CHEMISTRY LAB

(Common to all Branches)

Course Code: 15BC1102 L T P C 0 0 3 2

Course Outcomes:

At the end of the course the student shall be able to

- CO 1 Demonstrate Principles involved in determination of metal ions by titrimetry
- CO 2 Analyse different water quality parameters
- CO 3 Explain the properties of liquid lubricants and fuels
- CO 4 Understand the principles of Potentiometry to determine the metal ion
- CO 5 Understand the principles of determination of ions by Spectrophotometry

Any **TWELVE** of the following experiments are to be performed during the semester.

Determination of

- 1. Ferrous iron.
- 2. Ferric iron.
- 3. Total hardness of water sample.
- 4. Carbonate and bicarbonate of water sample.
- 5. Dissolved oxygen.
- 6. Available chlorine in bleaching powder.
- 7. Zinc by potassium ferrocyanide.
- 8. Copper by EDTA method
- 9. Calcium by permanganate.

- 10. Iron-II by potentiometric method.
- 11. Viscosity of lubricant by viscometer.
- 12. Flash and fire points of lubricant.
- 13. Percentage residue of carbon in oils.
- 14. Calorific value of solid fuels.
- 15. Fluoride by spectrophotometric method.
- 16. Iron in cement by spectrophotometric method.

REFERENCE:

1. A.I.Vogel, "*A text book of quantitative chemical analysis*", 6th Edition, Pearson Education, Pvt. Ltd., 2002.