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B.E / B.Tech (Full Time) DEGREE END SEMESTER EXAMINATIONS, April / May 2014

CIVIL ENGINEERING BRANCH

Semester

CE 8301 & Construction Techniques and Practices

(Regulation 2014)

Time: 3 Hours

Answer ALL Questions

Max. Marks 100

PART-A (10 x 2 = 20 Marks)

1. What are the variables in proportioning of concrete?
2. What are called Retarders?
3. Name the tools used in stone masonry construction.
4. What are the types of foundations?
5. What are the characteristics of ideal paint?
6. What are the factors governing the selection of suitable air conditioner for a building?
7. State the causes for damages in brick masonry buildings
8. How do we classify cracks in buildings?
9. Write briefly about vibrators used in concreting works.
10. What are the uses of jacks in construction.

Part – B (5 x 16 = 80 marks)

11.
 1. Write in detail about the factors to be considered during construction of brick masonry structures. (6)
 2. Write detailed notes on bonding in brick masonry construction. (10)

12.
 - a.
 - i. State and explain the concepts of concrete mix design. (6)
 - ii. Write in detail about the American concrete institute method (ACI method) of concrete mix design. (10)

(OR)

- b. i. Write notes on Ultrasonic Pulse Velocity Tests. (8)
- ii. Write in detail about the manufacture of cement. (8)

- 13. a. i. What are the defects that occur in painting? Explain. (8)
- ii. Write in detail about the disasters that can happen due to fire. (8)

(OR)

- b) i. What are the common methods used for Thermal insulation in buildings? Explain. (8)
 - ii. State the common rules to be followed during construction for natural ventilation. (8)
- 14 a) i. State and explain the reasons for damage occurrence in concrete and other structural components. (8)
 - ii. Write in detail about maintenance of buildings. (8)

(OR)

- b) i. Write detailed notes on Repair Management. (8)
 - ii. Write in detail about the material requirement for repair works (8)
- 15. a) i. Explain in detail about concreting methods and the equipments used for concreting. (8)
 - ii. Write detailed notes on selection of Material handling equipments. (8)

(OR)

- b) i. Write in detail about Material handling equipments. (8)
- ii. Write in detail about Earthwork equipments. (8)