



Code No. : **5326/S**

FACULTY OF ENGINEERING
B.E. 2/4 (Civil) I Semester (Suppl.) Examination, July 2012
ENGINEERING MATERIALS AND CONSTRUCTION

Time : 3 Hours]

[Max. Marks : 75

Instructions : 1) Answer **all** questions from Part – A.
2) **Any five** questions from Part – B.

PART – A

(25 Marks)

1. What is 'quarrying of a stone' ? 2
2. Explain the 'Tempering' process of bricks. 3
3. Give the chemical composition of cement. 3
4. What is the importance of 'bulking of sand' ? 2
5. How many types of batching process are there ? Which one is mostly adopted in preparation of concrete ? 2
6. What is a 'Ready mix concrete' ? 3
7. Write any four commercial forms of timber. 2
8. List out different types of Varnish. 2
9. Distinguish between 'plastering' and 'pointing'. 3
10. With respect to materials used classify form work. 3



PART – B

(50 Marks)

11. a) Explain different characteristics of a good building stone. 4
b) What is 'dressing of a stone' ? And explain different dressed surfaces of a stone with neat sketches. 6
12. a) Draw a neat sketch of 'pugmil' with all components. 3
b) Explain the process of burning of bricks in 'Bull's trench kiln' with a neat sketch. 7
13. a) List out different types of cements. And explain any two in detail. 6
b) What are the different characteristics of a good Coarse aggregate for manufacture of cement ? 4
14. a) What are the different stages involved in manufacturing of concrete ? 4
b) What is the importance of curing of concrete ? And explain any two methods in detail. 6
15. a) Enumerate different uses of timber as a building material. 3
b) What is the importance of seasoning of timber ? 3
c) Explain different constituents involved in paint. 4
16. a) List out different type of floors ? And explain any two in detail. 6
b) Explain the process of plastering a new surface. 4
17. Write short notes on the following :
a) Difference between load bearing and non load bearing walls according to provisions of IS 2572. 3
b) Various types of blended cement and their uses. 4
c) Types of reinforcement and specifications. 3