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Mid Term Examinations - October 2026

Date: 07/10/2026 **Time:** 11:45 AM - 01:15 PM

Course Code: CHE2501 **Course Name:** Chemistry of Smart Materials

Semester: First Semester **Max. Marks:** 50 **Weightage:** 50%

CO - Levels	CO1	CO2
Marks	80	100

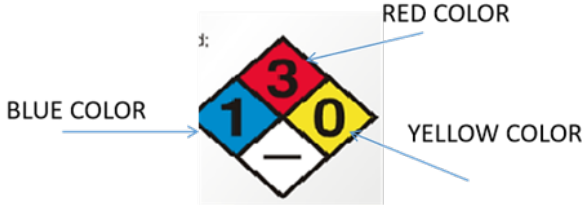
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Q.N.	Questions	M	CO	BT
1	**List out the types of organic memory materials.**	2	CO2	BT1
2	**What causes differences in colour in LED?**	2	CO2	BT1
3	**What are liquid crystals? Give one example.**	2	CO2	BT1
4	**What is OLED? Write the schematic representation of construction of OLED.**	2	CO2	BT2
5	**Name and write the structure of organic molecule used in memory device which behaves as p type semiconductor.**	2	CO2	BT2

PART B : Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
6	**What is molecular modelling? In detail explain the different types of molecular models of Methane.**	10	CO1	BT2
7	**Why bonds are formed? Explain in detail the different types of bonds with suitable examples and neat labeled diagram.**	10	CO1	BT2

PART C: Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
8	**The following MSDS label was found for a chemical. Discuss in detail the information obtained by colors and numbers for safety measures.** 	10	CO1	BT2
9	**What is chemoinformatics? List and out the tools used in chemoinformatics.**	10	CO1	BT2

PART D: Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
10	**List and explain in detail the criteria for organic or polymeric molecules to behave as semiconductor materials.**	10	CO2	BT2

PTO (Please Turn Over)

11	**Explain in detail the steps involved in manufacturing of semiconductor chips.**	10	CO2	BT2

PART E: Answer Any 1 Following Questions. 10 M				
Q.N.	**Questions**	**M**	**CO**	**BT**
12	**Classify the types of electronic memory devices with their materials, operating conditions, along with examples.**	10	CO2	BT2
13	**What are LEDs? Explain in detail the construction, working principle of LED.**	10	CO2	BT2

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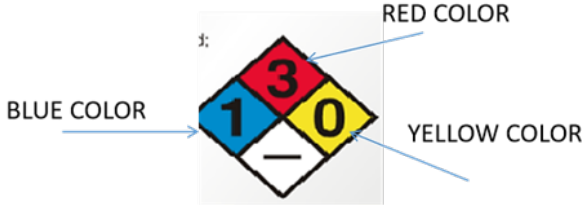
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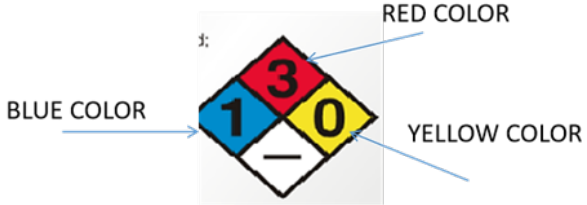
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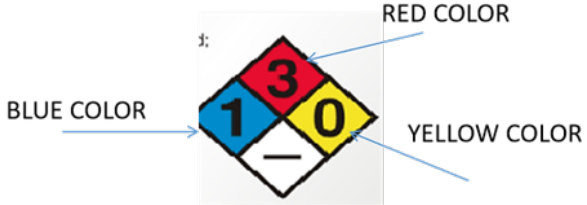
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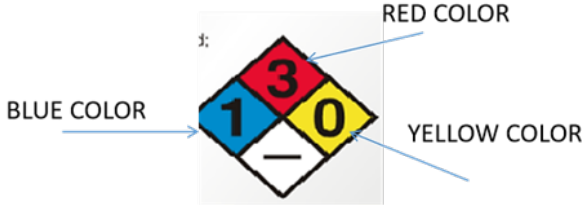
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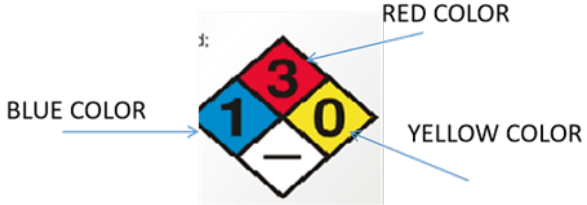
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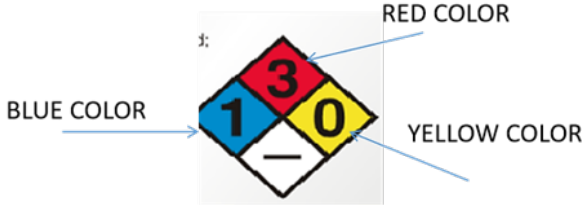
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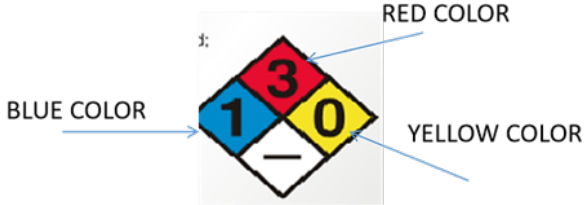
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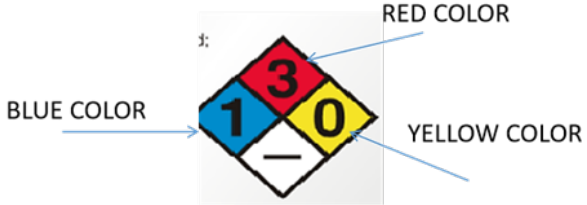
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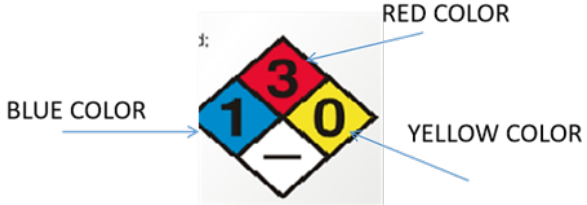
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Q.N.	Questions	M	CO	BT
8	**The following MSDS label was found for a chemical. Discuss in detail the information obtained by colors and numbers for safety measures.** 	10	CO1	BT2
9	**What is chemoinformatics? List and out the tools used in chemoinformatics.**	10	CO1	BT2

