## Topic 3

## Contemporary urban environments

This topic examines the processes of urban growth and change and in particular the social and environmental challenges that accompany these processes.

Environmental sustainability and social cohesion are key issues and themes that feature throughout the topic.

#### Urbanisation

gacities world, 2015	
ntage of people living in urban areas around the world	
40%	
48%	
73%	
80%	
82%	
70%	
55%	
ation in different parts of the world as shown	5 ma
	e world, 2015  Intage of people living in urban areas around the world  40%  48%  73%  80%  82%  70%  55%

Annotate Figurand urban resu	re 3.1 which shows the progress	rocesses of suburbanisation, counter-urbanisation , identify the main causes, characteristics
and effects. (A	O1, AO2)	9 ma
	Suburbanisation	Figure 3.1 Diagram showing urban processes: movemen of people, housing and infrastructure in and around urban settlements
		Edge of
88		urban area
CBD I	nner city Suburbs	Outer suburbs Green belt Rural villages
	Urban resurgence	Counter-urbanisation
What is a mega	city? (AO1)	1 m
Examine the rol	e of megacities and work	d cities in global and regional economies.
(AO1, AO2)	or megacines and work	8 mai

	ies, evaluate urban policy a	and regeneration in	

#### Urban forms

Urban form refers to the physical features that characterise built-up areas. These include the shape,

size, density and configuration of land use in urban settlements.

#### Contemporary characteristics

In the space below draw two models of urban morphology, one representing more developed cities and one more typical of less developed cities. (AO1, AO2)

8 marks

Compare the characteristics of cities in high income countries with those in developing parts of the world. (AO1, AO2)		
	the second section of the second section of the second sections that have	
	nce to examples, analyse the physical and human factors that have	
urban areas	spatial patterns of land use, segregation and diversity in contrasting (AO1, AO2)	9 m

#### New urban landscapes

Urban morphology and land use have changed significantly in recent years as a result of economic and social forces and political intervention. This is typified in the UK where many city centres have experienced decline because of the decentralisation of residential

and business areas and the growth of out-of-town retail, business and industrial parks. Strategies have been introduced by central and local government to reverse this decline.

-	naracteristics and account for their development in recent years. (AO1, AO2)	Official
a	Town centre mixed developments	
Ь	Edge cities	
C	Fortress landscapes	
****		
****	3	
****		
	entify some of the key features expected to be seen in a post-modern Western	
	ty. (AO1)	5 mar
		5 mar
		5 marl

# Social and economic issues associated with urbanisation

The key social and economic issues associated with urbanisation are poverty and **economic inequality** 

leading to deprivation, **social segregation** and **cultural diversity**.

	al segregation <i>or</i> cultural diversity as an issud AO2)	e in contrasting
urban areas. (AO1,		10 mar
urban areas. (AO1,	AO2)	(10 mar
urban areas. (AO1,	AO2)	(10 mar
urban areas. (AO1,	AO2)	(10 mar
urban areas. (AO1,	AO2)	(10 mar
urban areas. (AO1,	AO2)	(10 mar
urban areas. (AO1,	AO2)	(10 mar
urban areas. (AO1,	AO2)	(10 mar

#### Urban climate

Urban areas create weather patterns and a distinct localised climate known as a microclimate. Air quality is often poor in many towns and cities. Particulate

matter and photochemical smog are particular problems associated with urban environments.

D	Define what is meant by microclimate. (AO1)		
18	Describe the impact that the urban area has on temperatures compared to surrounding rural areas. (AO1, AO2)		
	surrounding rural areas. (AO1, AO2)	4 mark	

In Table 3.2, outline the reasons for increased frequency and intensity of precipitation, thunderstorms and fogs in urban environments. (AO1, AO2)

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Weather type	Reasons for increased frequency and intensity in urban areas
Precipitation (3 marks)	
Thunderstorms (3 marks)	
(5 Marks)	
_	-
Fog (3 marks)	
xamine the eff	ects of urban structures on wind speed, direction and frequency.
AO1, AO2)	6 ma

## Urban drainage

	area with those of a rural area. (AO1)	(3 mark
Ь	Explain the effects of the catchment characteristics and water usage in urban areas on the urban water cycle. (AO1, AO2)	6 marks
Ev	plain the meaning of 'sustainable urban drainage systems' (SLIDS) and suggest	
	plain the meaning of 'sustainable urban drainage systems' (SUDS) and suggest ethods using SUDS to manage urban catchment areas. (AO1, AO2)	6 mark
m		6 mark

### Urban waste and its disposal

Waste generation and its disposal cause enormous problems for local authorities and urban planners. The problems are predicted to intensify as waste levels increase by around 7% as a global average.

