

SHREE RAMKRISHNA INSTITUTE OF SCIENCE AND TECHNOLOGY

**LESSON PLAN**

SESSION : 2014-15

SEMESTER : 5<sup>TH</sup>

DEPARTMENT: **CIVIL ENGINEERING**

SUBJECT : **STRUCTURAL DESIGN AND DETAILING-I (SDD-I)**

TEACHER : PRANAB KUMAR MAJUMDER (PKM)

TIME : 60 PERIODS

Each day comprises of 2 periods

DAY	TOPIC	SUB-TOPIC
1	Introduction	P.C.C. and R.C.C. – Types of structures – Types of loads – IS codes
2	Beam	Properties of Singly Reinforced Beams – Working Stress Method of Design (WSMD)
3	' '	Numerical problems and Design and Detailing of Singly Reinforced Beam – WSMD
4	' '	' ' "
5	' '	' ' "
6	' '	Properties of Doubly Reinforced Beams – WSMD
7	' '	Numerical problems and Design and Detailing of Doubly Reinforced Beam – WSMD
8	' '	Design and Detailing of Shear Reinforcements – WSMD
9	' '	Bond and Curtailment of Reinforcements
10	' '	Design and Detailing of Lintel – WSMD
11	' '	Design and Detailing of Flanged Beam (T-Beam) – WSMD
12	' '	Properties of Singly Reinforced Beams – Limit State Method of Design (LSMD)
13	' '	Numerical problems and Design and Detailing of Singly Reinforced Beam – LSMD
14	Slab	Design and Detailing of One-way Simply Supported Slab – LSMD
15	' '	Design and Detailing of Two-way Simply Supported Slab – LSMD
16	' '	Design and Detailing of Cantilever Slab – LSMD
17	Column	Design and Detailing of Column – Square, Rectangular, Circular - LSMD
18	Footing	Design and Detailing of Footing – Uniform thickness - LSMD
19	' '	Design and Detailing of Tapered Footing - LSMD
20	Pre-stressed Beam	Stress calculation for Pre-stressed Beam
21	Stair	Design of Dog-legged Stair - LSMD
22	' '	Detailing of Dog-legged Stair
23	Slab	Design of Two-way Restrained Slab – LSMD
24	' '	Detailing of Two-way Restrained Slab
25	Miscellaneous	Miscellaneous descriptive and numerical problems
26	Revision	Beams
27	' '	Slabs
28	' '	Footings
29	' '	Stair
30	' '	Columns