

1. When a footing fails due to insufficient bearing capacity, distinct failure patterns are developed depending upon\_\_\_\_\_

- a) Failure mechanism
- b) Plastic equilibrium
- c) Shear strength
- d) All of the mentioned

Answer:a

2. When the water table is above the base of the footing, the submerged weight ' $\gamma$ ' can be used to compute\_\_\_\_\_

- a) Effective pressure and Surcharge
- b) Pore pressure
- c) None of the mentioned
- d) Both (a) and ( b).

Answer: a

3. In general shear failure, continuous failure is developed between\_\_\_\_\_

- a) Ground surface and footing
- b) Edge of the footing and ground surface
- c) Foundation and the ground surface
- d) None of the mentioned

Answer:b

4. The equation  $N_c = (N_q - 1) \cot \phi$ , have been adopted by\_\_\_\_\_

- a) Terzaghi and Peck
- b) Hansen
- c) Vesic
- d) All of the mentioned

Answer:d

5. In local shear failure, the development of plastic equilibrium is\_\_\_\_\_

- a) Full
- b) Partial
- c) Zero

d) None of the mentioned

Answer:b

6. Punching shear may occur in loose sand with density less than\_\_\_\_\_

a) 45 %

b) 50 %

c) 35 %

d) 20 %

Answer:c

7. The bearing capacity equation for strip footing as given IS standard, can be modified on the basis of\_\_\_\_\_

a) Shape of the footing

b) Type of soil

c) Bearing capacity

d) All of the mentioned.

Answer:a

8. The effect of water table is taken into account for bearing capacity in the form of\_\_\_\_\_

a) Depth factor

b) Inclination factor

c) Correction factor

d) Shape factor

Answer:c

9. An analysis of the condition of complete bearing capacity failure is usually termed as\_\_\_\_\_

a) General shear failure

b) Terzaghi's analysis

c) Bearing failure

d) All of the mentioned

Answer:a

10. Terzaghi's bearing capacity equation is not applicable for \_\_\_\_\_

a) Depth effect and Inclination factor

b) Narrow slope

c) None of the mentioned

d) Both (a) and (b).

Answer:a