



Shirpur Education Society's
R. C. PATEL INSTITUTE OF TECHNOLOGY, SHIRPUR

An Autonomous Institute
(Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere)
आर. सी. पटेल इन्स्टिट्यूट ऑफ टेक्नॉलॉजी, शिरपूर
(स्वायत्त महाविद्यालय)



Academic Year (2024-25)

Year: Second Semester: III

Program: SY B.Tech. (CIVIL ENGG.)

Max. Marks: 60

Subject: Concrete Technology(RCP23VCPC303)

Time: 2.30 To 4.30 pm

Date:26/03/2025

Duration: 2 Hours

RE END SEM EXAMINATION –ODD SEM- III (MARCH 2025)

Instructions: Candidates should read carefully the instructions printed on the question paper and on the cover page of the Answer Book, which is provided for their use.

- (1) This question paper contains_01_ pages.
- (2) **All Questions are Compulsory.**
- (3) All questions carry equal marks.
- (4) **Answer to each new question is to be started on a fresh page.**
- (5) **Figures in the brackets on the right indicate full marks.**
- (6) **Assume suitable data wherever required, but justify it.**
- (7) Draw the neat labelled diagrams, wherever necessary.

| Question No. | | Max. Marks |
|--------------|---|------------|
| Q1 (a) | i) List the laboratory tests for cement and describe one of them OR ii) What factors should be considered when storing cement? | [07] |
| Q1 (b) | Write down the requirement of Ideal aggregate? | [05] |
| Q2 (a) | i) Explain the stepwise process of Concrete? OR ii) Define Workability and discuss the properties of Fresh concrete? | [08] |
| Q2 (b) | Discuss the properties of Hardened concrete. | [04] |
| Q3 (a) | i) Differentiate between Accelerators and Retarders? OR ii) Write Short Note on Light weight concrete? | [07] |
| Q3 (b) | Describe the importance of Mineral Admixture | [05] |
| Q4 (a) | i) Explain Target strength of concrete? OR ii) Write Note on Statistical quality control in Concrete mix design | [07] |
| Q4 (b) | Define Mix design and its Objectives? | [05] |
| Q5 (a) | i) What are the different methods of NDT explaining any one method? OR ii) Explain the Corrosion of steel | [07] |
| Q5 (b) | Write Down the Note on “Deterioration of concrete” | [05] |

