Q1.

For **one** urban area you have studied, to what extent are environmental problems a consequence of globalisation?

[9 marks]

Q2.

'Addressing socio-economic issues is more important than dealing with environmental challenges in the management of urban areas.'

How far do you agree with this view?

[20 marks]

Q3.

Which of the following is a form of air pollution where exhaust fumes interact with sunlight to produce low-level ozone?

[1 mark]

A Methane released from landfill ⬭

B Particulate pollution ⬭

C Photo-chemical pollution ⬭

D Urban heat island effect ⬭

Q4.

'There are more challenges than opportunities associated with improving environmental

quality in urban areas.'

To what extent do you agree with this view?

[20 marks]

Q5.

'Environmental issues in urban areas will always emerge despite attempts to be more sustainable.'

With reference to **two** contrasting urban areas that you have studied, to what extent do you agree with this statement?

[20 marks]

Q6.

"The environmental sustainability of urban areas is influenced by the physical environmental conditions of each place."

With reference to two contrasting places, to what extent do you agree with this view?

[20 marks]

Q1.

AO1 – Knowledge and understanding of environmental problems in one urban area and knowledge and understanding of the concept of globalisation and the dimensions of globalisation – flows of capital, labour, products, services and information, patterns of production, distribution and consumption.

AO2 – Application of knowledge and understanding to analyse and evaluate the extent to which environmental problems are the result of globalisation.

Mark scheme

Level 3 (7–9 marks)
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. Analysis and evaluation is detailed and well supported with appropriate evidence. A well balanced and coherent argument is presented.

Level 2 (4–6 marks)
AO1 – Demonstrates some appropriate knowledge and understanding of concepts, processes, interactions and change. These are mostly relevant though there may be some minor inaccuracy.
AO2 – Applies some knowledge and understanding appropriately. Connections and relationships between different aspects of study are emerging/evident with some relevance. Analysis and evaluation evident and supported with some appropriate evidence. A clear but partial argument is presented.

Level 1 (1–3 marks)
AO1 – Demonstrates basic / limited knowledge and understanding of concepts, processes, interactions and change. These offer limited relevance with inaccuracy.
AO2 – Applies limited knowledge and understanding. Connections and relationships between different aspects of study are basic with limited relevance. Analysis and evaluation basic and supported with limited appropriate evidence. A basic argument is presented.

Notes for answers
This question links two different units of the specification, namely contemporary urban environments and global systems and global governance. Students are required to assess the extent to which globalisation (GG) is responsible for environmental problems in one urban area (CUE). Responses will be very much dependent on the urban area chosen. They may take the view that globalisation is not the dominant factor, and this is acceptable as long as they present a valid alternative argument explaining why globalisation is not a factor.

Max L1 for generic responses with no identifiable urban area. If more than one urban area included, credit best response.

AO1

- Knowledge and understanding of environmental problems in urban areas. These might include dereliction, waste disposal, lack of green space, traffic congestion, air pollution and water pollution.
- Case-study of one urban area. Understanding of the environmental problems found

in the urban area.

- Knowledge and understanding of the concept of globalisation – flows of money, labour and products. Patterns of industrialisation.
- Knowledge and understanding of the issues resulting from globalisation such as unequal flows of money and people, ideas and technology.

AO2

- Evaluation of the extent to which environmental problems in an urban area are the result of globalisation. For example, increased wealth in has led to an increase in waste. Dereliction of many former factories in urban areas in UK occurred as a result of globalisation as much industry was transferred to Asia.
- Analysis of extent to which globalisation results in environmental problems in the urban area studied. For example, Bangalore produces 20 000 tonnes of e-waste a year. This is the result of increased flows of money in the IT sector with firms like Google having bases in the city. 90% of the waste is removed using the informal sector – poor slum dwellers sort the waste but with no regulations this causes further environmental problems as toxic chemicals are released into the environment.
- Responses could consider how unequal flows of money impact on the ability of urban areas to deal with the environmental problem such as waste disposal. Many western cities are now able to export large volumes of their waste each year, reducing their waste problem. Analysis of how globalisation has caused a flow of labour into many cities such as Dhaka in Bangladesh with many global brands locating there. This causes water pollution due to increased dwellers in slums producing sewage.
- Analysis of the extent to which environmental problems are not the result of globalisation. Water pollution in many European cities is the result of old sewage infrastructure and poor waste disposal practice, for example disposal of wet wipes and fat disposal into main sewers. Similarly air pollution resulting from traffic congestion is difficult to relate directly to globalisation.
- Overall evaluation of the extent to globalisation of money is responsible for environmental problems should reflect whole response but will very much depend on the urban area chosen.

