Oxford Revise | AQA A Level Geography | Answers

Chapter 9

Exemplar answers have been written by the author of the revision guide and are not created or approved by AQA. They do not necessarily represent the only possible solution or way to answer the question. All exemplar answers are likely to be in the top mark band.

Questions 1–8 are point-marked. 1 mark per valid point with extra marks for development.

1 AO1 = 4

- Deindustrialisation can cause decline of traditional manufacturing industries in urban areas (1).
- Urban decay when sites are underused or abandoned (1).
- Redevelopment of former industrial sites (1).
- Governments may prioritise urban renewal to stimulate investment to revitalise urban areas (1).
- Buildings can be repurposed for new uses (1).
- Employment restructuring as unemployed secondary workers retrain for tertiary and quaternary sector jobs, sometimes in areas of the city that have undergone urban renewal, e.g. retail parks (1).
- Younger workforce may out-migrate to find work, ageing the population in urban areas.
- Governments may prioritise urban renewal to stimulate investment to revitalise urban areas (1).

Example answer: *Deindustrialisation leads to the decline of traditional manufacturing industries in urban areas (e.g. inner city or on the edge of cities). Sites are abandoned and buildings become derelict, leading to urban decay. These sites can also be redeveloped for new land uses and economic activities, e.g. residential, retail or office space. Industrial buildings can be repurposed or demolished and replaced by new builds. Governments may prioritise urban renewal to stimulate investment to revitalise urban landscapes. Deindustrialisation can lead to unemployment, lowering workers' standard of living or workers can retrain for jobs in the service and quaternary sectors, with these sectors located in areas of the city that have undergone urban renewal, e.g. retail parks. Deindustrialisation can lead to demographic changes if the younger workforce out-migrates to find work, ageing the population in urban areas.*

2 AO1 = 4

- Social segregation is the spatial and social division of different groups within an area (1).
- Residential segregation occurs when housing patterns reflect economic inequality (1).
- The housing market can lead to concentrations of lower income and higher income populations in different parts of the city (1).
- Different life-cycle stages may require different types of housing (1).
- Gentrification can displace lower income residents as property values and rents rise (1).
- Communities from different social groups may concentrate in areas for historical, cultural reasons (1).
- Immigrants (internal and international) may choose to live in communities with similar ethnic and linguistic backgrounds (1).

3 AO1 = 4

- Hard, impermeable surfaces reduce infiltration and increase surface runoff (1).
- Vegetation and soils in urban areas increase infiltration and reduce surface runoff (1).
- Drainage systems remove surface runoff (1).
- Technology can improve permeability (1).

4 AO1 = 4

- Urban areas are dynamic. The use of buildings and open spaces within urban areas changes over time. When they fall into disrepair or are abandoned, this leads to environmental problems such as air, water, land, and visual pollution (1).
- Building materials can be declared unsafe e.g. asbestos (causing respiratory problems), RAAC (increased risk of collapse of structures) and some forms of external cladding (increasing fire risks) reducing the environmental quality of the area (1).
- Derelict former industrial buildings and the land they are situated on may contain toxic substances which may seep into water courses and local habitats (1).
- 'Broken windows theory' - when buildings fall into disrepair, visible signs of neglect such as broken windows, can lead to lack of investment in neighbouring buildings, causing a larger area within the neighbourhood to be neglected (1).
- Dereliction through 'Planning blight' (delays in plans for redevelopment leaves buildings empty over time) can lead to lack of investment in an urban area and decrease its environmental quality (1).
- Abandoned and neglected buildings can increase the risk of damage from vandalism and graffiti, fly tipping and littering, or higher rates of other crimes, increasing environmental problems (1).
- Built environments can also decay through time due to weathering and use, particularly if there is a lack of maintenance and repair (1).
- Historic buildings may be more complex and costly to repair if they become derelict, reducing the environmental quality of neighbourhoods (1).

5 AO1 = 4

- Waste streams, the flow of waste from its source through to its recovery, recycle or disposal, are linked to characteristics of a population in different ways (1).
- Waste streams include domestic and industrial waste and the volume of these may be higher, and the type of waste different in a wealthier society compared to a less wealthy society (1).
- Populations with higher incomes are able to afford more products and so may produce higher levels of waste (1).
- Populations with a consumer lifestyle may use more products or may change products more frequently, causing increased levels of waste (1).
- Populations with a more environmentally conscious attitude may reuse and recycle products more readily and pressurise governments to improve waste recycling and disposal methods (1).

