

Code No: 18707/R16

## M. Tech. I Semester Regular Examinations, January-2017 REPAIR AND REHABILITATION OF STRUCTURES

Common to Structural Engineering (87) and Structural Design (85)

Time: 3 Hours Max. Marks: 60

## Answer any FIVE Questions All Questions Carry Equal Marks

- 1. a Explain the different materials used for repairing of a structure?
  - b Explain about different mineral admixtures used in mixing concrete?
- 2. a Explain about Beam shear Strengthening?
  - b Explain about Shear transfer Strengthening between Members?
- 3. Explain about
  - a)Bonded installation techniques
  - b) fundamental debonding mechanisms
- 4. Explain about No fines concrete? Write the applications of No fines concrete? Explain the advantages of No fines concrete?
- 5. a Explain about the different Materials used in high performance concretes?
  - b Explain the applications of SCC?
- 6. a Explain about Corrosion activity measurement?
  - b Explain about Ultrasound pulse velocity method with neat sketch
- 7. Explain about
  - a) plate end debonding
  - b) Intermediate crack debonding with neat sketches?
- 8. a Write the Properties of high performance concretes?
  - b Explain the Development of high performance concretes?

\*\*\*\*