

Internal Assessment
Geotechnical engineering I
2nd year DCE ,F.M. - 20

Answer any two questions:

1.a) Write down the definition of soil and general types of soil.

b) A soil sample has a porosity of 40%. The specific gravity of solid is 2.7. calculate (i) void ratio (ii) dry density (iii) unit weight if the soil is 50% saturated.(iv) unit weight if the soil is completely saturated. $4+6=10$

2. a) Describe the textural classification chart with sketch.

b) A soil sample with porosity of 38% has a degree of saturation of 50%. Taking specific gravity of sample is 2.67. Compute dry unit weight, saturated unit weight, submerged unit weight and bulk unit weight.

$4+6=10$

3. a) Describe Darcy's law. Describe those factors effect the permeability of soil.

b) What is Flow Net? Differentiate between consolidation and compaction. Give examples. $5+5=10$

The answer script should be sent in the following GOOGLE CLASSROOM id with the signature of the student in all pages.

Cover page must be attached with the answer script.

Room - 04(Geotechnical engineering I)

Class Code - p3liq6z

The original copy is to be submitted only when the institution is open .

Last date of submission -

10.08.2020(Monday) at 10: 30 P.M.

(Mr. Dipak Kumar Das)