

SIO 15 (FQ 2024) – Test 6 Homework #4 Questions

Test questions/choices of possible answers in the actual test may be modified from the questions below.

- 1) Which of these was NOT a factor that increased the risk for the 2014 Ozo mudslide?
 - a) Building on unstable ground
 - b) Careless logging
 - c) reforestation
 - d) Ignoring hazard maps

- 2) Which of these best describes the force counteracting the resistance force acting on a mass on a slope?
 - a) gravity
 - b) downslope force
 - c) buoyancy force
 - d) rebound force

- 3) Which of these does NOT increase the downslope force?
 - a) adding mass to the sliding body
 - b) lowering the slope angle
 - c) Steepening the slope

- 4) Why do we not know the exact number of fatalities in the 2020 Myanmar jade mine disaster?
 - a) The population number of Myanmar is unknown
 - b) Many miners were not legally registered
 - c) jade miners registered multiple times
 - d) great influx of international immigrants
 - e) raging warfare

- 5) In which natural environment would we typically find sinkholes?
 - a) ancient volcanoes
 - b) karst regions
 - c) thick sedimentary basin
 - d) on tall mountains
 - e) on lake floors

- 6) What typically causes sinkholes in San Diego?
 - a) Natural collapse of karst caves
 - b) Failing water infrastructure
 - c) Active volcanism
 - d) Frequent landfall of hurricanes
 - e) wildfires

- 7) About how much water is lost in cities due to faulty or failing water infrastructure?
- a) 0%
 - b) 10%
 - b) 30%
 - c) 50%
 - d) 100%
- 8) In the Portuguese Bend, Palos Verdes Peninsula, how did water get into the glide horizon in the 1950s?
- a) Leaky septic tanks in local homes
 - b) Particularly long rainy season
 - c) A tsunami
 - d) Dramatic sea level rise
- 9) Where along the stream profile do we find the highest erosion rates?
- a) Near the top
 - b) Near the bottom
 - c) Where that gradient is lowest
 - d) Near the base level
- 10) The gradient along a stream profile is lower near the top than near the bottom.
- a) true
 - b) false
- 11) Which of these is the world's longest river?
- a) Yangtze
 - b) Mississippi
 - c) Danube
 - d) Congo
 - e) Nile
- 12) As starting in the 1950s, the Palos Verdes Peninsula again experienced slow soil movement in 2024?
- a) true
 - b) false
- 13) As a result of slow soil movement in the Palos Verdes Peninsula, which of these services was shut off?
- a) internet
 - b) electric power
 - c) satellite phone
 - d) cell phone
 - e) landline phone

14) Which of these groups of people are particularly vulnerable during extreme-heat events?

- a) low-income families without cars
- b) high-income families with more than one SUV
- c) excessive users of air conditioners
- d) university students in climate-controlled lecture halls
- e) low-income families with nearby cooling centers

15) Why is a decade volcano worthy of particular study?

- a) It has a history of large destructive and fatal eruptions
- b) It has erupted in the last 10 years
- c) It erupts every 10 years
- d) It has particularly benign eruptions
- e) It is a volcano of the Decade Mountain chain