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Question Paper Code : 20275

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2018.

Fifth Semester

Civil Engineering

CE 6506 — CONSTRUCTION TECHNIQUES, EQUIPMENT AND PRACTICE

(Regulations 2013)

(Common to PTCE 6506 – Construction Techniques, Equipment and Practice for
B.E. Part-Time – Fourth Semester – Civil Engineering – Regulations 2014)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. State the classification of admixture according to the function.
2. What is the right time for curing concrete and duration curing?
3. What are the advantages of hollow block masonry?
4. What are control joints in flooring?
5. What is shoring and state its components?
6. State the various methods of dewatering a basement excavation.
7. What are launching girders?
8. What are false work in construction of heavy structures?
9. State the advantages of using hydraulic machines in construction.
10. State the classification of concrete mixers.

PART B — (5 × 13 = 65 marks)

11. (a) Describe the process of making ready mix concrete, transportation and placing them in 5th floor level for roof slab.

Or

- (b) Explain Ultrasonic Pulse Velocity Test.

12. (a) Explain the construction of two level underground parking using top down construction method.

Or

- (b) Explain slip form construction for construction of a cooling tower.

13. (a) Explain the construction of well foundation for a bridge to be constructed across river.

Or

- (b) Explain construction of sheet pile wall.

14. (a) Explain the process of transporting and installation of fixed offshore jacket platform.

Or

- (b) Explain the modern construction technique for cast in situ, box girder, multi span concrete bridge.

15. (a) Explain the basic configuration of hydraulic excavator and factors to be considered in selection best excavator.

Or

- (b) Explain the basic configuration and dredging process using cutter suction dredger.

PART C — (1 × 15 = 15 marks)

16. (a) Explain the construction sequence of constructing diaphragm wall.

Or

- (b) Explain the construction of under ground train tunnel using tunnel boring machine.