Questions 6–18 are level-marked.

6 AO3 – Analysis of the changes in urban population by group of economies between 2011 and 2021 to identify patterns and anomalies, using data manipulation to support response.
AO3 = 6

Level	Marks	Description
2	4–6	Clear analysis of the quantitative evidence provided, which makes appropriate use of evidence in support. Clear connection(s) between different aspects of the evidence.

1	1–3	Basic analysis of the quantitative evidence provided, which makes limited use of evidence in support. Basic connection(s) between different aspects of the evidence.

AO3

- In Figure 1, all groups show an increase in proportion of urban population between 2011 and 2021.
- Urbanisation has been most significant between 2011 and 2021 in developing economies.
- In Asia/Oceania, the percentage of urban population increased from 43 per cent in 2011 to 50 per cent in 2021, whereas Africa has seen around 4 per cent rise in the same decade.
- Urbanisation in the developing economies of the Americas has increased from around 78 per cent to 81 per cent and is comparable to levels of urbanisation in developed economies.
- Developed economies show a slight increase from 77 per cent to 79 per cent.
- In Asia/Oceania and Africa, urban population levels remain lower; in Asia/Oceania, 50 per cent of the population lived in non-urban areas (i.e. rural areas) in 2021, with Africa's rural population being 57 per cent in 2021.

Example answer: *Figure 1 shows urban population by group of economies. All groups show an increase in the proportion of urban population between 2011 and 2021. Urbanisation has been most significant in developing economies, in particular Asia and Oceania, which saw the percentage of urban population increase from 43 per cent in 2011 to 50 per cent in 2021. Africa saw an increase of around 4 per cent in the same decade. Urbanisation in the developing economies of the Americas increased around from 78 per cent to 81 per cent and is comparable to levels of urbanisation in developed economies, which rose from 77 per cent to 79 per cent. As the non-urban population is the rural population, the data indicates that 50 per cent of Asia's population and 57 per cent of Africa's population of the population lived in rural areas in 2021.*

7 AO3 – Analysis of the number and location of megacities between 2018 and 2030 to identify patterns and anomalies, using data manipulation to support response.
AO3 = 6

Level	Marks	Description
2	4–6	Clear analysis of the quantitative evidence provided, which makes appropriate use of data to support. Clear connection(s) between different aspects of the data.
1	1–3	Basic analysis of the quantitative evidence provided, which makes limited use of data to support. Basic connection(s) between different aspects of the data.

AO3

- Figure 2 shows the megacities in the world in 2018 and new megacities in 2030.
- In 2018, megacities were situated in every continent other than Oceania and Antarctica.
- In both 2018 and in 2030, most were/will be situated in South and East Asia.
- In 2030, it is estimated that there will be 10 new megacities, with most being in Asia (6) including India and China.
- Number of megacities in Africa will double (adding Luanda and Dar es Salaam).
- Europe will have one new megacity (London).
- None in the Americas as urbanisation rates are declining.

8 AO3 – Analysis of air quality data for the top five air polluted cities in the early 2020s to identify patterns and anomalies in the data, using data manipulation to support response.
AO3 = 6

Level	Marks	Description
2	4–6	Clear analysis of the quantitative evidence provided, which makes appropriate use of data to support. Clear connection(s) between different aspects of the data.
1	1–3	Basic analysis of the quantitative evidence provided, which makes limited use of data to support. Basic connection(s) between different aspects of the data.

AO3

- Figure 7 shows levels of air quality using particulate matter (PM2.5) data. The higher the value, the poorer the air quality.
- Values shown for each month of the year in 2022 as well as yearly average for 2020, 2021 and 2022.
- Top five cities are all situated in Asia: two in Pakistan, two in India and one in China.
- City ranked 1, Lahore, has levels of 97.4 in 2022.
- All top five countries exceeded WHO guidelines by over 10 times in 2022.
- Hotan and Peshawar's levels exceed WHO guidelines by over 10 times for all months of the year in 2022.
- Levels decrease in July and August for Lahore, Bhiwadi and Delhi (also September).
- Delhi is the only city in the top five with values that exceed WHO guidelines by 5 to 7 times, rather than above 7 times.
- The top five cities experience their highest levels in different months. Lahore's highest level is December and continues over the winter months. Delhi also experiences high levels of PM2.5 in winter (highest November), as does Peshawar (December).
- Levels in Hotan and Bhiwadi also fluctuate more widely throughout the year.
- All cities' yearly average exceeded limits by over 10 times in 2021 and 2020 (except Peshawar, where there was no data available for 2020).
- Between 2021 and 2022, yearly averages for PM2.5 readings had increased for Lahore and Peshawar, but had declined for Hotan, Bhiwadi and Delhi.
- Hotan's yearly averages for PM2.5 readings has dropped the most from 2020 (110.2 to 94.3).

