

Roll No.

Total No. of Pages : 01

Total No. of Questions : 08

M.Tech. (Civil Engineering) (Sem.-1,3)

**COMPOSITE MATERIALS**

Subject Code : CE-517

M.Code : 35213

Time : 3 Hrs.

Max. Marks : 100

**INSTRUCTIONS TO CANDIDATES :**

1. Attempt any FIVE questions out of EIGHT question.
2. Each question carry TWENTY marks.

1. What are the various properties of concrete that are affected by addition of fly ash? Briefly explain effect on each property.
2. In how many ways can a light weight concrete be produced? Explain.
3. What is Superplasticizers? Which superplasticizers are used and what are the main objectives of using a super plasticizers for high performance concrete?
4. Discuss the various mechanical properties of sulphur concrete.
5. Which properties of Ferro cement make it different from ordinary concrete?
6. What are main constituents of polymer concrete and also explain the use of each constituent in brief?
7. Explain in detail about the chemical composition and types of fly ash. Also explain how chemical composition of fly ash changes the property of OPC.
8. What are mixing and casting procedures followed with fibre-reinforced concrete?