

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

Term-End Examination

00825

June, 2017

ET-204(B) : ENGINEERING MATERIALS

Time : 3 hours

Maximum Marks : 70

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

1. (a) List all the types of cements. Describe any one of them in detail.
(b) Describe the functioning of bituminous emulsion. List the uses of cutback bitumen emulsion. 7+7

2. (a) What are the salient properties of universal bonding agents ?
(b) Describe the important properties of a sealing agent like MC-Fix-ST. 7+7

3. (a) List all the qualitative requirements of floors. Explain any one of them in detail.
(b) What precautions will you take while making a cement concrete floor topping ? 7+7

4. (a) What do you mean by superplasticizers ? Explain the mechanism by which superplasticizers increase workability.
- (b) Describe the damp proofing treatment for basement with the help of a systematic diagram. 7+7
5. (a) What are the different types of Magnesium Oxychloride Floors ? Explain their composition and uses.
- (b) List out the various advantages of epoxy flooring. 7+7
6. (a) What are the different categories of superplasticizers ? Which of them are most commonly used and why ?
- (b) What do you mean by w/c ratio ? Explain its significance. 7+7
7. (a) List the commonly used wallpapers. Describe the fixing procedure of a wallpaper.
- (b) Discuss the major advantages of using plastic sections over wood. 7+7
8. (a) Discuss various types of curing compounds. Also list out their merits and demerits.
- (b) Why is granolithic concrete flooring required ? Discuss its properties and uses. 7+7