

ASSIGNMENT:5 RETAINING WALL

1. Discuss drainage of back fill in retaining walls.
2. Write Short note on soldier piles and lagging.
3. Enlist different types of retaining wall with sketch.
4. How the counter fort retaining wall differs from the cantilever retaining walls?
5. What are the different modes of failure of retaining walls?
6. Write a short note on types of sheet pile walls.
7. A rigid retaining wall of 6 m height has two layers of back fill. The top layer up to depth of 1.5 m is sandy clay having $\phi = 30^\circ$, $c= 0$, and $\gamma=17.25 \text{ kN/m}^3$.
8. A retaining wall has a vertical back and is 7.32 m high. The soil is sandy loam of unit weight 17.3kN/m^3 . It shows a cohesion of 12 kN/m^2 and $\phi = 20^\circ$. Neglecting wall friction, determine the thrust on the wall. The upper surface of the fill is horizontal.

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