

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

01025

Term-End Examination

December, 2010

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 classified ? What are the differences between lime and cement ? 7
- (b) How the cement is manufactured? 7
(Wet process) ? Explain with sketch.
2. (a) How can you make a building water proof using Bitumen ? Explain with neat sketch. 7
- (b) Explain neatly, how tile adhesives are used? 7
What are the properties and uses of adhesives ?
3. (a) How concrete flooring is provided ? 7
- (b) What is FRC ? What are the advantages and disadvantages of FRC ? 7

4. (a) What is Fineness of cement ? How can you measure the fineness of cement in lab ? 7
(b) What are the basic requirements of good paints ? 7
5. (a) What are the different water reducing admixtures ? 7
(b) How the accelerators are useful in concrete making ? 7
6. Write short notes on the following : $4 \times 3\frac{1}{2} = 14$
(a) Lime putty.
(b) Grading of aggregate.
(c) Raw materials for cement.
(d) OPC.
7. Write short notes on the following : $4 \times 3\frac{1}{2} = 14$
(a) Fly ash.
(b) Ferro Cement.
(c) Epoxy resins.
(d) Retarders.
8. Write short notes on the following : $4 \times 3\frac{1}{2} = 14$
(a) Super plasticizers.
(b) Bitumen.
(c) Marble flooring.
(d) Tile flooring.
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