

Geology California Specific Examination (CSE) Sample Questions

Multiple Choice

Example No. 1

A geologist is retained by a municipality to determine the feasibility of freshwater storage options. The city would like a solution that minimizes evaporation and is able to reserve water in wet years for use in dry years. What option should be considered?

- A. Artificial recharge
- B. Riverbank filtration
- C. Surface reservoirs
- D. Tertiary water reuse

Example No. 2

A geologist working in the foothills of the Sierra Nevada is observing construction of an access road into a new development area. During construction, a pit containing mineralized waste rock from a previous prospect was encountered. What should be done with the exposed material?

- A. Use the material as a source of aggregate for the road base.
- B. The area should be encapsulated and paved over during construction.
- C. Use the material as a surface cover to prevent erosion and control surface runoff.
- D. A groundwater drainage system should be installed to prevent surface settlement.

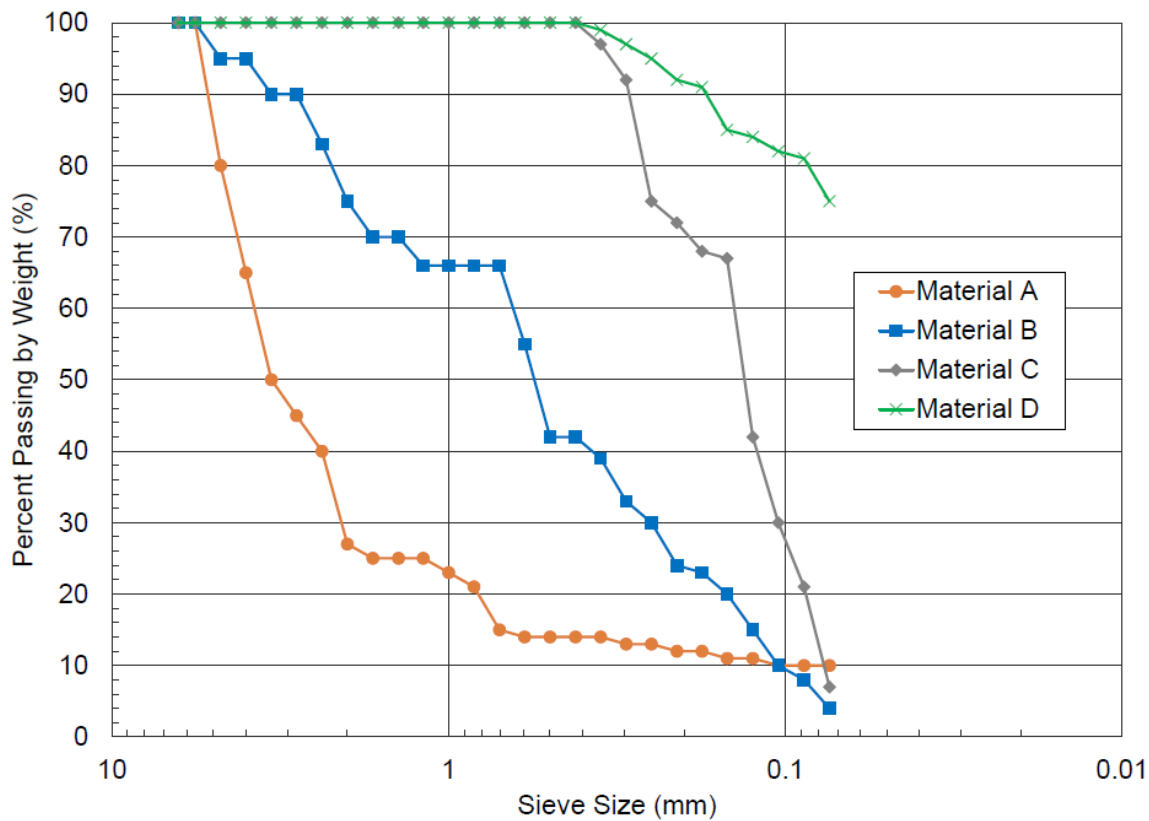
Example No. 3

Which of these geologic hazards is elevated several years after a wildfire?

- A. Deep-seated landslides
- B. Soil liquefaction
- C. Debris flow
- D. Rock fall

Example No. 4

Use the exhibit provided to answer the following question.



A geologist is evaluating grain-size curves from four potential borrow sources for use in constructing a levee in the Central Valley. The engineer has indicated that the levee will cross a few alluvial deposits of sands and silty sands which will be excavated and replaced with compacted low permeability material to reduce under seepage. Which of the borrow materials is most suitable for use by the engineer designing and constructing the levee?

- A. Material A
- B. Material B
- C. Material C
- D. Material D

Alternate Item Types

Example 1: Multiple Choice Multiple Response Question

A geologist is assessing an unauthorized petroleum release case for closure under the Low-Threat Underground Storage Tank Case Closure Policy. Which of the following categories of media-specific requirements must be satisfied in order for the case to be eligible for closure?

Select three options.

- A. Vapor intrusion
- B. Nuisance
- C. Groundwater
- D. MTBE
- E. Free Product
- F. Direct contact

Example 2: Drag and Drop

According to the Advisory Active Soil Gas Investigations, what is the correct order of steps to collect a soil gas sample from a new well?

Drag the options to the target panels.

Options

Perform a leak test. Collect samples in gas-tight containers. Purge stagnant air from the sampling system.

