

Code No: 137GJ

R16

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, October/November - 2020

REHABILITATION AND RETROFITTING OF STRUCTURES

(Civil Engineering)

Time: 2 Hours

Max. Marks: 75

Answer any Five Questions

All Questions Carry Equal Marks

1. Explain in detail the methods to identify distress in structures and measures to be adopted to prevent them. [15]
2. Briefly discuss the holistic models of deterioration of RCC structures. [15]
3. Explain the repair processes of concrete damaged by reinforcement corrosion. [15]
4. Explain the process of systematic assessment of fire affected structures. [15]
5. Explain in detail the stages for carrying out the condition survey. [15]
6. Briefly discuss the various tests to detect the corrosion of embedded steel along with their working principles. [15]
7. Narrate the methods to repair and rehabilitate a structure having foundation distress. [15]
- 8.a) Mention the different types of sensors available for building projects. [7+8]
- b) Describe in detail the concept of building instrumentation using smart sensors.

---ooOoo---