategies to try and deal with desertification. • Figure 7b shows how different stakeholders can be involved in strategies to deal with desertification. • Figure 7b shows how strategies can be used at different scales from local to global.	

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)** A moving to another country due to work (1) The answer cannot be B, C or D as these are all examples of forced migration.	**(1)**

Question number	Answer	Mark
8(a)(ii)	**AO1 (1 mark)** B – shortage of jobs (1) The answer cannot be A, C or D as these are all pull 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 (1). • To generate revenue (1) which can be used to address the imbalance of trade (1). • Developing service economy (1) to provide alternative income from primary/secondary sectors (1). Accept any other appropriate response.	**(2)**

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

Question number	Answer	Mark
8(c)(ii)	**AO4 (2 marks)** Award 1 mark for comparative statement, and a further mark for development, up to a maximum of 2 marks per idea. • There are more countries in Asia with a higher percentage of GDP from tourism than in South America (1). Most countries in South America are between 6.1-10.8% of GDP (1). • Asia has a greater variation of GDPs from tourism than South America (1). South East Asia has several countries with 18.1-75% of GDP from tourism (1). Credit answers that refer to GDP rather than % of GDP from tourism. 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. • Country may become dependent on tourism (1) which means people are vulnerable to changes in the tourist sector (1). • Mass tourism may cause damage to local areas (1) for example leaving litter or causing harm to wildlife (1). • Increase in greenhouse gas emissions (1) due to high levels of international tourism (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 high levels of GDP from tourism in some countries (1) which suggests increased disposable income (1). • There are few countries with high levels of GDP from tourism (1) suggesting movement of people within the global economy (1).	**(2)**

Question number	Answer	Mark
8(d)	**AO1 (2 marks)** Award 1 mark for each global institution. • International Monetary Fund (IMF) (1) • World Bank (1). • World Trade Organisation (WTO) (1) • United Nations (1). Accept any other appropriate response.	**(2)**

Question number	Answer	Mark
8(e)	**AO1 (2 marks) / AO2 (2 marks)** Award 1 mark for each impact, and a further mark for development or explanation, up to a maximum of 2 marks for each point. • Migration can provide countries with the skilled workers it needs (1) so a destination country is able to generate a higher GDP (1). • Where large number of people migrate this can create a burden on destination countries (1) leading to shortages in housing or jobs (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, movement of goods, people and revenue between countries.	
	• TNCS can be involved in the spread of culture 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.	
	• Globalisation is also fostered through economic development, advances in technology and transport but ultimately these are factors that affect the operation of TNCs too.	
	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 in Figure 8c).	
	• 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 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.
	• Being involved in the global economy can lead to job creation, the opportunity to earn a living and improve quality of life for many people, as well as economic development for the country more broadly.
	AO3
	• The benefits of globalisation can include:
	o Building trade links with other countries
	o Job creation and more formal job opportunities (and more skilled jobs)
	o Development of infrastructure
	o Foreign exchange increase through exports
	o Investment in new technologies.
	• The disadvantages of globalisation include:
	o The profit driven nature of enterprises in the global economy (e.g. TNCs)
	o Profits from TNCs often do not benefit host countries as much as they are sent back to where the headquarters is based.
	o There is the potential for exploitation of workers
	o It can lead to exploitation of the environment
	o 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.
	• The impacts of globalisation are 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 tourism is an important component of GDP for many countries across the globe.

Question number	Indicative content
	- Figure 8a shows how tourism represents a significant component of GDP for countries such as Thailand, Iceland, Morocco and Greece. - Figure 8a shows how tourism can be an important component of both developed and developing/emerging country economies. - 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 negative 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 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 population pyramid (1) The answer cannot be A (used for habitats), B or C (could not show population structure this way).	**(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 birth rate in a developing country.	**(1)**

Question number	Answer	Mark
9(b)	**AO1 (2 marks)** Award 1 mark for each suitable measure up to a maximum of 2 marks. • Gini coefficient (1) • GDP/GNI (1). • Gender pay gap (1) • Literacy rates (1). • Human Development Index - HDI (1) Accept any other appropriate response.	**(1)**

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

Question number	Answer	Mark
9(c)(ii)	**AO4 (2 marks)** Award 1 mark for comparative statement, with a further mark for development, or use of figures from the resource up to a maximum of 2 marks. • In both South America and Africa there are a large amount of countries with a higher percentage of aid (1) but there is greater variation in Africa (1). • In Africa there are more countries with higher percentage of international aid than South America (1) although most are between 0.3 and 8% (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 receive a higher proportion of aid (1) as this supports their development (1). • Some countries in South America have become more developed (1) and so require a lower level of international aid (1). • Impacts of climate of change affecting agricultural production i.e. droughts/flooding (1) which means need for aid to support economy (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 idea, and a further mark for development or explanation, up to a maximum of 2 marks. • The data is not displayed for all countries (1) so not possible to get a complete picture of global patterns (1). • Development can be measured by more than just indicators related to money (1) for example literacy rate, or composite indices such as the HDI (1). • Highlights global differences in equality (1) and where is needed support reducing inequality (1).	**(2)**

Question number	Answer	Mark
9(d)	**AO1 (2 marks)** Award 1 mark for the identification of suitable types of international aid. • Bilateral aid (1) • Multilateral aid (1) • Aid from NGOs (1) • Medical aid (1) • Food for relief in response to an event (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 way uneven development within a country can affect human welfare, up to a maximum of 2 marks for each point. • Uneven development of a country's infrastructure means that some areas remain undeveloped (1) and may not have access to basic services such as healthcare (1). • Development focused in cities can leave rural areas behind (1) leading to rural isolation and poverty (1). • Lack of investment in services (1) can leads to poor quality of life (1). Accept any other appropriate response.	**(4)**

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 supporting development: - 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. - 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. **AO4** - Figure 9b show three different bottom-up projects to support development in three different developing or emerging countries. - Figure 9b shows how bottom-up projects can support different elements of development including education, finance and housing. - Figure 9b provides examples of the types of activities bottom-up approaches can involve including education programmes, basic financial services or housing.

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
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. • 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. • International strategies in the form of aid can also be susceptible to corruption so the money does not necessarily benefit those it was intended to. **AO4**

Question number	Indicative content
	- Figure 9a shows how many countries in the global south still have a significant proportion of their imports as international aid. - Figure 9a shows how at least 14 countries in Africa have at least 8% of their imports as international aid. - Figure 9a indicates there is much less variation in South America than in Africa or Asia in the amount of imports represented by international aid (between 0-8% for those countries with data shown). - Figure 9b show three different bottom-up projects to support development in three different developing or emerging countries. - Figure 9b shows how bottom-up projects can support different elements of development including education, finance and housing. - Figure 9b provides examples of the types of activities bottom-up approaches can involve including education programmes, basic financial services or housing.

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

Question number	Indicative content
	to judgements that are supported by evidence throughout. (AO3) • Uses geographical skills to obtain accurate information that supports all aspects of the argument. (AO4)