First

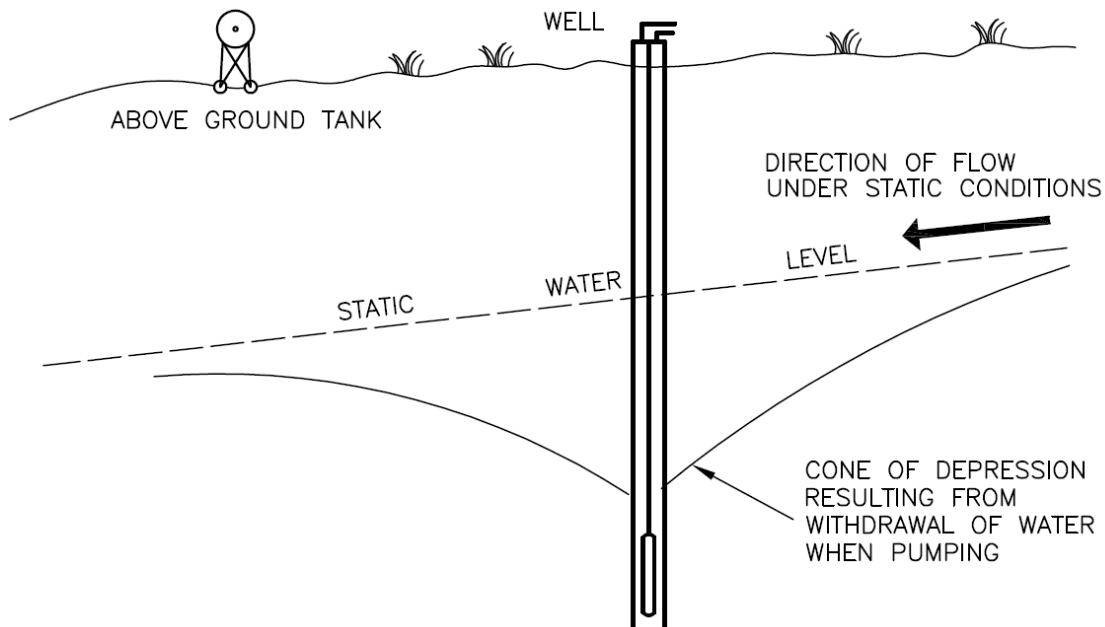
Second

Third

Example 3: Hot Spot

A geologist is evaluating the potential for impacts to a water well near a tank that is known to have leaked. Identify the area where contamination may be flowing to the well.

Click on the target area of the image.



Answers

Multiple Choice

Example No. 1: A

Example No. 2: B

Example No. 3: C

Example No. 4: D

Alternate Item Types

Example 1: Multiple Choice Multiple Response Question

Correct Answer: A, C, F

Tip: You must choose all three of these options to get credit for question. You do not get partial credit for picking one option.

Example 2: Drag and Drop

Correct Answer:

Drop Zones

First

Perform a leak test.



Second

Purge stagnant air from the sampling system.



Third

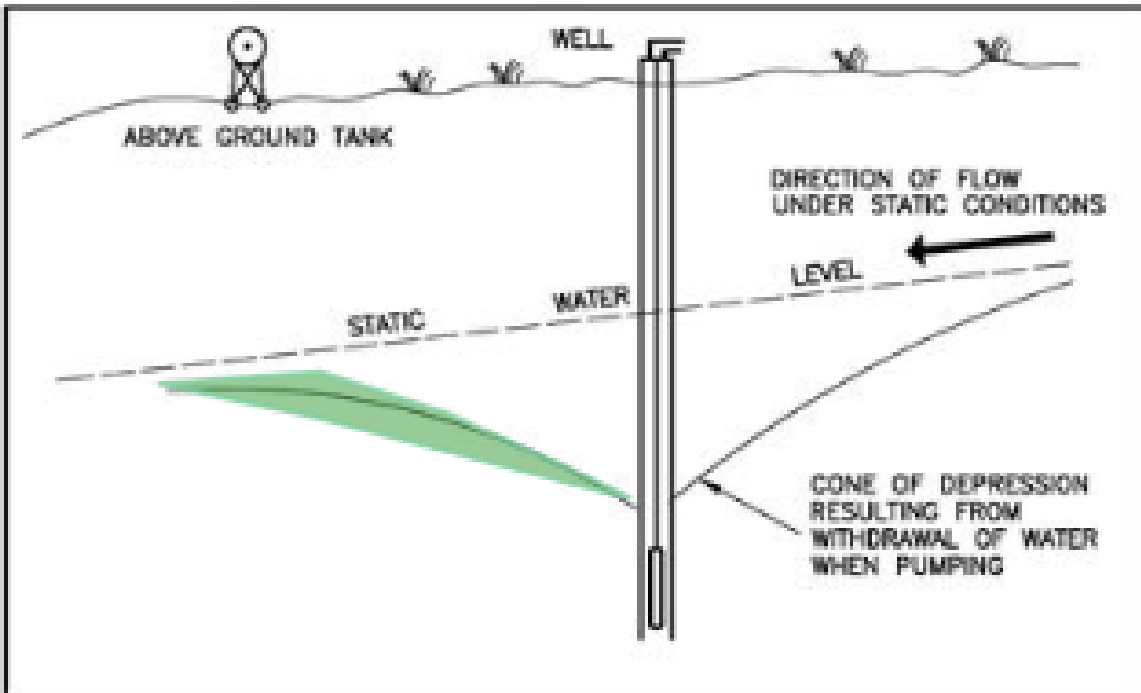
Collect samples in gas-tight containers.



Tip: You must drag all three options to the correct drop zone to get credit for question. You do not get partial credit for dragging one option to the correct drop zone.

Example 3: Hot Spot

Correct Answer: Anywhere in the green area.



Tip: You must click anywhere within the green shaded zone to get credit for this question.