

Roll No. ....

**23424**

**M. Tech 2nd Semester (Civil Engg.)  
Specialization in Structural Design  
Examination – May, 2018**

**REPAIRS AND REHABILITATION OF STRUCTURES**

**Paper : MTSD-204**

*Time : Three Hours ]*

*[ Maximum Marks : 100*

*Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.*

**Note :** Attempt any *five* questions.

1. (a) What do you understand by the term distress in the structure ? What are the main symptoms in a structure referred to distress ?  
(b) What are the various crack repair technique ? Explain.
2. List the causes for deterioration & distress in structures. Describe each, explaining what type of distress is witnessed due to each causes.

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3. How pre-repair evaluation is different from post-repair evaluation ? Discuss in detail.
4. What are the methods for repairing structural components at the element level ?
5. What are the unique features which demand specific attention while repair and rehabilitation ?
6. Describe in detail the techniques of damage assessment procedure for the repair and rehabilitation of structures.
7. Write a short note on the repair of following components :
  - (A) (a) Strengthening and stiffening of members.
    - (b) Strengthening and stiffening of beams and girders.
  - (B) Explain in detail how connections stabilization achieved. What are the stress reduction techniques ?
8. What do you understand by blanketing ? Describe difference types of blanketing. Also explain different types of overlays used in repair work.