



## **Mark Scheme (Results)**

Summer 2023

Pearson Edexcel GCE in  
Geography AS Paper 2

## Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications are awarded by Pearson, the UK's largest awarding body. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at [www.edexcel.com](http://www.edexcel.com) or [www.btec.co.uk](http://www.btec.co.uk) . Alternatively, you can get in touch with us using the details on our contact us page at [www.edexcel.com/contactus](http://www.edexcel.com/contactus) .

Pearson: helping people progress, everywhere

**Pearson aspires to be the world's leading learning company.** Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever **they are in the world.** We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: [www.pearson.com/uk](http://www.pearson.com/uk)

Summer 2023

Question Paper Log Number P70932RA

Publications Code 8GEO\_02\_2306\_MS

All the material in this publication is copyright

© Pearson Education Ltd 2018

### General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the **candidate's response is not worthy of credit according to the mark scheme.**
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding **the application of the mark scheme to a candidate's response, the team leader must be consulted.**
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Question number	State one economic benefit of the global shift of manufacturing for people in Asia Answer	Mark
1(a)	<p style="text-align: center;">AO1 (1 mark)</p> <p>Award 1 mark for a correct answer:</p> <ul style="list-style-type: none"> <li>• Higher paid employment (1)</li> <li>• More jobs(1)</li> <li>• Higher income(1)</li> <li>• Formal employment/stable income(1)</li> <li>• Promotion prospects (1)</li> <li>• More government spending on services (1)</li> <li>• Reduction in poverty (1).</li> </ul> <p>Accept any other appropriate response.</p>	(1)

Question number	Compare the use of water in Zhaoqing and Guangzhou. Answer	Mark
1(b)(i)	<p style="text-align: center;">AO3 (2 marks)</p> <p>Award 1 mark for each correctly identified comparison between the different cities. For example:</p> <ul style="list-style-type: none"> <li>• Guangzhou uses more water than Zhaoqing. (1)</li> <li>• Guangzhou uses about six times as much water as Zhaoqing. (1)</li> <li>• Guangzhou has higher water use for industry. (1).</li> <li>• Water use for industry is lower in Zhaoqing (1).</li> <li>• Water use for agriculture is higher in Zhaoqing. (1)</li> </ul> <p>Comparative language must be used.</p> <p>Accept any other appropriate response.</p>	(1+1)

Question number	Suggest one reason the cities shown in Figure 1 have different water usage. Answer	Mark
1(b)(ii)	<p style="text-align: center;">AO1 (2 marks)/AO2 (1 mark)</p> <p>Award 1 mark for suggesting a valid reason, and a further 2 marks for extending the explanation, up to a possible 3 marks. For example:</p> <ul style="list-style-type: none"> <li>• Guangzhou uses the most water for industry because more factories may be located there (1) and they require water for processing and cleaning (1) and meeting the needs of the large number of people who work there(1).</li> <li>• Guangzhou has access to the coast (1) so containerships can dock there(1) making it an ideal site for the location of factories which use large amounts of water(1).</li> <li>• Larger cities may have denser populations (1) so demand for domestic water use is greater (1) for homes and leisure use (1).</li> <li>• There are Special Economic Zones (SEZ) along the south coast of China (1) which have encouraged industry to set up here(1) so cities where these have been set up use more water (1).</li> </ul>	(3)

	<ul style="list-style-type: none"> <li>• More water is used for agriculture in Zhaoqing because this is the main industry(1) and rainfall may not be adequate (1) to sustain yields in crops/livestock (1).</li> <li>• Allow the idea that cities may have different sized populations, so the overall total water used or the proportions for different purposes may be affected.</li> <li>• Allow the idea that there may be more farming within some cities than others.</li> </ul> <p>Accept any other appropriate response.</p>	
--	--	--

Question number	Explain how global connections have resulted in two different types of flows between places Answer	Mark
1(c)	<p style="text-align: center;">AO1 (4 marks)</p> <p>For each way, award 1 mark for a way global connections have resulted in a flow between places and a further 1 mark for expansion, up to a maximum 2 marks each. For example:</p> <ul style="list-style-type: none"> <li>• Containership routes move large volumes of goods(1) via the global supply chain from factories in Asia to Europe/USA (1).</li> <li>• Outsourcing of industry from TNC headquarters to factory (1) so capital/money flows to pay workers /for raw materials (1).</li> <li>• EU trade bloc allows freedom of movement between members (1) so migrants move for employment/remittances sent home (1).</li> <li>• Political links between countries (1) allow migrants move to a place of safety (e.g. Ukraine/Hong Kong) (1).</li> <li>• Wifi/fibre optic cables allow social contacts between friends and family (1) so flows of information/ images/ instastories/ tiktoks are possible (1) .</li> <li>• Note the flows must be different.</li> <li>• Accept any other appropriate response.</li> </ul>	(4)

Question number	Explain the costs and benefits of using local sourcing to reduce environmental concerns about globalisation. Answer
1(d)	<p style="text-align: center;">AO1 (6 marks)</p> <p>Marking instructions</p> <p>Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.</p> <p>Indicative content guidance</p> <p>The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited. Relevant points may include:</p> <ul style="list-style-type: none"> <li>• Local sourcing means supplying goods including food, clothing, and many other natural and manmade products from nearby to the consumer.</li> <li>• This increases sustainability by cutting food miles because goods/products are produced locally rather than moved around the world.</li> <li>• This leads to reduced carbon emissions from containerships, planes and lorries as goods travel a short distance. Oil spills and accidents are also less likely.</li> </ul>

	<ul style="list-style-type: none"> <li>Local suppliers benefit from new demand for their products, increasing their market and sales, securing employment and allowing money to circulate in the local economy. This is a type of multiplier effect.</li> <li>Farmers and other producers overseas (including Fair Trade) lose out because their products are no longer needed. This leads to loss of earnings and spending, for example on school fees or medical care, with lasting economic and social effects. Profits for importers may go down as demand falls.</li> <li><b>Loss of choice for consumers (can't grow bananas or oranges in northern Europe).</b></li> <li>Growing locally may increase carbon footprint as heating for greenhouses is required.</li> <li>Minimum wages locally are likely to be higher than many places overseas so prices for consumers go up.</li> </ul> <p>Level 3 answers are likely to include both costs and benefits.</p>
--	--

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-2	<ul style="list-style-type: none"> <li>Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1)</li> <li>Understanding addresses a narrow range of geographical ideas, which lack detail. (AO1)</li> </ul>
Level 2	3-4	<ul style="list-style-type: none"> <li>Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1)</li> <li>Understanding addresses a range of geographical ideas, which are not fully detailed and/or developed. (AO1)</li> </ul>
Level 3	5-6	<ul style="list-style-type: none"> <li>Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1)</li> <li>Understanding addresses a broad range of geographical ideas, which are detailed and fully developed. (AO1)</li> </ul>

