

(Time: Three Hours)

Marks: 50

- N. B. 1. Question no.1 is compulsory**
2. Attempt Any Three Questions from remaining Five Questions
3. Draw neat sketches and give illustrations wherever necessary
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- Q.1 An Entrance porch of Five Star Hotel admeasures 12 M X 12 M. The porch is supported by 9 M X 9 M, 1200mm dia. R. C. C. Column Grid. The slab for porch is two-way waffle / ribbed floor. Give following details to explain construction.
- a. Plan of two-way ribbed floor for the canopy. Scale 1:50 showing reinforcement details (10)
 - b. Detail part section of Two-Way ribbed floor to scale 1:10 (10)
- Q.2 Explain with the help of neat sketches:
- a. Terracotta units in Hollow Slab (05)
 - b. Castone Floor units in Hollow Slabs. (05)
- Q.3 Explain Diagrid floor for a free-standing pavilion of size 24 M X 24 M.
- a. Draw key plan to scale 1:100 (05)
 - b. Reinforcement details of Diagrid Beams and Edge Beams to scale 1:20 (05)
- Q.4
- a. Explain with the help of neat sketches One-way ribbed floors. (05)
 - b. Explain structural use of stiffening beam in one-way ribbed floor. (05)
- Q.5 Explain with the help of neat diagrams reinforcement details of Flat slabs with respect to:
- a. Flat Slab with Drop Panel (05)
 - b. Flat Slab with Drop Panel and Capital (05)
- Q.6 Explain advantages and Disadvantages of precast R. C. C. construction technique. (10)
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