

PNS School of engineering and technology**Branch : Civil Engineering****SEMESTAR;3RD****Name of the faculty : DEVIPRASAD BISWAL****SUJECT NAME: GEOTECHNICAL ENGINEERING**

WEEK	Date	Topic theory
SPETEMBER 2 ND	15.09.22	Introduction,soil and soil engg,scope of soil mechanics
	16.09.22	
3rD	19.9.22	preliminary defination and relationships
	20.09.22	soil as a three phase system
	21.09.22	water content,density,specific gravity
	22.09.22	void ratio,porosity,percentage of air void,air content
	23.09.22	
	24.09.22	degree of saturation
4th	26.09.22	density index,bulk/saturated/submerged density
	27.09.22	inter relation of various parameters
	28.09.22	problems
	29.09.22	problems
OCTOBER 2ND	11.10.22	index properties of soil
	12.10.22	water content,density,specific gravity
	13.10.22	specific gravity
	14.10.22	
	15.10.22	particle size distribution
3RD	18.10.22	sieve analysis
	19.10.22	wet mechanical analysis
	20.10.22	particle size distribution curve and its uses
	21.10.22	
	22.10.22	consistency of soil
4th	26.10.22	atterbergs limit
	27.10.22	plasticity index,consistency index,liquidity index
	28.10.22	
	29.10.22	problems
	31.10.22	I.S. classification plasticity chart
NOVEMBER		
1ST	1.11.22	permeability and seepage
	2.11.22	concept of permeability,dracy's law,
	3.11.22	facors affecting permeability
	4.11.12	
	5.11.22	constant head permeability and falling head permeability
2ND	09.11.22	seepage pressure,effective stress,quick sand condition
	10.11.22	compaction and consolidation
	11.11.12	
	12.11.22	compaction,light and heavy compaction test,optimum moisture

3RD	14.11.22	maximum dry density, zero air void line
	15.11.22	factors affecting compaction
	17.11.22	consolidation, distinction between compaction and consolidation
	18.11.22	
	19.11.22	terzahi model analogy of compression
4TH	21.11.22	shear strength, mohr coulumb failure theory, cohesion
	22.11.22	strength envelope for different type of soil
	23.11.22	direct shear test, triaxial shear test
	24.11.22	unconfined compression test and vane shear test
	25.11.22	
	26.11.22	earth pressure on retaining structure
5TH	28.11.22	active earth pressure, passive earth pressure, earth pressure rest
	29.11.22	use of rankine's formula
	30.11.22	backfill with no surcharge/uniform surcharge
DECEMBER		
1ST	01.12.22	foundation engg. function of foundation
	02.12.22	
	03.12.22	shallow and deep foundation
2ND	5.12.22	types of failure general/local/punching
	6.12.22	bearing capacity of soil
	7.12.22	bearing capacity of soil using terzaghi's formula
	8.12.22	formula for strip, circular, and square footing
	9.12.22	
	10.12.22	
3RD	12.12.22	effect of water table on bearing capacity of soil
	13.12.22	plate load test
	14.12.22	standard penetration test
	15.12.22	problems
	16.12.22	
	17.12.22	problems
4TH	19.12.22	problems
	20.12.22	
	21.12.22	

Deviprasad Biswal

SIGNATURE OF LECTURER

Sudeepa Mishra

SIGNATURE OF HOD