9 AO1 – Knowledge and understanding of how demographic processes are leading to the growing number of megacities.
AO2 – Application of knowledge and understanding to analyse and evaluate the extent to which demographic processes are leading to the growing number of megacities.
AO1 = 4 AO2 = 5

Level	Marks	Description
3	7–9	AO1 – Demonstrates detailed knowledge and understanding of concepts, processes, interactions and change. These underpin the response throughout. AO2 – Applies knowledge and understanding appropriately with detail. Connections and relationships between different aspects of study are fully developed with complete relevance. Evaluation is detailed and well supported with appropriate evidence.

2	4–6	AO1 – Demonstrates clear knowledge and understanding of concepts, processes, interactions and change. These are mostly relevant though there may be some minor inaccuracy. AO2 – Applies clear knowledge and understanding appropriately. Connections and relationships between different aspects of study are evident with some relevance. Evaluation is evident and supported with clear and appropriate evidence.
1	1–3	AO1 – Demonstrates basic knowledge and understanding of concepts, processes, interactions and change. This offers limited relevance with inaccuracy. AO2 – Applies limited knowledge and understanding. Connections and relationships between different aspects of study are basic with limited relevance. Evaluation is basic and supported with limited appropriate evidence.

AO1

- Urbanisation, suburbanisation, counter-urbanisation, urban resurgence. The emergence of megacities and world cities and their role in global and regional economies.
- Economic, social, technological, political and demographic processes associated with urbanisation and urban growth.

AO2

- Evaluation of the role of demographic processes in the growth of megacities.
- Demographic processes have an important role in the growth of megacities.
- Demographic processes are linked to natural increase and migration.
- Migration is highly important, especially rural to urban migration in parts of Africa and Asia, and international migration, linked to globalisation, can also increase megacity growth.
- Migration leads to growth of cities with populations of greater than 10 million with high population densities.
- Migration from small towns within a country also increases population in megacities.
- Natural increase within megacities also contributes to their growth. Migrants tend to be younger and so more likely to have children, increasing or at least maintaining birth rates, and may increase total fertility rates above replacement rate of 2.1. Access to food and health services may be better than rural areas, decreasing death rates, particularly among children. Thus, birth rates are higher than death rates, causing natural increase and so contributing to population growth in megacities.
- Other processes apart from demographics play an important role.
- Increased economic activity (e.g. manufacturing and services), plus the growth of TNCs, provide employment opportunities for migrants, which then in turn increases populations of megacities.
- Government policies may also stimulate growth in megacities, e.g. free trade zones. Transportation (e.g. ports) and communication technology (e.g. broadband) are also important for megacities to grow.
- Location also affects the growth of megacities (e.g. available flat space, coastal locations, water supply).
- Candidates should come to an overall conclusion that assesses how demographic processes influence the growth of megacities.

Example answer: *The growth of megacities can be the result of a number of different processes, including demographic, economic, social, technological and political. On the one hand, demographic processes play a key role in the population growth of megacities. Migration, particularly rural to urban migration in parts of Africa and Asia, has a significant influence on megacity expansion. This internal migration from rural regions to urban areas, as well as population movements from smaller towns, particularly in EMEs and LDEs, adds to the urban*

population. International migrants can also contribute to the rapid growth of megacities, leading to populations exceeding 10 million with high population densities.

Furthermore, natural increase within megacities is another demographic process influencing their growth but may contribute less to the increase of megacities' populations than migration, particularly in the short term. Migrants, who are typically younger, tend to have higher fertility rates, contributing to a higher birth rate compared to death rates within urban areas. Improved access to food and health services in megacities, when compared to rural areas, further reduces mortality rates, especially among children, resulting in a net natural increase in population, causing megacities to grow.