Another important consideration is the relationship between levels of waste and economic development and the importance of individual lifestyles and attitudes. Rapid population growth in low income countries will inevitably increase waste generation. However, the waste produced per person in high income countries is much higher. The amount of waste produced by society is more a function of its wealth and level of consumerism than of its population size.

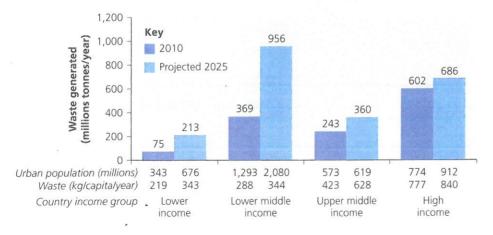
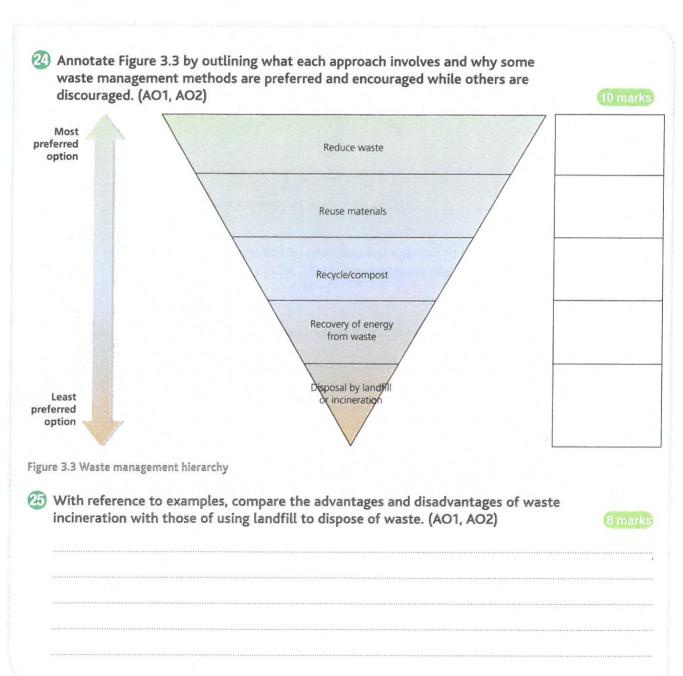


Figure 3.2 Trends in income waste generation

Analyse the trends in waste generation shown in Figure 3.2. (AO2, AO3)	6 marks

There are alternative approaches to waste management. Figure 3.3 shows the waste management hierarchy of different approaches. These are ranked from the most

preferred option in terms of reducing environmental impact to the least preferred.



## Other contemporary urban environmental issues

Explain why dereliction is an issue in some urban areas. (AO1)	5 marks
Examine the causes and consequences of water pollution. (AO1, AO2)	7 mark
Discuss the strategies used to manage the problems of <i>either</i> air pollution or water pollution <i>or</i> dereliction in urban environments. (AO1, AO2)	8 mark

## Sustainable urban development

A **sustainable urban environment** is one providing employment, a high quality of life, a clean, healthy environment and fair governance for all its citizens both now and in the long term. It will have a low ecological footprint and reduced impact on both the surrounding and the global environment.

To consider the sustainability and environmental impacts of major urban areas it is useful to think of the town or city as a system (as shown in Figure 3.4) with inputs from both local and global sources and with outputs which are released from the city into the local and global environment.

