



**Raven, Berg, Hassenzahl: Environment, 7th Edition**  
**Chapter 10 Urbanization**

1. Which event(s) corresponded with a rapid increase in the population growth rate of Las Vegas, NV?
- a) the end of World War II
  - b) completion of the trans-continental railroad
  - c) construction of Hoover Dam
  - d) recent climate change
  - e) all of these

Ans: c

Difficulty: Easy

**Response:**

Chapter Opener; 10.0

2. Which of the following problems is commonly shared by cities in both highly developed and developing countries?
- a) lack of adequate medical facilities
  - b) lack of adequate clean water
  - c) lack of adequate technology
  - d) lack of adequate schools
  - e) lack of adequate shelter

Ans: e

Difficulty: Easy

**Response:**

Urbanization Trends; 10.1.2

3. Mexico City:
- a) is representative of urbanization in a developing country
  - b) is a good example of a megacity
  - c) was one of the 10 largest cities in the world in 2005
  - d) had a population of 19.4 million in 2005
  - e) all of these

Ans: e

Difficulty: Easy

**Response:**

Urbanization Trends; 10.1.2



4. What percentage of the U.S. population lives in cities?

- a) 25%
- b) 50%
- c) 79%
- d) 85%
- e) 100%

Ans: c

Difficulty: Easy

**Response:**

Population and Urbanization; 10.1

5. Urbanization:

- a) is growing more quickly in developing countries than in developed countries
- b) currently accounts for housing about 75% of the global population
- c) results in fewer employment opportunities in developed countries as compared to rural areas
- d) refers to the migration of city people to the country to enjoy country living
- e) describes a grouping of 10,000 or more individuals

Ans: a

Difficulty: Easy

**Response:**

Urbanization Trends; 10.1.2

6. The young age structure of urban areas can be attributed to:

- a) high birth rates in urban areas
- b) influx of young people from rural areas
- c) high death rates in urban areas
- d) the presence of more females than males in urban areas
- e) shortened life expectancy of urban dwellers

Ans: b

Difficulty: Easy

**Response:**

Characteristics of the Urban Population; 10.1.1



7. Unlike people who live in urban areas, people who live in rural areas:
- a) are employed in occupations which involve industrial labor
  - b) are far more heterogeneous with respect to race
  - c) are far more heterogeneous with respect to religion
  - d) are generally younger than those in the surrounding cities
  - e) are employed in occupations which involve harvesting natural resources

Ans: e

Difficulty: Easy

**Response:**

Population and Urbanization; 10.1

8. What characteristic defines a megacity?
- a) a city that has more than 1 million inhabitants
  - b) a city that grows by approximately 1,000 new immigrants each day from overpopulated rural areas
  - c) a cluster of small or medium-sized cities, each with population of less than 1 million
  - d) a suburban sprawl of developed suburbs
  - e) a city that has over 100 high-rise buildings

Ans: a

Difficulty: Easy

**Response:**

Urbanization Trends; 10.1.2

9. The process in which people increasingly move from rural areas to densely populated cities is termed:
- a) high density accommodation
  - b) rural redistribution
  - c) urbanization
  - d) metropolitan relocation
  - e) municipality magnetism

Ans: c

Difficulty: Easy

**Response:**

Population and Urbanization; 10.1



10. Urban ecologists study urban trends and patterns in the context of four variables (POET) referring to:
- a) pollution, opportunity, emigration, and transportation
  - b) population, organization, environment, and technology
  - c) pain & suffering, overt crime rate, employment, and trades
  - d) poverty, overcrowding, education, and traffic
  - e) politics, options, ecosystems, and travel

Ans: b

Difficulty: Easy

**Response:**

The City as an Ecosystem; 10.2

11. Sustainable urban development ideally involves:
- a) green space
  - b) recycling
  - c) urban farmers
  - d) solar energy
  - e) all of these

Ans: e

Difficulty: Easy

**Response:**

Making Cities More Sustainable; 10.4

12. A patchwork of vacant and developed tracts around the edges of cities that contain a low population density is considered:
- a) smart growth
  - b) sustainable development
  - c) green architecture
  - d) suburban sprawl
  - e) compact development

Ans: d

Difficulty: Easy

**Response:**

Suburban Sprawl; 10.3.2



13. All of the following are considered a part of a city's infrastructure *except*:
- a) roads
  - b) department stores
  - c) garbage trucks
  - d) prisons
  - e) water treatment plants

Ans: b

Difficulty: Easy

**Response:**

The City as an Ecosystem; 10.2

14. What is gentrification?
- a) The movement of wealthier people back to older, run-down homes that have been renovated.
  - b) The remaining of people in the city and older suburbs who find themselves the victims of declining property values and increasing isolation from suburban jobs.
  - c) The movement of more affluent citizens to the suburbs to avoid the noise and pollution of inner cities.
  - d) The remaining of people in the inner city because of prejudice encountered when they seek to move out to suburban neighborhoods.
  - e) The movement of people to the suburbs to pay less in terms of taxes but more in terms of transportation costs.