Question number	Assess the extent to which the global growth of a westernised culture has caused tensions. Answer
1(e)	<p style="text-align: center;">AO1 (3 marks)/AO2 (9 marks)</p> <p>Marking instructions</p> <p>Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.</p> <p>Responses that demonstrate only AO1 without any AO2 should be awarded marks as follows:</p> <ul style="list-style-type: none"> <li>Level 1 AO1 performance: 1 mark</li> <li>Level 2 AO1 performance: 2 marks</li> <li>Level 3 AO1 performance: 3 marks.</li> </ul> <p>Indicative content guidance</p> <p>The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited. Relevant points may include:</p> <p>AO1</p> <ul style="list-style-type: none"> <li>Global culture is largely based on western ideas and consumption. But other cultures have a global reach.</li> </ul>

- Cultural diffusion of this global culture occurs as a result of globalisation; TNCs, global media corporations, tourism and migration have all created a **‘westernised’ global culture which impacts on people.**
- Tensions could be social, political and environmental and result from the rapid cultural change caused by globalisation.
- Open borders, deregulation and encouragement of foreign direct investment has created culturally mixed societies and thriving migrant diasporas in some locations, but tensions have resulted elsewhere.
- Attempts have been made in some locations to control the spread of globalisation and thus reduce tensions by censorship, limiting immigration and trade protectionism.
- Some groups seek to retain their cultural identity by protecting their culture and language.

#### AO2

- Cultural tensions occur in many different locations for different reasons, as ideas/values from elsewhere influence traditional societies.
- This can be inter-generational as younger people exposed to global culture through social media etc make choices to challenge the expectations of older family members/religious leaders. In some communities tensions could be large, for example protests about wearing hijab in Iran.
- Racism and fear of economic and cultural loss can spread resentment about migrants, scale can be considerable, with violence occurring.
- In some locations, cultural erosion (loss of language, traditional food, music, clothes, social relations, religion) which may be linked to tourists or actions of TNCs has resulted in changes to the built and natural environment which creates tensions for local people. Economic benefits may override cultural tensions here.
- Reactions against western culture have created opposition to globalisation and even to violence and terrorism. Governments restrict access to the internet or set limits on foreign music, trying and protect language/local cultures.
- Tensions do not occur everywhere, or are minimal (or overlooked): Migrant communities have established thriving enclaves in host nations, e.g. Chinatowns in London/New York which attract visitors and tourists and are celebrated by the local communities.
- Choices about films, clothes, media, travel, food, religion alongside new opportunities for employment or creating a business may be welcomed in many communities.

Judgements will depend on the examples used, and the ideas explored. Candidates might include examples of places where tensions have grown and divided communities, as well as places where tensions have been defused or managed.

The relative power of TNCs, governments and local groups influence the extent to which traditional cultures can withstand the might of the media and advertising and impacts from tourism, and most may conclude that continued tensions leading to decline of indigenous cultures is unavoidable.

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-4	<ul style="list-style-type: none"> <li>• Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1)</li> <li>• Applies knowledge and understanding of geographical information/ideas, making limited logical connections/relationships. (AO2)</li> <li>• Applies knowledge and understanding of geographical information/ideas to produce an interpretation with limited relevance and/or support. (AO2)</li> <li>• Applies knowledge and understanding of geographical information/ideas to make unsupported or generic judgements about the significance of few factors, leading to an argument is unbalanced or lacks coherence. (AO2)</li> </ul>
Level 2	5-8	<ul style="list-style-type: none"> <li>• Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1)</li> <li>• Applies knowledge and understanding of geographical information/ideas logically, making some relevant connections/relationships. (AO2)</li> <li>• Applies knowledge and understanding of geographical information/ideas to produce a partial but coherent interpretation that is mostly relevant and supported by evidence. (AO2)</li> <li>• Applies knowledge and understanding of geographical information/ideas to make judgements about the significance of some factors, to produce an argument that may be unbalanced or partially coherent. (AO2)</li> </ul>
Level 3	9-12	<ul style="list-style-type: none"> <li>• Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1)</li> <li>• Applies knowledge and understanding of geographical information/ideas logically, making relevant connections/relationships. (AO2)</li> <li>• Applies knowledge and understanding of geographical information/ideas to produce a full and coherent interpretation that is relevant and supported by evidence. (AO2)</li> <li>• Applies knowledge and understanding of geographical information/ideas to make supported judgements about the significance of factors throughout the response, leading to a balanced and coherent argument. (AO2)</li> </ul>



Question number	Define the term gentrification. Answer	Mark
2(a)	<p style="text-align: center;">AO1 (1 mark)</p> <ul style="list-style-type: none"> <li>• Different demographic moves in (e.g. younger/wealthier/ professional) (1)</li> <li>• A place is improved by investment in housing(1)</li> <li>• Attraction of new/different types of businesses to an area (1)</li> <li>• Long standing residents feel their culture is undermined (1)</li> <li>• Doing up a neighbourhood, which attracts wealthier residents (1)</li> </ul> <p>Accept any other appropriate response.</p>	(1)

Question number	Identify which one of the following statements is correct for the time period shown. Answer	Mark
2(b)(i)	<p>C is correct because London's % growth in 2015 was 2.0%</p> <p><b>A is incorrect because the UK's growth rate was higher than London's in 2009</b></p> <p><b>B is incorrect because London's growth rate has been higher than London's in most years</b></p> <p>D is incorrect because the UK's % growth in 2014 was below 2%</p>	(1)

Question number	Calculate the difference between the two growth rates in 2011. Answer	Mark
2(b)(ii)	<p>Difference is 2.1</p> <p>In 2011, London growth rate is 3.0 (accept 3.1)</p> <p>In 2011, UK growth rate is 0.9 (accept 0.8)</p> <p>Accept answers between 1.9 and 2.2</p> <p><i>Working is not required</i></p>	(1)

Question number	Suggest how deprivation scores for Bargate, central Southampton are useful for city authorities in decision making. Answer	Mark
2(c)	<p style="text-align: center;">AO1 (2 marks)/AO2 (1 mark)</p> <p>Award 1 mark for analysing the resource to identify a reason regeneration might be needed, and a further 2 marks for expansion, up to a maximum 3 marks. For example:</p> <ul style="list-style-type: none"> <li>• Bargate includes several LSOAs which are in the lowest/most deprived deciles and so city authority needs to focus help here (1) as it is likely many people are unemployed or in temporary/low paid work (1) environment may be rundown/showing signs of decay(1).</li> <li>• The central parts of Southampton are in the lowest three deciles for multiple deprivation (1) so there may be low levels of educational</li> </ul>	(3)

	<p>achievement (1) and local authorities need to help improve access to training (1).</p> <ul style="list-style-type: none"> <li>• Much of Bargate is highly deprived (1) so investment in housing/ infrastructure/ environment is needed (1) to help improve quality of life/encourage new businesses to move in (1)</li> </ul> <p>Accept any other appropriate response.</p>	
--	--	--

