

[M19 ST1107]

**I M. Tech I Semester (R19) Regular Examinations
 REPAIR & REHABILITATION OF STRUCTURES
 (Civil Engineering)
 MODEL QUESTION PAPER**

TIME: 3 Hrs.

Max. Marks: 75 M

Answer **ONE Question** from **EACH UNIT**

All questions carry equal marks

			CO	KL	M
		UNIT - I			
1.	a).	Categorise the materials used for repair	1	K4	7
	b).	Distinguish between visual investigation methods.	1	K4	8
		OR			
2.	a).	Distinguish between Glass fiber wraps and carbon fiber wraps.	1	K4	7
	b).	Examine non-destructive evaluation and its importance.	1	K4	8
		UNIT - II			
3.	a).	Classify structural concrete strengthening.	2	K4	7
	b).	Categorise methods of repair of cracks.		K4	8
		OR			
4.	a).	Examine beam shear capacity strengthening, shear transfer strengthening and stress reduction techniques.	2	K4	7
	b).	Award column strengthening, flexural strengthening and connection stabilization.		K5	8
		UNIT - III			
5.		Discover the bonded installation techniques.	2	K4	15
		OR			
6.		Contrast the fundamental de-bonding mechanisms.	2	K4	15
		UNIT - IV			
7.	a).	Examine the mechanical properties of fiber-reinforced concrete.	4	K4	7
	b).	Discover the applications of fiber-reinforced concrete.			8
		OR			
8.	a).	Discover the properties and reaction mechanism of fly ash-modified concrete.	4	K4	7
	b).	Examine the durability of fly ash-modified concrete.			8
		UNIT - V			
9.		Theme of the high performance concrete.	4	K4	15
		OR			
10.		Theme of Self-compacting concrete.	4	K4	15