Sea	at No.	: Enrolment No	_
Su	hiec	GUJARAT TECHNOLOGICAL UNIVERSITY M. E SEMESTER – II • EXAMINATION – SUMMER • 2014 t code: 1724904 Date: 20-06-2014	
	u	t Name: Maintenance and Rehabilitation of Structures	
	-	02:30 pm - 05:00 pm Total Marks: 70	
	struct	<u> </u>	
	2	 Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. 	
Q.1	(a)		07
Q.1	(b)	•	07
Q.2	(a) (b)		07 07
		OR	
	(b)	•	07
		 Epoxy resin Special concrete and its application. 	
Q.3	(a) (b)	Explain important properties of various repair materials. What do you mean by Epoxy material? What are the various properties of Epoxy materials? Give steps to apply epoxy material for rehabilitation work. OR	07 07
Q.3	(a) (b)	<u>.</u>	07 07
Q.4	(a)	What is Cathodic protection explain in detail?	07
	(b)	Enlist various reasons of failures of corrosion protection system for Bonded post tensioned concrete Structure.	07
0.4		OR	
Q.4	(a)	What is corrosion mechanism? Explain cover thickness and cracking effect on steel.	07
	(b)	How will you restore original strength for	07
	()	(1) Small cracks in existing masonry.	
		(2) Large cracks and crushed concrete.	
Q.5	(a)	Explain: (Any Two)	07
		1. Corrosion Inhibitors.	
		2. Dry Mix and Wet Mix Shotcrete.	
	(b)	3. Predictive and preventive maintenance. Write about steps for repairs to damaged structure due to Chemical Disruption,	07
	(0)	Marine Exposure and leakage.	07
		OR	
Q.5	(a)	Describe following repair rehabilitation strategies (Any two) (a) Enhancing shear strength. (b) Base isolation. (c) Flood damaged Structure.	07
	(b)		07