However, there are other processes that contribute to the growth of megacities. Increased economic activity, driven by sectors such as manufacturing and services, as well as the growth of Transnational Corporations (TNCs), provide employment opportunities that attract migrants to urban areas. Social factors rather than economic ones may drive migrants to megacities, e.g. joining friends and family in a particular city. Government policies, such as the establishment of free trade zones, can stimulate economic growth and urbanisation.

Moreover, the availability of infrastructure, including transportation hubs, e.g. ports, and advanced communication technology, such as broadband, are critical for the growth of megacities. The geographical location of a city, with consideration of factors like available flat space, coastal proximity and water supply, also influences the potential for growth of megacities.

Overall, demographic processes like migration and natural increase are significant contributors to the growth of megacities, particularly in terms of their population size and especially in LDEs and EMEs in parts of Asia and Africa. However, other factors can influence megacity growth. Economic activities, government policies, and geographical considerations also have a key role to play in the growth of megacities.

10 AO1 – Knowledge and understanding of how new urban landscapes, such as town centre mixed developments, cultural and heritage quarters and fortress developments lead to cultural diversity.
AO2 – Application of knowledge and understanding to analyse and evaluate the extent to which new urban landscapes, such as town centre mixed developments, cultural and heritage quarters and fortress developments leads to cultural diversity.
AO1 = 4 AO2 = 5

Level	Marks	Description
3	7–9	AO1 – Demonstrates detailed knowledge and understanding of concepts, processes, interactions and change. These underpin the response throughout. AO2 – Applies knowledge and understanding appropriately with detail. Connections and relationships between different aspects of study are fully developed with complete relevance. Evaluation is detailed and well supported with appropriate evidence.
2	4–6	AO1 – Demonstrates clear knowledge and understanding of concepts, processes, interactions and change. These are mostly relevant though there may be some minor inaccuracy. AO2 – Applies clear knowledge and understanding appropriately. Connections and relationships between different aspects of study are evident with some relevance. Evaluation is evident and supported with clear and appropriate evidence.

1	1–3	AO1 – Demonstrates basic knowledge and understanding of concepts, processes, interactions and change. This offers limited relevance with inaccuracy. AO2 – Applies limited knowledge and understanding. Connections and relationships between different aspects of study are basic with limited relevance. Evaluation is basic and supported with limited appropriate evidence.

AO1

- Physical and human factors in urban forms. Spatial patterns of land use, economic inequality, social segregation and cultural diversity in contrasting urban areas, and the factors that influence them.
- New urban landscapes: town centre mixed developments, cultural and heritage quarters, fortress developments, gentrified areas, edge cities. The concept of the post-modern western city.

AO2

- Evaluation of how new urban landscapes: town centre mixed developments, cultural and heritage quarters and fortress developments influence cultural diversity.
- Cultural diversity includes the range of different groups within a society. These groups may be linked to race, ethnicity, sexual orientation, religion, language, gender, age, disability and socioeconomic status.
- Town centre mixed developments do affect patterns of cultural diversity:
    - Multifunctional zones with a range of residential, retail, commercial and leisure spaces, attracting a broad range of cultures.
    - Different amenities and services provided, e.g. recreational facilities which appeal to people from differing backgrounds.
    - Planners include access to these by people from different cultures in their redevelopment plans. Some land uses, e.g. universities, increase likelihood of increased diversity.
- Town centre mixed developments have less impact on patterns of cultural diversity:
    - Some groups may be forced to relocate when redevelopment has taken place or are priced out of new city centre housing.
    - Affordable housing in mixed developments in town centres may be limited, so younger economically active and wealthy retirees may favour residential areas in city centres.
- Cultural and heritage quarters do affect patterns of cultural diversity:
    - Intentional planning and design to show cultural and heritage aspects of a place to encourage tourism and investment.
    - Access to museums, galleries, festivals and events attracts residents who engages with these activities.
- Cultural and heritage quarters have less impact on patterns of cultural diversity:
    - May be too artificial attracting tourists only so local businesses more focused on them rather than local communities; increases prices of land and rents.

Fortress developments do affect patterns of cultural diversity

- Uses defensible space design and security (gates, CCTV, AI) which increases safety for users.
- Polarises different income groups as higher income residents can afford to pay for the technology and for the homes within these developments, so discouraging social mixing and limited interaction between different income groups.
- Physical barriers e.g. gates fragment different communities within an urban area.

Fortress developments have less impact on patterns of cultural diversity

- Polarises by income rather than ethnicity so can still be culturally diverse in terms of ethnicity and language.

