

Civil Engineering and Human Health

Civil Engineering · Answer Key · 15 Questions

1. Which essential human intake requirement is the primary focus of civil engineering water treatment plants?

- A) Oxygen
- B) Potable water**
- C) Sunlight
- D) Carbon dioxide

2. What component of a building's design is essential to prevent the accumulation of carbon dioxide and maintain indoor air quality for occupants?

- A) Ventilation systems**
- B) Decorative carpeting
- C) Wall thickness
- D) Door color

3. Civil engineers design waste management systems primarily to protect public health by preventing the spread of what?

- A) Waterborne diseases**
- B) Common colds
- C) Muscle fatigue
- D) Eye strain

4. Which structural feature in public buildings is designed to assist people with mobility impairments in moving between floor levels?

- A) High ceilings
- B) Ramps**
- C) Heavy doors
- D) Glass windows

5. Civil engineers design foundations to resist seismic forces, primarily to prevent building collapse and ensure the safety of what?

- A) Human lives**
- B) Furniture longevity
- C) Soil quality
- D) Bird migration

6. In urban planning, the design of sidewalks and pedestrian paths is intended to encourage which physical human activity?

A) Walking

B) Sleeping

C) Swimming

D) Weightlifting

7. What do civil engineers design in hospitals to ensure that the interior environment remains stable and promotes patient recovery?

A) Climate control systems

B) Bright wall paint

C) Soft carpeting

D) Wooden fences

8. The primary health benefit of designing effective storm drainage systems is the prevention of what?

A) Building floods

B) Excessive sunshine

C) Lack of oxygen

D) Noise pollution

9. Bridge design involves load-bearing calculations to ensure human safety during what type of transit?

A) Traffic movement

B) Sky gazing

C) Plant growth

D) Animal grazing

10. What structural element is installed in tall buildings to provide a safe exit for occupants during an emergency, such as a fire?

A) Stairwells

B) Decorative statues

C) Kitchenettes

D) Storage closets

11. Sanitary sewers are engineered to remove waste from human environments, which helps prevent the breeding of what?

A) Harmful bacteria

B) Common house plants

C) Healthy fish

D) Domestic cats

12. Which type of building material is often used in civil engineering to help block excessive noise, which protects human auditory health?

A) Sound-insulating materials

- B) Glass panels
- C) Thin plastic sheets
- D) Open wooden slats

13. The structural inclusion of handrails on stairs is a civil engineering safety standard designed to prevent what?

A) Falls

- B) Fatigue
- C) Dehydration
- D) Sunburn

14. Building codes set by civil engineering standards often require natural light sources, which are known to improve human what?

A) Circadian rhythms

- B) Hair growth
- C) Tooth enamel
- D) Finger strength

15. Civil engineering projects involving park design aim to provide green spaces, which are proven to reduce human levels of what?

A) Stress

- B) Muscle mass
- C) Bone density
- D) Water intake