Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

ME - SEMESTER- II(New course) • EXAMINATION (Remedial) - WINTER- 2015

Sul	bject (Code: 2723308 Date: 14/12/20	15
Sul	bject]	Name: Rehabilitation and Retrofitting of Buildings	
Tir	ne:2:	30 pm to 5:00 pm Total Marks: 7	70
Inst	ruction	is:	
		Attempt all questions.	
	2.	Make suitable assumptions wherever necessary.	
3 1	3.	Figures to the right indicate full marks Explain the factors effecting the durability of concrete	07
Q.1	(a) (b)	Explain the factors affecting the durability of concrete. Elaborate the carbonation effect on concrete.	07 07
	(D)		
Q.2	(a)	Write in short about the push over analysis. Explain under which circumstances it will be useful.	07
	(b)	Explain the role of quality control in construction. OR	07
	(b)	Differentiate with examples, Repair, Rehabilitation and retrofitting.	07
Q.3	(a)	Explain the technique for the strengthening of earthquake damaged column.	07
	(b)	Enlist the method of repair. Explain any one of them in detail. OR	07
Q.3	(a)	Explain the technique for the strengthening of earthquake damaged beam.	07
	(b)	Enlist the method of rehabilitation. Explain any one of them in detail.	07
Q.4	(a)	Elaborate on the Structural & Non-structural cracks in buildings with suitable examples.	07
	(b)	Elaborate on õNon-destructive testing of connections in steelö. OR	07
Q.4	(a)	Write in short on Rebar locator and SASW method.	07
	(b)	Discuss stages for repair of concrete slab where the carbonation depth reached reinforcement level.	07
Q.5	(a)	What are the defects and deterioration observed in steel structures? Explain in detail.	07
	(b)	Explain the procedure of survey and assessment of structural conditions in RCC structures.	07
		OR	
Q.5	(a)	Explain the procedure of controlling the sulphate attack.	07
	(b)	What are the main objectives of condition assessment of structure?	07
