

Printed Pages : 2



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(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 181802

Roll No.

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B. Arch.

(SEM. VIII) THEORY EXAMINATION, 2014-15
CONSTRUCTION & MATERIALS - VIII

Time : 3 Hours]

[Total Marks : 50

Notes :

1. Answer FOUR questions, of which Question No. 1 is compulsory.
 2. Use an appropriate scale for drawing.
 3. Dimensioning and labelling should be done in all drawings.
 4. Assume any missing data.
 5. Stationary supplied - 02 cartridge sheets only. Attempt your answers accordingly.
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- 1 Design a Prestressed concrete roof structure to span a Multipurpose hall of size 40.0 m. X 60.0 m. Explain your scheme with the help of relevant plans, sections, elevations and isometric of any two fixing / joinery details.

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[Contd...

- 2 Differentiate between steel Portal frame construction and Prestressed concrete construction. Explain in detail the types of connections in portal frames. **10**
- 3 Explain types of prefabrication systems used for public buildings. Illustrate the various members of a School building which can be prefabricated. **10**
- 4 Differentiate between pre-cast and cast in situ reinforced concrete floor systems. Illustrate any one type of cast in situ reinforced concrete floor system for long span structures. **10**
- 5 Write short notes on any two of the following: **10**
- (a) Role of Passive reinforcement in prestressed concrete
 - (b) Need of Modular Coordination in prefabrication
 - (c) North light truss and lattice girder roofs
- 6 Write short notes on any two of the following: **10**
- (a) Cross wall construction
 - (b) Precast concrete slab - slab connection
 - (c) Double 'T' slabs.
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