

ANNA UNIVERSITY OF TECHNOLOGY, COIMBATORE.
B.E. / B.TECH. DEGREE EXAMINATIONS : NOV / DEC 2010

REGULATIONS : 2008

THIRD SEMESTER – CIVIL ENGG.

080100011 - CONSTRUCTION TECHNIQUES, EQUIPMENT AND PRACTICES

Time : 3 Hours

Max. Marks : 100

PART – A

(20 x 2 = 40 MARKS)

ANSWER ALL QUESTIONS

1. What is meant by hydration of cement?
2. What are the two process of manufacturing of cement?
3. Differentiate rapid hardening cement and quick setting cement with respect to their constituents and properties.
4. Write any three non-destructive testing methods conducted in concrete.
5. List the values of the standard deviation for the following degree of control of mixing and placing of concrete.
(a) Excellent (b) Fair
6. What is meant by centre line marking?
7. What are the methods adopted to make a building damp proof?
8. Mention the classification of stone masonry.
9. Differentiate 'Shallow Foundation' and 'Deep Foundation'.
10. Define Scaffolding.
11. What is sinking cofferdam?
12. What is Shoring?
13. Give the different types of sheet piles?
14. What is caisson?
15. Give the advantages of Box/Pipe Jacking?
16. Give the various methods of tunneling through rock.
17. What is grouting?
18. Write the types of earthwork equipment?

19. Mention the names of equipments for pile driving.
20. Write any four special forms of shells.

PART – B

(5 x12 = 60 MARKS)

ANSWER ANY FIVE QUESTIONS

21. What are the processes involved in Manufacturing of cement? Explain it briefly.
22. Write the step by step procedure of concrete mix design using IS method.
23. a. Distinguish between stone masonry and brick masonry (6)
b. Explain the different bonds in brick masonry (6)
24. a. Briefly explain the method of providing a damp proof course in a building. (6)
b. Explain any three types of floorings. (6)
25. Explain with neat sketches about the Box jacketing techniques.
26. What is Dewatering? Explain in detail the methods of Dewatering.
27. a. Write the advantages of prestressed concrete as compared to normal reinforced concrete structures? (6)
b. Write short notes on methods of prestressing. (6)
28. Discuss the factors influencing the selection of equipment for earth work.

****THE END ****