

CRM08

Rev 1.11

<FY>

<26/12/23>

CONTINUOUS INTERNAL EVALUATION - 2

Dept: FY	Sem / Div: I /CD,AIML	Sub: Applied Chemistry for Computer science engineering and allied branches	S Code: BCHES102
Date: 06/12/23	Time: 3:00-4:30 pm	Max Marks: 50	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 Explain the detection of Herbicide - Glyphosate and bio-molecule- ascorbic acid using disposable sensor with reactions.	10	L2	CO1
	b What are batteries? Explain the construction and working of lithium ion batteries and mention its applications.	8	L2	CO1
	c Explain the steps involved in extraction of gold from e-waste.	7	L2	CO5
OR				
2	a Explain the detection of pharmaceutical pollutant diclofenac and hydrocarbon pollutant 1-hydroxy pyrene using Electrochemical sensor with electro-oxidation reactions.	10	L2	CO1
	b What is Quantum Dot Sensitized Solar Cell (QDSSC)? Explain the construction and working of QDSSC.	8	L2	CO1
	c Discuss the following: (i) Pyrometallurgy (ii) Hydrometallurgy	7	L2	CO5
PART B				

3	a	(i) Explain the types of organic memory devices by taking p- type and n-type semiconducting materials. (ii) Mention any four properties and applications of Polythiophenes (P3HT).	10	L2	CO2
	b	Discuss the working of Liquid Crystal Display.	8	L2	CO2
	c	Define photoactive and electroactive materials and write their working principle in display system.	7	L2	CO2

OR

4	a	(i) Explain the Classification liquid crystals. (ii) Mention any four properties and applications of liquid crystals electronic memory.	10	L2	CO2
	b	Mention any four properties and applications of OLED and Poly[9-vinylcarbazole] (PVK)].	8	L2	CO2
	c	Discuss the use of Polyimide Polymeric material for Organic memory device.	7	L2	CO2

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