Ans: a

Difficulty: Easy

**Response:**

Urban Land Use Planning; 10.3

15. Transportation has affected the spatial structures of cities because:
- a) as cities grow, a grid must be maintained for street development
  - b) as cities grow, a plan must be in place to evenly distribute the accumulation of heat from automobile use
  - c) as cities grow, they expand along public transportation routes
  - d) as cities grow, they expand in the direction of waterways
  - e) as cities grow, the dependence on transportation is lessened

Ans: c

Difficulty: Easy

**Response:**

Transportation and Urban Development; 10.3.1



16. Designing and constructing buildings that are made of recycled materials, and are energy efficient and economical, is a trend called:
- a) friendly construction
  - b) green architecture
  - c) environmental building
  - d) passive design
  - e) ecology construction

Ans: b

Difficulty: Easy

**Response:**

Making Cities More Sustainable; 10.4

17. In 2005 \_\_\_\_\_ was the fifth largest city in the world with 18.2 million people. By 2015, this city's population is projected to be 21.9 million, which will make it the second largest city in the world.
- a) Mumbai (Bombay), India
  - b) Mexico City, Mexico
  - c) Calcutta, India
  - d) Shanghai, China
  - e) New York, U.S.A.

Ans: a

Difficulty: Easy

**Response:**

Urbanization Trends; 10.1.2

18. A program in Curitiba, Brazil which pays bus tokens, surplus food, or school supplies for filled garbage bags is:
- a) Trash to Treasure Program
  - b) Rubbish Reward Program
  - c) Debris Barter Program
  - d) Garbage Purchase Program
  - e) Waste Watchers Program

Ans: d

Difficulty: Easy

**Response:**

Case-in-Point Curitiba, Brazil; 10.4.1

19. A brownfield is an urban area of:
- a) vacant house lots that are overgrown with weeds and vegetation
  - b) parking lot pavement that collects heat during the day and emits heat at night
  - c) meadows that are earmarked for industrial development
  - d) sports arenas for baseball, football, and soccer
  - e) abandoned, vacant factories, warehouses, and residential sites that may be contaminated from past uses

Ans: e

Difficulty: Easy

**Response:**

Environmental Problems Associated with Urban Areas; 10.2.2

20. The National Science Foundation has two long-term research (LTER) sites (Baltimore and Phoenix) to gather information on:
- a) interactions among humans in urban settings
  - b) the ecological effects of humans on their urban environment
  - c) the effects of natural disasters on plant and animal populations
  - d) public awareness of environmental policy decisions
  - e) the flow of money into and out of the urban region

Ans: b

Difficulty: Easy

**Response:**

Phoenix, Arizona: Long-Term Study of an Urban Ecosystem; 10.2.1

21. All of the following are negative effects of prolonged exposure to noise pollution *except*:
- a) hearing damage
  - b) increased blood pressure
  - c) increased frequency of heart disease
  - d) psychological stress
  - e) all of these can be caused by prolonged exposure to noise pollution

Ans: e

Difficulty: Easy

**Response:**

Environmental Problems Associated with Urban Areas; 10.2.2

22. All of the following historical events have led to movement of people into cities *except*:
- 1) development of agriculture
  - 2) the American Revolution
  - 3) the Industrial Revolution
  - 4) a search for jobs associated with natural resource extraction
- a) 1
  - b) 2
  - c) 3
  - d) 4
  - e) Both 2 and 4

Ans: e

Difficulty: Medium

**Response:**

Population and Urbanization; 10.1

23. Which of the following statements regarding urbanization trends is true?
- a) As of 2008, 75% of the world's population lives in urban areas for the first time in history.
  - b) Currently, most urban growth in the world is occurring in developing countries.
  - c) Cities in developing nations tend to have more females while cities in highly developed countries often have a higher ratio of males to females.
  - d) Urbanization in developed countries is increasing at a more rapid rate than in developing countries.
  - e) According to the United Nations, there are almost 100 cities worldwide with a population of at least 1 million inhabitants.

Ans: b

Difficulty: Medium

**Response:**

Urbanization Trends; 10.1.2

24. Compact development benefits the environment in all of the following ways *except*:
- a) reversing the trend towards urbanization
  - b) reducing air pollution
  - c) preserving rural areas
  - d) utilizing brownfields, rather than natural habitats, for further development
  - e) minimizing the reliance on personal motor vehicles

Ans: a

Difficulty: Medium

**Response:**

Environmental Benefits of Urbanization; 10.2.3



25. Which of the following statements concerning urbanization is *not* correct?
- a) Urban and rural areas often have different proportions of males and females.
  - b) To urban ecologists, technology refers to human inventions that directly affect the urban environment.
  - c) Most workers in cities in the United States have to commute only one or two miles from home to work.
  - d) Growing urban areas impact land-use patterns and water drainage.
  - e) Factories and commercial enterprises in urban areas cause a buildup of airborne emissions.

