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ANNA UNIVERSITY: (UNIVERSITY DEPARTMENTS)

B.E (Full Time) END SEMESTER ARREAR EXAMINATIONS – NOV / DEC 2023

Civil Engineering
Semester II
CY7253 & Chemistry for Civil Engineering
(Regulation 2015)

Time: 3 Hours

Answer ALL Questions

Max. Marks 100

PART- A (10 x 2 = 20 Marks)

Q.No	Question s	Marks
1.	Write a note on special cement	2
2.	Mention the uses of Fly ash	2
3.	How corrosion rate is measured?	2
4.	List out the environmental factors affecting corrosion rate	2
5.	Define composite material with an example	2
6.	Give examples for synthetic adhesive	2
7.	Define Abrasive. How is it mentioned?	2
8.	What is meant by porosity of a refractory material?	2
9.	Define TDS of a water sample	2
10.	Differentiate between COD and BOD	2

PART- B (5 x 16 = 80 Marks)

(Q. No 11 is Compulsory)

Q.No	Question s	Marks
11.	i) Explain important applications of composite materials ii) List out the chemical factors influencing adhesive action	8 8
12.	a) i) Write down the steps involved in manufacture of cement ii) Mention the uses of different forms of glass	8 8
OR		
	b) i) Explain the process of setting and hardening of Portland cement ii) Explain different forms of clay products	8 8
13.	a) i) Write down the mechanism of electrochemical corrosion ii) How corrosion is prevented by sacrificial anode method	8 8
OR		
	b) i) With a neat diagram explain galvanizing process ii) Highlight the function of ingredient of a paint	8 8
14.	a) i) Write a short note on a) Refractoriness b) Porosity ii) How abrasive cloth and paper are prepared?	8 8
OR		
	b) i) Write down the preparation, properties and uses of Silicon carbide ii) Explain different types of natural abrasive	8 8
15.	a) i) Write down different stages involved in treatment of domestic water ii) Explain reverse osmosis process with a neat diagram	8 8
OR		
	b) i) How hardness of a water sample is determined? ii) With a neat diagram, explain ion exchange process of softening of water	8 8