1. The “founder” of statics is generally agreed to be:
   a. Archimedes
   b. da Vinci
   c. Galileo
   d. Hooke
   e. Euler

2. The maximum number of unknown reactions for a determinate beam is:
   a. 3
   b. 4
   c. 6
   d. Depends on available condition equations
   e. None of these are true

3. Which of the following are true regarding stability and determinacy?
   a. A stable structure must be determinate.
   b. An indeterminate structure must be stable.
   c. In the real world there are many unstable structures.
   d. It is preferable that structures be stable and determinate.
   e. None of the above are true.

4. For superposition to be applicable:
   a. Structures must behave elastically.
   b. Structures must follow small deflection theory.
   c. The material must be steel.
   d. Both a and b.
   e. None of these are true.
5. AISC 360-16 Section C1 requires that several load effects be considered in an analysis. Which of the following is not one of those requirements?
   a. Torsional deformations
   b. 2nd-order effects
   c. Residual stresses
   d. Out-of-plumbness
   e. All of these must be considered.

6. For the relationship between load, shear, and moment, which of the following is true?
   a. The value of the shear is the slope of the loading diagram.
   b. The slope of the moment diagram is the value of the shear.
   c. The change in moment between A & B is the area under the load diagram between A & B.
   d. The area under the moment diagram is the value of the shear.
   e. The value of the load is the slope of the moment diagram.

7. Which of the following is true regarding influence lines?
   a. They are only useful with moving loads.
   b. They have no application for building structures.
   c. They are helpful in determining where to load a structure for maximum influence.
   d. They are essential for determining reactions.
   e. None of these are true.

8. For a second-order analysis, which of the following are true?
   a. Equilibrium equations are written about the deformed geometry.
   b. Deflections influence analysis results.
   c. Axial load impacts the moment in beam-columns.
   d. All of the above
   e. None of the above

9. Which of the following describe a linear analysis?
   a. Load effect is proportional to load magnitude.
   b. Materials behave elastically.
   c. Superposition is valid.
   d. All of the above
   e. None of the above
10. According to A. R. Dykes, which of the following describes structural engineering?
   a. We don’t wholly understand the materials used.
   b. We can’t precisely analyze the structures we build.
   c. We really can’t assess the forces involved.
   d. All of the above
   e. None of the above