Question number	Explain two ways used by local governments to attract investment and growth to places. Answer	Mark
2(d)	<p style="text-align: center;">AO1 (4 marks)</p> <p>Award 1 mark for identification of an appropriate way used by local governments, and a further 1 mark for expansion, up to 2 marks each.</p> <ul style="list-style-type: none"> <li>• Create sympathetic business environments e.g. business /science park (1) with road access/services to encourage new start-ups and employment (1).</li> <li>• <b>Rebranding via creating a new 'brand' for a place e.g. via activities/ food/sport/heritage (1) to attract visitors and more spending in local businesses /hotels (1)</b></li> <li>• Support for local initiatives such as Business Improvement District (BID) schemes (1) which encourage local businesses to work together on advertising and seasonal promotions e.g. food festival (1).</li> <li>• Increase planning permission given to developers (1) so there is housing available for new workers (1).</li> <li>• Councils can work with local businesses over decisions about parking costs/running park and ride schemes (1) to attract more visitors by making it easier for them to travel(1).</li> <li>• Allow non-UK ideas, for example Economic Zones and their attractions for business.</li> </ul> <p>Accept any other appropriate response</p>	(4)

Question number	Explain the reasons inequalities in pay are found across a country. Answer
2(e)	<p style="text-align: center;">AO1 (6 marks)</p> <p>Marking instructions</p> <p>Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.</p> <p>Indicative content guidance</p> <p>The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited. Relevant points may include:</p> <ul style="list-style-type: none"> <li>• Places where skilled labour is needed may have to compete for the best workers so pay rates will be high.</li> <li>• Places which specialise in quaternary employment, such as research and development, and in finance and investment and IT professionals are likely to have higher pay as earnings in these sectors are high because of the shortages of workers with the required skills.</li> </ul>

	<ul style="list-style-type: none"> <li>Places which rely on tourism for employment are likely to have seasonal employment on minimum wages, and much work will be part time and weather dependent, reducing pay in that place.</li> <li>Inequalities exist within areas and between them and pay will vary within a place as well as across the country.</li> <li>Places where deindustrialisation has occurred are likely to see a decline in employment opportunities. Most jobs are likely to be in retail or in local government or care or support for the unemployed, where most wages are low. Investment is unlikely because many workers lack the skills employers are looking for.</li> <li>Inequalities in pay for males and females occur for many reasons which could be explained.</li> <li>Allow ideas about reasons for the differences between rural and urban pay.</li> </ul> <p>Accept any other appropriate response.</p>
--	---

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-2	<ul style="list-style-type: none"> <li>Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1)</li> <li>Understanding addresses a narrow range of geographical ideas, which lack detail. (AO1)</li> </ul>
Level 2	3-4	<ul style="list-style-type: none"> <li>Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1)</li> <li>Understanding addresses a range of geographical ideas, which are not fully detailed and/or developed. (AO1)</li> </ul>
Level 3	5-6	<ul style="list-style-type: none"> <li>Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1)</li> <li>Understanding addresses a broad range of geographical ideas, which are detailed and fully developed. (AO1)</li> </ul>

Question number	Many rural places experience social and economic inequalities. Assess the effectiveness of rebranding strategies in reducing these inequalities in rural places. Answer
2(f)	<p style="text-align: center;">AO1 (3 marks)/AO2 (9 marks)</p> <p>Marking instructions</p> <p>Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.</p> <p>Responses that demonstrate only AO1 without any AO2 should be awarded marks as follows:</p> <ul style="list-style-type: none"> <li>Level 1 AO1 performance: 1 mark</li> <li>Level 2 AO1 performance: 2 marks</li> <li>Level 3 AO1 performance: 3 marks.</li> </ul> <p>Indicative content guidance</p> <p>The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited. Relevant points may include:</p> <p>AO1</p> <ul style="list-style-type: none"> <li>Both economic and social inequalities present challenges in rural settlements, and remoteness is a particular problem for places far from urban settlements. These help set priorities for regeneration.</li> </ul>

- The social and economic inequalities rural places face include agricultural decline and competition from overseas, low wages, seasonal employment, out-migration of the young, inequalities of income and limited investment from national government, rising housing costs, slow roads and journey times and limited public transport.
- UK government policy decisions can play a key role in regeneration, though rebranding and re-imaging of places may not involve government action, especially in rural places.
- Government sets planning laws, house building targets, influences housing affordability and gives permission for 'fracking', which will affect economic and social inequality in rural places.
- Rural regeneration strategies include rebranding and may include retail-led plans, tourism, leisure and sport and both public/private rural diversification.
- There is a range of rural rebranding strategies used in the postproduction countryside.

## AO2

- Rural residents experience social and economic inequalities. Many long term residents have fewer economic and social opportunities than incomers. Young people may seek opportunities elsewhere, leading to an ageing population. Elderly people may lack access to services they need.
- Rebranding may involve heritage and literary associations, food, farm diversification and specialised products, outdoor pursuits and adventure in both accessible/remote areas.
- These often intend to make rural places or products more attractive to national and international tourists.
- Governments usually see urban places as having priority, and infrastructure investment (high speed rail, airport development) seeks to regenerate regions but often neglects many rural places.
- Governments often neglect rural places, and EU money is no longer available post-Brexit.
- Rural places near large urban settlements experience different inequalities to remoter places, for example housing costs may rise as commuters seek a 'rural idyll'.
- Remoter rural places have multiple challenges including access and low visitor numbers, presenting a challenge for rebranding strategies. Transport issues are likely to limit number of paying visitors.
- Some places have additional challenges of with abandoned quarries/factories with the potential for celebrating post-industrial heritage, but considerable investment is required.
- Access to the sites will be a problem as roads are likely to be narrow so journey times are slow, reducing accessibility so numbers of visitors likely to make the journey may be small. This reduces profitability.
- Investment costs vary. They may be high in terms of the equipment needed, safety equipment and training and costs are likely to be borne by the companies themselves.
- There are many hurdles to overcome which may limit profitability and success: weather, COVID restrictions, spending on advertising to encourage visitors.
- Jobs created are often seasonal, temporary and low paid, and weather dependent, and a run of wet days in summer holidays could reduce visitor numbers.
- Food festivals could be spread across a longer time frame and have been successful elsewhere (Ludlow, Weymouth Festival of the Sea) and online sales extend this further.
- Even if rebranding strategies are successful, underlying inequalities are likely to remain. The strategies are often project focussed, rather than tackling the major issues faced by those living in rural places.

