

ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS) VISAKHAPATNAM

V SEMESTER

CHEMISTRY

Time: 3Hrs/Week

CH-E3-5254(2)

INDUSTRIAL CHEMISTRY – I I

Max.Marks:50

W.e.f.20AH Batch

CHEMISTRY PRACTICAL – III B

SYLLABUS

**COURSE OBJECTIVES:**

Enable the students to acquire skill the skills of qualitative and quantitative estimations pertaining to water quality

**COURSE OUTCOMES:**

On successful completion of this practical course, student shall be able to:

- Learn the procedures for the determination of BOD and COD.
- Demonstrate skills in the determination of chloride in the given water sample
- Acquire skills in determining the hardness of water.

**Practical (Laboratory) Syllabus:**

**(30hrs)**

1. Determination of Hardness of water by EDTA titration.
2. Determination of Chemical Oxygen Demand (COD)
3. Determination of Biological Oxygen Demand (BOD)
4. Determination of chloride using Mohr's method.
5. Determination of pH, turbidity and total solids in water sample.
6. Determination of  $\text{Ca}^{+2}$  and  $\text{Mg}^{+2}$  in soil sample by flame photometry.
7. Determination of Ph in soil samples using pH metry.

**Lab References:**

1. Textbook of Vogel's Quantitative Chemical Analysis, Sixth edition, Pearson.
2. Textbook on Experiments and Calculations in Engineering Chemistry, S.S.Dara, S.Chand.

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