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PRESIDENCY UNIVERSITY

BENGALURU

Mid - Term Examinations - March 2026

Date: 13-03-2026

Time: 02:00pm - 03:30pm

School: SOCSE	Program: B. Tech		
Course Code: CHE2501	Course Name: Chemistry of Smart Materials		
Semester: II	Max Marks: 50	Weightage: 25%	

CO - Levels	C01	C02	C03	C04	C05
Marks	20	30			

Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2marks.

5Q x 2M=10M

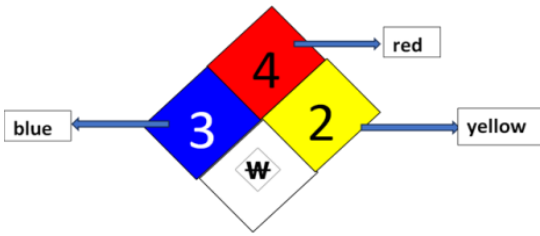
1	Write materials used in memristor type electronic memory device.	2 Marks	L1	C02
2	Define liquid crystal display with an example.	2 Marks	L1	C02
3	What is memory device. Give an example.	2 Marks	L1	C02
4	Write two advantages of LED.	2 Marks	L1	C02
5	What is LEC? Mention its working principle.	2 Marks	L1	C02

Part B

Answer the Questions.

Total Marks 40M

6.	a.	Describe DFT and briefly explain the charge of Hydrogen in HF and HLi molecule with respect to DFT by providing neat labelled diagram.	10 Marks	L2	CO1
Or					
7.	a.	Discuss the types of bonds by providing suitable example and diagram.	10 Marks	L2	CO1

8.	a.	Discuss the MSDS label in detail for the following chemical:	10 Marks	L2	CO1
					
Or					

9.	a.	Discuss the molecular formula, structural formula, ball and stick model and space filling model for water.	10 Marks	L2	CO1
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10.	a.	Discuss the working of liquid crystal display (LCD).	10 Marks	L2	CO2
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Or					
11.	a.	Discuss n-type and p-type organic memory materials in detail with suitable examples.	10 Marks	L2	CO2

12.	a.	Describe the eight major stages involved in the fabrication process of semiconductor chips.	10 Marks	L2	CO2
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Or					
13.	a.	Discuss the properties and applications of OLED.	10 Marks	L2	CO2