

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

**Term-End Examination
December, 2012**

ET-204(B) : ENGINEERING MATERIALS

Time : 3 hours

Maximum Marks : 70

Note : Attempt any five questions. All questions carry equal marks.

1. (a) Explain the classification and uses of lime. 7
(b) Describe the raw materials used for the manufacturing of cement. 7

2. (a) Explain the desirable characteristics of Bitumen for road work. 7
(b) What do you mean by cutback Bitumen? Explain its various types. 7

3. (a) Define "Sealing Agents". Explain the properties and fields of application of MC-Fix-ST. 7
(b) Explain properties, fields, of application and application procedure of ready to use Hydraulically setting fine mortar. 7

4. (a) Explain various factors on which strength of concrete depends. 7
(b) Describe the qualitative requirements of floor. 7
5. (a) Discuss various functions served by admixtures in concrete mixes. 7
(b) Discuss various methods of textured concrete finishes. 7
6. (a) Describe major advantages of using plastic sections over wood. 7
(b) Explain the various accessories used in cable trunking and the purpose of each. 7
7. Write short notes on the following : $4 \times 3\frac{1}{2} = 14$
(a) Gypsum Plaster
(b) Foamed Concrete
(c) Damp Proofing
(d) Sandwich Panels
8. Differentiate between the following : $4 \times 3\frac{1}{2} = 14$
(a) Quick and Hydrated lime
(b) Bonding and Sealing agents
(c) Superplasticizers and plasticizers
(d) Rock and Lake Asphalt