Credit any other valid approach.

AO1 = 4
AO2 = 5
[Total 9 marks]

Q2.

AO1 − Knowledge and understanding of the social and economic issues and environmental issues affecting urban areas. Knowledge and understanding of management strategies used to manage these issues.

AO2 − Application of knowledge and understanding to analyse and evaluate the relative significance of socio-economic and environmental challenges when deciding urban management strategies.

Notes for answers

The question links various aspects of the Contemporary urban environments section of the specification, specifically the social and economic issues associated with urbanisation, urban environmental issues, and potentially, urban climate and urban waste and its disposal.
Focus might be based on managing part of an urban system: e.g. transport, housing / industry, energy / waste.

AO1

- An understanding of the key ideas, 'socio-economic' and 'environmental' should be expected. The idea of urban 'management' will be important as the focus of the question.
- Knowledge and understanding of issues associated with economic inequality, social segregation, and cultural diversity.
- Inequalities tend to exist in terms of access to job opportunities, education, housing and basic public services such as water and sanitation. Knock-on impacts of this are poorer health, higher unemployment and a lack of social mobility. The poor get stuck in a cycle of poverty from which it is hard to escape.
- Ethnic communities have become isolated from wider society as they have maintained their own language and beliefs and limited their interaction with others, leading to segregation.
- Awareness of strategies to manage socio-economic issues such as improved provision of schools, enforcing a living wage, giving access to affordable housing, greater provision of public transport.
- Measures to deal with social variations e.g. health care such as spatial availability of clinics; health education programmes e.g. access to healthy living e.g. sports and leisure facilities.
- Segregation may be reduced by legislation on anti-racism, employment rights and opportunities to combat discrimination, prejudice and racism and encouraging greater political involvement of different cultural groups.
- Issues of cultural diversity: local authorities provide English lessons or bilingual literature. Hospitals cater for specific illnesses and schools may alter their curricula and holiday patterns to cater for different ethnic groups.
- Knowledge and understanding of environmental challenges in urban areas, including atmospheric pollution, water pollution, dereliction and urban sprawl, urban waste disposal.
- Pollution controls on industry and traffic; dealing with legacy of an industrial past - land remediation strategies designed to remove contaminants from the ground; waste related legislation, education and financial incentives; improvements to housing built when standards were lower e.g. heating, damp.
- Water pollution strategies, for instance, may entail construction of water-treatment facilities and wastewater plants; and regulations aimed at 'point source' polluters such as industries, which discharge water pollution into receiving waters or sewer systems that flow into treatment plants.
- Knowledge and understanding of specific government and local strategies designed to manage social and environmental challenges.
- Knowledge and understanding of the different approaches used to tackle socio-economic and environmental issues, partially dependent on national economic context.

AO2

- Management of socio-economic issues may be seen to be more pressing and immediate than environmental problems, although much depends on the nature of the environmental issue. Some environmental challenges may require immediate action, particularly where pollution incidents occur. Credit opposing / balanced view if supported by evidence.
- Evaluation of the effectiveness of strategies to reduce urban inequalities, including cultural segregation and economic inequalities.
- Evaluation of the effectiveness of strategies to tackle cultural diversity issues. Cultural diversity can put extra pressure on stretched urban services. Effectiveness linked to financial investment, prioritisation by decision makers, degree of isolation of different communities and receptivity to strategies adopted.
- Evaluation of effectiveness of strategies to tackle environmental challenges. Most difficult water-quality challenge: dealing with 'non-point source' pollution which is the result of precipitation run-off from chemicals and toxins from urban settlements.