	<ul style="list-style-type: none"> <li>Judgements are likely to include assessment about the strengths and weaknesses of rebranding, but stronger Level 3 answers are likely to address the specific economic and social inequalities that rural places face and consider how far strategies might address these.</li> <li><b>Several have ignored 'rural' and written about urban places, or a combination of both locations.</b> Credit where you can, for example if they have discussed general ideas about inequalities and rebranding strategies which could relate to rural areas.</li> <li>Accept any other appropriate response</li> </ul>
--	---

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-4	<ul style="list-style-type: none"> <li>Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1)</li> <li>Applies knowledge and understanding of geographical information/ideas, making limited logical connections/relationships. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to produce an interpretation with limited relevance and/or support. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to make unsupported or generic judgements about the significance of few factors, leading to an argument is unbalanced or lacks coherence. (AO2)</li> </ul>
Level 2	5-8	<ul style="list-style-type: none"> <li>Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1)</li> <li>Applies knowledge and understanding of geographical information/ideas logically, making some relevant connections/relationships. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to produce a partial but coherent interpretation that is mostly relevant and supported by evidence. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to make judgements about the significance of some factors, to produce an argument that may be unbalanced or partially coherent. (AO2)</li> </ul>
Level 3	9-12	<ul style="list-style-type: none"> <li>Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1)</li> <li>Applies knowledge and understanding of geographical information/ideas logically, making relevant connections/relationships. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to produce a full and coherent interpretation that is relevant and supported by evidence. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to make supported judgements about the significance of factors throughout the response, leading to a balanced and coherent argument. (AO2)</li> </ul>

Question number	Compare the environmental quality in Locations A and B. Answer	Mark
3(a)(i)	<p style="text-align: center;">AO3 (3 marks)</p> <p>Award 1 mark for each descriptive point that is made. Candidates may describe the similarities and differences between the two places or provide a summary for each. For example:</p> <ul style="list-style-type: none"> <li>• Overall, the environmental quality is much lower in A than B.</li> <li>• A and B have similar scores for noise and quality of pavements.</li> <li>• The biggest difference is seen in scores for state of repair of buildings.</li> <li>• A scores lower than B on Level of noise.</li> </ul> <p>Accept any other appropriate response. Do not credit reasons for the differences/ similarities.</p>	(3)

Question number	Suggest two other criteria the students could have included in their environmental quality survey. Answer	Mark
3(a)(ii)	<p style="text-align: center;">AO3 (2 marks)</p> <p>Award 1 mark for a reasonable criterion for example:</p> <ul style="list-style-type: none"> <li>• CO2 emissions</li> <li>• Street parking</li> <li>• Safety for pedestrians</li> <li>• Street lighting</li> </ul> <p>Accept any other appropriate response.</p> <p>Do not credit criteria already on Figure 3 (Noise/safety from traffic/graffiti/ litter/ state of buildings and pavements).</p> <p>Do not credit comments about number of people etc. as this is about environmental quality.</p> <p>Crime could not easily be incorporated into this type of survey, so cannot be credited.</p>	(1+1)

Question number	Explain how secondary data sources could be used to investigate the reasons for differences in environmental quality. Answer	Mark
3(b)	<p style="text-align: center;">AO3 (4 marks)</p> <p>Award 1 mark for each valid idea of a secondary data source that might help explain differences in environmental quality, with extra marks for extension points up to a maximum 4 marks. For example:</p> <ul style="list-style-type: none"> <li>• Census/ONS data would give an indication of level of overcrowding/ car ownership/ unemployment/ income (1) which might explain why there has been low spending on the exterior of housing (1).</li> <li>• Estate agent data would show house prices (1) showing level of demand for housing (1) and comparison with previous years would show if the trend was up or down (1).</li> <li>• IMD data could be used to show more information about the ways in which each area experiences inequality (1) for example, in terms of income or health, (1) showing likely ability of the population to invest in the physical wellbeing of their place of residence (1).</li> </ul>	(4)

	Accept any other appropriate response. Do not allow suggestions about other primary data that could be collected.	
--	---	--

Question number	Assess the effectiveness of your data processing and presentation techniques in analysing the data you collected. Answer
3(c)	<p style="text-align: right;">AO3 (9 marks)</p> <p>Marking instructions</p> <p>Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.</p> <p>No marks for stating research question, but this should be used as the context for the answer.</p> <p>Indicative content guidance</p> <p><b>Content depends on students' choices of field research question and the data required for this investigation.</b> Assessment should include the following:</p> <ul style="list-style-type: none"> <li>• Data processing initially requires tabulating of data which could involve spread sheets or Google sheets.</li> <li>• Data could then be graphed to show distribution or trends, using bar graphs, histograms, line graphs, scatter graphs and lines of best fit, pie charts, cross sections, flow diagrams.</li> <li>• Sketch maps or annotated OS maps or google maps or choropleth maps are useful ways to present data, as are annotated photography.</li> <li>• Descriptive measures of central tendency may be appropriate, including mean, mode, median and standard deviation.</li> <li>• <b>Spearman's Rank maybe used to</b> measure for correlation between two variables.</li> <li>• Student t-test or Mann-Whitney U could be used to test for differences between two data sets, and <b>Chi-squared could compare observed data with 'expected' results.</b></li> <li>• Each of these would involve setting up a hypothesis and a null hypothesis, choosing an appropriate test, carrying it out and then testing the significance of the result.</li> <li>• Whatever graphical, mapping, presentation or statistical methods are used, it is crucial that analysis of results takes place, which could involve interpretation and explanation of any patterns or differences that were identified.</li> <li>• Assessment: Expect students to offer details about their fieldwork question focusing on what they found out from their presentation and analysis. They re likely to and assess the methods they chose and the extent to which each was useful and appropriate, or not.</li> <li>• Some may critically consider which method was the most useful and explain why.</li> <li>• Another route to assessment would be to suggest ways the presentation and analysis could be improved.</li> </ul> <p>Accept any other appropriate response.</p> <p>Do not accept fieldwork contexts for Glaciation or Coasts.</p>

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-3	<ul style="list-style-type: none"> <li>• Shows evidence that fieldwork investigation skills used may not have been fully appropriate or effective for the investigation of the geographical questions/issue. (AO3)</li> </ul>

Level	Mark	Descriptor
		<ul style="list-style-type: none"> <li>• Considers the fieldwork investigation process/data/evidence, with limited relevant connections and/or judgements. (AO3)</li> <li>• Argument about the investigation is simplistic and/or generic. (AO3)</li> </ul>
Level 2	4-6	<ul style="list-style-type: none"> <li>• Shows evidence that fieldwork investigation skills used were largely appropriate and effective for the investigation of the geographical questions/issue. (AO3)</li> <li>• Critically considers the fieldwork investigation process/data/evidence in order to make some relevant connections and valid judgements. (AO3)</li> <li>• Argument about the investigation may have unbalanced consideration of factors, but is mostly coherent. (AO3)</li> </ul>
Level 3	7-9	<ul style="list-style-type: none"> <li>• Shows evidence that fieldwork investigation skills used were appropriate and effective for the investigation of the geographical questions/issue. (AO3)</li> <li>• Critically considers the fieldwork investigation process/data/evidence in order to make relevant connections and judgements that are supported by evidence. (AO3)</li> <li>• Argument about the investigation includes balanced consideration of factors and is fully developed and coherent. (AO3)</li> </ul>



