



B.Tech IV Semester Regular Examinations, July 2024

CONCRETE TECHNOLOGY (Civil Engineering)

Maximum Marks: 60

Date: 23.07.2024 Duration: 3 hours

- Note:**
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 10 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A		CO	Bloom Tx
All the following questions carry equal marks (10X1M=10 Marks)			
1.a)	Give two examples of mineral admixtures in concrete.	1	1
b)	Define initial setting time and final setting time.	1	1
c)	Define Bulking of sand.	2	1
d)	Define fineness modulus of aggregate.	2	1
e)	Define segregation in concrete.	3	1
f)	Define workability of fresh concrete	3	1
g)	What does the gel-space ratio represent in concrete?	4	1
h)	List factors influencing creep in concrete	4	1
i)	Write about fiber reinforced concrete?	5	1
j)	Write about self-compacting concrete?	5	1
Part-B			
Answer All the following questions. (5X10M=50Marks)			Bloom Tx level
2	What is the chemical composition of cement? Explain about its Function. [10] OR	1	2
3	What are different grades of cement and explain the factors Influencing Grade Selection? [10]	1	2
4	Explain in detail different tests on aggregates. [10] OR	2	2
5	a Explain thermal properties of aggregates. [5] b Explain Grading of Fine and Coarse Aggregates. [5]	2	2
6	a Write a short note on Quality of Mixing Water in concrete. [5] b Explain in brief the steps involved in manufacture of concrete. [5] OR	3	2

7	Explain how time and temperature can affect the workability of concrete. [10]	3	2
8	Explain Factors Affecting Strength of concrete. [10]	4	2
	OR		
9	Explain in detail any three NDT methods for concrete. [10]	4	2
10	Describe briefly about the steps involved in IS method for Mix Design. [10]	5	2
	OR		
11	Write short notes an 1. High density concrete. [5] 2. Light weight concrete. [5]	5	2