

6.11 Challenges of Urban Sustainability

Name: _____ Class: _____ Date: _____ **Total: 10 marks**

KEY WORDS challenges of urban sustainability 城市可持续性的挑战 • climate change 气候变化
• sprawl 城市蔓延 • informal settlements 非正规住区

Objective

Build the skills to answer exam questions on **challenges of urban sustainability** 城市可持续性的挑战.

You must be able to:

- explain how sprawl harms sustainability
- explain sanitation and housing-affordability challenges
- link cities to **climate change** 气候变化
- state one sustainable solution

1 Worked examples

Study these first. Each one shows the method for a task used later.

■ Sprawl and services

Sprawl raises car use, emissions, and the cost of extending water, power, and transit, while covering farmland and habitat.

■ Sanitation and housing

Fast-growing cities can struggle to supply clean water and **sanitation**, and rising demand makes **housing** unaffordable, forcing informal settlements.

■ Climate and solutions

Cities produce most greenhouse-gas emissions. Solutions include public transit, green building, denser smart growth, and affordable housing.

2 Practice

2.1 Explain how urban sprawl harms sustainability. [2]

2.2 State two challenges a fast-growing city faces in providing for residents. [2]

2.3 A booming city has spreading informal settlements without proper sanitation.

(a) State one health risk this creates. [1]

(b) State one sustainable response. [1]

3 Exam-style questions

3.1 A major sustainability problem caused by urban sprawl is [1]

- **A** less driving
- **B** higher car use and emissions
- **C** cheaper services
- **D** protected farmland

3.2 A sustainable response to unaffordable city housing is to [1]

- **A** ban all building
- **B** build affordable, denser housing near transit
- **C** expand low-density sprawl
- **D** remove sanitation

3.3 Cities produce most of the world's greenhouse-gas emissions.

(a) State one reason cities emit so much.

[1]

(b) State one policy to cut a city's emissions.

[1]

Solutions

2.1 it increases driving/emissions and the cost of services; it consumes farmland and habitat.

2.2 any two of: clean water/sanitation, affordable housing, transit, waste, power.

2.3 (a) spread of disease from poor water/sanitation. (b) invest in water/sanitation, affordable formal housing, upgrading.

3.1 B. sprawl increases driving and emissions.

3.2 B. affordable dense housing near transit is a sustainable fix.

3.3 (a) concentrated transport, energy use, industry, and buildings. (b) public transit, green buildings, renewable energy, smart growth.