Ans: c

Difficulty: Medium

**Response:**

Environmental Problems Associated with Urban Areas; 10.2.2

26. Many major U.S. cities face similar problems. They include all of the following *except*:
- a) traffic congestion
  - b) suburban sprawl
  - c) urban renewal forcing the poor out of neighborhoods
  - d) compact development
  - e) school funding issues

Ans: d

Difficulty: Medium

**Response:**

Environmental Problems Associated with Urban Areas; 10.2.2

27. Curitiba's improved living conditions and decreasing environmental impact come from all of the following *except*:
- a) a Garbage Purchase program
  - b) development of an extensive series interconnected parks
  - c) development of inexpensive, efficient mass transit
  - d) sharply curtailed population growth
  - e) cleaner air

Ans: d

Difficulty: Medium

**Response:**

Case in Point: Curitiba, Brazil; 10.4.1



28. Currently the percentage of people living in cities, compared with rural settings, in highly developed countries is \_\_\_\_\_ than that in developing countries.
- a) less than
  - b) greater than
  - c) the same as
  - d) rapidly increasing while slowing
  - e) stagnant while slowing

Ans: b

Difficulty: Medium

**Response:**

Urbanization Trends; 10.1.2

29. Urban heat islands affect local air current and weather conditions including:
- 1) increased number of thunderstorms over cities in summer months
  - 2) lingering dust domes over cities
  - 3) stronger natural disasters such as earthquakes and hurricanes
  - 4) extreme cold temperatures in the winter and record setting heat in summer
- a) 1
  - b) 2
  - c) 3
  - d) 4
  - e) Both 1 and 2

Ans: e

Difficulty: Medium

**Response:**

Environmental Problems Associated with Urban Areas; 10.2.2

30. Portland, Oregon provides a good example of compact development because:
- a) land-use policies are in place
  - b) immigration is regulated through sponsorship
  - c) automobiles are no longer used for transportation within city limits
  - d) birth control measures are mandated by the city government
  - e) brownfields are transformed into green space

Ans: a

Difficulty: Medium

**Response:**

Environmental Benefits of Urbanization; 10.2.3



31. What do brownfields have in common with dust domes?
- a) both are environmental problems associated with rural areas
  - b) both are environmental problems associated with previous chemical contamination
  - c) both are environmental problems associated with the buildup of pollution
  - d) both are environmental problems associated with urban areas
  - e) both are environmental problems associated with high temperatures

Ans: d

Difficulty: Medium

**Response:**

Environmental Problems Associated with Urban Areas; 10.2.2

32. What is one way in which urban areas in developing nations differ from urban areas in highly developed nations?
- a) urban areas in developing nations have more females than males than urban areas in highly developed nations
  - b) urban areas in developing nations have a greater percentage people living in cities than urban areas in highly developed nations
  - c) urban areas in developing nations have the worst air pollution in the world, including urban areas in highly developed nations
  - d) urban areas in developing nations are growing at a slower rate than urban areas in highly developed nations
  - e) urban areas in developing nations have fewer "top 10 largest cities" than urban areas in highly developed nations

Ans: c

Difficulty: Medium

**Response:**

Urbanization Trends; 10.1.2

33. Which of the following does *not* represent a "green architecture" feature?
- a) triple-pane windows
  - b) motion sensors linked to lights in classrooms
  - c) geothermal energy for heating and cooling
  - d) using recycled water in toilets
  - e) none of these, all are green architectural features

Ans: e

Difficulty: Medium

**Response:**

Making Cities More Sustainable; 10.4.



34. According to a study from Columbia University and the International Institute for Environment and Development, what percentage of all cities with populations of 5 or more million people are vulnerable to the risks of climate change?
- a) 10%
  - b) 20%
  - c) 33%
  - d) 50%
  - e) 66%

Ans: e

Difficulty: Easy

**Response:**

Case in Point: Curitiba, Brazil; 10.4.1

35. What is a valid conclusion given the following data?

|   | Developing Countries             | Highly Developed Countries       |
|---|----------------------------------|----------------------------------|
| Percentage of urban inhabitants in 2004 | 44%                              | 74%                              |
| Gender of urban inhabitants             | Higher ratio of males to females | Higher ratio of females to males |
| Rate of urban growth                    | High                             | Low                              |
| Challenges of urban development         | High                             | High                             |
| Megacities                              | Many                             | Many                             |

- a) Urbanization of developing countries is better than that of highly developed countries.
- b) Urbanization is a worldwide phenomenon.
- c) Females prefer urban living.
- d) Cities in highly developed and developing countries have exactly the same challenges.
- e) Megacities are an artifact of highly developed countries.

