# 1384

## April 2025

#### Time – Three hours (Maximum Marks: 100)

- [N.B. 1. Answer all questions under Part-A. Each question carries 3 marks.
  - Answer all the questions either (a) or (b) in Part-B. Each question carries 14 marks.

### PART - A

- 1. List the types of cement.
- 2. Write any three properties of good sand.
- 3. What is air-entraining admixture?
- 4. Mention the types of mix design method.
- 5. Write any three types of polymer concrete.
- 6. List the applications of light weight concrete.

the the types of joints used in concrete works with near supported

the tipes of cracks in concrete structures. Also write about a

- 7. List out the requirements of formwork.
- 8. Define prestressed concrete.
- 9. What are dowel bars?
- 10. List the causes of cracking.

[Turn over....

#### PART - B

11. (a) Explain about the production of concrete.

(Or)

- (b) Describe the functions and properties of coarse aggregates.
- 12. (a) Write the procedure for design mix of concrete as per IS code method.

  (Or)
  - (b) Explain about any three admixtures.
- (a) Explain the types of materials used in light weight concrete.
   (Or)
  - (b) Differentiate between the fibre reinforced concrete and polymer concrete.
- 14. (a) Explain the magnel blaton system with neat diagram.

  (Or)
  - (b) Discuss about the cleaning and treatment of forms.
- 15. (a) Describe the types of joints used in concrete works with neat sketches.
  (Or)
  - (b) Discuss the types of cracks in concrete structures. Also write about its assessment.