11 AO1 – Knowledge and understanding of how economic inequality and social segregation has an impact on 'liveability' in urban areas.
AO2 – Application of knowledge and understanding to analyse and evaluate the importance of how economic inequality and social segregation has an impact on liveability in urban areas.
AO1 = 4 AO2 = 5

Level	Marks	Description
3	7–9	AO1 – Demonstrates detailed knowledge and understanding of concepts, processes, interactions and change. These underpin the response throughout. AO2 – Applies knowledge and understanding appropriately with detail. Connections and relationships between different aspects of study are fully developed with complete relevance. Evaluation is detailed and well supported with appropriate evidence.
2	4–6	AO1 – Demonstrates clear knowledge and understanding of concepts, processes, interactions and change. These are mostly relevant though there may be some minor inaccuracy. AO2 – Applies clear knowledge and understanding appropriately. Connections and relationships between different aspects of study are evident with some relevance. Evaluation is evident and supported with clear and appropriate evidence.
1	1–3	AO1 – Demonstrates basic knowledge and understanding of concepts, processes, interactions and change. This offers limited relevance with inaccuracy. AO2 – Applies limited knowledge and understanding. Connections and relationships between different aspects of study are basic with limited relevance. Evaluation is basic and supported with limited appropriate evidence.

AO1

- Liveability is the combination of factors that affect an urban community's quality of life. These factors are varied but may include environmental, economic, social and political factors.
- How does economic inequality and social segregation impact liveability in urban areas

AO2

- Evaluation of the importance of how economic inequality and social segregation affects liveability in urban areas.
- Economic inequality does have an impact on liveability:
- Economic inequality can affect access to basic services, affordability of housing, quality of infrastructure, and crime and safety
- Economic prosperity through income generation allows people to access goods and services and rent or buy housing.
- Having lower income levels makes some housing in cities unaffordable for some. The employment opportunities available in the city may affect whether or not people can afford to live in (or near to) the city.
- The built environment is a key part of the physical fabric of the city as many urban activities take place within them. Economic inequality may lead to varying levels of investment in urban areas. Buildings which

are safe and fit for purpose, whether historic or modern contribute to the liveability of an area. Derelict neighbourhoods may not attract investment, increasing income inequality within the city.
- Governments may target areas of economic deprivation for urban regeneration projects in an attempt to improve liveability.

Social segregation does have an impact on liveability:
- The built environment creates a sense of place and identity. Areas which are segregated may provide familiarity for some but apprehension for others, affecting their perception of liveability.
- Access to key services such as education and health are important for the long-term sustainability of the city and the quality of life for its residents. Other local services such as libraries and sports facilities are a priority for some, whereas cultural and entertainment opportunities are an important contributor to liveability for others. Social segregation may improve access to these for some but may act as a barrier to key services for others.
- Segregated neighbourhoods can lead to polarisation of communities, weakening social cohesion and negatively affecting liveability.

Economic inequality and social segregation have less impact on liveability.
- The natural environment such as green (e.g. parks) and blue (e.g. rivers) spaces within the city are important for mental and physical health for all groups within the city, therefore have an important impact on liveability. Public spaces may have equal access for all, reducing the importance of economic inequality and social segregation on liveability.
- Some might argue that a safe, secure environment is the most important factor, as without this businesses and services cannot function and people would be worse off.
- Different individuals, groups and organisations will have different views and attitudes towards which factors contribute most to their quality of life in the city.
- Political factors such as the opportunities for community engagement and participating in decision making at a local level are of value for some people and groups.
- Candidates should come to an overall conclusion that assesses the importance of different factors affecting liveability in urban areas.

12 AO1 – Knowledge and understanding of strategies to improve environmental sustainability in contrasting urban areas
AO2 – Application of knowledge and understanding to analyse and evaluate strategies to improve environmental sustainability in contrasting urban areas
AO1 = 4 AO2 = 5

Level	Marks	Description
3	7–9	AO1 – Demonstrates detailed knowledge and understanding of concepts, processes, interactions and change. These underpin the response throughout. AO2 – Applies knowledge and understanding appropriately with detail. Connections and relationships between different aspects of study are fully developed with complete relevance. Evaluation is detailed and well supported with appropriate evidence.
2	4–6	AO1 – Demonstrates clear knowledge and understanding of concepts, processes, interactions and change. These are mostly relevant though there may be some minor inaccuracy. AO2 – Applies clear knowledge and understanding appropriately. Connections and relationships between different aspects of study are evident with some

		relevance. Evaluation is evident and supported with clear and appropriate evidence.
1	1–3	AO1 – Demonstrates basic knowledge and understanding of concepts, processes, interactions and change. This offers limited relevance with inaccuracy. AO2 – Applies limited knowledge and understanding. Connections and relationships between different aspects of study are basic with limited relevance. Evaluation is basic and supported with limited appropriate evidence.

