

2 BUILDINGS AND FACILITY LAYOUT

QUIZ 1 (20 POINTS TOTAL)

True/False (6 points)

1. Most local ordinances do not require governmental authorities to review and approve building plans for emergency exits.
 - a. true
 - b. false

2. Government building codes establish a minimum safety requirement that is adequate for all situations.
 - a. true
 - b. false

3. A parking lot surface should be smooth and hard.
 - a. true
 - b. false

4. Proper treatment and disposal of waste materials requires specialized training.
 - a. true
 - b. false

5. All industrial facility railways must comply with the regulations of the Federal Railroad Administration (FRA).
 - a. true
 - b. false

6. A “dead man control” should be used in battery-powered locomotives.
 - a. true
 - b. false

Multiple Choice (6 points)

7. _____ should be designed to minimize building heat and cooling losses.
 - a. Enclosures
 - b. Shipping and receiving
 - c. Walkways
 - d. Trestles

8. Hauling by heavy-duty trucks requires roadways up to _____ wide for two-way traffic.
 - a. 15 ft
 - b. 20 ft
 - c. 50 ft
 - d. none of the above

15. In addition to enclosing a piece of property, what are the other uses for fences at a facility?

16. What are the advantages and disadvantages of angled parking?

17. State and local laws regulate the proper disposal of waste materials. How should a facility handle chemical waste? Combustible materials?

18. Toxic smoke, fumes, or dust is a serious problem in some industries. Tall stacks are used to diffuse gases in the atmosphere. What factors determine the effectiveness of such measures?

19. What is the definition of a confined space? What dangers are inherent?

Short Essay (1 point)

20. Hector Ortega is responsible for scouting out potential sites for his company's new corporate headquarters. What factors must he consider?

QUIZ 2 (18 POINTS TOTAL)

True/False (5 points)

1. The direction the wind blows can be considered a factor when designing new structures.
 - a. true
 - b. false

2. Parking lots are best located inside a facility's fence.
 - a. true
 - b. false

3. An increased percentage of direct light generally results in a more glare-free and comfortable environment.
 - a. true
 - b. false

4. The use of green lessens a worker's psychological response to noise.
 - a. true
 - b. false

5. In high-hazard building occupancy, all areas of a building should be 75 ft or closer to an exit.
 - a. true
 - b. false

Multiple Choice (6 points)

6. ____ glare is caused by a source of light within the field of vision.
 - a. Direct
 - b. Reflected
 - c. Discomfort
 - d. Disability

7. ____ glare is glare that reduces visual performance and visibility and that is accompanied by discomfort.
 - a. Direct
 - b. Reflected
 - c. Discomfort
 - d. Disability

8. Color preference studies show that men prefer the color ____.
 - a. red
 - b. blue
 - c. green
 - d. orange

9. According to the OSHA and ANSI Safety Color Code Corporate Colors, _____ is used to designate dangerous equipment, i.e., parts of machines and equipment that may cut, crush, shock, or otherwise injure.
- a. red
 - b. orange
 - c. yellow
 - d. green
10. _____ is defined as how light or dark a color is.
- a. Value
 - b. Intensity
 - c. Hue
 - d. Saturation
11. NFPA 101, Life Safety Code, generally requires that _____ exits be provided on each floor.
- a. one
 - b. two
 - c. three
 - d. four

Short Answer (6 points)

12. When designing new buildings and structures, what factors determine size, shape and type of building to be designed? Name three.
13. Name two types of protective lighting systems.
14. A good security system should be considered when designing a facility. What security considerations should be made?

15. What is the light reflectance value of color? Why is it important to keep in mind when designing facilities?

16. What factors should be taken into consideration when selecting a flooring material?

17. When designing employee workstations, what should you keep in mind? Name three considerations.

Short Essay (1 point)

18. Select four flooring materials from the following list. Describe their benefits, drawbacks, and recommended uses: asphalt, paving brick, concrete, cork tile, vinyl based tile, magnesite, cast iron plates, metal grille, parquet, rubber, terrazo, ceramic glazed tile, wood, wood blocks.