

LESSON PLAN-WINTER-2022
SWAMI VIVEKANANDA SCHOOL OF ENGG & TECH, BBSR

Discipline- CIVIL DEPARTMENT	Semester-3RD	Name of teaching faculty- MADHUMITA SAHOO		
Subject- GTE	No class allotted/ per week -5	SEM From date- 15/09/2022 to 22/12/2022 No of weeks- 17		
Week	Class day	Theory Topics		
3RD	9/15/2022	INTRODUCTION Geo-Technical engg		
	9/16/2022	Soil and soil Engineering		
	9/17/2022	Scope of soil mechanics Origin and formation of soil		
4TH	9/19/2022	PRELIMINARY DEFINATIONS AND RELATIONSHIP		
	9/20/2022	Soil as three phase system		
	9/21/2022	Water content ,density, Specific gravity		
	9/22/2022	Void ratio, Porosity, percentage of air content, air voids		
	9/23/2022	Degree of saturation , Density index,bulk/saturated/dry/submerged density		
	9/24/2022	Interrelationship of various soil parameters		
5TH	9/26/2022	PROBLEM		
	9/27/2022	INDEX PROPERTIES OF SOIL		
	9/28/2022	3.1 Water Content		
	9/29/2022	3.2 Specific Gravity		
	9/30/2022	3.3 Particle size distribution: Sieve analysis, wet mechanical analysis, particle size distribution curve and its uses		
1ST	10/1/2022	Consistency of Soils, Atterberg's Limits, Plasticity Index, Consistency Index, Liquidity Index		
3RD	10/10/2022	CLASSIFICATION OF SOIL		
	10/11/2022	CLASSIFICATION OF SOIL - General		
	10/12/2022	CLASSIFICATION OF SOIL - General		
	10/13/2022	CLASSIFICATION OF SOIL - I.S Classification		
	10/14/2022	CLASSIFICATION OF SOIL - I.S Classification		
	10/15/2022	CLASSIFICATION OF SOIL:- Plasticity chart		

4TH	10/17/2022	PERMEABILITY AND SEEPAGE		
	10/18/2022	Concept of permeability, Darcys law		
	10/19/2022	Co-efficient of permeability		
	10/20/2022	Factors affecting permeability		
	10/21/2022	Constant head permeability test		
	10/22/2022	Falling head permeability Test		
5TH	10/24/2022	Seepage pressure , effective stress		
	10/25/2022	phenomenon of quick sand		
	10/26/2022	Compaction and Consolidation		
	10/27/2022	6.1 Compaction: Compaction, Light and heavy compaction Test, Optimum Moisture		
	10/28/2022	Maximum Dry density, zero air void line		
	10/29/2022	factors affecting compaction, field compaction methods and their suitability		
6H	10/31/2022	factors affecting compaction, field compaction methods and their suitability		
1ST	11/1/2022	CONSOLIDATION, Consolidation		
	11/2/2022	Distinction between compaction and consolidation		
	11/3/2022	Terzaghis model analogy of compression/ springs showing the process of consolidation - field implications		
	11/4/2022	Terzaghis model analogy of compression/ springs showing the process of consolidation - field		
	11/5/2022	SHEAR STRENGTH		
2ND	11/7/2022	Concept of shear strength,		
	11/8/2022	Mohr-coulomb failure theory cohesion, angle of internal friction		
	11/9/2022	Mohr-coulomb failure theory cohesion, angle of internal friction		
	11/10/2022	strength envelope for different type of soil,		
	11/11/2022	strength envelope for different type of soil,		
	11/12/2022	measurement of shear strength		
	11/14/2022	INTERNAL ASSESSMENT		
	11/15/2022	INTERNAL ASSESSMENT		

3RD	11/16/2022	INTERNAL ASSESSMENT		
	11/17/2022	Direct shear test ,		
	11/18/2022	Triaxial shear test,		
	11/19/2022	EARTH PRESSURE OF RETAINING STRUCTURES		
4TH	11/21/2022	Active earth pressure		
	11/22/2022	passive earth pressure		
	11/23/2022	earth pressure at rest		
	11/24/2022	Use of Rankines formula for the following case (cohesion less soil only)		
	11/25/2022	Use of Rankines formula for the following case (cohesion less soil only)		
	11/26/2022	(i) backfill with no surcharge		
5TH	11/28/2022	,(ii) Backfill with uniform surcharge		
	11/29/2022	FOUNDATION ENGINEERING		
	11/30/2022	Funtions of Foundsations		
1ST	12/1/2022	Shallow Foundation		
	12/2/2022	Deep Foundations		
	12/3/2022	Differention Types of shallow Foundations, With sketches		
2ND	12/5/2022	Differention Types of Deep Foundations ,With sketches		
	12/6/2022	Types of Failure (General shear ,)		
	12/7/2022	TYpes of Failure (local shear & punching)		
	12/8/2022	Bearing Capacity of Soil		
	12/9/2022	Bearing Capacity of Soil		
	12/10/2022	Bearing Capacity of Soil using Terzaghis formula &IS Code formulae for Strip		
3RD	12/12/2022	Bearing Capacity of Soil using Terzaghis formula &IS Code formulae for Strip,		
	12/13/2022	Circular And Square Footing		
	12/14/2022	Effect water table on bearing capacity of soil		
	12/15/2022	Plate Load Test		
	12/16/2022	Standardard penetration Test		
	12/17/2022	Revision		
4TH	12/19/2022	Revision		
	12/20/2022	Revision		
	12/21/2022	Revision		
	12/22/2022	Revision		

H.O.D
Civil Engineering

S.V S.E.T., Madanpur

Revision
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PRINCIPAL

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