

B.Tech. Degree III Semester Examination November 2013

CE 1304 A/B CONCRETE TECHNOLOGY
(2012 Scheme)

Time : 3 Hours

Maximum Marks : 100

PART A
(Answer *ALL* questions)

(8 × 5 = 40)

I. Write Short notes on:

- (a) Grade of cement and grade of concrete
- (b) Admixtures in concrete
- (c) Bleeding and segregation in concrete
- (d) Methods of curing in concrete
- (e) Shrinkage and creep in concrete
- (f) Rebound hammer
- (g) High performance concrete and polymer concrete
- (h) Factors influencing mix design.

PART B

(4 × 15 = 60)

II. Describe the various laboratory tests on cement

(15)

OR

III. Explain the physical and mechanical properties of aggregate based in concrete.

(15)

IV. Define workability. Explain various methods to determine workability of concrete.

(15)

OR

V. (a) Explain the various means of transporting concrete to work site.

(8)

(b) What are the different types of vibrators used in concrete? Explain each of them.

(7)

VI. (a) Which are the laboratory tests conducted to find the tensile strength of concrete?

(7)

(b) Define durability of concrete. Discuss the various factors affecting concrete durability.

(8)

OR

VII. (a) Explain stress-strain characteristics in concrete.

(7)

(b) Explain with neat sketch working of ultra-sonic pulse velocity testing in concrete

(8)

(3 × 5 = 15)

VIII. Write short notes on

- (a) Ready mixed concrete
- (b) Shotcrete
- (c) Fibre reinforced concrete

OR

IX. Describe in detail I.S. method for mix design

(15)
