

1. Which of the following is a type of shallow footing?
  - a) Spread footing
  - b) Pile foundation
  - c) Pier foundation
  - d) Well foundation

Ans : a

2. When two column loads are unequal, which of the possible footing can be provided?
  - a) Strap footing
  - b) Raft footing
  - c) Trapezoidal combined footing
  - d) Mat footing

Ans : c

3. The settlement of the plate in load test is measured with the help of \_\_\_\_\_
  - a) Sensitive dial gauges
  - b) Test plate
  - c) Measuring unit
  - d) Datum bar

Ans : a

4. Pile foundations are generally preferred to for
  - a) bridge foundations
  - b) sky scrapper buildings
  - c) residential buildings
  - d) runways

Ans : b

5. In-situ vane shear test is used to measure shear strength of
  - a) very soft and sensitive clays
  - b) stiff and fissured clays

- c) sandy soils
- d) All of the above

Ans : a

6. The seismic refraction methods cannot be used if the wave velocity in the lower layer is ..... that in the upper layer.

- a) greater than
- b) less than
- c) more than four times
- d) more than thrice

Ans : b

7. The height-diameter ratio for the in-situ vane is

- a) 1
- b) 1.5
- c) 2
- d) 3

Ans : c

8. Select the incorrect statement:

For a good quality soil sample,

- a) The area ratio should be low.
- b) The cutting edge should be thick.
- c) The inside clearance should be small.
- d) The outside clearance should be small.

Ans : b

9. If the actual value of the standard penetration number(N) is greater than 15 for fine sands below water table, the corrected value of N is

- a)  $15 + ((N+15)/2)$
- b)  $15 - ((N+15)/2)$

c)  $15 + ((N-15)/2)$

d)  $15 + ((15-N)/2)$

Ans : c

10. The allowable pressure, that should be selected for a maximum settlement is \_\_\_\_\_

a) 40 mm

b) 25 mm

c) 30 mm

d) 10 mm

Ans : b