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Reg. No.

# B.TECH. DEGREE EXAMINATION, MAY 2015

## Sixth Semester

Branch: Civil Engineering

CE 010 606 L05—CONCRETE TECHNOLOGY (Elective I) (CE)

(New Scheme-2010 Admission onwards)

[Regular / Improvement / Supplementary]

Time: Three Hours

Maximum: 100 Marks

#### Part A

Answer all questions.

Each question carries 3 marks.

- I. Write short notes on the following terms :-
  - 1 Grading of aggregate.
  - 2 Workability.
  - 3 Water-cement ratio.
  - 4 Durability.
  - 5 Light weight concrete.

 $(5 \times 3 = 15 \text{ marks})$ 

### Part B

Answer all questions.

Each question carries 5 marks.

- II. Write short notes on the following terms :-
  - 6 Flakiness Index.
  - 7 Air entraining agents.
  - 8 Factors affecting Modulus of Elasticity.
  - 9 Thermal properties of concrete.
  - 10 Ferrocement.

 $(5 \times 5 = 25 \text{ marks})$ 

#### Part C

Answer all questions.

Each full question carries 12 marks.

11. Describe the various test for finding the properties of cement.

Or

12. Describe the various test for determining the quality of aggregate to be used for concreting work

Turn over

13. Explain the term workability and enumerate the various factors affecting workability.

Or

- 14. What is meant by curing of concrete? Explain the various methods to do it.
- 15. Explain the factors affecting the strength of concrete.

Or

- 16. Explain the terms Creep and Shrinkage. What are the factors affecting these parameters?
- 17. Briefly explain the effect of sea water in concrete work. What is meant by sulphate attack?

Or

- 18. Describe briefly the different tests to be conducted in hardened concrete.
- 19. Explain the term no fine concrete. How is it made in practice? State the advantages of this type of concrete.

Or

20. Explain Special concreting methods adopted in extreme weather conditions.

 $(5 \times 12 = 60 \text{ marks})$ 

