Tsunami - Review Questions

1. Tsunamis can be called by the more common name of ‘tidal wave’. (TRUE, FALSE)

2. Tsunamis are caused by each of the follow except:
   a. Earthquakes
   b. Hurricanes
   c. Volcanoes
   d. Landslides

3. Tectonic plates are moving up to ______ inch(es) per year.
   a. two
   b. three
   c. four
   d. one

4. The type of fault that causes the most tsunamis is called the:
   a. reverse fault
   b. normal fault
   c. slip-reverse fault
   d. slip-strike fault

5. A magnitude 7.0 Richter scale earthquake is ______ times more powerful than a 4.0 magnitude earthquake.
   a. 3
   b. 30
   c. 300
   d. 1000

6. As a tsunami wave approaches the coast it begins to move _______________ (faster/slower) and the height of the wave ________________ (increases/decreases).

7. This type of fault where one plate is forced under another plate is called a…
   a. normal fault
   b. abnormal fault
   c. reverse fault
   d. slip-strike fault

National Weather Service Southern Region
www.srh.noaa.gov
8. After a tsunami wave passes your location it is safe to return to the water. (TRUE, FALSE)

9. Most tsunamis occur in the ________________ Ocean.
   a. Atlantic.
   b. Indian.
   c. Pacific.
   d. Antarctic.

10. More tsunamis occur in the ____________________ (Mediterranean Sea / Caribbean Sea) than in the
    ________________ (Mediterranean Sea / Caribbean Sea).

11. _________________ buoys help maintain and improve the capability for the early detection and real-time reporting of
    tsunamis.
    a. DART (Deep-ocean Assessment and Reporting of Tsunamis)
    b. TADR (Tsunami Alert and Depth Reporting)
    c. TART (Tsunami Assessment in Real Time)
    d. DATB (Data Assimilation from Tsunami Buoys)

12. A tsunami ________________ is the highest level of tsunami alerts and are issued due to the imminent threat of a
    tsunami from a large undersea earthquake or following confirmation that a potentially destructive tsunami is underway.
    a. watch
    b. warning
    c. bulletin
    d. alarm

13. If you feel a strong earthquake while at a beach you need to get on the Internet to check if a tsunami warning has
    been issued for your area. (TRUE, FALSE)

14. A tsunami generated from an earthquake in Chile can arrive in Japan in about ___________ hours.
    a. 3
    b. 12
    c. 15
    d. 22
15. Buoys that monitor tsunamis can accurately detect water level changes as small as ________ millimeter(s) at depths up to __________ feet.
   a. 10 / 20,000
   b. 1 / 20,000
   c. 20 / 10,000
   d. 5 / 10,000

16. Of all tsunamis produce by earthquakes, landslides and volcanoes _________ % are produced directly by earthquakes.
   a. 56
   b. 61
   c. 74
   d. 83

17. In the open ocean, tsunami waves travel as fast as _________________.
   a. A 'top-fuel' dragster
   b. A jet plane
   c. As the wind in a category 5 hurricane
   d. The speed of sound

18. Tsunamis are more likely to happen from ________________________ (shallower & larger / deeper & smaller) earthquakes than ________________________ (shallower & larger / deeper & smaller) ones.

19. The daily tidal variation of sea-surface height is much greater by far compared to tsunamis induced height changes in the open ocean. (TRUE, FALSE)

20. As a tsunami approaches shorelines, the wave's period ________________ with no decrease in the wave's energy.
   a. decreases by 20%
   b. Increases by 20%
   c. remains the same
   d. decreases by 40%