

Urban Planning and the Natural World

Urban Planning · Answer Key · 10 Questions

1. Which type of urban green space is most effective at supporting pollinator populations, such as bees and butterflies?

- A) Large, manicured lawns with limited floral diversity.
- B) Dense, exotic tree plantations.
- C) Native wildflower meadows and gardens.**
- D) Uniformly paved plazas with scattered potted plants.

2. What is a primary ecological benefit of incorporating green roofs in urban environments?

- A) Increased urban heat island effect due to plant transpiration.
- B) Improved insulation for buildings, reducing energy consumption and stormwater runoff.**
- C) Creation of artificial habitats for invasive insect species only.
- D) Reduced biodiversity by favoring only a few hardy plant species.

3. The concept of 'wildlife corridors' in urban planning refers to:

- A) Designated pedestrian pathways through parks.
- B) Underpasses or overpasses that allow animals to safely cross roads and other human-made barriers.**
- C) Areas specifically for viewing wildlife from afar.
- D) Sections of the city with the highest density of animal shelters.

4. Which of the following is a common method used in urban planning to mitigate the impact of urban development on aquatic ecosystems?

- A) Directing all urban runoff into the nearest river without treatment.
- B) Increasing the impervious surface area to channel water faster.
- C) Implementing green infrastructure like rain gardens and permeable pavements to manage stormwater.**
- D) Building artificial canals to increase water flow through urban areas.

5. What is 'biophilic design' in urban planning?

- A) Designing cities solely for industrial purposes.
- B) Incorporating natural elements and processes into the built environment to improve human well-being and ecological health.**
- C) Creating enclosed, climate-controlled urban spaces.
- D) Focusing on infrastructure that exclusively supports vehicular traffic.

6. Street trees in urban areas primarily contribute to environmental health by:

- A) Increasing air pollution through respiration.
- B) Reducing the urban heat island effect, absorbing air pollutants, and managing stormwater.**
- C) Providing nesting sites for exclusively non-native bird species.
- D) Significantly decreasing the amount of available sunlight in residential areas.

7. What is a 'bioswale' in the context of urban planning?

- A) A rigid concrete channel designed for rapid water drainage.
- B) A vegetated channel or depression designed to manage stormwater runoff by filtering and slowing it down.**
- C) An elevated walkway for pedestrians that avoids all natural areas.
- D) A densely packed residential zone with minimal green space.

8. The concept of 'urban forestry' in planning emphasizes:

- A) The removal of all trees to make way for buildings.
- B) The strategic planting, management, and care of trees within urban environments for their ecological and social benefits.**
- C) Focusing only on fast-growing, ornamental tree species.
- D) Confining trees to private gardens and removing them from public spaces.

9. Which urban planning strategy helps to reduce light pollution, benefiting nocturnal wildlife?

- A) Using unshielded, high-intensity floodlights across all public areas.
- B) Installing upward-facing light fixtures with broad beams.
- C) Implementing shielded, downward-facing light fixtures with motion sensors and appropriate color temperatures.**
- D) Maximizing the number of brightly lit streets and buildings throughout the night.

10. In urban planning, what is the significance of preserving and restoring wetlands within city limits?

- A) They are primarily developed for commercial real estate.
- B) They serve as critical habitats for diverse wildlife and help in natural water filtration and flood control.**
- C) They are seen as unusable land requiring immediate drainage and development.
- D) Their main purpose is to increase the mosquito population for ecological balance.