

**Exam: AFSA Applied Sprinkler Technology 201: Hydraulic Calculations, Part 1**

1. Which of the following is true when choosing the design criteria for a fire sprinkler system?
 - A. Each area of the building must be designed independently.
 - B. A single occupancy must be chosen for the entire building the system is protecting.
 - C. The system may be designed to protect the entire building for the highest hazard found.
 - D. The design criteria must be determined by the building architect.

2. Which of the following must be considered when evaluating the water supply for a sprinkler system?
 - A. Seasonal fluctuations
 - B. Future development plans
 - C. Volume of stored water
 - D. All of the above
 - E. None of the above

3. Sprinkler orifice sizes are designated by K-factor. Using NFPA 13 as your guide, which of the following is not a recognized K-factor?
 - A. 1.4
 - B. 14.0
 - C. 5.6
 - D. 21.0
 - E. 28.0

4. Using NFPA 13, what is the C-factor (Value) for all Galvanized steel pipe?
 - A. 100
 - B. 120
 - C. 140
 - D. 150
 - E. None of the above

5. Which of the following is the formula for determining area of coverage of a sprinkler?
 - A. $A = S \times L$
 - B. $A = Q \times D$
 - C. $A = S/L$

$$D. A = L/S$$