

ANNA UNIVERSITY COIMBATORE
B.E / B.Tech DEGREE EXAMINATIONS JAN / FEB 2009
REGULATIONS - 2007
SECOND SEMESTER – CIVIL ENGINEERING
070100001 / 4CV1202 – CONSTRUCTION MATERIALS

E : 3 HOURS

MAX.MARKS : 100

PART A

(20 x 2 = 40 MARKS)

ANSWER ALL QUESTIONS

1. List out the classification of Rocks
2. What are the requirements of a good building stone?
3. Define the term FROG and mention its importance.
4. Define the term slacking of Lime and mention the methods
5. What are the chemical composition of cement?
6. What is an admixture ? Give some examples?
7. Define the term bulking of sand.
8. State the properties and uses of concrete.
9. Enumerate various defects in timber
10. Differentiate enamel paints and emulsion paints
11. What are the classifications of varnishes?
12. Define the term water - cement ratio. State its importance in concrete.
13. Differentiate RMC and RCC
14. Mention any four applications of Geo textiles in civil engineering

15. Define the term seasoning of timber and name the various methods
16. What do you mean by Gauged mortar?
17. Differentiate the terms FRP and GRP.
18. What do you mean by Efflorescence and mention its ill effects.
19. List out the test to be conducted on cement.
20. What are fire clay bricks and where it is used?

PART – B

(5 x 12 = 60 MARKS)

ANSWER ANY FIVE QUESTIONS

21. (i) What are the characteristics of a good brick ? (6)
(ii) Mention the tests to be carried out for stone and explain any two tests briefly (6)
22. (i) Explain the classifications of Lime (6)
(ii) Describe the manufacture of cement by dry or wet process with a flow diagram (6)
23. (i) What are the objects of using sand in mortar and what are different sizes of sand. (6).
(ii) What are the tests to be conducted on Cement and explain any two of them (6)
24. (i) Define Workability of Concrete and Explain the slump test to determine the workability of concrete (8)
(ii) What is consolidation of concrete and how it is done (4)
25. (i) Write short notes on : (a) Ply wood (b) Fiber boards (6)
(ii) Describe in detail various types of defects of painting (6)

26. (i) List out the various market form of steel with simple sketches (6)
(ii) What are the various process in heat treatment of steel (6)
27. (i) Explain the Uses of Composite materials and Glasses in civil engineering (8)
(ii) What do you mean by bullet proof glass (4)
28. Write short notes on :
(a) Use of Fly ash in Cement manufacturing (6)
(b) Use of Industrial waste material in Civil engineering (6)

*****THE END*****