Assignment 12

The due date for submitting this assignment has passed.

As per our records you have not submitted this assignment.

Due on 2021-04-14, 23:59 IST.

1) Cracking mode of failure in shallow footings on rock/massive masses involves generation of
   - zones of compressive stress concentration
   - zones of tensile stress concentration
   - wedge below the footing
   - none of the above

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   - zones of compressive stress concentration
   - zones of tensile stress concentration
   - wedge below the footing
   - none of the above

2) If the joints in rock mass have dip varying between 15° and 30°, what will be the characteristic with respect to their orientation

   - Favourable
   - Fair
   - Unfavourable
   - Very favourable

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   - Favourable
   - Fair
   - Unfavourable
   - Very favourable

3) In which cases, the pressure bulb below the footing extends to a maximum depth:

   - Favourable orientation of joints
   - Fair orientation of joints
   - Unfavourable orientation of joints
   - Very unfavourable orientation of joints

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   - Favourable orientation of joints
   - Fair orientation of joints
   - Unfavourable orientation of joints
   - Very unfavourable orientation of joints

4) Biot's approach for the determination of ultimate bearing capacity of strip footings is based on:

   - Consolidation theory
   - Hoek and Brown criterion
   - Classical earth pressure theory
   - None of the above

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   - Consolidation theory
   - Hoek and Brown criterion
   - Classical earth pressure theory

5) A strip footing of 1.5 m width made on the base of the bearing is exposed to the ground surface. The base of the footing is horizontally bounded with spacing, S = 5 m, B = 3.5 m. 1 point

   - 15 kPa
   - 25 kPa
   - 32 kPa
   - 12 kPa

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   - 15 kPa

6) Most suitable method for determination of safe bearing pressure of footings on highly weathered rock masses with very low strength of rock is:

   - Pressuremeter test
   - Rock mass classification
   - Core strength
   - Plate load test

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   - Pressuremeter test
   - Rock mass classification
   - Core strength
   - Plate load test

7) Net safe bearing pressure of a limestone is generally

   - 15 kPa
   - 1500 kPa
   - 1.5 MPa
   - 1.5 kPa

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   - 15 kPa

8) For a rock mass having RMR of 75, what will be the net safe bearing pressure?

   - 150 tons
   - 55 tons
   - 550 kN
   - 300 kN

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   - 150 tons

9) Plate load test was conducted on poor quality using a square plate of 50 cm size. What will be the settlement of footing of size 3 m corresponding to a plate settlement of 3 mm:

   - 5.40 mm
   - 9.60 mm
   - 5.40 cm
   - 9.60 cm

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   - 5.40 mm

10) Horizontal stiffness of foundations on rock is ________ compared to its vertical stiffness.

    - too small
    - small
    - large
    - too large

    No, the answer is incorrect.
    Score: 0
    Accepted Answers:
    - too small