

Reg.No:

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SNS College of Technology, Coimbatore- 35(Autonomous)  
B.E/B.Tech– Internal Assessment Examination I Academic  
Year 2022-2023(Odd)



VII Semester  
19CEE409 – REPAIR AND REHABILITATION  
OF STRUCTURES  
(Common to Civil Engineering)

Time: 1<sup>1/2</sup>Hours

Maximum Marks: 50

Answer All Questions

PART – A (5X2 = 10)

CO

Blooms

- |   |   |      |     |
|---|---|------|-----|
| 1. Define Rehabilitation  | 2 | CO 1 | Rem |
| 2. What are the factors influencing maintenance?  | 2 | CO 1 | Rem |
| 3. Illustrate the possible decisions that can be made after evaluating the strength of a structure? | 2 | CO 2 | Und |
| 4. Show, how does a concrete structure get affected by heat?  | 2 | CO 2 | Und |
| 5. How can you control cracks in a structure?   | 2 | CO 2 | Rem |

**PART B — (2 x 13 = 26 Marks)**

- |  |    |      |     |
|--|----|------|-----|
| 6 (a) Elaborate in detail about the prevention aspect of maintenance<br>(or)                                 | 13 | CO 1 | Cre |
| (b) Explain the various causes for deterioration of concrete structures                                      | 13 | CO 1 | Eva |
| 7 (a) Explain in detail about quality assurance<br>(or)  | 13 | CO 2 | Eva |
| (b) Distinguish the different types of cracks find in concrete structure.<br>Also list the remedial measure. | 13 | CO 2 | Ana |

**PART C — (1 x 14 = 14 Marks)**

- |  |    |      |     |
|--|----|------|-----|
| 8 (a) Analyze the concrete structure and describe the steps in the assessment procedure for evaluate damages in a structure.<br>(or) | 14 | CO 1 | Ana |
| (b) Explain the types of corrosion protection methods and explain any three methods.   | 14 | CO 1 | Cre |

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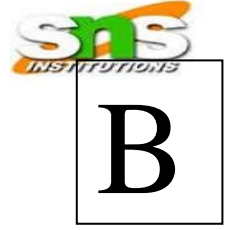
Rem – Remembering, Und- Understanding, App – Apply, Ana – Anlayzing,  
Eva – Evaluate, Cre - Creating

Reg.No:

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Time: 1<sup>1/2</sup>Hours

Maximum Marks: 50

Answer All Questions  
PART – A (5X2 = 10)

|   |   | CO   | Blooms |
|---|---|------|--------|
| 1. any the following  | 2 | CO 1 | Rem    |
| (i) Repair  |   |      |        |
| (ii) Rehabilitation   |   |      |        |
| (iii) “Maintenance”.  |   |      |        |
| 2. How deterioration of concrete occurs due to corrosion?                         | 2 | CO 1 | Und    |
| 3. Distinguish between structural cracks and non – structural cracks with example | 2 | CO 2 | Ana    |
| 4. What is the role of cover in RC structure?                                     | 2 | CO 2 | Rem    |
| 5. Which are the factors that affect the durability of concrete?                  | 2 | CO 2 | Rem    |

**PART B — (2 x 13 = 26 Marks)**

|  |    |      |     |
|--|----|------|-----|
| 6 (a) Illustrate maintenance, importance and facets of maintenance.  | 13 | CO 1 | Ana |
| (or)   |    |      |     |
| (b) Elaborate the detail about quality assurance   | 13 | CO 2 | Eva |
| 7 (a) Explain in detail about the prevention aspect of maintenance   | 13 | CO 1 | Cre |
| (or)   |    |      |     |
| (b) List out the factors that contribute to the failure of concrete structures and explain design and construction errors in concrete structures | 13 | CO 2 | Ana |

**PART C — (1 x 14 = 14 Marks)**

|  |    |      |     |
|--|----|------|-----|
| 8 (a) Elaborately explain about the following                                  | 14 | CO 1 | Ana |
| (i) Effect of temperature on concrete  |    |      |     |
| (ii) Effect of climate on concrete   |    |      |     |
| (or)   |    |      |     |
| (b) Elaborately explain about the effect of temperature on concrete structures | 14 | CO 2 | Cre |

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Rem – Remembering, Und- Understanding, App – Apply, Ana – Analyzing, , Eva – Evaluate, Cre - Creating

