

## **CHEMISTRY LAB**

**(Common to all Branches)**

**Course Code: 13BC1103**

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| <b>L</b> | <b>T</b> | <b>P</b> | <b>C</b> |
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### **Course Educational Objectives:**

The course is to develop the basic experimental skills and analytical thinking.

The course attempt to provide information regarding various chemical techniques used in quantitative chemical analysis.

### **Course Outcomes:**

The student will be able to determine the substance quantitatively and analyse the data obtained to resolve the prolem in their respective areas.

### **LIST OF EXPERIMENTS :**

1. Determination of ferrous iron.
2. Determination of ferric iron.
3. Determination of total hardness of water.
4. Determination of carbonate and bicarbonate of water.
5. Determination of dissolved oxygen.
6. Determination of available chlorine in bleaching powder.
7. Determination of zinc by potassium ferrocyanide.
8. Determination of copper by EDTA method
9. Determination of calcium by permanganate.
10. Determination of iron-II by potentiometric method.
11. Determination of viscosity of lubricant by viscometer.
12. Determination of flash and fire points of lubricant.
13. Determination of percentage residue of carbon in oils.

14. Determination of calorific value of solid fuels.
15. Determination of fluoride by spectrophotometric method.
16. Determination of iron in cement by spectrophotometric method.

**REFERENCE:**

A.I.Vogel, “*A Text book of quantitative chemical analysis*”, 6<sup>th</sup> Edition, Pearson Education, Pvt. Ltd., 2002.

