Reg. No. :

Question Paper Code : X10240

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2020 AND APRIL/MAY 2021
Fourth Semester
Civil Engineering
CE 8401 – CONSTRUCTION TECHNIQUES AND PRACTICES
(Regulations 2017)

Time : Three Hours | Maximum : 100 Marks

Answer ALL questions

PART – A **(10×2=20 Marks)**

1. Differentiate the load transfer mechanism in load bearing structure and Framed Structure.
2. Highlight on "Passive Building".
3. Mention the purpose of Foundation in a building.
4. List out the causes of dampness.
5. Enumerate on Coffer Dams.
6. Mention the applications of Box Jacking.
7. What is a Cable-stayed bridge ?
8. List out the types of offshore platforms.
9. Mention the equipments generally used for compacting concrete.
10. What are the various types of conveyors ?

PART – B **(5×13=65 Marks)**

11. a) List out the various types of form used for constructing high rise building. Elaborate on the Slip Form Construction in detail.

(OR)

b) According to NBC how buildings are classified for the energy efficient

buildings.

12. a) List out the types of joints in a structure. Explain any two in detail.

(OR)

b) Enumerate on the methods are generally adopted to prevent the defect of dampness in a structure.

13. a) Elaborate on methods of ground water control in brief.

(OR)

b) Give a detailed note on various types of construction techniques developed for construction of tunnels.

14. a) Define Pre-stressing. Also write the advantages and principal of pre-stressing.

(OR)

b) Highlight on the importance of 'Material Handling'. Also list out the best practice guidelines when designing a material handling system for a construction project along with the negative impacts of poor material handling.

15. a) List out the Pile driving equipments. Elaborate in brief.

(OR)

b) Elaborate on any six types of Earth moving equipment commonly used.

PART – C **(1×15=15 Marks)**

16. a) Elaborate on a Case Study of an Energy Efficient Commercial Building.

(OR)

b) Fabrication and erection of steel structures.

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