CONTINUOUS INTERNAL EVALUATION - 2

Dept:FY (Chemistry)	Sem / Div: I/D,E,F	Sub: Engineering Chemistry	S Code:21CHE12
Date:16/02/22	Time: 3:00-4:30 pm	Max Marks: 40	Elective:N

Note: Answer any 2 full questions, choosing one full question from each part.

QN		Questions	Marks	RBT	CO's
		PART A			
1	a	Define corrosion and explain the electrochemical theory of corrosion taking iron as an example	8	L1, L2	CO2
	b	What is inorganic coating in corrosion protection? Explain anodizing *Al* with relevant reactions	8	L2	CO2
	c	Explain the effect of nature of corrosion product on rate of corrosion	4	L2	CO2
		OR			
2	a	Define electroless plating. Explain the electroless plating of *Cu* in the manufacture of double sided printed circuit board with involved reactions	8	L1, L2	CO2
	b	Explain the corrosion protection by cathodic protection	8	L2	CO2
	c	Distinguish between electroplating and electroless plating	4	L3	CO2
		PART B			
3	a	Define the term conducting polymer. Explain the mechanism of conduction in polyaniline	8	L1, L2	CO3
	b	What are nano materials? Explain the synthesis of nano	8	L1	CO3

		nano materials by sol-gel method		L2	
	c	Write the synthesis of Kevlar Fibres mentioning any 2 applications.	4	L1, L2	CO3
		OR			
4	a	Explain the following (a) Carbon nano tubes (b) Fullerenes	8	L2	CO3
	b	What is biodegradable polymer? Explain the synthesis of poly lactic acid. Mention any 4 properties and applications of the same.	8	L1	CO3
	c	Explain any one size dependent property of nano material with a relevant example.	4	L2	CO3

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