- Analysis of the severity and nature of environmental issues, which will vary between high income and lower income countries. Lack of money and inadequate technology in low income countries has resulted in much lower water quality standards. Effective legislation is often absent and enforcement of pollution controls limited.
- Analysis of urban management in different contexts. In many low income countries management of urban issues is handicapped by lack of capital. Scale of poverty, homelessness, poor infrastructure is much greater, so governments may focus efforts on dealing with socio economic challenges.
- In high income countries, urban management may give greater precedence to environmental challenges, partly due to pressure from local population. There is a strong imperative to give serious attention to environmental challenges because of national and international agreements and targets.
- Overall conclusion may highlight the complexity of urban management strategies. Contemporary sustainable strategies may take account of both socioeconomic and environmental challenges, and consider planning holistically.

Level 4 (16−20 marks)
- Detailed evaluative conclusion that is rational and firmly based on knowledge and understanding which is applied to the context of the question (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 (AO2).
- 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 (AO1).

Level 3 (11−15 marks)
- 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 (AO2).
- 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 (AO1).

Level 2 (6−10 marks)
- 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 (AO2).
- 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 (AO1).
- Some awareness of scale and temporal change which is sometimes integrated where appropriate. There may be a few inaccuracies (AO1).

Level 1 (1−5 marks)

- Very limited and / or unsupported evaluative conclusion that is loosely based upon knowledge and understanding which is applied to the context of the question (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 (AO2).
- Very limited relevant knowledge and understanding of place(s) and environments (AO1).
- Isolated knowledge and understanding of key concepts and processes (AO1).
- Very limited awareness of scale and temporal change which is rarely integrated where appropriate. There may be a number of inaccuracies (AO1).

Level 0 (0 marks)

- Nothing worthy of credit.

AO1 = 10, AO2 = 10

[Total 20 marks]

Q3.

C

AO1 = 1

[Total 1 mark]

Q4.

AO1 − Knowledge and understanding of the factors affecting environmental quality in urban areas. Aware of a range of measures to improve environmental quality as well as the merits of each approach.

AO2 − Application of knowledge in relation to challenges and opportunities. Evaluation should be explicit. Brings together different aspects of environmental quality. Analysis and evaluation shows awareness of the relative merits of each approach. There should be some explicit assessment of the 'extent' to which the statement is accepted.

Notes for answers

AO1

- The impact of urban forms and processes on local climate and weather.
- Urban temperatures: the urban heat island effect. Precipitation: frequency and intensity. Fogs and thunderstorms in urban environments.
- Wind: the effects of urban structures and layout on wind speed, direction and frequency. Air quality: particulate and photo-chemical pollution.
- Pollution reduction policies.
- Issues associated with catchment management in urban areas. The development of sustainable urban drainage systems (SUDS).
- 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.
- Comparison of incineration and landfill approaches to waste disposal in relation to a specified urban area.
- Environmental problems in contrasting urban areas: atmospheric pollution, water pollution and dereliction.

- Strategies to manage these environmental problems.
- Contemporary opportunities and challenges in developing more sustainable cities.
- Strategies for developing more sustainable cities.

AO2

Analysis − Expect to see references to a broad range of initiatives designed to improve environmental quality in cities and make these environments more sustainable than is presently the case:

- Transport measures − cycle ways, greener fuels, urban transport systems such as trams.
- Home fuel − switch to renewables or natural gas.
- Construction − more energy efficient building design − solar power, K glass, etc.
- Waste management − more recycling / less incineration / less landfill.
- Urban conservation and green spaces − encouraging natural habitats to develop link to air quality must be evident.
- Increased use of technology to monitor various environmental quality measures including air quality.

Analysis − Expect to see case studies and other evidence in support. The level of detail and sense of place will be important in differentiating between candidates.

Analysis − Challenges are likely to consider cost, public desire and political will as well as the general viability of measures to improve sustainability. Support is likely to include places where there has been significant success as well as on-going challenges.