AO1

- Contemporary opportunities and challenges in developing more environmentally sustainable cities.
- Strategies for developing more environmentally sustainable cities.

AO2

- Evaluation of strategies to improve sustainability in contrasting urban areas, such as London, UK, a city in a HDE city and Mumbai, India, a city in an EME
- London:
    - Strategies to improve the environmental and social sustainability of local neighbourhoods.
    - BedZED was developed in the early 2000s in Hackbridge in London. City's first zero-carbon community. Construction of new buildings requires materials which are often transported from outside regions, increasing fuel use and emissions.
    - For BedZED, 52 per cent of construction materials were sourced within 35 miles. 15 per cent of the materials used were either reclaimed or recycled, reducing the need for new resources to be used.
    - The development aimed to improve its sustainable energy use by using a biomass boiler. Homes were designed to reduce energy loss, making them more efficient.
    - Car sharing was encouraged to cut down the use of fossil fuels and reduce emissions.
    - Water use was reduced through the installation of energy efficient toilets.
    - Access to greenspace helped the physical and mental wellbeing of residents.
    - At a city-wide level, environmental sustainability through managing transport: Transport for London.
    - The introduction of the congestion charge, where drivers paid to enter London's central area, reduced traffic congestion and helped to improve air quality. London's Ultra Low Emission Zone (ULEZ) also aims to tackle gas and particle emissions.
    - Increasing the frequency of different modes of public transport encourages people to leave their cars at home.
    - Developing cycle lanes and access for pedestrians promotes health and well-being as well as reducing fuel use.
- Mumbai:
    - In Mumbai, environmental sustainability of the built environment has been tackled through large scale redevelopment and small-scale improvement initiatives to improve living conditions for residents.
    - E.g. Large-scale improvements to the built environment have taken long periods of time to take place, e.g. plans were made in 2009 to redevelop Bhendi Bazaar, home to more than 20 000 people to tackle overcrowded conditions with poor access to facilities including sanitation, with the first phases completed in 2020. Large scale redevelopment plans of the Dharavi Slum have been delayed.
    - Large developments take more time and require more investment.
    - Smaller scale projects are often more successful at a local scale as the community is engaged in decision making and directly benefit from the changes made.

- Local government and NGOs have been involved in managing environmental issues in Mumbai and improving sustainability.
- Sanitation has been improved through SPARC, an Indian NGO, which has built 300 community managed toilet blocks.
- Waste issues have been tackled through the 'Clean Up Mumbai' campaign by the Municipal Corporation of Greater Mumbai to remove litter and educate residents about the benefits of reducing waste.
- Improvements in traffic management have been made through installing 550 smart traffic signals installed to regulate vehicle flow. Investment has been made in electric buses and smartphone technology used through the Chalo app to make payments quicker and easier.
- Candidates should come to an overall conclusion that assesses strategies to improve sustainability in one urban area.

13 AO1 – Knowledge and understanding of environmental and social problems in urban areas and how they are managed.
AO2 – Application of knowledge and understanding to analyse and evaluate the extent to which dealing with environmental issues is more challenging than tackling social problems when managing urban areas.
AO1 = 10 AO2 = 10

