# Department of Chemistry 

## Shri G.S. Institute of Technology \& Science, <br> Indore

## B.Tech. I Year

| Course | Course Outcomes |  |
| :---: | :---: | :---: |
| $\begin{aligned} & 0 \\ & \stackrel{i n}{\theta} \\ & \underset{0}{7} \end{aligned}$ | CO1 | Describe the basics of Organic, Inorganic and Physical Chemistry. |
|  | CO2 | Apply Specifications, testing and treatment of water for industrial and domestic use. |
|  | CO3 | Illustrate Concepts, manufacturing and applications of different types of industrially important materials and their maintenance. |
|  | CO4 | Explain the applications of spectral and analytical techniques in qualitative and quantitative analysis. |
|  | CO5 | Understand the Ethics behind applying Chemical Methods in Industries and day-to-day use. |

## B.Tech First Year Chemistry Theory (CH10516)

## CO-PO Mapping

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CO1 | 2 | 3 | - | 2 | 1 | - | 1 | 1 | - | 1 | - | 1 |
| CO2 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | - | - | 1 |
| CO3 | 2 | 2 | 1 | 1 | - | 1 | - | 1 | - | - | - | 1 |
| CO4 | 2 | 3 | 1 | 2 | - | 1 |  |  | 1 | - | - | 1 |
| CO5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | - | - | - | 1 |

## B.Tech. I Year

2023

## Course Outcomes (COs) : For Laboratory Course :

This laboratory course will illustrate the principles of chemistry relevant to the study of science and engineering. The students will learn to:

| Course | Lab Outcomes |  |
| :---: | :---: | :---: |
| $\begin{aligned} & 0 \\ & 10 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \hline \end{aligned}$ | L01 | Develop abilities to perform various types of qualitative and quantitative analyses. |
|  | LO2 | Determine properties of lubricants and oil samples. |
|  | LO3 | Analyse water samples for in terms of hardness, chloride content, alkalinity and other dissolved / undissolved impurities. |
|  | LO4 | Ability to understand, explain and use instrumental techniques for elucidating properties of lubricants oil samples, chemical materials etc. |
|  | LO5 | Follow to good laboratory practices during performance. |

## B. Tech First Year Chemistry Practical (CH10656)

CO-PO Mapping

| LO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LO1 | 2 | 2 | 2 | 3 | 1 | 3 | 2 | 1 | 3 | 1 | - | 1 |
| LO2 | 3 | 3 | 1 | 2 | 1 | 1 | 1 | 1 | 3 | 1 | - | 2 |
| LO3 | 2 | 2 | 2 | 3 | 1 | 3 | 2 | 1 | 3 | 1 | - | 2 |
| LO4 | 3 | 3 | 1 | 3 | 3 | 2 | 1 | 1 | 3 | 1 | - | 2 |
| LO5 | - | - | - | - | - | 2 | 1 | 3 | 3 | - | - | 3 |

