

[Total No. of Questions - 9] [Total No. of Printed Pages - 2]

Dec.-22-0238

CE-606 (Concrete Technology)

B.Tech. 6th (CBCS)

Time : 3 Hours

Max. Marks : 60

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Attempt Five questions in all, selecting one question from each Section A, B, C and D. Question no. 9 is compulsory.

SECTION - A

1. What are the fundamental factors influencing the compressive strength of concrete? Explain any two. (10)
2. State the steps involved in mix-proportioning for medium strength concrete. (10)

SECTION - B

3. What are admixtures? Enlist the different admixtures used in concrete construction. Explain the function and property of any two types of admixture. (10)
4. What are the factors which control the performance of High Performance Concrete? (10)

SECTION - C

5. What is ferrocement? Describe briefly its properties and applications. (10)
6. What is ready mixed concrete? Describe the proportions of ready mix concrete. (10)

2

CE-606

SECTION - D

7. Which tests are included in acceptance testing of Hardened concrete? Describe ultrasonic pulse velocity test. (10)
8. Describe the rebound hammer test. State the factors influencing the test results and the applications where this method is useful. (10)

SECTION - E (Compulsory Question)

9. Short answer type questions :
 - (a) What are the factors affecting the workability of fresh concrete?
 - (b) What is fiber reinforced concrete?
 - (c) What are the factors which influence corrosion?
 - (d) Why do super plasticizers perform better than surface active agents?
 - (e) Write down the application of polymer concrete.
 - (f) Write a note on durability of concrete.
 - (g) Write a note on slump test of concrete.
 - (h) Write down the constituents of high grade concrete. (8×2½=20)