

ME CIVIL | sem I | choice based | 2nd half 2018

Time: 3 Hrs

7/12/2018
Max Marks: 80

PLEASE NOTE:

1. Question No 1 is Compulsory.
2. Attempt any **three** questions out of remaining questions.
3. Figures to the right indicate full marks.

- Q1 Answer any four questions 20
- a) Explain the repair of masonry structures.
 - b) Write a short note on interpretation and evaluation of test results of conditional survey.
 - c) Explain the use of polymer modified concrete as a repair material.
 - d) Discuss the stress reduction technique used for distressed structures.
 - e) Explain in brief, different waves generated during an earthquake.
- Q2 a) Explain the Rebound Hammer Test method for diagnosis and assessment of deterioration in concrete structures. 10
- b) What is a heritage structure? Explain the repair of any one heritage structure in India. 10
- Q3 a) Consider a building affected by earthquake. Discuss this as a case study. Analyse its various effects and suggest suitable methods of remedy. 10
- b) Describe the FRP jacketing method for strengthening of structures. 10
- Q4. a) Explain how repair of marine structures is carried out. What special precautions are required in this case. 10
- b) Explain post repair inspection and maintenance of structures. 10
- Q5 a) Describe in detail the repair of an overhead water tank. 10
- b) How the plate bonding technique is carried out. What are the advantages of this method. 10
- Q6. a) Explain the reasons for cracks. What are repair strategies for cracks. 10
- b) Write a note on structural audit of structures. 10
