

Time: 3 Hrs.

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) What is the reason that 'The ramps are made compulsory in all public buildings'?
 - b) During fire in building, lifts should not be used. Only staircase should be used. Do you agree with this statement? Explain the reason.
 - c) Compare single phase and three phase electricity supply
 - d) Write a short note on rebound hammer test
 - e) Write list of various tests done to assess the condition of structure
 - f) Write a short note on polymer concrete
- Q2 Answer any four questions 20
- a) Compare lifts and escalators
 - b) If there is fire in your building, explain what will be your response.
 - c) Explain different types of wires used.
 - d) Draw neat sketches of different types of cracks observed in buildings.
 - e) Write a short note on ultra-sonic pulse velocity test.
- Q3 a) Draw neat sketches of following and name all important components. (explanation not required) 10
- i. Septic tank
 - ii. Earthing system
- b) Compare destructive and non-destructive tests 10
- Q4 a) What are the causes of distress in concrete structures. 10
- b) Draw and explain the water supply system of a residential building. 10
- Q5 a) What factors you will consider while choosing repair material. 10
- b) Write a note on classification of lighting 05
- c) What are causes of seepage in concrete structures 05
- Q6 a) Write a note on modern lighting 10
- b) Explain the methods of corrosion prevention. 10
