

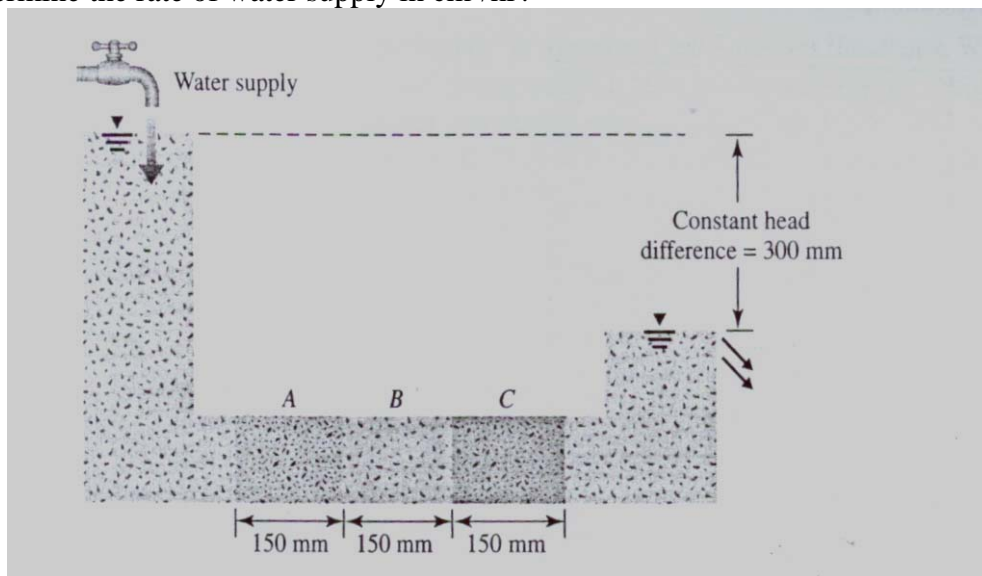
CE 381 : Engineering Properties of Soils and their measurements

Homework#4

1. Three layers of soil in a tube that is 100 mm x 100 mm in cross-section are shown in the figure below. Water is supplied to maintain a constant head difference of 300 mm across the sample. The hydraulic conductivity of the soils in the direction of flow through them are as follows:

Soil	k (cm/sec)
A	10^{-2}
B	3×10^{-3}
C	4.9×10^{-4}

Determine the rate of water supply in cm^3/hr ?



2. A layered soil is shown in the figure below. Estimate the ratio of equivalent permeability, $k_{H(eq)} / k_{V(eq)}$

