

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

00932 **Term-End Examination**

December, 2016

ET-204(B) : ENGINEERING MATERIALS

Time : 3 hours

Maximum Marks : 70

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

1. (a) Describe the raw materials used for the manufacture of Portland cement.
(b) What do you mean by rapid hardening cement ? Explain its uses. 7+7
2. (a) Discuss the functioning and uses of bituminous emulsion.
(b) Explain the salient features of universal bonding agent. 7+7
3. (a) What do you mean by chemically resistant mortars ? Discuss various types in detail.
(b) Describe the properties and applications of Foam/Aerated concrete. 7+7

4. (a) Discuss the applications of Epoxy Resins.
- (b) Explain the qualitative requirements of floors. 7+7
5. (a) Describe the important purposes for which admixtures are used in concrete.
- (b) Explain the applications of "Integral Water Proofing Compounds". 7+7
6. (a) Discuss circuit breakers in detail.
- (b) What is cable trunking ? Explain its advantages. 7+7
7. (a) What is Plaster of Paris (POP) ? Explain its uses.
- (b) What do you mean by the term 'Plywood' ? Explain the conditions under which it can be used economically. 7+7
8. (a) Describe the mechanism of strength development of cement. How is it different from that of lime ?
- (b) Explain the desirable characteristics of Bitumen for road work. 7+7
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