

[B19BS1105]

I B.Tech II Semester (R19) Regular Examinations.

APPLIED CHEMISTRY

(Common to CSE,ECE &IT)

MODEL QUESTION PAPER

Time : 3Hrs

Max. Marks :75M

Answer **ONE Question** from **EACH UNIT**.

All questions carry equal marks.

			CO	KL	M
		UNIT - I			
1.	a).	Explain the mechanism of free radical Polymerization reaction with a suitable example.	1	2	8
	b).	Distinguish between thermoplastic and thermosetting resins.	1	4	7
		OR			
2.	a).	What are conducting Polymers? Discuss the applications of conducting Polymers.	1	1	8
	b).	Write notes on Bu Na – S and Bu Na – N.	1	1	7
		UNIT - II			
3.	a).	Explain the Proximate analysis of coal and give its significance.	2	2	8
	b).	Explain Photovoltaic cell with neat diagram.	2	1	7
		OR			
4.	a).	Explain the fractional distillation of crude oil.	2	1	8
	b).	How synthetic Petrol can be prepared by Berguis Process.	2	1	7
		UNIT - III			
5.	a).	Explain the mechanism of electrochemical theory of corrosion with neat diagram.	3	1	8
	b).	Describe briefly abt cathodic Protection.	3	2	7
		OR			
6.	a).	Explain Hydrogen – Oxygen fuel cell with neat cell diagram	3	1	8
	b).	Discuss on various constituents of Paint.	3	2	7
		UNIT - IV			
7.	a).	What is hardness? How it is determined by EDTA method? Explain.	4	1	8
	b).	Describe with equations how water can be softened using Lime & Soda Process	4	1	7
		OR			
8.	a).	Discuss varis sterilizing methods used in municipal water treatment.	4	2	8
	b).	Illustrate the reverse osmosis Process with a neat diagram.	4	2	7
		UNIT - V			
9.	a).	Discuss chemistry involved in setting and hardening of cement?	5	2	8
	b).	What are refractories? Discuss the classification of refractories.	5	1	7
		OR			
10.	a).	Write the engineering applications of Liquid Crystals.	5	1	8
	b).	Explain the stoichiometric defects in crystals.	5	2	7