

NAME OF FACULTY :- MR. ASHISH JUNEJA
 DISCIPLINE :- CIVIL ENGG.
 SEMESTER :- 4TH
 SUBJECT :- RCC
 LESSON PLAN DURATION :- FROM JAN, 2018 to APRIL, 2018
 WORK LOAD PER WEEK :- 5 Lecture/week

THEORY		
Week	Lecture Day	Topic
		Assignment/Test
1st	1	Concept of Reinforced Cement Concrete (RCC), Suitability of steel as reinforcing material
	2	Properties of mild steel and HYSD steel , Loading on structures as per IS: 875
	3	Working stress method: Definition and basic assumptions
	4	Limit state method: Definition and basic assumptions
	5	Shear as per IS:456-2000 by working stress method
2nd	6	Shear strength of concrete without shear reinforcement
	7	Maximum shear stress
	8	Shear reinforcement
	9	Definitions and assumptions made in limit state of collapse
3rd	10	Definitions and assumptions made in limit state of collapse
	11	Partial factor of safety for materials
	12	Partial factor of safety for loads
	13	Design loads
	14	Stress block, parameters
4th	15	Stress block, parameters
	16	Theory of singly reinforced beam by Limit State Method
	17	design of singly reinforced beam by Limit State Method
	18	Numericals Problems
	19	Numericals Problems
5th	20	Numericals Problems
	21	Numericals Problems
	22	Numericals Problems
	23	Numericals Problems
	24	Theory of simply supported doubly reinforced rectangular beam by Limit State Method
6th	25	design of simply supported doubly reinforced rectangular beam by Limit State Method
	26	Numericals Problems
	27	Numericals Problems
	28	Numericals Problems
	29	Numericals Problems
7th	30	Numericals Problems
	31	Numericals Problems
	32	Behaviour of T beam
	33	Behaviour of inverted T beam
	34	Behaviour of isolated T beam
8th	35	Behaviour of isolated T beam
	36	Behaviour of 'L' beams
	37	Theory of simply supported one way slab
	38	design of simply supported one way slab
	39	design of one way slab including sketches showing reinforcement details by Limit State Method
9th	40	Numericals Problems
	41	Numericals Problems
	42	Numericals Problems
	43	Numericals Problems
	44	Numericals Problems
10th	45	Numericals Problems
	46	Theory of two-way simply supported slab
	47	design of two-way simply supported slab
	48	design of two-way simply supported slab with corners free to lift
	49	No provisions for torsional reinforcement by Limit State Method
	50	sketches showing reinforcement details (plan and two sections)
	51	Numericals Problems
	52	Numericals Problems

11th	53	Numericals Problems
	54	Numericals Problems
	55	Definition and classification of columns
12th	56	Effective length of column
	57	Specifications for longitudinal and lateral reinforcement
	58	Design of axially loaded square columns by Limit State Method
	59	Design of axially loaded rectangular columns by Limit State Method
13th	60	Design of axially loaded circular short columns by Limit State Method
	61	Numericals Problems
	62	sketching of reinforcement(sectional elevation and plan)
	63	Concept of pre-stressed concrete
	64	Methods of pre-stressing : pre-tensioning and post-tensioning
	65	Advantages and disadvantages of pre-stressing , Losses in pre-stress