

Kerala Technological university KTU First year B.tech Syllabus  
for **CY110Engineering Chemistry Lab**

**Course No. : CY110**

**Course Name: Engineering Chemistry Lab**

**L-T-P-Credits: 0-0-2-1**

**Year of Introduction: 2015**

**Course Objectives,Syllabus:**

**List Of Exercises / Experiments (Minimum Of 8 Mandatory)**

Estimation Of Total Hardness – Edta Method.

Estimation Of Iron In Iron Ore.

Estimation Of Copper In Brass.

Estimation Of Dissolved Oxygen By Winklers Method.

Estimation Of Chloride In Water.

Preparation Of Urea Formaldehyde And Phenol-Formaldehyde Resin.

Determination Of Flash Point And Fire Point Of Oil By Pensky Martin Apparatus.

Determination Of Wavelength Of Absorption Maximum And Colorimetric

Estimation Of  $\text{Fe}^{3+}$  In Solution.

Determination Of Molar Absorptivity Of A Compound Other Than  $\text{Fe}^{3+}$ .

Analysis Of Ir Spectra Of Any Three Organic Compounds.

Analysis Of  $^1\text{H}$  Nmr Spectra Of Any Three Organic Compounds.

Calibration Of Ph Meter And Determination Of Ph Of A Solution.

Verification Of Nernst Equation For Electrochemical Cell.

Potentiometric Titrations: Acid – Base And Redox Titrations

Conductivity Measurements Of Salt Solutions.

Flame Photometric Estimation Of  $\text{Na}^+$  To Find Out The Salinity In Sand.