

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

00662 **Term-End Examination**

June, 2019

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. 7
- (b) Define fibre reinforced concrete and explain its uses. 7
2. (a) Explain the important tests which should be carried out to ascertain the suitability of bitumen. 7
- (b) Discuss the salient features of universal bonding agent. 7

3. (a) Describe the structural components of a floor. 7
- (b) What do you understand by curing ? Discuss the advantages of using curing compounds. 7
4. (a) Describe the various purposes for which admixtures are used. 7
- (b) Explain the damp proofing treatment for floors above the ground level with the help of a neat sketch. 7
5. (a) Explain the different types of “Decorative Ceiling Tiles”. 7
- (b) Describe the advantages of Medium Density Fibre Board over solid wood. 7
6. (a) Describe the term “Plywood”. Explain the conditions under which it can be used economically. 7
- (b) What do you mean by “Cable Trunking” ? Explain its advantages. 7
7. Write short notes on the following : $4 \times 3 \frac{1}{2} = 14$
- (a) Hydration Products of Cement
- (b) Slacking and Hardening of Lime
- (c) Gypsum Plaster
- (d) Purpose of Painting

8. Differentiate between the following :

$$4 \times 3 \frac{1}{2} = 14$$

- (a) Bitumen and Tar
 - (b) Hydraulic and Hydrated Lime
 - (c) Super-plasticizers and Plasticizers
 - (d) Voltage Booster and Voltage Regulator
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