PART D: Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
10	**List and explain in detail the criteria for organic or polymeric molecules to behave as semiconductor materials.**	10	CO2	BT2

PTO (Please Turn Over)

11	**Explain in detail the steps involved in manufacturing of semiconductor chips.**	10	CO2	BT2

PART E: Answer Any 1 Following Questions. 10 M				
Q.N.	**Questions**	**M**	**CO**	**BT**
12	**Classify the types of electronic memory devices with their materials, operating conditions, along with examples.**	10	CO2	BT2
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Mid Term Examinations - October 2026

Date: 07/10/2026 **Time:** 11:45 AM - 01:15 PM

Course Code: CHE2501 **Course Name:** Chemistry of Smart Materials

Semester: First Semester **Max. Marks:** 50 **Weightage:** 50%

CO - Levels	CO1	CO2
Marks	80	100

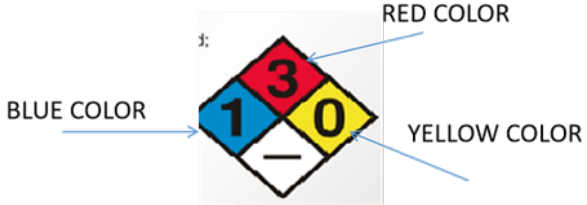
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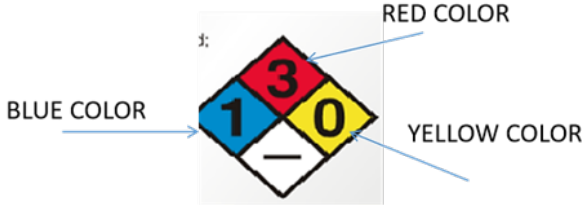
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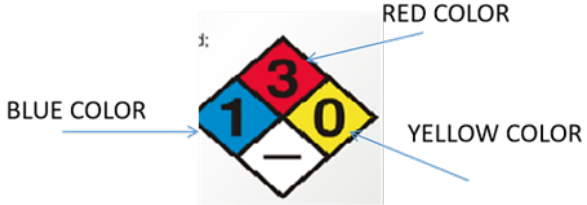
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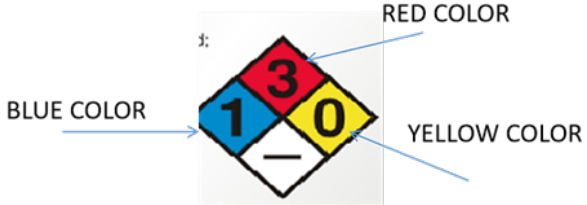
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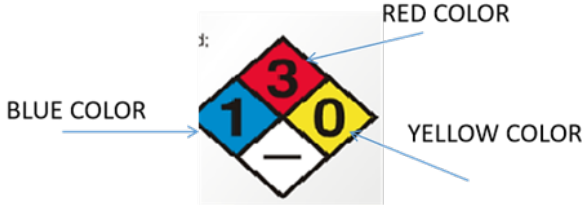
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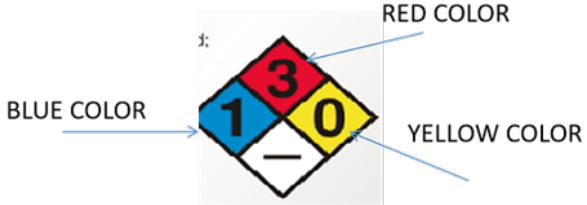
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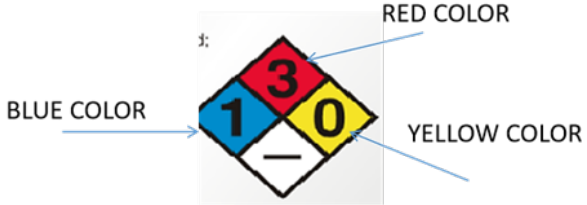
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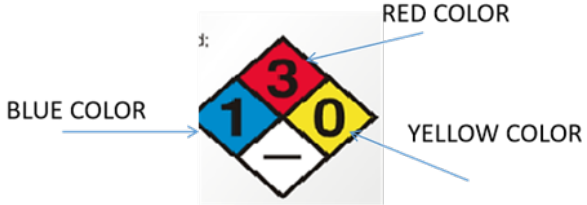
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