

**School of Engineering****M.Tech Structural Engineering  
Semester End Examination - Jun 2024****Duration : 180 Minutes  
Max Marks : 100****Sem II - G1PC205T - Maintenance and Rehabilitation of Structures**General Instructions*Answer to the specific question asked**Draw neat, labelled diagrams wherever necessary**Approved data hand books are allowed subject to verification by the Invigilator*

- |     |   |        |
|-----|---|--------|
| 1)  | What are the equipment used in vacuum concrete method?  | K1(2)  |
| 2)  | Illustrate the steps carried out in structural inspection.  | K2(4)  |
| 3)  | Illustrate the two Inspection of building in detail.  | K2(6)  |
| 4)  | Identify the various steps involved in the systematic approach of investigations and the factors to be ascertained. | K3(9)  |
| 5)  | Construct the short notes on vacuum concrete and self-compacting concrete.  | K3(9)  |
| 6)  | Explain in detail about thermal and shrinkage cracks.   | K5(10) |
| 7)  | Examine the method of preventing corrosion in the structure.  | K4(12) |
| 8)  | Discuss in detail about movement of foundation structure.   | K5(15) |
| 9)  | Explain the causes of cracks and how it is minimize it?   | K5(15) |
| 10) | Define the term underpinning. Discuss any two of its methods mentioning its applicability.                          | K6(18) |