HIWITS Roll No.

B.E./B.Tech (Full Time) DEGREE END SEMESTER EXAMINATIONS, Nov/Dec.2013

CIVIL ENGINEERING

Fourth Semester

CE 282/CE9252 CONSTRUCTION TECHNIQUES AND PRACTICES

(English and Tamil Medium) (Regulations: 2004/2008)

Time: 3 Hours

Answer ALL Questions

Max. Marks 100

PART- A (10 x 2 = 20 Marks)

- 1. List the various types of high grade cements.
- 2. List the chemical admixture and mineral admixtures used in the concrete.
- 3. List the different types of foundations used in building construction.
- 4. What are cavity walls, where they are used?
- 5. List the factors causing fire accidents in buildings?
- 6. List the characteristics of ideal paints?
- 7. List the factors damaging the concrete and components of buildings?
- 8. List the factors damaging the brick masonry.
- 9. State the uses of vibrators in construction.
- 10. List the classification of pumps?

PART-B $(5 \times 16 = 80 \text{ Marks})$

11. Design a concrete mix for the following data:

(16)

Grade - M35
Cement - OPC 43
Aggregate - 20 mm

Minimum cement content - 320 kg/cm³

Maximum water/unit ratio - 0.45

Workability - 170 mm slump

Exposure condition - Severe
Placing of concrete - Pumping
Suervision - Good

Chemical Admixtures - Super Plasticizers

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) List and explain the various types of bonds that are being used in the construction value sketches. (Or)	with neat (16)
) List and explain the various types of flooring that are being used in the construction sketches.	with neat (16)
) Explain in detail about painting and white washing in buildings. (Or)	(16)
) Explain the operational requirements of ventilation and air conditioning in buildings.	(16)
) i) Discuss the aspect of sound insulation in buildings. ii) Derive the expression for intensity or loudness of soundness.	-(8) (8)
(Or)	
) Clarify and explain in detail the various types of maintenance work in buildings.	(16)
) Explain in detail the various types of concrete equipments with neat sketches.	(16)
(Or)	
) List and explain the various types of material handling equipments in construction	(16)

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