### ENGINEERING CHEMISTRY LABORATORY

Sub Code	:	10CHEL17/10CHEL27	IA Marks	:	25
Hrs/ Week	:	03	Exam Hours	:	03
Total Hrs.	:	42	Exam Marks	:	50

# PART - A

- 1. Potentiometric estimation of FAS using standard K2Cr2O7 solution
- 2. Colorimetric estimation of Copper
- Conductometric estimation of an Acid mixture using standard NaOH solution
- 4. Flame Photometric estimation of Sodium and Potassium in the given sample of Water
- 5. Determination of pKa of a weak acid using pH Meter
- Determination of Viscosity co-efficient of a given liquid using Ostwald's Viscometer.

#### PART - B

- Determination of Total Hardness of a sample of Water using Disodium salt of EDTA.
- Determination of CaO in the given sample of Cement by Rapid EDTA method.
- Determination of Percentage of Copper in Brass using standard Sodium thiosulphate solution.
- Determination of Iron in the given sample of Haematite ore solution using Potassium dichromate Crystals by external indicator method.
- 5. Determination of COD of the given Industrial Waste water sample.
- Determination of Total Alkalinity of a given Water Sample using standard Hydrochloric acid.

#### References Books:

- 1) Laboratory manual in Engineering Chemistry Sudharani, Dhanpatrai Publishing Company.
- Vogel's Text Book of Quantitative Chemical Analysis revised by G.H.Jeffery, J. Bassett, J. Mendham and R.C Denney.

## Scheme of Examination:

One experiment from Part- A and another from Part - B shall be set. Different experiments may be set from Part- A and a common experiment from Part - B.

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H.O.D.

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