Discipline: Civil	Semester :- 3rd	Name of The Teaching Faculty :- Er. Preeti Kayyani Sethy TH-2
Subject :- Geotechnical Engineering	No. of Days / Week Class Alloted :- 4	Semester from :- 15.09.2022 to 22.12.2022 No. of Weeks :- 15
WEEKS	CLASS DAY	THEORY
	1st	
12.09.2022	2nd	
To	3rd	Soil and soil Engineering
17.09.2022	4th	scope of soil Mechanics origin and formation of soil
	1st	soil as a three phase system
19.09.2022	2nd	Water content, Density, specific gravity,
To		void ratio,
24.09.2022	3rd	Porosity, Percentage of air voids, air content,
		Degree of saturation, density index.
	4th	Bulk / saturated / dry / submerged density
	1st	interrelationship of various soil parameters.
26.09.2022	2nd	Water content
To	3rd	specific Gravity
01.10.2022	4th	particle size distribution : sieve analysis, wet mechanical analysis, particle size distribution curve and its uses.
	1st	
03.10.2022	2nd	
To	3rd	PUJA HOLIDAY
08.10.2022	4th	
	1st	Consistency of soils, Atterberg's Limits, plasticity
10.10.2022		indx, consistency index, Liquidity index
To	2nd	I.S. classification
15.10.2022	3rd	Continuing...
	4th	plasticity chart
	1st	Continuing...
17.10.2022	2nd	Concept of permeability
To	2nd	Darcy's Law, co-efficient of permeability.
22.10.2022	4th	Factors affecting Permeability
	1st	DIWALI
24.10.2022	2nd	constant head permeability and falling head

WEEKS	CLASS DAY	THEORY
TO		- Permeability Test.
29.10.2022	3rd	Seepage pressure, effective stress, phenomenon of quick sand
	4th	Continuing...
	1st	compaction: compaction, Light and heavy compaction Test
31.10.2022		
TO	2nd	optimum moisture
05.11.2022	3rd	content of soil, maximum dry density, zero air void line.
	4th	Factors affecting, compaction. Field compaction methods and their suitability.
	1st	← LAST MONDAY OF KARTIKA →
07.11.2022	2nd	← RASHA PURNIMA →
TO	3rd	Consolidation: Consolidation, distinction between
12.11.2022		compaction and consolidation
	4th	Terzaghi's model analogy of compression/ Springs showing the process of consolidation. Field implications.
14.11.2022	1st	Continuing...
TO	2nd	concept of shear strength
19.11.2022	3rd	Mohr-Coulomb failure theory
	4th	Cohesion, Angle of internal friction, Strength envelope for different type of soil.
21.11.2022	1st	Measurement of shear strength: - Direct shear test,
TO		triaxial shear test.
26.11.2022	2nd	unconfined compression test and vane-shear test
	3rd	Active earth pressure.
	4th	Passive earth pressure.
28.11.2022	1st	Earth pressure at rest.
TO	2nd	use of Rankine's Formula for the following cases(cohesion-
02.12.2022		less soil only).
	3rd	Back fill with no surcharge
	4th	Back fill with uniform surcharge.
05.12.2022	1st	Functions of Foundations, Shallow and deep foundation
TO	2nd	Different type of shallow foundations with sketches
10.12.2022	3rd	← LAST THURSDAY of MARGASIRA →
	4th	Different types of deep foundations with sketches
12.12.2022	1st	Types of failure (General shear, local shear & punching)
TO	2nd	Bearing capacity of soil, bearing capacity of
17.12.2022		soil using Terzaghi's Formulae & IS code formulae for strip, circular and square footings.
	3rd	Effect water table on bearing capacity of soil
	4th	Plate load Test
19.12.2022	1st	standard penetration test
TO	2nd	PYQ practice
22.12.2022	3rd	PYQ practice
	4th	

15.9.2022