Analysis − The response should show an understanding of different aspects of environmental quality. Air, water and land are likely to feature, but some may also extend into the built environmental quality. This is a legitimate approach.

Evaluation − There should be some explicit element which considers the question. For example some may conclude that currently urban living is not sustainable due the deterioration in living conditions for so many people and the unsustainable use of resources / increase of waste / emissions. These issues are causing considerable environmental degradation in urban areas. However there are opportunities which represent solutions to these issues but they came at considerable financial cost in many cases and do not necessarily operate at the required scale as things stand.

Level 4 (16−20 marks)

- Detailed evaluative conclusion that is rational and firmly based on knowledge and understanding which is applied to the context of the question (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 (AO2).
- 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 (AO1).

Level 3 (11−15 marks)

- 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 (AO2).
- 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 (AO1).

Level 2 (6−10 marks)
- 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 (AO2).
- 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 (AO1).
- Some awareness of scale and temporal change which is sometimes integrated where appropriate. There may be a few inaccuracies (AO1).

Level 1 (1−5 marks)
- Very limited and / or unsupported evaluative conclusion that is loosely based upon knowledge and understanding which is applied to the context of the question (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 (AO2).
- Very limited relevant knowledge and understanding of place(s) and environments (AO1).
- Isolated knowledge and understanding of key concepts and processes (AO1).
- Very limited awareness of scale and temporal change which is rarely integrated where appropriate. There may be a number of inaccuracies (AO1).

Level 0 (0 marks)
- Nothing worthy of credit.

AO1 = 10, AO2 = 10

[Total 20 marks]

Q5.

AO1 − Knowledge and understanding of the nature of a range of impacts urban areas have on both local and global environments. Knowledge and understanding of case studies of two contrasting urban areas.

AO2 − Application of knowledge and understanding to assess the negative extent of environmental impacts of urban areas in two contrasting urban areas. Assessment should come to a view about the extent to which the environmental impacts of urban areas are negative.

Notes for answers

AO1
- Environmental impact of urban areas in two contrasting urban areas. Ecological

footprint of urban areas. Dimensions of sustainability: natural, physical, social and economic. Nature and features of sustainable cities. Concept of liveability.
- Environmental problems in contrasting urban areas: atmospheric pollution, water pollution and dereliction.
- Case studies of contrasting urban areas to illustrate and analyse the nature and impact of physical environmental conditions. With particular reference to the implications for environmental sustainability, the character of the urban areas and the experience and attitudes of their populations.
- The impact of urban forms and processes on local climate and weather.
- Urban temperatures: the urban heat island effect. Precipitation: frequency and intensity. Fogs and thunderstorms in urban environments. Wind: the effects of urban structures and layout on wind speed, direction and frequency. Air quality: particulate and photo-chemical pollution.
- Urban precipitation, surfaces and catchment characteristics; impacts on drainage basin storage areas; urban water cycle: water movement through urban catchments.
- The environmental impacts of alternative approaches to waste disposal: unregulated, recycling, recovery, incineration, burial, submergence and trade.

AO2
- Assessment − Expect to see a wide range of approaches to this question however as the focus of the question originates from the 'sustainable urban development' element of the specification, responses will probably assess sustainability in the contrasting urban areas as the focus of their assessment.
- Assessment − Responses should seek to address the extent to which the contrasting urban areas have negative environmental impacts. Impacts may originate from factors such as: transport, energy production / consumption, construction, waste management, urban form, water management, food production / consumption.
- Assessment − Responses should seek to address the nature of the environmental impacts. Impacts are likely to focus on air, water and land, which are all valid.
- Assessment − Responses should seek to address how environmental impacts differ between the urban areas.
- Assessment − Expect clear case study detail in support. The level of detail and assessment of extent to which environmental impacts are negative in the contrasting urban areas will be important in differentiating candidates.
- Assessment − there should be some explicit element which considers the question. For example, some may conclude that the environmental impacts of both urban areas are negative and the areas are not sustainable as urban living automatically has some negative environmental impacts. However, the question seeks to ellicit assessment of which urban area has the most negative environmental impacts. Some may argue that the larger and most rapidly urbanising of the two areas has the greatest negative environmental impacts.
- Any overall conclusion is legitimate as long as there is clear rationale based upon preceding content.