Question number	<p>Outsourcing and offshoring of industry and services have occurred as part of the global shift to Asia. Bengaluru in southern India is a hub city that has attracted international and national businesses.</p> <p>Evaluate the extent to which this has benefited the businesses, people and environment of Bengaluru, India.</p> <p>Answer</p>
4	<p style="text-align: center;">AO1 (4 marks)/AO2 (12 marks)</p> <p>Marking instructions</p> <p>Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.</p> <p>Responses that demonstrate only AO1 without any AO2 should be awarded marks as follows:</p> <ul style="list-style-type: none"> <li>• Level 1 AO1 performance: 1 mark</li> <li>• Level 2 AO1 performance: 2 marks</li> <li>• Level 3 AO1 performance: 3 marks</li> <li>• Level 4 AO1 performance: 4 marks</li> </ul> <p>Indicative content guidance</p> <p>The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited. Relevant points may include:</p> <p>AO1</p> <ul style="list-style-type: none"> <li>• The movement of the global economic centre of gravity to Asia via global shift of manufacturing and services can lead to changes in the built environment.</li> <li>• TNCs are important in globalisation both contributing to its spread (global production networks, globalisation and the development of new markets) and taking advantage of economic liberalisation (outsourcing and offshoring).</li> <li>• This can bring benefits (infrastructure investment, waged work, poverty reduction, education and training) to the local people and communities.</li> <li>• Costs including loss of productive land and biodiversity, air and water pollution, unplanned settlements, environmental and resource pressure (food/clean water/energy/ space), and these may be unsustainable into the future.</li> <li>• These <b>impact on people's health and</b> wellbeing.</li> <li>• Rural-urban migration (push and pull factors) is partly responsible for the growth of megacities, and rapid urban growth creates social and environmental challenges.</li> <li>• Places have changed their function and characteristics over time and can be measured by land use changes, and employment and demographic changes.</li> <li>• International and global influences have shaped places, and the lives of residents are affected by these changes.</li> </ul> <p>AO2</p> <ul style="list-style-type: none"> <li>• Cities in India have attracted TNCs looking to cut costs and find educated workers to improve profitability and take advantage of benefits they offer.</li> <li>• Bengaluru has grown rapidly, partly due to rural-urban migration and high fertility rates. Migrants move to a city they see as having opportunities for improving well-being for themselves and their families, bringing change to the in-migrants and to the city itself and its existing residents.</li> <li>• The effects for the community have been both positive (largely economic benefits) and negative (social and environmental costs) as housing and services are often overwhelmed by numbers of people.</li> <li>• Businesses benefit from the skilled labour and their work ethic which help improve the profitability of the business as costs are 45% lower.</li> </ul>

Question number	<p>Outsourcing and offshoring of industry and services have occurred as part of the global shift to Asia. Bengaluru in southern India is a hub city that has attracted international and national businesses.</p> <p>Evaluate the extent to which this has benefited the businesses, people and environment of Bengaluru, India.</p> <p>Answer</p>
	<ul style="list-style-type: none"> <li>• The multiplier effect means that many other ancillary businesses benefit through the supply chain, both within Bengaluru and the rest of India and globally.</li> <li>• Infrastructure is struggling to cope with the speed of growth as new roads are needed and water has to be brought in from outside the city by lorry, and power cuts interrupt business, learning and everyday life.</li> <li>• Local businesses experience increased spending in the local community by employees benefiting many others (shops, developers, access to education for their children and access to healthcare).</li> <li>• The environment has not benefited at all as the capacity of the natural world to absorb the pollution seen in Bellandur Lake, sewage, noise and loss of biodiversity has been overwhelmed, with fumes and loss of species.</li> <li>• This means human health suffers (asthma from pollution) and from extended hours at repetitive work which causes stress and physical health problems from using IT and sitting in a chair for hours on end.</li> <li>• Change is not welcomed by all and tensions occur between the new and existing residents.</li> <li>• Evaluation is likely to include ideas that economically people and businesses benefit, and there may be some social benefits as wages allow spending on the needs of the family. But environmentally this is not beneficial or sustainable as the city grows and more natural land and water sources are lost.</li> </ul>

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-4	<ul style="list-style-type: none"> <li>• Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1)</li> <li>• Applies knowledge and understanding of geographical information/ideas, making limited and rarely logical connections/relationships, to produce an interpretation with limited relevance and/or support. (AO2)</li> <li>• Applies knowledge and understanding of geographical information/ideas to produce an unsupported or generic conclusion, drawn from an argument that is unbalanced or lacks coherence. (AO2)</li> <li>• Limited synthesis of geographical ideas from across the course of study. (AO2)</li> </ul>
Level 2	5-8	<ul style="list-style-type: none"> <li>• Demonstrates geographical knowledge and understanding, which is occasionally relevant and may include some inaccuracies. (AO1)</li> <li>• Applies knowledge and understanding of geographical information/ideas with limited but logical connections/relationships to produce a partial interpretation that is supported by some evidence but has limited coherence. (AO2)</li> <li>• Applies knowledge and understanding of geographical information/ideas to come to a conclusion, partially supported by an unbalanced argument with limited coherence. (AO2)</li> </ul>

Level	Mark	Descriptor
		<ul style="list-style-type: none"> <li>Argument partially synthesises some geographical ideas from across the course of study, but lacks meaningful connections. (AO2)</li> </ul>
Level 3	9-12	<ul style="list-style-type: none"> <li>Demonstrates geographical knowledge and understanding, which is mostly relevant and accurate. (AO1)</li> <li>Applies knowledge and understanding of geographical information/ideas to find some logical and relevant connections/relationships to produce a partial but coherent interpretation that is supported by some evidence. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to come to a conclusion, largely supported by an argument that may be unbalanced or partially coherent. (AO2)</li> <li>Argument synthesises some geographical ideas from across the course of study, making some meaningful connections. (AO2)</li> </ul>
Level 4	13-16	<ul style="list-style-type: none"> <li>Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1)</li> <li>Applies knowledge and understanding of geographical information/ideas to find fully logical and relevant connections/relationships to produce a full and coherent interpretation that is supported by evidence. (AO2)</li> <li>Applies knowledge and understanding of geographical information/ideas to come to a rational, substantiated conclusion, fully supported by a balanced argument that is drawn together coherently. (AO2)</li> <li>Argument comprehensively and meaningfully synthesises geographical ideas from across the course of study throughout the response. (AO2)</li> </ul>

Question number	State one reason some people perceive suburban areas as desirable places to live. Answer	Mark
5(a)	<p style="text-align: center;">AO1 (1 mark)</p> <ul style="list-style-type: none"> <li>• Away from the noise/ pollution / crime risks of the city centre (1).</li> <li>• Availability of space for gardens/larger houses (1).</li> <li>• Easy to travel to countryside/city centre (1).</li> <li>• More open space/larger gardens (1).</li> </ul> <p>Accept any other appropriate response.</p>	(1)

Question number	Identify which one of the following statements is correct for the time period shown. Answer	Mark
5(b)(i)	<p style="text-align: center;">AO3 (1 mark)</p> <p>C is correct because immigration has always been over 100,000</p> <p>A is incorrect because immigration has been lower than emigration B is incorrect because emigration has been lower than immigration D is incorrect because emigration has been below 200,000</p>	(1)