Ans: b

Difficulty: Medium

**Response:**

Urbanization Trends; 10.1.2



36. \_\_\_\_\_ is an excellent example of a city with rapid spread of urban sprawl while \_\_\_\_\_ is a good example of a city that avoided the problem of suburban sprawl.
- a) Curitiba, Brazil / Tokyo, Japan
  - b) New York, NY / Calcutta, India
  - c) Mexico City, Mexico / Mumbai (Bombay), India
  - d) The Greater Atlanta area, GA / Portland, OR
  - e) Chicago, IL / The Greater Atlanta area, GA

Ans: d

Difficulty: Medium

**Response:**

Suburban Sprawl; 10.3.2 and Environmental Benefits of Urbanization; 10.2.3

37. Land use in many cities is based on economic concerns. Which urban area would be charged the highest taxes?
- a) residential property nearest the central business district
  - b) the central business district
  - c) land-intensive businesses
  - d) residential property in the suburbs
  - e) infrastructure property such as schools, prisons, & water treatment plants

Ans: b

Difficulty: Medium

**Response:**

Urban Land Use Planning; 10.3

38. What effect would zoning have on an individual who wants to build and operate a five-story department store above their garage?
- 1) The individual could operate a commercial business in a residential neighborhood as long as all of the homes were zoned as shopping centers.
  - 2) The individual could operate a commercial business over the garage because he owns the land zone below.
  - 3) The individual could not operate a commercial business on his residence because zoning restricts areas to specific land uses – commercial, residential or industrial
  - 4) The individual could not build a five-story store on his residence because zoning ordinances regulate building height among other things.
- a) 1
  - b) 2
  - c) 3
  - d) 4
  - e) Both 3 and 4

Ans: e

Difficulty: Medium

**Response:**

Urban Land Use Planning; 10.3

39. What do the cities of Tokyo-Yokohama-Osaka-Kobe represent in Japan?

- 1) home to 50 million people
  - 2) the 4 largest cities in a developing country
  - 3) small or medium-sized cities with populations of less than 1 million
  - 4) an urban agglomeration
- a) 1
  - b) 2
  - c) 3
  - d) 4
  - e) Both 1 and 4

Ans: e

Difficulty: Medium

**Response:**

Urbanization Trends; 10.1.2

40. What is required in order for a location to be considered a “city”?

- a) the answer varies from country to country
- b) a high incidence of homelessness
- c) a population of 10 million residents or more
- d) a climate that supports outdoor activities year round
- e) certain traits such as high socio-economic levels and a population of similar ethnicity

Ans: a

Difficulty: Medium

**Response:**

Population and Urbanization; 10.1

41. Which of the following are *not* environmental problems commonly associated with urban areas?

- a) brownfields
- b) compact development
- c) dust domes
- d) urban heat islands
- e) all of these

Ans: b

Difficulty: Easy

**Response:**

Environmental Problems Associated with Urban Areas; 10.2.2



42. Which of the following terms is used to describe an urbanized core region that consists of several adjacent cities or megacities and their surrounding developed suburbs?
- a) brownfield
  - b) suburban agglomeration
  - c) county
  - d) urban agglomeration
  - e) none of these

Ans: d

Difficulty: Easy

**Response:**

Urbanization Trends; 10.1.2

43. Which of the following statements is *not* true about cost differences between urban and suburban areas?
- a) People in “central business districts” of cities typically pay higher taxes.
  - b) People in suburbs often pay less in transportation costs.
  - c) People in suburban areas typically pay higher taxes.
  - d) The less affluent seek housing away from the city to avoid high taxes.
  - e) none of these

Ans: d

Difficulty: Medium

**Response:**

Urban Land Use Planning; 10.3

44. Which of the following is true regarding the susceptibility of large cities (population size above 5 million) to damage caused by global climate change?
- a) they are not vulnerable, because they are protected by extensive infrastructure
  - b) they are extremely vulnerable, because of their close proximity to coastlines
  - c) they are not vulnerable, because many of them are located in the northern hemisphere
  - d) they are extremely vulnerable, because many of them are located in arid climates
  - e) they are not vulnerable, because most of them are located in areas forecasted to experience little, if any, future change in climate

Ans: b

Difficulty: Medium

**Response:**

Case in Point: Curitiba, Brazil; 10.4.1



45. What factors have contributed to the economic disparity between older neighborhoods and suburbs?
- 1) declining inner-city property values
  - 2) gentrification
  - 3) relocation of jobs to suburban areas
- a) 1
  - b) 2
  - c) 3
  - d) Both 1 and 3
  - e) All of these

Ans: d

Difficulty: Medium

**Response:**

Suburban Sprawl; 10.3.2