

23424

**M. Tech. 2nd Semester (Civil Engg.) (Specialization in
Structural Design) Examination, May-2015**

REPAIR AND REHABILITATION OF STRUCTURES

Paper-MTSD-204

Time allowed : 3 hours]

[Maximum marks : 100

*Note : Attempt any five questions. All questions carry
equal marks.*

1. What are the main distress symptoms in a structure ?
What are the various crack repair technique explain. 20
2. List the causes for deterioration and distress in
structures. Describe each, explaining what type of
distress is witnessed due to each cause. 20
3. Explain in detail the difference between pre-repair
evaluation and post-repair evaluation. 20
4. What are the methods for repairing structural
components at the element level ? 20
5. What are the unique features which demand specific
attention while repair and rehabilitation ? 20
6. Describe in detail the damage assessment procedure for
the repair and rehabilitation of structures. 20

7. Write a short note on the repair of following components :
- (a) Strengthening and stiffening of members.
 - (b) How connection stabilization achieved ?
 - (c) Strengthening and stiffening of beams and girders.
 - (d) Stress reduction techniques. 20
8. What is meant by jacketing ? Explain different methods of jacketing. Also explain different types of overlays used in repair work. 20