Level	Marks	Description
4	16–20	• AO2 – Detailed evaluative conclusion that is rational and firmly based on knowledge and understanding which is applied to the context of the question. Interpretations are comprehensive, sound and coherent. • AO2 – Detailed, coherent and relevant analysis and evaluation in the application of knowledge and understanding throughout. • AO2 – Full evidence of links between knowledge and understanding to the application of knowledge and understanding in different contexts. • AO1 – Detailed, highly relevant and appropriate knowledge and understanding of place(s) and environments used throughout. • AO1 – Full and accurate knowledge and understanding of key concepts and processes throughout. • AO1 – Detailed awareness of scale and temporal change which is well integrated where appropriate.
3	11–15	• AO2 – Clear evaluative conclusion that is based on knowledge and understanding which is applied to the context of the question. • AO2 – Generally clear, coherent and relevant analysis and evaluation in the application of knowledge and understanding. • AO2 – Generally clear evidence of links between knowledge and understanding to the application of knowledge and understanding in different contexts. • AO1 – Generally clear and relevant knowledge and understanding of place(s) and environments. • AO1 – Generally clear and accurate knowledge and understanding of key concepts and processes. • AO1 – Generally clear awareness of scale and temporal change which is integrated where appropriate.
2	6–10	• AO2 – Some sense of an evaluative conclusion partially based upon knowledge and understanding which is applied to the context of the question. • AO2 – Some partially relevant analysis and evaluation in the application of knowledge and understanding.

		• AO2 – Some evidence of links between knowledge and understanding to the application of knowledge and understanding in different contexts. • AO1 – Some relevant knowledge and understanding of place(s) and environments which is partially relevant. • AO1 – Some knowledge and understanding of key concepts, processes and interactions and change. There may be a few inaccuracies. • AO1 – Some awareness of scale and temporal change which is sometimes integrated where appropriate. There may be a few inaccuracies.
1	1–5	• AO2 – Very limited and/or unsupported evaluative conclusion that is loosely based upon knowledge and understanding which is applied to the context of the question. Interpretation is basic. • AO2 – Very limited analysis and evaluation in the application of knowledge and understanding. This lacks clarity and coherence. • AO2 – Very limited and rarely logical evidence of links between knowledge and understanding to the application of knowledge and understanding in different contexts. • AO1 – Very limited relevant knowledge and understanding of place(s) and environments. • AO1 – Isolated knowledge and understanding of key concepts, processes and interactions and change. • AO1 – Very limited awareness of scale and temporal change which is rarely integrated where appropriate. There may be a number of inaccuracies.
0	0	• Nothing worthy of credit.

AO1

- Environmental problems in contrasting urban areas: atmospheric pollution, water pollution and dereliction.
- Strategies to manage these environmental problems.
- Impact of urban areas on local and global environments. Ecological footprint of major urban areas.
- Dimensions of sustainability: natural, physical, social and economic.

AO2

- Environmental problems include sanitation, drainage, air pollution, litter.
- Social issues include health, education, poverty and community engagement.
- Management can be at a range of scales, timeframes and involve different organisations and decision makers.
- Arguments for environmental problems as more challenging:
    - Problems directly lead to decreased life expectancy, e.g. improved sanitation and drainage needed to reduce water borne diseases such a cholera.
    - This requires high levels of investment, government planning and takes time to build.
    - Air pollution: more difficult to identify sources and need laws to implement limits on pollutants, policies to reduce emissions and for these to be enforced.
    - Areas can be affected by climate change which is on a global scale and requires international cooperation which takes time and may not be effective.
    - However, communities can help tackle issues on a local scale such as litter reduction and waste recycling, so large scale investment not always needed.
- Arguments for social issues as more challenging:
    - Improving life chances and decreasing social inequality is complex and linked to different factors.

- Government investment in education and health needed to raise literacy and numeracy rates and to increase life expectancy.
- Issues such as discrimination need behavioural changes in society which may take time.
- Social issues such as poverty are closely linked to economic factors so these need to be considered when solutions are put forward.
- Social issues can affect individual neighbourhoods in different ways, e.g. differing types of crime.
- Community engagement is important and different groups may have different views on the best solutions.

14 AO1 – Knowledge and understanding of impact of economic characteristics, lifestyles and attitudes on waste generation and disposal.
AO2 – Application of knowledge and understanding to analyse and evaluate the extent the impact of economic characteristics, lifestyles and attitudes on waste generation and disposal.
AO1 = 10 AO2 = 10

