

**B.Tech. Civil (Construction Management) /
B.Tech. Civil (Water Resources Engineering)**

Term-End Examination

June, 2011

ET-204(B) : ENGINEERING MATERIALS

Time : 3 hours

Maximum Marks : 70

Note : *Attempt any five questions. All questions carry equal marks. Your answer should be in your own language.*

1. (a) How the lime is manufactured ? Explain the slaking of lime. 7
- (b) What are the different grades of OPC available in Indian Market ? What is hardening of cement ? 7
2. (a) What is meant by water proofing ? What are the different water proofing materials available in the market ? 7
- (b) What are the different adhesives available in the market ? Explain any one in detail. 7
3. (a) How can you provide granolithic flooring ? 7
- (b) What is Polymer Concrete ? What are the merits and demerits of granolithic flooring ? 7

4. (a) What are paints ? What are the different paints used ? 7
(b) How can you determine the normal consistency of cement ? 7
5. (a) What is an admixture ? What are the different types of admixtures used in concrete ? 7
(b) How the curing compounds are utilized ? 7
6. Write short notes on the following. $4 \times 3\frac{1}{2} = 14$
(a) Hardening of lime
(b) Alkali - aggregate reaction
(c) Types of cement
(d) Storage of cement
7. Write short notes on the following. $4 \times 3\frac{1}{2} = 14$
(a) Fly ash
(b) Concrete grades
(c) Flakiness index
(d) Bulking of Sand
8. Write short notes on the following. $4 \times 3\frac{1}{2} = 14$
(a) Cut - back bitumen
(b) Timber flooring
(c) Epoxy resins
(d) Water - Cement Ratio
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