

**LESSON PLAN –RMB.**

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NAME OF FACULTY :  
DISCIPLINE : **CIVIL ENGG.**  
SEMESTER : **5<sup>TH</sup>**  
SUBJECT : **REPAIR AND MAINTENANCE OF BUILDING**  
LESSON PLAN DURATION : **15WEEKS**  
DURATION-3 **HRS/WEEK**

WEEK	THEORY	
1 <sup>ST</sup> WEEK	1 <sup>ST</sup> DAY	IMPORTANCE AND SIGNIFICANCE OF REPAIR AND MAINTENANCE OF BUILDINGS
	2 <sup>ND</sup> DAY	MEANING OF MAINTENANCE
	3 <sup>RD</sup> DAY	OBJECTIVE OF MAINTENANCE
2 <sup>ND</sup> WEEK	1 <sup>ST</sup> DAY	FACTORS INFLUENCING THE REPAIRS AND MAINTENANCE
	2 <sup>ND</sup> DAY	DEFINITION OF DETERIORATION/DECAY
	3 <sup>RD</sup> DAY	FACTORS CAUSING DETERIORATION AND THEIR CLASSIFICATION
3 <sup>RD</sup> WEEK	1 <sup>ST</sup> DAY	HUMAN FACTORS CAUSING DETERIORATION, CHEMICAL FACTORS CAUSING DETERIORATION, ENVIROMENTAL CONDITION CAUSING DETERIORATION, MISCELLANEOUS FACTORS
	2 <sup>ND</sup> DAY	EFFECTS OF VARIOUS AGENCIES OF DETERIORATION ON VARIOUS BUILDING MATERIALS I.E
	3 <sup>RD</sup> DAY	BRICKS, STONES, TIMBER, CONCRETE, PAINTS, METALS
4 <sup>TH</sup> WEEK	1 <sup>ST</sup> DAY	DOUBT WILL BE TAKEN AND REVISION

	2 <sup>ND</sup> DAY	SYSTEMATIC APPROACH/PROCEDURE OF INVESTIGATION
	3 <sup>RD</sup> DAY	SEQUENCE OF DETAILED STEPS FOR DIAGNOSIS OF BUILDING DEFECTS/PROBLEMS
5 <sup>TH</sup> WEEK	1 <sup>ST</sup> DAY	REVISION OF 3 <sup>ND</sup> UNIT
	2 <sup>ND</sup> DAY	
	3 <sup>RD</sup> DAY	LIST NON DESTRUCTIVE AND OTHERS TESTS ON STRUCTURAL ELEMENTS AND MATERIALS TO EVALUATE THE CONDITION OF THE BUILDING
6 <sup>TH</sup> WEEK	1 <sup>ST</sup> DAY	DEFINE DEFECTS IN BUILDINGS AND CLASSIFICATION OF DEFECTS
	2 <sup>ND</sup> DAY	BUILDING DEFECTS IN VARIOUS BUILDING ELEMENTS FOUNDATIONS ,BASEMENTS AND DPC,WALLS,COLUMN AND BEAMS, ROOF AND TERRACE, AND DEFECTS CAUSED BY DAMPNES
	3 <sup>RD</sup> DAY	COMPATIBILITY ASPECTS OF REPAIRS MATERIALS  ANTI CORROSION COATINGS, ADHESIVE BONDING AIDS, REPAIRS MORTARS, CURING COMPOUND, JOINTS SEALANTS, PROTECTIVE COATING
7 <sup>TH</sup> WEEK	1 <sup>ST</sup> DAY	REVISION OF 4 <sup>TH</sup> AND 5 <sup>TH</sup> UNIT AND DOUBT WILL BE TAKEN
	2 <sup>ND</sup> DAY	PREVENTIVE MAINTENANCE CONSIDERATION AND SURFACE PREPARATION TECHNIQUE FOR REPAIRS
	3 <sup>RD</sup> DAY	CRACK REPAIRS METHOD  EPOXY INJECTION, GROOVING AND SEALING,STITCHING,ADDING REINFORCEMENT AND GROUTING
8 <sup>TH</sup> WEEK	1 <sup>ST</sup> DAY	REPAIRS OF SURFACE DEFECTS OF CONCRETE -BUG HOLES
	2 <sup>ND</sup> DAY	FORM TIE HOLES, HONEY COMB AND LARGER VOIDS -REPAIRS OF CORROSION IN RCC ELEMENTS
	3 <sup>RD</sup> DAY	-STEPS IN REPAIRING -PREVENTION OF CORROSION IN REINFORCEMENT

		REVISION AND ASSIGNMENT
9 <sup>TH</sup> WEEK	1 <sup>ST</sup> DAY	
	2 <sup>ND</sup> DAY	MATERIALS PLACEMENT TECHNIQUE WITH SKETCHES  -PNEUMATICALLY APPLIED, OPEN TOP PLACEMENT, BIRD MOUTH -DRY PACKING, FORM AND PUMP, TROWEL APPLIED METHOD
	3 <sup>RD</sup> DAY	REVISION AND TEST WILL BE GIVEN
10 <sup>TH</sup> WEEK	1 <sup>ST</sup> DAY	REPAIRS OF DPC AGAINST RISING DAMPNES
	2 <sup>ND</sup> DAY	-PHYSICAL METHOD, ELECTRICAL METHOD, CHEMICAL METHOD
	3 <sup>RD</sup> DAY	DOUBT WILL BE TAKEN
11 <sup>TH</sup> WEEK	1 <sup>ST</sup> DAY	REPAIRS OF WALLS -REPAIRS OF MORTARS JOINTS AGAINST LEAKAGE -EFFLORESCENCE REMOVAL
	2 <sup>ND</sup> DAY	WATER PROOFING OF WET AREAS ,WATER PROOFING OF FLAT RCC ROOFS
	3 <sup>RD</sup> DAY	VARIOUS WATER PROOFING SYSTEM AND THEIR CHARACTERSTITICS
12 <sup>TH</sup> WEEK	1 <sup>ST</sup> DAY	TYPES OF SEALING JOINTS WITH DIFFERENT TYPES OF SEALANTS
	2 <sup>ND</sup> DAY	TECHNIQUE FOR REPAIRS OF JOINTS AND REPAIR OF OVERHEAD AND UNDERGROUND WATER TANKS
	3 <sup>RD</sup> DAY	DOUBT WILL BE TAKEN
13 <sup>TH</sup> WEEK	1 <sup>ST</sup> DAY	REVISION OF 1 <sup>ST</sup> UNIT
	2 <sup>ND</sup> DAY	REVISION OF 2 <sup>ND</sup> UNIT
	3 <sup>RD</sup> DAY	REVISION OF 3 <sup>RD</sup> UNIT

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14 <sup>TH</sup> WEE	1 <sup>ST</sup> DAY	UNIT TEST WILL BE GIVEN
	2 <sup>ND</sup> DAY	REVISION OF 4 <sup>TH</sup> UNIT
	3 <sup>RD</sup> AY	REVISION OF 5 <sup>TH</sup> UNIT
15 <sup>TH</sup> WEEK	1 <sup>ST</sup> DAY	REVISION OF 6 <sup>TH</sup> UNIT
	2 <sup>ND</sup> DAY	DOUBT WILL BE TAKEN
	3 <sup>RD</sup> AY	COMBINED TEST OF ALL UNIT