Question number	Calculate the difference between emigration and immigration in 2010. Answer	Mark
5(b)(ii)	<p style="text-align: center;">AO3 (1 mark)</p> <p>Answer: 270,000</p> <p>Emigration in 2010 is 280,000 (acceptable range is 275,000-285,000) Immigration in 2010 is 550,000 (acceptable range is 540,000-560,000)</p> <p>Accept answers between 265,000 and 285,000</p> <p><i>Working is not required</i></p>	(1)

Question number	Suggest one reason for the distribution of Lithuanian speakers. Answer	Mark
5(c)	<p style="text-align: center;">AO1 (2 marks)/AO2 (1 mark)</p> <p>Award 1 mark for analysing the resource to identify one reason for the distribution of Lithuanian speakers, and a further 2 marks for expansion, up to a maximum 3 marks.</p> <ul style="list-style-type: none"> <li>• The Lithuanian speakers are clustered in Beckton/a small area of east London (1) because they may be related to each other or be from the same towns in Lithuania(1) and they can share their language/ culture/ food/ religion in a foreign country (1).</li> <li>• They live close to each other in Beckton (1) so they can help each other settle into a new city (1) and helping newcomers find accommodation/jobs nearby(1).</li> </ul>	(3)

	<ul style="list-style-type: none"> <li>The Lithuanian speakers are clustered in Beckton (1) which is near the river/docks for work (1) so the time/cost of journeys to work are reduced (1).</li> </ul> <p>Accept any other appropriate response.</p>	
--	---	--

Question number	Explain two changes in UK culture resulting from migration from either former colonies or the European Union.	Mark
	Answer	
5(d)	<p style="text-align: center;">AO1 (4 marks)</p> <p>For each reason, award 1 mark for a change and a further 1 mark for expansion, up to a maximum 2 marks each. For example:</p> <ul style="list-style-type: none"> <li>Many restaurants takeaways/shops serve food/clothes/goods meeting the needs of migrants from former colonies or the EU (1) which have displaced traditional British establishments/ introduce change to high streets (1).</li> <li>Church buildings are now used as mosques (1) because the new residents in a places are Muslim/Christians have moved away/locals do not want to attend church. (1)</li> <li>Music/art/performance reflect wider diversity (1) as influences from other languages and traditions contribute to UK cultural experience (1)</li> <li>New mosques / places of worship have been constructed (1) widening the diversity of religious worship. (1)</li> </ul> <p>Accept any other appropriate response.</p>	(4)

Question number	Explain why residents' perceptions of inner-city life can be both positive and negative.
	Answer
5(e)	<p style="text-align: center;">AO1 (6 marks)</p> <p>Marking Instructions</p> <p>Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.</p> <p>Indicative content guidance</p> <p>The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited. Relevant points may include:</p> <ul style="list-style-type: none"> <li>Perceptions vary because different demographic groups have different priorities.</li> <li>Young people may perceive the inner city as desirable as it is close to work and social opportunities and so travel is cheap.</li> <li><b>They are less likely to have children so don't mind the lack of a garden/small flat.</b></li> <li>Older people may have lived in the inner city for a long time and seen change come and go and prefer to stay rather than begin somewhere new.</li> <li>Some older people/long term residents may experience a sense of fear of crime and sadness as the community they grew up with has changed.</li> <li>Recent migrants may feel this is a place of security if they can live amongst those who speak their language and dress as they do. Shops and places of worship create a sense of belonging.</li> </ul>

	<ul style="list-style-type: none"> <li>The media (including films, soaps, social media, tourist websites) often represent inner city life as dangerous or exciting, which alters perceptions for people who do not live there.</li> <li>Better answers tend to differentiate between groups of residents with different perceptions, for example, older people, families with children, students etc.</li> <li>Accept any other appropriate response.</li> </ul>
--	--

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-2	<ul style="list-style-type: none"> <li>Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1)</li> <li>Understanding addresses a narrow range of geographical ideas, which lack detail. (AO1)</li> </ul>
Level 2	3-4	<ul style="list-style-type: none"> <li>Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1)</li> <li>Understanding addresses a range of geographical ideas, which are not fully detailed and/or developed. (AO1)</li> </ul>
Level 3	5-6	<ul style="list-style-type: none"> <li>Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1)</li> <li>Understanding addresses a broad range of geographical ideas, which are detailed and fully developed. (AO1)</li> </ul>

Question number	Changes in rural places may be perceived as undesirable by some people. Assess the success of approaches to managing these changes in rural places. Answer
5(f)	<p style="text-align: center;">AO1 (3 marks)/AO2 (9 marks)</p> <p>Marking instructions</p> <p>Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.</p> <p>Responses that demonstrate only AO1 without any AO2 should be awarded marks as follows:</p> <ul style="list-style-type: none"> <li>Level 1 AO1 performance: 1 mark</li> <li>Level 2 AO1 performance: 2 marks</li> <li>Level 3 AO1 performance: 3 marks.</li> </ul> <p>Indicative content guidance</p> <p>The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited. Relevant points may include:</p> <p>AO1</p> <ul style="list-style-type: none"> <li>Rural places are changing as populations grow or decline, people migrate in and out, employment, housing, services and infrastructure are increased or decline.</li> <li>These changes may be perceived as undesirable by residents and/or outsiders because of the challenges of remoteness, limited social opportunities, limited range of services, high transport costs, and reputation.</li> <li>Rural stakeholders (including local and national governments, local businesses and residents as well as different age and ethnic groups) may manage or attempt to manage change in diverse rural communities.</li> </ul>

Question number	Changes in rural places may be perceived as undesirable by some people. Assess the success of approaches to managing these changes in rural places. Answer
	<ul style="list-style-type: none"> <li>Stakeholders view rural areas in many different ways and will assess the success of the changes using their own criteria. They are influenced by the meaning of the place to them, and the impact of change on both the reality and their image of that place.</li> <li>Remote rural places experience different changes to retirement villages and commuter villages.</li> <li>Changes to rural places could be explored in terms of their populations (e.g. ethnicity, age, wealth profiles or gender) or the built/natural environment.</li> </ul> <p>AO2</p> <ul style="list-style-type: none"> <li>Different demographic and ethnic groups view rural living spaces in contrasting ways, and perceptions of living spaces change over time as communities evolve.</li> <li>Changes could be categorised as economic or social or environmental.</li> <li>Changes affect different demographic groups in contrasting ways, and perceptions of the place will alter for the same person over the years, as well as between groups.</li> <li>Many elderly will struggle with transport issues and loneliness, and as the elderly become more fragile and less mobile, staying in rural places may become impossible.</li> <li>Younger people face many social and economic issues, as limited public transport prevents them from seeing friends socially or finding a job, and also restricts choice of school or college. Many are likely to leave rural villages as they grow up, though some do return in later life.</li> <li>People of diverse ethnic backgrounds in rural places may often experience racism, isolation and income inequality. These are pervasive long-lasting issues unlikely to be addressed by the small-scale management strategies of volunteers or local councils.</li> <li>Approaches include decisions about transport, schools, housing/health provision, social groups, and employment amongst others. Cost/ funding are major limitations.</li> <li>Judgements could be that management may be effective for some demographic groups, perhaps the young and healthy retired, or those with younger children as help with social needs (education and health care) are available. But the oldest in the community, as well as people of diverse ethnicity or teenagers may find management ineffective in addressing economic and social challenges.</li> <li><b>Several have ignored ‘rural’ and written about urban places, or a combination of both locations. Credit where you can, for example if they have discussed general strategies which could theoretically be applied to rural areas. Also</b></li> <li></li> </ul>

