

15 INDOOR AIR QUALITY

QUIZ 1 (14 POINTS TOTAL)

True/False (4 points)

1. Studies consistently rank indoor air pollution among the top five environmental risks to public health.
 - a. true
 - b. false
2. Fans vented to the outside that intermittently remove air from a single room can act as a driving force for pollutants.
 - a. true
 - b. false
3. Industrial air quality standards are usually appropriate for buildings too.
 - a. true
 - b. false
4. Tobacco smoke contains several hundred toxic substances.
 - a. true
 - b. false

Multiple Choice (3 points)

5. According to research, what amount of time do most people spend indoors?
 - a. 60 percent
 - b. 70 percent
 - c. 80 percent
 - d. 90 percent
6. What organization's ventilation standards are the basis for most building ventilation codes?
 - a. Environmental Protection Agency
 - b. National Institute for Occupational Safety and Health
 - c. American Society of Heating, Refrigerating, and Air-Conditioning Engineers
 - d. American Society of Safety Engineers
7. Relative humidity should be maintained below _____ to minimize mold growth.
 - a. 60 percent
 - b. 50 percent
 - c. 40 percent
 - d. 30 percent

Short Essay (1 point)

14. What is a stack effect?

QUIZ 2 (12 POINTS TOTAL)

True/False (4 points)

1. Minimizing exposure to hazardous materials is not as simple as replacing the lid on a container of cleaning material.
 - a. true
 - b. false

2. A few volatile organic compounds have been directly linked to cancer in humans.
 - a. true
 - b. false

3. No single field encompasses all the needed principles and skills of an effective IAQ manager.
 - a. true
 - b. false

4. The amount of outdoor air considered adequate for proper ventilation has changed very little over time.
 - a. true
 - b. false

Multiple Choice (3 points)

5. Which of the following is important to ensure that building mechanical systems operate as designed?
 - a. a large budget
 - b. preventive maintenance
 - c. an inspection certificate
 - d. buying the best systems

6. Materials containing formaldehyde are used widely in _____.
 - a. carpeting
 - b. plywood
 - c. glue
 - d. all of the above

7. Microorganisms and other biological contaminants include _____.
- a. dander
 - b. nematodes
 - c. amoeba
 - d. all of the above

Short Answer (4 points)

8. List four factors that might contribute to complaints from occupants about indoor air quality.
9. The condition of a building's indoor environment is based on complex interactions of a number of factors. Name three.
10. List three common pollutant sources.
11. What are three acceptable strategies for controlling pollutants that contribute to poor IAQ?

Short Essay (1 point)

12. What part does humidity play in thermal comfort?