1. The S-wave shadow zone is evidence that
   (A) The outer core is liquid
   (B) The outer core is composed of iron and nickel oxides
   (C) The inner core is solid
   (D) It is very hot near the core

2. The first motions of earthquake are useful for
   (A) Determining the location of an earthquake.
   (B) Determining the style of faulting that caused an earthquake.
   (C) Determining the magnitude of an earthquake.
   (D) Determining the depth of an earthquake.

3. Which of the following describes the build up and release of stress during an earthquake?
   (A) The intensity scale
   (B) The elastic rebound theory
   (C) The principle of superposition
   (D) None of these

4. Who developed the procedure used to measure the size of an earthquake?
   (A) Charles Richter
   (B) Edward Sheridan
   (C) James Hutton
   (D) Art Smith

5. Which of the following measures an earthquake's intensity based on the observed effects on people and structures?
   (A) Richter scale
   (B) Modified Mercalli scale
   (C) The Centigrade scale
   (D) The moment magnitude scale

6. Which of the following statement is correct
   (A) Apparent dip is always less than the true dip
   (B) Apparent dip is always greater than the true dip
   (C) Apparent dip is always equal to the true dip
   (D) True dip is always less than the apparent dip

7. In a syncline
   (A) Younger rocks are in the center (core) of the fold
   (B) Older rocks are in the center (core) of the fold
   (C) None of these

8. One limb may dip up to 90° where as the other will be nearly horizontal, is known as
   (A) Overturned fold
   (B) Recumbent fold
9. In which of the following type of fold the attitude of the fold axis or the hinge line is defined by two measurements: the bearing (strike) and its projection (inclined or horizontal)
   (A) **Plunging fold**
   (B) Recumbent fold
   (C) **Monoclinal fold**
   (D) Overturned fold

10. Stereographic projections is used for solving
    (A) Apparent dip
    (B) The trend and plunge of the intersection of two planes
    (C) Angles between planes
    (D) **All of these**

11. The horizontal component of the dip separation and it gives the amount of land shifted sideways
    (A) Heave
    (B) Head
    (C) **Throw**
    (D) Dip

12. If we treat a fault as rectangular, the dimension along strike is called the fault
    (A) Width
    (B) **Length**
    (C) Dip
    (D) Head

13. Horizontal slip between the adjacent blocks along the strike of the fault line
    (A) Dip-slip faults
    (B) **Strike-slip faults**
    (C) Normal-slip faults
    (D) None of these

14. Dip angle of reverse slip and thrust slip faults are degree
    (A) dip < 45° and dip < 45°
    (B) dip > 45° and dip > 45°
    (C) **dip > 45° and dip < 45°**
    (D) dip < 45° and dip > 45°

15. What is the surface expression occurs in an extensional (tension) environment
    (A) Folding/reverse fault
    (B) Bending horizontally/strike slip fault
    (C) **Thinning crust/normal fault**
    (D) None of these