



G H RAISONI COLLEGE OF ENGINEERING NAGPUR

(An Autonomous Institute affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

CRPF Gate No.3, Hingna Road, Digdoh Hills, Nagpur. Maharashtra-440016 (India)

Course wise Teaching Plan for Session : Summer Term 2018

Course : Geotechnical Engineering - I

Faculty : bjpgodbole - Mr. Buddharatna

Janbrao Godbole

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Introduction, Methods of determining insitu density.	02/05/2018	BCEL213	A
1	2	Methods of determining in situ density.	02/05/2018	BCEL213	A
1	3	Physical Properties - Specific gravity, water content.	03/05/2018	BCEL213	A
1	4	Numerical on interrelationships	03/05/2018	BCEL213	A
2	5	3 Phase Diagram	04/05/2018	BCEL213	A
2	6	Physical Properties - Specific gravity, water content.	04/05/2018	BCEL213	A
2	7	shape and size, grain size distribution curves	05/05/2018	BCEL213	A
2	8	Relative density, consistency of soils	05/05/2018	BCEL213	A
2	9	Numericals on grain size distribution, sp.gravity	09/05/2018	BCEL213	A
2	10	Unified soil classification system	09/05/2018	BCEL213	A
2	11	Consistency of soil	10/05/2018	BCEL213	A
2	12	IS soil classification system, field identification tests.	10/05/2018	BCEL213	A
3	13	Darcy's law, determination of permeability,	11/05/2018	BCEL213	A
3	14	Darcy's law, determination of permeability,	11/05/2018	BCEL213	A
3	15	equivalent permeability in stratified soils, insitu permeability test	12/05/2018	BCEL213	A
3	16	equivalent permeability in stratified soils, insitu permeability test	12/05/2018	BCEL213	A
3	17	1-D flow, Laplace's equation, flow nets	16/05/2018	BCEL213	A
3	18	method to draw flownets, Their characteristics & seepage, uplift pressure	16/05/2018	BCEL213	A
3	19	confined and unconfined flows	17/05/2018	BCEL213	A
3	20	confined and unconfined flows	17/05/2018	BCEL213	A



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Unit	Topic Code	Topic Covered	Date	Course	Section
3	21	Preliminary problems of discharge estimation of homogeneous soils.	18/05/2018	BCEL213	A
3	22	Effective, Neutral and total stresses in Soil mass.	18/05/2018	BCEL213	A
4	23	Compaction - General principles, tests, factors affecting compaction	19/05/2018	BCEL213	A
4	24	Compaction - General principles, tests, factors affecting compaction	19/05/2018	BCEL213	A
4	25	field compaction, compaction techniques.	23/05/2018	BCEL213	A
4	26	Consolidation- Fundamentals, 1-D consolidation	23/05/2018	BCEL213	A
4	27	normally and over-consolidated clays	24/05/2018	BCEL213	A
4	28	Preconsolidation Curve	24/05/2018	BCEL213	A
4	29	time rate of consolidation, coefficient of consolidation	30/05/2018	BCEL213	A
4	30	Numericals on grain size distribution, sp.gravity	30/05/2018	BCEL213	A
5	31	secondary consolidation, 3-D consolidation, vertical sand drains.	30/05/2018	BCEL213	A
5	32	Shear strength of soil, components of shear strength, factors affecting shear strength	31/05/2018	BCEL213	A
5	33	Principle of effective stress, Mohr-Coulomb failure criterion	31/05/2018	BCEL213	A
5	34	direct shear test	01/06/2018	BCEL213	A
5	35	Unconfined compression test	01/06/2018	BCEL213	A
5	36	Triaxial shear test : consolidated drained, consolidated undrained, unconsolidated undrained	02/06/2018	BCEL213	A
5	37	Vane shear test, shear strength of clays and sands	02/06/2018	BCEL213	A
6	38	Stress distribution in soil mass	06/06/2018	BCEL213	A
6	39	Boussinesque's Theory - point & Uniformly loaded rectangular & circular areas	06/06/2018	BCEL213	A



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Unit	Topic Code	Topic Covered	Date	Course	Section
6	40	Newmarks charts	07/06/2018	BCEL213	A
6	41	Soil nailing, geo membrane	07/06/2018	BCEL213	A
1	42	Revision	08/06/2018	BCEL213	A
6	43	Revision	08/06/2018	BCEL213	A