Level 4 (16−20 marks)
- Detailed evaluative conclusion that is rational and firmly based on knowledge and understanding which is applied to the context of the question (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 (AO2).
- 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 (AO1).

Level 3 (11−15 marks)

- 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 (AO2).
- 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 (AO1).

Level 2 (6−10 marks)

- 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 (AO2).
- 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 (AO1).
- Some awareness of scale and temporal change which is sometimes integrated where appropriate. There may be a few inaccuracies (AO1).

Level 1 (1−5 marks)

- Very limited and / or unsupported evaluative conclusion that is loosely based upon knowledge and understanding which is applied to the context of the question (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 (AO2).
- Very limited relevant knowledge and understanding of place(s) and environments (AO1).
- Isolated knowledge and understanding of key concepts and processes.
- Very limited awareness of scale and temporal change which is rarely integrated where appropriate. There may be a number of inaccuracies (AO1).

Level 0 (0 marks)

- Nothing worthy of credit.

AO1 = 10, AO2 = 10

[Total 20 marks]

Q6.

AO1 − Knowledge and understanding of the factors affecting issues of environmental sustainability. Knowledge and understanding of the principles associated with understanding the character of the urban areas and nature and impact of physical environmental conditions on the environmental sustainability.

AO2 − Application of knowledge and understanding to assess a range of issues of

environmental sustainability in contrasting urban areas and to judge how the nature of the physical environmental conditions of each area impact on that sustainability.

Notes for answers

AO1

- The nature and impact of physical environmental conditions with particular reference to the implications for environmental sustainability.
- Urban characteristics in contrasting settings. Physical environmental factors in urban forms − including the shape, size, density and make-up or configuration of settlements. Spatial patterns of land use.
- Impacts of urban forms on local climate and weather − urban micro-climates: the urban heat island, urban precipitation, wind and urban air quality.
- Urban drainage − Issues associated with catchment management in urban areas. The development of sustainable urban drainage systems. River restoration and conservation in damaged urban catchments.
- Environmental problems in contrasting urban areas: atmospheric pollution, water pollution and dereliction.
- Impact of urban areas on local environments. Environmental sustainability. Nature and features of sustainable cities. Concept of liveability.
- Contemporary opportunities and challenges in developing more sustainable cities.
- Strategies for developing more sustainable cities.
- Case studies of two contrasting urban areas illustrating the nature and impact of physical environmental conditions, with particular reference to the implications for environmental sustainability.

AO2

Responses are expected to show an understanding of the impact of the physical environmental conditions on issues of environmental sustainability in contrasting urban areas. There should be clear recognition of the learning from the case studies of two contrasting urban areas from the Contemporary urban environments unit, however reciting learned case study material does not constitute AO2. It is the integration of the two aspects of the question that allows access to AO2.

- Responses will assess the nature of the physical urban environment of the named case studies − this will include an assessment of the physical characteristics that make up their urban form, including the shape, size, density and organisation.
- One issue of environmental sustainability that responses may assess is urban drainage in the contrasting urban areas. Assessment of environmental sustainability issues relating to different aspects of the urban water cycle, including: usage of water in urban areas; water distribution; water treatment; wastewater collection; wastewater treatment. Some will assess issues relating to environmental sustainability associated with river flood management strategies, and / or river restoration and conservation. This will offer opportunities to make comparisons of different river management strategies in the contrasting urban areas, with different decisions affecting the level of environmental sustainability. If issues associated with catchment management in urban areas are raised expect assessment of sustainable urban drainage systems (SUDS) and how attempting to manage drainage in a more natural way impacts on the level of environmental sustainability.
- Expect responses to assess issues of environmental sustainability relating to urban waste and its disposal in the contrasting urban environments. This would allow an assessment of different strategies to manage waste in urban areas, including: landfill sites; incineration; waste reduction; recycling − physical reprocessing, biological reprocessing, recycling of e-waste; water pollution − chemical, thermal, pathogen; dereliction. Assessment could focus on the different environmental sustainability issues raised by these, or on the sustainability issues associated with their management in different urban areas and the overall impact on the level of environmental sustainability.