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-4	<ul style="list-style-type: none"> <li>Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1)</li> <li>Applies knowledge and understanding of geographical information/ideas, making limited logical connections/relationships. (AO2)</li> </ul>

Level	Mark	Descriptor
		<ul style="list-style-type: none"> <li>• Applies knowledge and understanding of geographical information/ideas to produce an interpretation with limited relevance and/or support. (AO2)</li> <li>• Applies knowledge and understanding of geographical information/ideas to make unsupported or generic judgements about the significance of few factors, leading to an argument is unbalanced or lacks coherence. (AO2)</li> </ul>
Level 2	5-8	<ul style="list-style-type: none"> <li>• Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1)</li> <li>• Applies knowledge and understanding of geographical information/ideas logically, making some relevant connections/relationships. (AO2)</li> <li>• Applies knowledge and understanding of geographical information/ideas to produce a partial but coherent interpretation that is mostly relevant and supported by evidence. (AO2)</li> <li>• Applies knowledge and understanding of geographical information/ideas to make judgements about the significance of some factors, to produce an argument that may be unbalanced or partially coherent. (AO2)</li> </ul>
Level 3	9-12	<ul style="list-style-type: none"> <li>• Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1)</li> <li>• Applies knowledge and understanding of geographical information/ideas logically, making relevant connections/relationships. (AO2)</li> <li>• Applies knowledge and understanding of geographical information/ideas to produce a full and coherent interpretation that is relevant and supported by evidence. (AO2)</li> <li>• Applies knowledge and understanding of geographical information/ideas to make supported judgements about the significance of factors throughout the response, leading to a balanced and coherent argument. (AO2)</li> </ul>



Question number	Compare the environmental quality for Locations A and B. Answer	Mark
6(a)(i)	<p style="text-align: center;">AO3 (3 marks)</p> <p>Award 1 mark for each comparative point that is made. Candidates should be finding the similarities and differences between the two places. For example:</p> <ul style="list-style-type: none"> <li>• Overall, the environmental quality is much lower in A than B.</li> <li>• A and B have similar scores for noise and quality of pavements.</li> <li>• The biggest difference is seen in scores for state of repair of buildings.</li> <li>• A scores lower than B on Level of noise.</li> </ul> <p>Accept any other appropriate response. Do not credit reasons for the differences/ similarities.</p>	(3)

Question number	Suggest two other criteria the students could have included in their environmental quality survey. Answer	Mark
6(a)(ii)	<p style="text-align: center;">AO3 (2 marks)</p> <p>Award 1 mark for a reasonable criterion for example:</p> <ul style="list-style-type: none"> <li>• Noise levels</li> <li>• Pollution/CO2 emissions</li> <li>• Street parking</li> <li>• Safety for pedestrians</li> <li>• Street lighting</li> </ul> <p>Accept any other appropriate response.</p> <p>Do not credit ideas from Figure 6: (Noise/safety from traffic/graffiti/ litter/ state of buildings and pavements).</p> <p>Do not credit comments about number of people etc.</p>	(1+1)

Question number	Explain how secondary data sources could be used to investigate the reasons for differences in environmental quality. Answer	Mark
6(b)	<p style="text-align: center;">AO3 (4 marks)</p> <p>Award 1 mark for each valid idea of a secondary data source that might help explain differences in environmental quality, with extra marks for extension points up to a maximum 4 marks. For example:</p> <ul style="list-style-type: none"> <li>• Census/ONS data would give an indication of level of overcrowding/ car ownership/ unemployment/ income (1) which might explain why there has been low spending on the exterior of housing (1).</li> <li>• Estate agent data would show house prices showing level of demand for housing (1) and comparison with previous years would show if the trend was up or down (1).</li> <li>• IMD data could be used to show more information about the ways in which each area experiences inequality (1) for example, in terms of income or health, showing likely ability of the population to invest in the physical wellbeing of their place of residence (1).</li> </ul> <p>Accept any other appropriate response. Do not allow suggestions about other primary data that could be collected.</p>	(4)

Question number	Assess the effectiveness of your data processing and presentation techniques in analysing the data you collected. Answer
6(c)	<p style="text-align: right;">AO3 (9 marks)</p> <p>Marking instructions</p> <p>Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.</p> <p>No marks for stating research question, but this should be used as the context for the answer.</p> <p>Indicative content guidance</p> <p><b>Content depends on students' choices of field research question and the data</b> required for this investigation. Assessment should include the following:</p> <ul style="list-style-type: none"> <li>• Data processing initially requires tabulating of data which could involve spread sheets or Google sheets.</li> <li>• Data could then be graphed to show distribution or trends, using bar graphs, histograms, line graphs, scatter graphs and lines of best fit, pie charts, cross sections, flow diagrams.</li> <li>• Sketch maps or annotated OS maps or google maps or choropleth maps are useful ways to present data, as are annotated photography.</li> <li>• Descriptive measures of central tendency may be appropriate, including mean, mode, median and standard deviation.</li> <li>• <b>Spearman's Rank maybe used to measure for correlation</b> between two variables.</li> <li>• Student t-test or Mann-Whitney U could be used to test for differences between two data sets, and Chi-squared could compare observed data with 'expected' results.</li> <li>• Each of these would involve setting up a hypothesis and a null hypothesis, choosing an appropriate test, carrying it out and then testing the significance of the result.</li> <li>• Whatever graphical, mapping, presentation or statistical methods are used, it is crucial that analysis of results takes place, which could involve interpretation and explanation of any patterns or differences that explanation of any patterns or differences that were identified.</li> <li>• Assessment: Expect students to offer details about their fieldwork question focusing on what they found out from their presentation and analysis. They are likely to and assess the methods they chose and the extent to which each was useful and appropriate, or not.</li> <li>• Some may critically consider which method was the most useful and explain why.</li> <li>• Another route to assessment would be to suggest ways the presentation and analysis could be improved.</li> </ul> <p>Accept any other appropriate response.</p> <ul style="list-style-type: none"> <li>• Do not accept fieldwork contexts for Glaciation or Coasts.</li> </ul>

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-3	<ul style="list-style-type: none"> <li>• Shows evidence that fieldwork investigation skills used may not have been fully appropriate or effective for the investigation of the geographical questions/issue. (AO3)</li> </ul>

