

Jaypee University of Information Technology, Waknaghat

T 2 Examination – October 2018

M. Tech. 3rd Semester (Construction Management and Structural Engineering)

Dr. Parbaj Kumar

Course Code: 12M1WCE332

Max. Marks: 25

Course Name: Repair and Retrofitting of Structures

Course Credit: 03

Max. Time: 90 Minutes

Note: All questions are compulsory. Carrying of mobile phone during examination will be treated as case of unfair means. Assume any missing data.

- Q.1 Define prime objectives of condition assessment of a building structure. 2
- Q.2 Explain the stages followed to carry out condition survey. 6
- Q.3 List the damage type in a structure along with repair measure. 2
- Q.4 List the common observation order of deterioration in reinforced concrete building. 2
- Q.5 Write the relevant tests and test methods associated with roll number group. 2

Group	Roll No.	Tests	Marks
Group-1	172601, 172604, 172608, 172654	Sulphate Attack	4
		TGA	3
		Impact Echo Test	2
		Load Test	2
		List the test used to evaluate the fire damage assessment.	1
Group-2	172603, 172606, 172652, 172656	Rebound Hammer Test	2.0
		Windsor Probe	1.5
		Core Cutter Test	3.0
		Half Cell Method	2.5
		XRD	3.0
Group-3	172602, 172605, 172609, 172655	Ultrasonic Pulse Velocity	2.5
		Chloride	4.0
		Permeability	4.0
		Radiography	1.5
Group-4	172607, 172653, 172657	Pullout Test	2.5
		Carbonation Test	4.0
		Resistivity Meter	2.0
		DTA	2.5
		Differentiate field and laboratory tests from the test list suggested in groups 1, 2, 3, and 4	1.0