1) In the design example, how are required brace strengths determined?
   a) From a 3-D finite element analysis
   b) From a catalog
   c) Using simple methods for horizontal force distribution and trigonometry to convert frame shear into brace axial force.

2) What does the factor \( \beta \) (beta) represent?
   a) The expected strength of the BRB core material
   b) The strain hardening of the BRB core material
   c) The compression overstrength (compared to tension) of the BRB

3) Which of the following statements are true?
   a) BRB area or strength may be specified
   b) BRB steel material yield strength may be limited to a range of 38-46 ksi
   c) BRB steel material yield strength should not be limited to a range narrower than 38-46 ksi
   d) All of the above
   e) None of the above

4) What does the factor \( \omega \) (omega) represent?
   a) The expected strength of the BRB core material
   b) The strain hardening of the BRB core material
   c) The compression overstrength (compared to tension) of the BRB

5) Beam flexure in a V- or inverted-V braced (“chevron”) frame is due to...(pick one)
   a) The strain hardening of the BRB
   b) The compression overstrength (compared to tension) of the BRB
   c) Brace weight
   d) All of the above
   e) None of the above
6) In calculating the strength of the beam with respect to web local yielding at the chevron connection, what bearing length is considered?
   a) The horizontal projection of the Whitmore width
   b) The gusset length
   c) One half (½) the gusset length

7) In the design example, the anchor rods are not used to resist shear. Why?
   a) The anchor rods are de-bonded
   b) The connection is modeled as a pin.
   c) It is generally more economical to design anchor rods for tension only and provide a different load path for the horizontal force.

8) In the chevron connection, the gusset may be lengthened to reduce the required shear strength of the beam. True or false?
   a) True
   b) False

9) Which forces are considered in the design of the beam-column-brace connection in the stacked, inverted-V configuration?
   a) The expected tension and compression strength of the connecting brace
   b) The expected tension and compression strength of the braces of the level below connecting to the beam
   c) The collector force from diaphragm analysis
   d) All of the above
   e) None of the above
   f) a and b only

10) In BRBF the column required axial strength is determined using a seismic force equal to....(pick one)
    a) The overstrength seismic load (ΩoE)
    b) The capacity limited seismic load (Ec) based on the expected strengths of the braces in the frame
    c) The greater of a (ΩoE) and b (Ec)
    d) The lesser of a (ΩoE) and b (Ec)