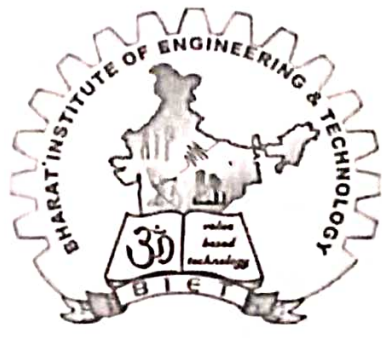


3rd sem

BHARAT INSTITUTE OF ENGINEERING & TECHNOLOGY

SIVARAM VIHAR, GHATAKESWAR HILLS
MOHADA, BERHAMPUR (GM.)



REGISTER FOR PROGRESS COURSE

Time \ Day	9:05 9:55	10:45 11:35	11:35 12:25		
MON	✓				
TUE		✓	✓		
THU	✓				

Year/ Session	Semester from Date:	To Date:
Semester & Branch	3 rd sem, civil department	
Subject with Code	Th-02 Geotechnical Engineering	
Name of the Faculty Member	Sunita samant Singhara	

B.I.E.T., COURSE PLAN

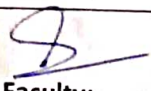
Month	Week	Class Day	Theory/Practical Topic
SEPTEMBER	3rd	15.09.22	1) Introduction 1.1 Soil and soil engineering 1.2 Scope of soil Mechanics
		15.09.22	1.3 Origin and formation of soil
		19.09.22	2) preliminary Definitions and Relationship
	4th	19.09.22	2.1 soil as a three phase system
		20.9.22	2.2 water content, Density specific gravity, voids ratio, porosity, percentage of air voids, air content, degree of saturation, density index Bulk/saturated
		(2)	dry/submerged density, interrelationship of various soil parameters.
		22.9.22	
		26.9.22	
		27.9.22	
		27.9.22	3) Index properties of soil
5th	27.9.22	3.1 water content	
	29.9.22	3.2 specific Gravity.	
	30.9.22	3.3 particle size distribution: sieve analysis wet mechanical analysis particle size distribution curve and its uses	
OCTOBER	1st	01.10.22	2.4 consistency of soils, Atterberg's Limits, plasticity Index, consistency Index, Liquidity Index

Signature of the Faculty: 

Signature of the Principal/Course Co-ordinator/HOD: 

B.I.E.T., COURSE PLAN

Month	Week	Class Day	Theory/Practical Topic	
NOVEMBER	2 nd	19.10.22	4/ classification of soil.	
	3 rd	13.10.22		4.1 General
		14.10.22	4.2 1.5 classification plasticity chart	
		17.10.22		
		18.10.22 (2)		
	4 th	20.10.22	5/ permeability and seepage	
		21.10.22	5.1 concept of permeability, Darcy's Law, co-efficient of permeability	
			25.10.22	5.2 Factors affecting permeability
			(2)	5.3 constant head permeability and falling head permeability Test.
	1 st	27.10.22	5.4 seepage pressure, effective stress, phenomenon of quick sand	
		31.10.22		
		1.11.22		
		3.11.22		
	2 nd	1.11.22	6/ compaction and consolidation	
		3.11.22	6.1 compaction: compaction, light and heavy compaction Test, optimum moisture content of maximum dry density, zero air voids, factors affecting compaction, field compaction methods and their suitability	
			4.11.22	6.2 consolidation: consolidation distinction between
7.11.22				
10.11.22				

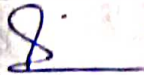
Signature of the Faculty: 

Signature of the Principal/Course Co-ordinator/HOD: 

Sign

B.I.E.T., COURSE PLAN

Month	Week	Class Day	Theory/Practical Topic
	3 rd	14.11.22	Compaction and consolidation.
		15.11.22 (2)	Terzaghi's model analogy of compression/springs showing the process of consolidation - Field implications.
		17.11.22	7) Shear strength 7.1 concept of shear strength Mohr-Coulomb failure theory cohesion
		18.11.22	angle of internal friction,
		19.11.22	strength envelope for different type of soil, Measurement of
	4 th	21.11.22	shear strength; Direct shear test, triaxial shear test,
		22.11.22 (2)	unconfined compression and vane-shear test
		24.11.22	8) Earth pressure on retaining structures.
		25.11.22	8.1 Active earth pressure, passive earth pressure, Earth pressure at rest.
	5 th	28.11.22	8.2 Use of Rankine's formula for the following cases (cohesionless soil only)
		29.11.22 (2)	(i) backfill with no surcharge
		30.11.22 (2)	(ii) backfill with uniform surcharge.

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B.I.E.T., COURSE PLAN

Month	Week	Class Day	Theory/Practical Topic	
DECEMBER	1 st	1.12.22	a) Foundation Engineering	
		5.12.22	9.1 Functions of foundation shallow and deep foundation, different types of	
		6.12.22 (2)	shallow and deep foundation with sketches types of failure (General shear, Local shear & punching shear)	
	2 nd	8.12.22	9.2	Bearing capacity of soil
		9.12.22	12.12.22	bearing capacity of soils using Terzaghi's formula & IS code formula for strip, circular and square footings, Effect
		13.12.22 (2)	14.12.22	water table on bearing capacity of soil.
		15.12.22	16.12.22	9.3
	3 rd	19.12.22	20.12.22	

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