

Amitesh bhatt lecture plan geotechnical engg

SHAMBHUNATH INSTITUTE OF ENGINEERING AND TECHNOLOGY					
DEPARTMENT OF CIVIL ENGINEERING					
SUBJECT- GEOTECHNICAL ENGG (NCE- 501)					
LECTURE PLAN AMITESH BHATT					
S.No.	Unit	Lecture No.	Topic	Date of completion	Book
1	UNIT 1	1	Introduction		GOPAL RANJAN AND RAO, K.R. ARORA
2		2	SOIL AND ITS ORIGIN		
3		3 AND 4	PROPERTIES OF SOIL		
4		5 AND 6	INTERRELATIONSHIP BETWEEN SOIL PARAMETERS		
5		7	QUESTIONS ON SOIL PROPERTIES		
6		8	INDEX PROPERTIES & ITS INVESTIGATIONS		
7		9	PARTICLE SIZE ANALYSIS- MECHANICAL		
8		10,11 &12	SEDIMENTATION ANALYSIS		
9		13,14 &15	ATTERBERG LIMITS		
10		16 &17	SOIL CLASSIFICATION		
11		18 & 19	SOIL MINERALS		
15	UNIT 2	20 &21	CAPILLARY FLOW IN SOILS		
16		22 & 23	PERMEABILITY OF SOIL , FACTORS AFFECTING AND MEASUREMENT		
17		24	QUESTION ON CAPILLARITY AND PERMEABILITY		
18		25	EFFECTIVE STRESS PRINCIPLE		
19		26	DIFFERENT CONDITIONS OF EFFECTIVE STRESS PRINCIPLE		
20		27 & 28	QUESTION ON EFFECTIVE STRESS PRINCIPLE		
21		29	SOIL COMPACTION AND FACTORS AFFECTING		
22		30	LABORATORY INVESTIGATION OF COMPACTION		
23		31 & 32	COMPACTION IN FIELDS		
32		UNIT 3	33 AND 34	STRESSES DUE TO DIFFERENT APPLIED LOADS	
33	35		STRESS DISTRIBUTION ON PLANES		
34	36		NEWMARKS CHART		
35	37		CONSOLIDATION AND ITS TYPES		
36	38		CONSOLIDATION TEST		
37	39 AND 40		DETERMINATION OF COEFFICIENT OF CONSOLIDATION		
38	41 & 42		QUESTIONS ON CONSOLIDATION		
47	UNIT 4	43	INTRODUCTION TO SHEAR STRENGTH		
48		44 & 45	MOHR -COULOMB FAILURE CRITERIA		
49		46, 47 & 48	DIFFERENT TYPES OF TEST		
50		49 & 50	SKEMPTOMS PORE PRESSURE PARAMETERS		
51		51 & 52	QUESTIONS ON SHEAR STRENGTH		
52		53 & 54	EARTH PRESSURE THEORIES		
53		55,56 & 57	DETERMINATION OF EARTH PRESSURE FOR VARIOUS CONDITION		
63	UNIT 5	58 & 59	SITE INVESTIGATION AND GROUND CHARACTERISTICS		
64		60 & 61	DIFFERENT TYPE OF IN SITU TEST		
65		62	INTRODUCTION TO FOUNDATION		
66		63 & 64	BEARING CAPACITY OF SHALLOW FOUNDATION		
67		65 & 66	MODES OF FAILURE		
68		67 & 68	QUESTIONS ON BEARING CAPACITY		