- Other issues of environmental sustainability that responses could assess may include air quality and atmospheric pollution. Others may assess the impact of urbanisation on surrounding rural areas as cities in some parts of the world continue to expand, which could also include issues relating to impacts of increasing urban populations on other natural resources.

Overall evaluation − The judgements made about the nature of the issues of environmental sustainability will depend on the illustrative examples used as evidence. Ultimately assessment must focus on how any issues of environmental sustainability are affected by the physical environmental conditions and come to a view on the contrasting extent of these in the different urban settings.

Level 4 (16−20 marks)
- Detailed evaluative conclusion that is rational and firmly based on knowledge and understanding which is applied to the context of the question (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 (AO2).
- 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 (AO1).

Level 3 (11−15 marks)
- 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 (AO2).
- 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 (AO1).

Level 2 (6−10 marks)
- 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 (AO2).
- 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 (AO1).
- Some awareness of scale and temporal change which is sometimes integrated where appropriate. There may be a few inaccuracies (AO1).

Level 1 (1−5 marks)
- Very limited and / or unsupported evaluative conclusion that is loosely based upon knowledge and understanding which is applied to the context of the question (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 (AO2).
- Very limited relevant knowledge and understanding of place(s) and environments (AO1).
- Isolated knowledge and understanding of key concepts and processes (AO1).
- Very limited awareness of scale and temporal change which is rarely integrated where appropriate. There may be a number of inaccuracies (AO1).

Level 0 (0 marks)
- Nothing worthy of credit.

AO1 = 10, AO2 = 10

[Total 20 marks]

Q1.

This cross-specification question proved quite challenging, requiring students to link their knowledge of environmental problems in one urban area to the extent to which globalisation was responsible. Many students simply set out AO1 knowledge of environmental problems in their urban area with only passing reference to globalisation. Some students incorrectly used urban microclimates to exemplify environmental problems. The most commonly used urban areas were London and Mumbai. Many students did not note the 'one' in bold and covered two urban areas.

The most effective responses chose one area and then considered the extent to which globalisation contributed to their environmental problems. In these responses, environmental problems often went beyond air pollution, looking at waste disposal and urban sprawl. These were then linked effectively to the role played in causing them such as migration, TNCs and transport. These answers frequently incorporated extent by examining the degree to which other factors were responsible, such as government policies. A few students expressed a considered view that globalisation actually reduced environmental problems as it had provided a solution and increased wealth to deal with the problem.

Clearer geographical thinking would have raised students' performances on this question, for example by considering important geographical concepts such as scale and temporal change in their responses.

Q3.

68% of students scored this mark by shading lozenge C. Those getting the question wrong most often chose option B relating to particulate pollution.

Q5.

Many candidates found this question quite challenging. Whilst 51% did reach Level 3 or higher, only 12% scored in Level 4 and 10% failed to get out of Level 1. Many were confident in their AO1 knowledge and understanding of the characteristics of their two case studies, but often failed to give clear assessment of specific environmental issues or specific attempts at sustainability in these locations. The best answers engaged with the assumption of inevitability suggested in the question. These applied their knowledge and understanding of their case studies to either argue for or against this inevitability. Many came to the view that urban areas are inevitably unsustainable and that they will always pose environmental issues. This approach was valid and could score well if the argument was clearly supported with evidence from their chosen urban areas. A limited number of responses self-penalised by only referring to one urban area. Any scale of urban area was accepted. Some focused on whole cities, e.g. Mumbai, whilst others focused on more local scaled examples, e.g. Dharavi in Mumbai. Either approach was valid. As long as there was some clear difference in some aspect of the chosen case studies, examiners were open to most contrasting places offered by candidates.

It is worth reminding centres that both 20-mark questions will not have direct links to the identified specification content. Students need to be prepared to use their knowledge and understanding of content, concepts and processes. This should then be applied to the context of questions, rather than a narrative approach of reciting learned materials which some more limited responses showed.