

BE / Civil / sem-VII / CBCGS / R-19-20 / C-scheme / ACT / SH-24

30/11/2024

Max. Marks: 80

Time: 3 hours

1. Question.No.1 is compulsory.
2. Answer any three questions out of remaining five questions.
3. Assume suitable data wherever required
4. Figures to the right indicate full marks.

QP-10066484

Q.1 Attempt any four

(20)

- (i) What are problems faced while erecting of roof truss?
- (ii) Explain Construction sequence in cooling towers.
- (iii) Explain why dome structures are preferred give one example.
- (iv) Explain Erection of overhead tank?
- (v) What is in- situ prestressing in high rise structures?
- (vi) Explain repair of steel structure.

Q.2a What are various types of dredging methods? Explain anyone dredging system in detail

(10)

b) What is seismic retrofitting and how it is achieved

(10)

Q.3 a) Write short note on column jacking and box jacking stating its suitability

(10)

b) Write detailed note with necessary detailed sketch on Pre Engineering Building.

(10)

Q.4 a) List various types of sheet pile and state necessity of steel sheet piles with sketch

(10)

b) Describe in details the factors to be considered and procedure of net zero building.

(10)

Q.5 a) Write in detail about repair of building in terms of leakage, cracks and steel structure. What test are needed to do undergo structural audit

(10)

b) State factors to be considered while designing green building. What are various grading systems used in India for green building.

(10)

Q.6 Write short notes on **any four**

(20)

- 1) List various types of cofferdam and sketch anyone
- 2) Smart Roads
- 3) Vacuum dewatered flooring
- 4) Stepwise procedure of launching large span girder
- 5) Advances in Construction Industry

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