Seat	No.: _	Enrolment No		
		GUJARAT TECHNOLOGICAL UNIVERSITY		
\mathbf{M}	IE - S	EMESTER- II (Old course) • REMEDIAL EXAMINATION - SUMMER 201	5	
Subject Code: 1722006 Date:				
•	Subject Name: Rehabilitation of Structures			
_	Time: 02:30 pm to 5:00 pm Total Marks: 70			
111116	: . U	2.30 pm to 3.00 pm	•	
Instru	ıction	S:		
	1.	Attempt all questions.		
	2.	Make suitable assumptions wherever necessary.		
	3.	Figures to the right indicate full marks.		
Q.1	(a)	Discuss the factors affecting the durability of Concrete	07	
Q.1	(b)	Define following term	07	
	(~)	Repair, Rehabilitation, Retrofitting, Restoration, Preservation, Creep and	0.	
		efflorescence		
Q.2	(a)	Discuss the factors to be considered for the selection of repair methods	07	
	(b)	Discuss about rebound test equipment and its operation with required sketch	07	
	<i>a</i> >	OR	0=	
0.2	(b)	What is NDT? Explain in brief about NDT of connection in steel.	07 07	
Q.3	(a) (b)	Explain(1) Carbonation (2) Freezing & Thawing (3) Chemical attack What are the essential parameters for repair materials? Explain it in brief.	07	
	(0)	OR	07	
Q.3	(a)	What is alkali-aggregate reaction? Discuss the effect of aggregate size and	07	
	()	cement type on the phenomenon.		
	(b)	Explain factors to be considered for the selection of repair methods of	07	
		structures.		
Q.4	(a)	Explain IS codal provisions for conducting rebound hammer test	07	
	(b)	Enlist different repairing methods. Explain any one with figure.	07	
ΩA	(a)	OR Explain IS codal provisions for Influence parameter of UPV test result.	07	
Ų.4	(a) (b)	What do you mean by push over analysis? Explain its benefits for structural	07	
	(6)	analysis.	07	
Q.5	(a)	Describe at least four considerations for preventive maintenance of structure	07	
	(b)	Explain how use of improper materials and poor workmanship contribute to the	07	
		structural failures.		
o -		OR	. –	
Q.5	(a)	What do you understand by condition assessment of R.C.C structure? Explain	07	
	(b)	it along with check list. Explain the electro-chemical process responsible for corresion of steel in	07	
	(b)	Explain the electro-chemical process responsible for corrosion of steel in concrete with necessary sketch.	U/	