Urban environments-2

Name: _____

Class: _____

Date:_____

Time:

Total Marks Available:

Total Marks Archived:

Level: IGCSE Mathematics A

Subject: Geography

Exam Board: Edexcel IGCSE Geography- it is however suitable for use by mathematics student of other boards

Topic: Urban environments -2

Type: Mark Scheme

To be used by all students preparing for Edexcel IGCSE Geography- Students of other Boards may also find this useful

Mark Scheme

Q1.

Question number	Indicative content
	AO3 (4 marks)/AO4 (4 marks) **Marking instructions** Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below. **Indicative content guidance** The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited. Relevant points may include: **AO3** • Urbanisation is the increasing proportion of a countries population living in towns, cities and other urban areas and towns and cities are growing in size in most parts of the world leading to different problems • Of the challenges shown, arguably waste (e.g. ancient sewage systems) and segregation (historic and cultural factors) are most complex and expensive to fix, but they don't affect all places equally. • Even in developed world cities, ensuring there is sufficient transport, sanitation, education, health care, housing and utilities are major obstacles don't to costs, spaces and planning controls • Figure 3c only represents a limited number of challenges that might affect urban areas. These will vary spatially and temporally and have different effects so often can be generalised, as in Figure 3c. • Not all developed world urban areas are experiencing such growth – in fact, some are in population decline. Typically, the reason for this is low-fertility as well as ageing populations and lifestyle choices

	AO4	
	• On Figure 3c, it can be see that there are four groups of challenges • Traffic congestion is linked to problems of managing large cities. • Segregation leads to separation and division of rich and poor • Large cities have problems disposing of their waste in a long term and sustainable way.	

		• The is the problem of people moving from the countryside to urban areas, as well as those who travel on a daily basis.
Level	**Mark**	**Descriptor**
	0	No rewardable material.
Level 1	1–3	• Attempts to apply understanding to deconstruct information but understanding and connections are flawed. An unbalanced or incomplete argument that provides limited synthesis of understanding. Judgements that are supported by limited evidence. (AO3) • Uses some geographical skills to obtain information with limited relevance and accuracy, which supports few aspects of the argument. (AO4)
Level 2	4–6	• Applies understanding to deconstruct information and provide some logical connections between concepts. An imbalanced argument that synthesises mostly relevant understanding, but not entirely coherently, leading to judgements that are supported by evidence occasionally. (AO3) • Uses geographical skills to obtain accurate information that supports some aspects of the argument. (AO4)
Level 3	7–8	• Applies understanding to deconstruct information and provide logical connections between concepts throughout. A balanced, well-developed argument that synthesises relevant understanding coherently leading to judgements that are supported by evidence throughout. (AO3) • Uses geographical skills to obtain accurate information that supports all aspects of the argument. (AO4)

Q2.

Question number	Indicative content
	AO3 (4 marks)/AO4 (4 marks)
	Marking instructions
	Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.
	Indicative content guidance
	The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited. Relevant points may include:
	AO3

- There are a range of environmental challenges facing urban environments in developed countries including: air pollution, waste disposal, energy use, lack of green space.
- High levels of traffic and congestion in city centres leads to increased air pollution. London regularly exceeds the international safety limits for air quality. Air pollution is thought to contribute to respiratory problems. In London it is estimated that 9,000 people die a year due to air pollution.
- Waste is a major issue for urban areas: New York produces around 12,000 tonnes of household waste everyday, as well as 13,000 tonnes with much of this ending up in landfill.
- In addition to the environmental challenges, urban areas also face a range of social and economic challenges which can exacerbate the environmental ones (e.g. demand for health and education services diverting funding that could be used to combat air pollution or waste).

AO4
- Figure 3c indicates there are a range of environmental challenges facing urban areas.
- Figure 3c suggests that the number of vehicles visiting urban centres is a challenge and that to address this there has been a move to limit them.
- Figure 3c suggests that the amount of waste produced in urban area is a challenge and therefore there is a need for increased recycling facilities to be more sustainable.
- Figure 3 suggests air pollution may be leading to increased respiratory problems for urban populations.

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	• Attempts to apply understanding to deconstruct information but understanding and connections are flawed. An unbalanced or incomplete argument that provides limited synthesis of understanding. Judgements that are supported by limited evidence. (AO3) • Uses some geographical skills to obtain information with limited relevance and accuracy, which supports few aspects of the argument. (AO4)
Level 2	4–6	• Applies understanding to deconstruct information and provide some logical connections between concepts. An imbalanced argument that synthesises mostly relevant understanding, but not entirely coherently, leading to judgements that are supported by evidence occasionally. (AO3) • Uses geographical skills to obtain accurate information that supports some aspects of the argument. (AO4)
Level 3	7–8	• Applies understanding to deconstruct information and provide logical connections between concepts throughout. A balanced, well-developed argument that synthesises relevant understanding coherently leading to judgements that are supported by evidence throughout. (AO3) • Uses geographical skills to obtain accurate information that supports all aspects of the argument. (AO4)

Q3.

Question number	Answer	Mark
	AO1 (1 mark) • Idea of different people / groups/ cultures being separated (for some reason) (1) • People forced apart (1) • People living in divided communities (1) Accept any other appropriate response. Allow ideas around exclusion.	(1)

Q4.

Question number	Answer	Mark
	AO2 (1 mark)/AO3 (1 mark) Award 1 mark (AO3) for one piece of evidence and a further 1 mark (AO2) for an appropriate extension, up to a maximum of 2 marks. • The housing in the picture is very high density (1), which is typical of city areas where land values are high (1). • The image shows multiple-storey houses (1), which are likely to house large numbers of people (1). • There is little green space (1), indicating the built-up nature of the area since land values are so high (1). Accept any other appropriate response.	(2)

Q5.

