| 22PCM313P | | | | | Safety, Health and Environment Laboratory | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Teaching Scheme | | | | | Examination Scheme | | | | | |
| | | | | | Theory | | | Practical | | Total |
| L | T | P | C | Hr/Week | MS | ES | IA | LW | LE/Viva | Marks |
| 0 | 0 | 2 | 1 | 2 | - | - | - | 50 | 50 | 100 |

**COURSE OBJECTIVES**

- Students gain hands on experience on analysis.

**Week 1:** Determination of pH and turbidity.
**Week 2:** Determination of Conductivity and TDS (Organic and Inorganic)
**Week 3:** Determination of Alkalinity/Acidity.
**Week 4:** Determination of Chlorine.
**Week 5:** Determination of Iron.
**Week 6:** Determination of Dissolved Oxygen.
**Week 7:** Determination of Nitrates.
**Week 8:** Determination of Optimum Dose of Coagulants.
**Week 9:** Determination of Chlorine Demand.
**Week 10:** Determination of Total Phosphorous.
**Week 11:** Determination of Chemical Oxygen Demand.
**Week 12:** Determination of Biological Oxygen Demand.

**COURSE OUTCOMES**

On completion of the course, the student will be able to

**CO1:** Determine the pH, TDS and conductivity of the organic and inorganic sample.
**CO2:** Analyze the alkalinity, acidity and chlorine content.
**CO3:** Describe the analysis of dissolved oxygen and nitrate content.
**CO4:** Demonstrate the coagulant and chlorine demand equipment.
**CO5:** Estimate the amount of phosphorous content in the sample.
**CO6:** Understand to estimate the COD and BOD.

**END-SEMESTER EXAMINATION QUESTION PAPER PATTERN**

**Max. Marks: 100** **Exam Duration: 3 Hr**

PART A: Evaluation based on the class performance and Laboratory book 50 Marks
PART B: Viva Examination based conducted experiments 50 Marks