G.P. DHANGAR (Fatehabad)

Name of Faculty : Mr. Mohan Lal

Discipline   : CIVIL ENGG.

Semester   : 5th sem

Subject   : RCC

Week	Lecture No.	Topic Covered
1	1	Introduction, concept of RCC
	2	Reinforced material
	3	Properties of mild steel and HYSD bar
	4	Loading on structure
	5	Working stress method
2	6	Limit state method
	7	Introduction on shear and development length
	8	Shear on working stress method
	9	Shear strength of concrete without shear reinforcement
	10	Maximum shear stress
3	11	Shear reinforcement
	12	Numerical problems
	13	Singly reinforced beam, basic assumption of RCC beam
	14	Stress strain curve , neutral axis
	15	Balanced ,under reinforced, over reinforced beam, moment of
4	16	Design of single reinforced beam
	17	Numerical problems
	18	Limit state method
	19	Partial safety factor for load and material , design loads
	20	Stress block, parameter
5	21	Singly reinforced beam
	22	Theory and design of RCC Beam by limit state method
	23	Theory and design of RCC Beam by limit state method
	24	Numerical problems
	25	Numerical problems
6	26	Introduction on doubly reinforced beam
	27	Theory and design of doubly RCC beam
	28	Design procedure of doubly RCC beam
	29	Numerical problems
	30	Numerical problems
7	31	Behavior of T-Beam
	32	Isolated T beam

	33	Inverted T beam
	34	Introduction on one way slab
	35	Theory and design of simply supported one way slab by limit state
8	36	Theory and design of simply supported one way slab by limit state
	37	Reinforcement details
	38	Reinforcement details
	39	Design procedure of one way slab
	40	Numerical problems
9	41	Numerical problems
	42	Numerical problems
	43	Introduction on two way slab
	44	Theory and design of simply supported two way slab by limit state
	45	Theory and design of simply supported two way slab by limit state
10	46	Reinforcement details
	47	Reinforcement details
	48	Design procedure of two way slab in all condition
	49	Numerical problems
	50	Numerical problems
	51	Axially loaded column
11	52	Classification and effective length of column
	53	Numerical problems
	54	Numerical problems
12	55	Specification of longitudinal and lateral ties
	56	Design procedure of different type of column
	57	Numerical problems
13	58	Prestressed concrete
	59	Concept and method prestessing
	60	Advantages and disadvantage, losses in prestress