Unit 3 - Week 1

Assignment 1

The due date for submitting this assignment has passed. Due on 2019-02-13, 23:59 IST.
As per our records you have not submitted this assignment.

1) The boundary water content between the plastic state to semisolid state is called
   (a) liquid limit
   (b) plastic limit
   (c) shrinkage limit
   (d) permeability limit

No, the answer is incorrect.
Score: 0
Accepted Answers:
b

2) If the liquid limit and plastic limit of a soil are 43% and 23% respectively then the plasticity index of the soil is
   (a) 10%  (b) 17%  (c) 20%  (d) 30%

No, the answer is incorrect.
Score: 0
Accepted Answers:
c

3) 

No sunk cost.
4) If the plasticity index of a soil is 10 then the soil can be classified as
   (a) Low plastic
   (b) Highly plastic
   (c) Medium plastic
   (d) Non plastic
   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   c

5) A soil has a liquid limit of 55% and lies above the “A-line” when plotted on a plasticity chart. The group symbol of the soil as per IS soil classification is
   (a) CH
   (b) CI
   (c) MI
   (d) CL
   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   a

6) A soil has a liquid limit and plastic limit of 40% and 20% respectively. As per the plasticity chart and IS soil classification the group symbol of the soil is
   (a) CH
   (b) CI
   (c) MI
   (d) CL
   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
7) If the relative density of a granular soil is 72% then the soil can be classified as
   (a) Loose
   (b) Medium
   (c) Dense
   (d) Very dense

   No, the answer is incorrect.
   Score: 0
   Accepted Answers: c

b) The void ratios of soil in its loosest and densest state are 0.9 and 0.4. If the void ratio in
   the natural state is 0.5, the relative density is
   (a) 55%
   (b) 67%
   (c) 74%
   (d) 80%

   No, the answer is incorrect.
   Score: 0
   Accepted Answers: d

c) In a shrinkage limit test, let \( V_1 \) and \( V_2 \) be the initial and final volumes of the sample at
   \( W_1 \) and \( W_2 \) be its corresponding weights. Let unit weight of water is \( \gamma_w \). By definition, the
   shrinkage limit of the sample is
   (a) \( \frac{(W_1 - W_2) - (V_1 - V_2)\gamma_w}{W_2} \)
   (b) \( \frac{(W_1 - W_2) + (V_1 - V_2)\gamma_w}{W_2} \)
   (c) \( \frac{(W_1 + W_2) - (V_1 - V_2)\gamma_w}{W_2} \)
   (d) \( \frac{(W_1 - W_2) + (V_1 + V_2)\gamma_w}{W_2} \)
10) The uniformity coefficient ($C_u$) for a well graded sand, must be greater than

(a) 3   (b) 4   (c) 5   (d) 6

No, the answer is incorrect.
Score: 0
Accepted Answers:
d