1. As stated in the Commentary of the AISC Seismic Provisions for Structural Steel Buildings, how are structural steel systems expected to dissipate seismic input energy?
   a. Through the cyclic elastic elongation and contraction of structural elements
   b. Through controlled inelastic deformations of the structure
   c. Both a and b
   d. Neither a nor b

2. According to the speaker, where did about 90 percent of fractures occur in steel moment frames, during the 1994 Northridge earthquake?
   a. At the top flange of beam-to-column connections
   b. At the single-plate-to-column flange weld of beam-to-column connections
   c. At the bottom flange of beam-to-column connections
   d. At the top and bottom of the beam at the plastic moment location, about d away from the column face

3. What organization sponsored the development of recommendations for moment frame construction in seismic zones, based on studies of the 1994 Northridge earthquake?
   a. American Institute of Steel Construction (AISC)
   b. American Welding Society (AWS)
   c. Federal Emergency Management Agency (FEMA)
   d. United States Geological Survey (USGS)

4. True or False: The k-area is a region of the web that extends from the k dimension to a distance 1-1/2 in. into the web beyond the k dimension.
   a. True
   b. False

5. Which of the following prequalified connections requires a weld access hole of a geometry specified in AWS D1.8?
   a. Bolted Flange Plate Moment Connection (BFP)
   b. Bolted Unstiffened Extended End-Plate Moment Connection (BUEEP)
   c. Welded Unreinforced Flange-Welded Web Moment Connection (WUF-W)
   d. All of the above
6. Where should demand critical welds be specified?
   a. At any weld in a building containing a special moment frame
   b. At any weld that is part of the seismic force resisting system
   c. Where required in the prequalification standard
   d. For the weld that is determined by the Engineer of Record as the most highly-stressed in a given connection

7. The Commentary of AWS D1.8 states that the scope of this standard is to ensure that welded joints, designed to undergo significant repetitive inelastic strains as a result of earthquakes, and welds connecting members, designed to resist such inelastic strains, have which of the following characteristics?
   a. Strength
   b. Notch toughness
   c. Integrity
   d. All of the above

8. Which of the following standards is referenced directly in the scope of AWS D1.8?
   a. AISC 360 Specification for Structural Steel Buildings
   b. AISC 341 Seismic Provisions for Structural Steel Buildings
   c. AISC 358 Prequalified Connections for Special and Intermediate Steel Moment Frames for Seismic Applications
   d. All of the above

9. Heat input is a function of which of the following?
   a. Modulus of elasticity of the base material
   b. Intensity of resistance
   c. Travel speed
   d. All of the above

10. True or False: Notch toughness is optimized by minimizing heat input.
    a. True
    b. False