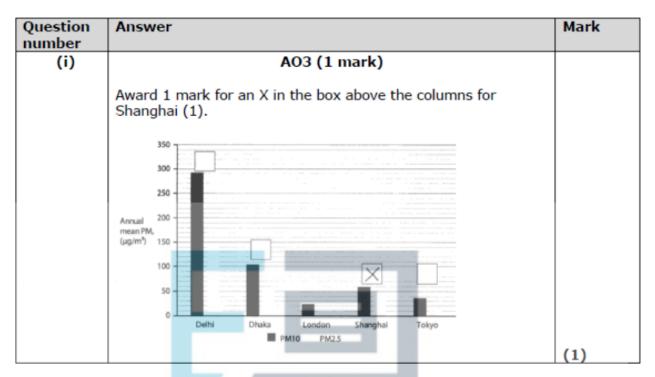| Question number	Answer	Mark
	AO2 (2 +2 marks) Award 1 mark for identification of a factor that can affect land use patterns and an additional 1 mark for development through further explanation or exemplification. • Land value (1) high value land in the CBD for example tends to be used by businesses who can afford the higher rates. • Access to transport routes (1) as many people try to locate either their business or residential areas near efficient transport networks (1). • The amount of space required for an activity (1) business parks tend to be located in a large open area to accomodate all their facilities (1). Accept any other appropriate response.	**(4)**

Q6.

Question Number	Answer	Mark
	AO2 (4 marks) Award 1 mark for identification of each suitable strategy and an additional 1 mark for development through further explanation or exemplification. Maximum 2 marks for each strategy. • Self-help scheme (1) where the local authority provides cheap building materials or loans to make home improvements (1). • Site and service schemes (1) where local people are able to buy a piece of land cheaply to build their own home (1). • Urban planning (1) where the government replaces squatter settlement housing with high-quality high-rise flats (1). • Local governments trying to destroy parts of squatter settlements (1) leaving many people homeless (1).	

| | • NGOs provide aid to reduce poverty (1) through education or provision of training (1).

Accept any other appropriate response. | (4) |

Q7.

Question number	Answer	Mark
(i)	**AO3 (1 mark)** Award 1 mark for an X in the box above the columns for Shanghai (1). 	(1)

Question number	Answer	Mark
(ii)	**AO2 (1 mark)** A Delhi (149) B (Dhaka = 47), C (London = 11) and D (Shanghai = 14) are incorrect as they have a smaller difference.	(1)

Question number	Answer	Mark
(iii)	**AO2 (1 mark)** • Traffic/vehicles/cars (1) • Industry/factories (1) Accept any other appropriate response.	(1)

Q8.

Question number	Answer	Mark
(i)	**AO2 (1 mark) / AO3 (1 mark)** Award 1 mark (AO2) for a reason further mark (AO3) for extension through explanation, up to a maximum of 2 marks: • Land values increase towards the centre as there is more competition for space (1) which means that shops and services are having to pay more money in central locations (1) • Central areas (red and yellow) tend to have high accessibility in terms of public transport (1) which makes them more appealing to both business and people who might want to live in the central area (1). • The lowest footfalls will be in the peripheral (green) zones but these will have lowest values (1) as they tend to be less commercialised so shops will have less walk-in customers (1). Accept any other appropriate response.	(2)

Question number	Answer	Mark
(ii)	**AO1 (2 marks)** A Land for development that was previously used for industry	(1)

Q9.

Question number	Answer	Mark
	AO2 (2 marks)/AO3 (1 mark) Award 1 mark (AO3) for a basic reason for the differences in commuting patterns and a further 2 marks (AO2) for extension through explanation or description, up to a maximum of 3 marks. • In the outer areas there is a predominance of cars (1) because there may be less road congestion and/or limited public transport options (1). People living in these areas might have a further distance to travel into the centre of London for work (1). • Central London has many people cycling/walking (1) due to potentially higher levels of traffic congestion in the central area (1), which would slow down journey times (1). • Central London has many people cycling/walking (1) as they only need to travel a short distance (1), with the bulk of their journey being completed via public transport (1). • In the middle/inner suburbs, public transport is dominant (1). This might be because people need the connectivity of public transport (1) as it still would be too far to walk/cycle into the centre of London (1). Accept any other appropriate response.	(3)

Q10.

Question number	Answer	Mark
	AO1 (1 mark) / (AO3) 2 marks	
	Award 1 mark for an identification of the change taking place and a further 2 marks for explanation of a reason, up to a maximum of 3 marks.	
	• There has been an increase from 0.7m to 2.3m (1) as governments have encouraged lower emissions in cities (1) which means that cars have been taxed so people use bicycles (1).	
	• There has been an increase from 0.7m to 2.3m (1) as people have become frustrated by congestion in cities (1) which means bikes are often the quickest way to get around (1).	
	• There has been an increase from 0.7m to 2.3m (1). Governments incentivised through cheap hire models bicycle usage (1) which means more bikes have been installed to keep up with rising consumer demand (1).	(3)
	Accept any other appropriate response.	

Q11.

Question number	Answer	Mark
	AO2 (2+2 marks) Award 1 mark for a reason and a further expansion mark, up to a maximum of 2 marks each. • Prices of land typically increase towards the city centre (1) therefore only certain land-uses and activities can afford the rents / spaces (1). • Historic reasons such as growth of urban areas next to a river bridging point (1) can means that the core CBD is in a particular / unusual location (1). • Transport routeways and nodes can influence land-use patterns (1) as these offer points of access which means that housing or industry can develop next to points of accessibility (1). Accept any other appropriate response.	
		(4)