



SAMPLE WEBINAR QUIZ

Required: Exactly 10 single-answer questions.

Course: Shear Strength Selection For Static Slope Stability Analysis

1. True or False – Soils typically exhibit significant tensile strength. **False**
2. Factors most strongly affecting soil shear strength include:
 - a. Specific gravity, stress history, and degree of saturation
 - b. **Drainage conditions, density, stress history, and stress path**
 - c. Test method, specific gravity, and color
 - d. Particle shape, erodibility, and moisture content
3. Of the following options, which is best suited to estimation of shear strength for an in situ sand layer?
 - a. Direct shear test
 - b. Consolidation test
 - c. Triaxial compression test
 - d. **Correlation to the standard penetration test**
4. True/ False – Brittle soil behavior consists of a high peak stress at lower strain and a significantly lower shear strength at higher strain. **True**
5. When subjected to drained shear load, a very dense sand will
 - a. Increase in volume (dilate) throughout shearing
 - b. **Initially decrease in volume (contract), followed by an increase in volume (dilation)**
 - c. Decrease in volume (contract) throughout shearing
 - d. Initially increase in volume (dilate), followed by a decrease in volume (contraction)
6. In completing rapid drawdown stability analysis:
 - a. All soils should be characterized by drained strength parameters
 - b. **Individual soils should be characterized by either drained or undrained strength parameters, depending on the rate of drawdown and soil permeabilities**
 - c. All soils should be characterized by undrained strength parameters
 - d. None of the above
7. True or False – In stability analyses it is recommended to rely on undrained strengths that require negative excess pore water pressures. **False**
8. For a normally consolidated clay, it would be expected that
 - a. **Undrained strength is less than drained strength**
 - b. Drained strength is less than undrained strength
 - c. Drained strength and undrained strength are equal
 - d. None of the above
9. True or False – For undrained loading, it is generally easier to estimate undrained strengths than to use drained strength parameters and estimate pore water pressure response. **True**
10. Undrained strengths should be considered for stability analyses for:
 - a. Long term normal pool operations and rapid drawdown
 - b. End of construction conditions and long term normal pool operations
 - c. **End of construction conditions and rapid drawdown**
 - d. Flood loading and long term normal pool operations