

1. The vertical downward movement of the base of the structure is called _____
 - a) Penetration resistance
 - b) Settlement
 - c) Effective pressure
 - d) Shear failureAnswer :b

2. The component S_c , used in the total settlement of clay refers to which of the following?
 - a) Total settlement
 - b) Consolidation settlement
 - c) Immediate plastic settlement
 - d) Settlement due to secondary consolidation of clayAnswer: b

3. The immediate settlement can be computed from the expression, based on _____
 - a) Theory of plasticity
 - b) Theory of elasticity
 - c) Terzaghi's analysis
 - d) Pressure distributionAnswer: b

4. The value of E_s used in the immediate settlement equation, can be found out using _____
 - a) Triaxial test
 - b) Compression test
 - c) Direct shear test
 - d) Rankine's theoryAnswer: a

5. Meyerhof's extended the analysis of plastic equilibrium of a surface footing to _____
 - a) Shallow foundation and Deep foundation
 - b) Inclined foundation
 - c) None of the mentioned
 - d) Both (a) and (b)Answer: a

6. According to the assumptions in Terzaghi's analysis, the soil is _____

- a) Homogeneous and Isotropic
- b) Non Homogeneous
- c) None of the mentioned
- d) only (b)

Answer: a

7. The depth factor can be applied to footing only when _____

- a) Back filling is compacted
- b) Shape factors are not used
- c) The base of the footing is circular
- d) All of the mentioned

Answer: a

8. The immediate settlement of a rigid footing is about times the maximum settlement of an equal flexible footing,

- a) 0.9
- b) 0.8
- c) 0.7
- d) 0.6

Answer: b

9. The permissible settlement is the maximum in case of

- a) Isolated footing on clay
- b) Raft on clay
- c) Isolated footing on sand
- d) Raft on sand

Answer: b

10. The bearing capacity of soil supporting a footing of size $3\text{m} \times 3\text{m}$ will not be affected by the presence of water located at a depth below the base of footing of

- a) 1 m
- b) 1.5 m
- c) 3 m
- d) 6 m

Answer: c