Level	Mark	Descriptor
		<ul style="list-style-type: none"> <li>• Considers the fieldwork investigation process/data/evidence, with limited relevant connections and/or judgements. (AO3)</li> <li>• Argument about the investigation is simplistic and/or generic. (AO3)</li> </ul>
Level 2	4-6	<ul style="list-style-type: none"> <li>• Shows evidence that fieldwork investigation skills used were largely appropriate and effective for the investigation of the geographical questions/issue. (AO3)</li> <li>• Critically considers the fieldwork investigation process/data/evidence in order to make some relevant connections and valid judgements. (AO3)</li> <li>• Argument about the investigation may have unbalanced consideration of factors, but is mostly coherent. (AO3)</li> </ul>
Level 3	7-9	<ul style="list-style-type: none"> <li>• Shows evidence that fieldwork investigation skills used were appropriate and effective for the investigation of the geographical questions/issue. (AO3)</li> <li>• Critically considers the fieldwork investigation process/data/evidence in order to make relevant connections and judgements that are supported by evidence. (AO3)</li> <li>• Argument about the investigation includes balanced consideration of factors and is fully developed and coherent. (AO3)</li> </ul>

Question number	<p>Migration and global changes in the manufacturing industry have shaped the city of Leicester.</p> <p>Evaluate the extent to which international influences have benefited the businesses and people of Leicester.</p> <p>Answer</p>
7	<p style="text-align: center;">AO1 (4 marks)/AO2 (12 marks)</p> <p>Marking instructions</p> <p>Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.</p> <p>Responses that demonstrate only AO1 without any AO2 should be awarded marks as follows:</p> <ul style="list-style-type: none"> <li>• Level 1 AO1 performance: 1 mark</li> <li>• Level 2 AO1 performance: 2 marks</li> <li>• Level 3 AO1 performance: 3 marks</li> <li>• Level 4 AO1 performance: 4 marks</li> </ul> <p>Indicative content guidance</p> <p>The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited. Relevant points may include:</p> <p>AO1</p> <ul style="list-style-type: none"> <li>• The movement of the global economic centre of gravity to Asia via the global shift of manufacturing has led to changes both in the places that have lost industry and those that have gained it.</li> <li>• Some deindustrialised regions in developed countries face economic and social problems as a result of economic restructuring (depopulation, crime and high unemployment).</li> <li>• Social and political tensions may result from the rapidity of global change caused by globalisation and migration.</li> <li>• Migration has economic, social, political and environmental costs and benefits for both host and source locations.</li> <li>• Diverse living spaces in urban areas have social characteristics that reflect ethnicity and culture in terms of distinctive retail outlets, places of worship and leisure.</li> <li>• Experiences and perceptions of living spaces change over generations and between different ethnic groups as communities have evolved economically and culturally.</li> <li>• Stakeholders assess success differently depending on the impact of change on their image of the place.</li> </ul> <p>AO2</p> <ul style="list-style-type: none"> <li>• International influences include the economic changes brought by the global shift of industry overseas and the returning (reshoring) of some manufacturing businesses in recent years. Migration has changed the population characteristics, the culture and the built environment of Leicester.</li> <li>• Illegal businesses exploit workers, and the same people who formerly worked in the factories in the 1980s on relatively good wages are now being paid below the minimum wage.</li> <li>• Low wages contribute to the poverty experienced in some parts of Leicester.</li> <li>• <b>Migration has been part of Leicester's history for decades with waves of</b> migrants from different parts of the world seeking employment or safety from persecution. 23 different nationalities run shops in one street, 70 languages are spoken and a good atmosphere has meant tensions appear to be few. Many</li> </ul>

	<p>elected representatives are from diverse communities, showing they are engaged in their home community.</p> <ul style="list-style-type: none"> <li>• Changes to the culture of Leicester include diverse shops and restaurants, with places of worship for many different religions. Diwali celebrations are enjoyed by thousands, with opportunities for businesses.</li> <li>• However, racism leads to hostility, as well as violence between groups (September 2022) and some migrants experience social exclusion.</li> <li>• The universities seek to improve opportunities for all and have ambitions to achieve equality in terms of achievement for all its students, although diverse students still achieve fewer of the highest grade degrees. Improved opportunity should help reduce dependency on working in illegal factories in the future.</li> <li>• Children experience high levels of poverty and many leave school without the qualifications they need to succeed in UK today.</li> <li>• Evaluation might include discussion about the extent to which international influences have benefited Leicester, with a community that celebrates its diversity and has attracted migrants from all over the world.</li> <li>• These changes in demographics have been managed successfully in this diverse urban community, as relations across the city appear to be good. Although authorities including universities seek to stress the changes they have achieved and hope to achieve, the reality is that racism still continues and poverty remains an issue in this city.</li> </ul>
--	--

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-4	<ul style="list-style-type: none"> <li>• Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1)</li> <li>• Applies knowledge and understanding of geographical information/ideas, making limited and rarely logical connections/relationships, to produce an interpretation with limited relevance and/or support. (AO2)</li> <li>• Applies knowledge and understanding of geographical information/ideas to produce an unsupported or generic conclusion, drawn from an argument that is unbalanced or lacks coherence. (AO2)</li> <li>• Limited synthesis of geographical ideas from across the course of study. (AO2)</li> </ul>
Level 2	5-8	<ul style="list-style-type: none"> <li>• Demonstrates geographical knowledge and understanding, which is occasionally relevant and may include some inaccuracies. (AO1)</li> <li>• Applies knowledge and understanding of geographical information/ideas with limited but logical connections/relationships to produce a partial interpretation that is supported by some evidence but has limited coherence. (AO2)</li> <li>• Applies knowledge and understanding of geographical information/ideas to come to a conclusion, partially supported by an unbalanced argument with limited coherence. (AO2)</li> <li>• Argument partially synthesises some geographical ideas from across the course of study, but lacks meaningful connections. (AO2)</li> </ul>
Level 3	9-12	<ul style="list-style-type: none"> <li>• Demonstrates geographical knowledge and understanding, which is mostly relevant and accurate. (AO1)</li> </ul>

		<ul style="list-style-type: none"> <li>• Applies knowledge and understanding of geographical information/ideas to find some logical and relevant connections/relationships to produce a partial but coherent interpretation that is supported by some evidence. (AO2)</li> <li>• Applies knowledge and understanding of geographical information/ideas to come to a conclusion, largely supported by an argument that may be unbalanced or partially coherent. (AO2)</li> <li>• Argument synthesises some geographical ideas from across the course of study, making some meaningful connections. (AO2)</li> </ul>
Level 4	13-16	<ul style="list-style-type: none"> <li>• Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1)</li> <li>• Applies knowledge and understanding of geographical information/ideas to find fully logical and relevant connections/relationships to produce a full and coherent interpretation that is supported by evidence. (AO2)</li> <li>• Applies knowledge and understanding of geographical information/ideas to come to a rational, substantiated conclusion, fully supported by a balanced argument that is drawn together coherently. (AO2)</li> <li>• Argument comprehensively and meaningfully synthesises geographical ideas from across the course of study throughout the response. (AO2)</li> </ul>