

Hall Ticket Number:

--	--	--	--	--	--	--	--	--

I/IV B.Tech (Regular / Supplementary – Repeat Exam) DEGREE EXAMINATION

January, 2021

CE/ME/EEE Branches

Second Semester

Engineering Chemistry

Time: Three Hours

Maximum : 50 Marks

Answer ALL Question from PART-A .

Answer ANY FOUR from PART-B.

(1X10=10 Marks)

(4X10=40 Marks)

**PART-A**

No.	Questions 1 (a to j)	Level	Cos
a	Define alkalinity of water	Remember	CO 1
b	Write any two examples for coagulants	Remember	CO 1
c	What is desalination	Analyze	CO 1
d	Define entropy	Analyze	CO 2
e	What is dry corrosion	Understand	CO 2
f	Write the units of calorific value	Apply	CO 3
g	What is meant by knocking	Understand	CO 3
h	Define octane number	Remember	CO 3
i	Write the uses of paracetamol	Understand	CO 4
j	What are biodegradable polymers? Give examples	Understand	CO 4

**PART-B**

No.		Level	COs	Marks
	(a) Explain determination of hardness of water by EDTA method	Understand	CO 1	6
2	(b) Write a note on scales	Understand & Apply	CO 1	4
	(a) Explain the determination of break point chlorination	Understand & Evaluate	CO 1	6
	(b) Discuss the method of treatment of reverse osmosis	Apply	CO 1	4
4	(a) Explain wet corrosion and its mechanism	Understand	CO 2	6
	(b) Deduce Nernst equation for single electrode potential	Understand	CO 2	4
5	(a) Explain corrosion controlled by cathodic protection method with neat diagram	Understand	CO 2	6
	(b) Write short note on Electroplating of gold	Understand	CO 2	4
6	(a) Discuss the construction and working of Bomb calorimeter	Remember & Apply	CO 3	6
	(b) Write a short note on cetane number	Analyze	CO 3	4
7	(a) Describe refining of petroleum and mention uses of various fractions	Understand & Apply	CO 3	6
	(b) Write a short note on LPG	Understand	CO 3	4
	(a) Describe Markownikoff's and Anti-Markownikoff's rules	Understand	CO 4	6
8	(b) Describe the method of synthesis of "Aspirin"	Understand & Apply	CO 4	4
9	(a) Distinguish between Thermoplastic and Thermosetting polymers	Analyze	CO 4	6
	(b) Explain the preparation and applications of Bakelite	Apply	CO 4	4