Level	Marks	Description
4	16–20	AO2 – Detailed evaluative conclusion that is rational and firmly based on knowledge and understanding which is applied to the context of the question. Interpretations are comprehensive, sound and coherent. AO2 – Detailed, coherent and relevant analysis and evaluation in the application of knowledge and understanding throughout. AO2 – Full evidence of links between knowledge and understanding to the application of knowledge and understanding in different contexts. AO1 – Detailed, highly relevant and appropriate knowledge and understanding of place(s) and environments used throughout. AO1 – Full and accurate knowledge and understanding of key concepts and processes throughout. AO1 – Detailed awareness of scale and temporal change which is well integrated where appropriate.
3	11–15	AO2 – Clear evaluative conclusion that is based on knowledge and understanding which is applied to the context of the question. AO2 – Generally clear, coherent and relevant analysis and evaluation in the application of knowledge and understanding. AO2 – Generally clear evidence of links between knowledge and understanding to the application of knowledge and understanding in different contexts. AO1 – Generally clear and relevant knowledge and understanding of place(s) and environments. AO1 – Generally clear and accurate knowledge and understanding of key concepts and processes. AO1 – Generally clear awareness of scale and temporal change which is integrated where appropriate.
2	6–10	AO2 – Some sense of an evaluative conclusion partially based upon knowledge and understanding which is applied to the context of the question. AO2 – Some partially relevant analysis and evaluation in the application of knowledge and understanding. AO2 – Some evidence of links between knowledge and understanding to the application of knowledge and understanding in different contexts. AO1 – Some relevant knowledge and understanding of place(s) and environments which is partially relevant.

		AO1 – Some knowledge and understanding of key concepts, processes and interactions and change. There may be a few inaccuracies. AO1 – Some awareness of scale and temporal change which is sometimes integrated where appropriate. There may be a few inaccuracies.
1	1–5	AO2 – Very limited and/or unsupported evaluative conclusion that is loosely based upon knowledge and understanding which is applied to the context of the question. Interpretation is basic. AO2 – Very limited analysis and evaluation in the application of knowledge and understanding. This lacks clarity and coherence. AO2 – Very limited and rarely logical evidence of links between knowledge and understanding to the application of knowledge and understanding in different contexts. AO1 – Very limited relevant knowledge and understanding of place(s) and environments. AO1 – Isolated knowledge and understanding of key concepts, processes and interactions and change. AO1 – Very limited awareness of scale and temporal change which is rarely integrated where appropriate. There may be a number of inaccuracies.
0	0	Nothing worthy of credit.

AO1

- Urban physical waste generation: sources of waste – industrial and commercial activity, personal consumption. Relation of waste components and waste streams to economic characteristics, lifestyles and attitudes.
- The environmental impacts of alternative approaches to waste disposal: unregulated, recycling, recovery, incineration, burial, submergence and trade.

AO2

- Waste generation (production) in urban areas can be linked to different factors including economic characteristics, lifestyles and attitudes.
- Waste disposal (including the 3Rs – reduce, reuse, recycle) in urban areas can be linked to different factors including economic characteristics, lifestyles and attitudes.
- Economic characteristics, lifestyle and attitudes can have both positive and negative impacts on both the production of waste and the methods used to reduce, reuse and recycle (3Rs).
- People in more wealthy countries tend to produce more waste per capita as they have higher levels of consumption.
- People in more wealthy countries tend to buy more products (with more packaging), as well as a variety of products which are made from a range of materials.
- Wealthier communities may have a more ‘single use’ culture and may rely more on items which are disposable, or foods packaged in plastic to increase their shelf life.
- People in more wealthy countries tend to use these products for less time, e.g. clothing, meaning that more are needed over time.
- Growing ‘middle-class’ populations, particularly in EMEs, will add to the amount of waste produced.
- HDEs and EMEs have more industrial activity which produces a higher amount of hazardous waste, requiring money to dispose of or recycle without harming people or the environment.
- Rising urbanisation, linked to economic growth, in parts of Asia and Africa also increases the concentration of waste from households and industrial activities in urban areas.
- HDEs may have more money for research and investment in new technology, so are able to produce materials which are more biodegradable.

- HDEs have more money to implement effective recycling schemes.
- Attitudes of people, businesses, organisations and governments are highly important if the level of waste is to be reduced and the amount of recycling increased.
- Attitude of governments at both national and local authority level is important.
- Greater awareness of the negative effects of waste products on the environment. This can lead to people taking greater responsibility for changing their behaviour to reduce the amount of products used and to engage with recycling.
- Success of recycling depends on how willing people are to sort waste produced, so products that can be recycled get into the right system.
- People can be encouraged to dispose of hazardous household waste, e.g. lithium batteries, more responsibly. Increases in recycling can lead to less volume of waste in landfill sites.
- Governments can have policies and guidelines on disposal and recycling and provide funds to enable new, more environmentally friendly waste schemes to be put into place.
- Governments also invest in the infrastructure needed to manage waste disposal.

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