

Total No. of Pages : 01

Total No. of Questions : 08

M.Tech. (Civil Engg.) (2016 Batch) (Sem.-1)

COMPOSITE MATERIAL

Subject Code : MTCE-201

Paper ID : [74237]

Time : 3 Hrs.

Max. Marks :100

INSTRUCTION TO CANDIDATES :

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

Q.1 Discuss in detail effects of supplementary cementing materials on the fresh properties of concrete. (20)

Q.2 a) Write a short note on fiber reinforced concrete. Also mention the factors affecting the properties of FRC. (12)

b) Write the applications of different types of fibers in detail. (08)

Q.3 a) Explain in detail about durability and abrasion resistance of HVFA. (12)

b) Write the applications of HVFA concrete. (08)

Q.4 a) Describe in detail various mix design methods for SCC. (14)

b) Mention the uses of SCC. (06)

Q.5 Briefly write a note on types of FRP. Also discuss the effects of FRP on concrete elements under various loading conditions. (20)

Q.6 What are polymer composite concrete? Describe any three in detail. (20)

Q.7 Describe in detail the effects of waste materials and by-products on the properties of mortar and concrete. (20)

Q.8 Briefly discuss mechanism of concrete failure at high temperature. (20)