

Unit IV

7. (a) What are the advantages and disadvantages of steel structures over R.C.C. structures. 7
- (b) Explain the various planning and design considerations to be undertaken for steel structures. 8
8. Explain the various techniques of fabrication and erection of steel structures. Support your answer with relevant sketches and case-studies. 15

No. of Printed Pages : 04

Roll No.

AA-664

M. Tech./MCRM

EXAMINATION, May 2018

(First Semester)

(Re-appear Only)

CONSTRUCTION AND REAL ESTATE

MANAGEMENT

MCRM609

Construction Technology

Time : 3 Hours]

[Maximum Marks : 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. Make

M-AA-664

4

30

(3-06/13)M-AA-664

P.T.O.

relevant sketches wherever necessary.
Neatness carries due weightage.

Unit I

1. (a) Explain the term 'Foundation' ? What is the purpose of providing foundations ? 7
(b) What are the causes of failure of foundation and what method would you adopt to ensure the stability of the structure. 8
2. What are the different types of piles that are used in high rise buildings ? 15

Unit II

3. Explain in detail the characteristics and uses of the following types of concrete : 15
 - (a) Fibre reinforced concrete.
 - (b) High performance concrete.

4. (a) Explain the principles of concrete mix design as prescribed by BIS. 7
(b) Explain with the help of examples the various types of advance formwork techniques used in modern structures. 8

Unit III

5. (a) Explain the various principles and methods used in pre-cast construction techniques, with the help of examples. 7
(b) State the difference between pre-tensioning and post-tensioning in concrete structures. 8
6. Write short notes on the following supported by relevant examples : 15
 - (a) Composite construction
 - (b) Pre-engineered structure.