

# **Certified Engineering Geologist (CEG) Examination Sample Questions**

## **Based on the Test Plan Effective January 2020**

### **Example No. 1**

According to CGS Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California, what is the lowest acceptable Factor of Safety in a liquefaction analysis?

- A. 1
- B. 1.1
- C. 1.3
- D. 1.5

### **Example No. 2**

Field vane tests are most appropriate to provide an in-place measure of undrained shear strength for what type of material?

- A. Loose sand
- B. Hard clay
- C. Soft clay
- D. Stiff silt

### **Example No. 3**

During a back cut excavation for a fill slope, a contractor unexpectedly encounters numerous springs. After reevaluating the stability analysis, what should an engineering geologist recommend to the engineer?

- A. A French drain above the back cut
- B. Piezometers above the back cut
- C. Horizontal drains into the back cut
- D. A drainage blanket on the back cut

**Example No. 4**

Use the exhibit provided to answer the following question.

The diagram depicts a shear strength typical of which of the following materials?

- A. Claystone
- B. Sandstone
- C. Fissured clay
- D. Moderately fractured granite