- a Annotate the diagram shown in Figure 3.4(a) to suggest inputs that might be taken into the urban area from local or global sources and outputs that are released into the surrounding or global environment. (AO1, AO2)

b Annotate the diagram shown in Figure 3.4(b) to suggest how the inputs might be adjusted and to outline the loops out and back into the more sustainable city. (AO1, AO2)





#### (b) More sustainable city/urban environment



Figure 3.4 The urban area as a system

	neant by the concep			4 marks
With reference to sustainable cities		he strategies that	are used to develop	o more 10 mark

#### Exam-style questions (AS, Paper 1)

What is photo-chemical pollution? Circle the correct answer. (AO1)

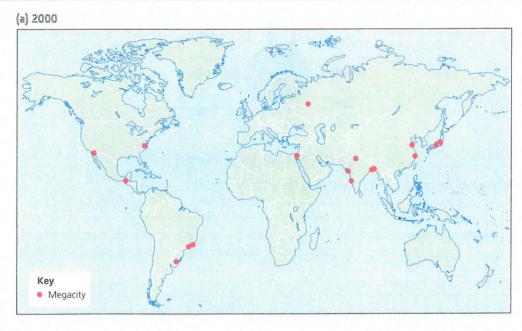


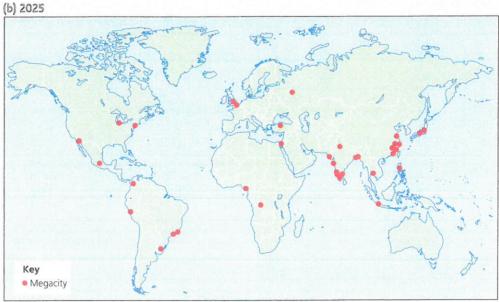


- A Pollution found in cities as a result of sunlight reacting with nitrogen oxides and other hydrocarbons from vehicle exhaust fumes resulting in the production of ozone
- B A name for the pollution found above an urban area resulting from the mix of different chemical gases emitted into the atmosphere from the city
- C A type of air pollution resulting from tiny particles of solid or liquid matter suspended in the atmosphere
- D A type of water pollution resulting from chemical effluents leaking into drainage systems from industrial premises
- 2 Outline reasons for urban resurgence. (AO1)



3 marks





Figures 3.5 Distribution of megacities, 2000-2025 (predicted)

2000 and 2025 as shown in Figure 3.5. (AO2, AO3)	(6) (6 mar
Analyse the impacts of deindustrialisation on urban areas. (AO1, AO2)	9 mark
'River restoration and conservation in damaged urban catchments will enhand environmental quality as well as improve urban drainage.' With reference to a specific project, discuss this statement and evaluate the project outcomes.	e

#### Exam-style questions (A-level, Paper 2)

(AO1) What are the key features of counter-urbanisation? Circle the correct answer.





- A During the 1950s and 1960s large-scale construction of council housing took place on the suburban fringe.
- B One of the negative effects of counter-urbanisation is that it creates urban sprawl as it infringes on areas of the green belt.
- Counter-urbanisation leads to the social, economic and structural regeneration of the urban area following a period of decline.
- Counter-urbanisation affects the layout of rural settlements as modern, mainly private housing estates are built on the edge of small settlements.

Analyse the trends in urbanisation between 1950 and 2050 (predicted) shown in Figure 3.6. (AO2, AO3)





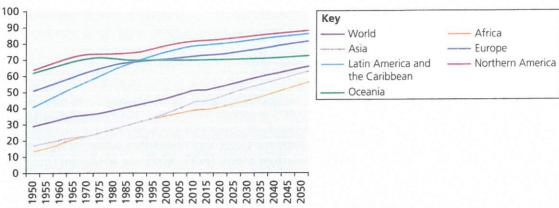


Figure 3.6 Levels of urbanisation in different continents, 1950-2050 (predicted)

Assess the extent to which the urban heat island effect is a problem in urban areas. (AO1, AO2)





(1) 'Strategies to manage social and economic issues in urban areas are more challenging than those strategies used to manage environmental problems.' How far do you agree with this view? (AO1, AO2)

(25)



Write your answer on a separate sheet of paper.