| 20PEB126P |  |  |  |  | CHEMISTRY PRACTICAL |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Teaching Scheme |  |  |  |  | Examination Scheme |  |  |  |  |  |
| L | T | P | C | Hours/Weak |  | heory |  |  | tical | tal Marks |
| L | T | $P$ | C | Hours/Week | MS | ES | IA | LW | LE/Viva | tal Marks |
| 0 | 0 | 2 | 1 | 2 | 0 | 0 | 0 | 50 | 50 | 100 |

## COURSE OBJECTIVES

> Demonstrate co-relation of the experiments with practical problems
> Enhance knowledge to understand multicomponent reservoir fluid sample.
> Improve skills to find out reservoir fluid and rock interaction.
> Support in developing non-damaging fluids for well/reservoir specific operations.

## LIST OF EXPERIMENT

1. Estimation of Alcohol
2. Estimation of Aldehydes \& Ketones
3. Estimation of Phenol
4. Determination of average molecular weight by viscometer
5. Ore analysis
6. Estimation of Amines
7. Estimation of Aromatics
8. Qualitative analysis of simple Organic compounds.
9. Hydrolysis of Sucrose.
10. Waste Water analysis
11. Adsorption Studies - Freundlich Adsorption Isotherm
12. Determination of Transition Temperature.
13. Determination of Critical solution temperature for the Phenol - Water system.
14. Determination of Saponification value of an oil.
15. To determine the moisture \& volatile contents in a given coal sample by proximate analysis.

## COURSE OUTCOMES

On completion of the course, student will be able to
C01- Interpret different types of instruments for qualitative and quantitative analysis of chemicals.
CO2- Identify the organic functional groups in a given sample.
CO3- Determine the physico-chemical properties of single and multicomponent systems.
CO4- Perform quantitative investigation on carbon-based energy source.

## TEXT / REFERENCE BOOKS

1. Furniss, and Arthur Israel Vogel. Vogel's Textbook of Practical Organic Chemistry. London: Longman Scientific \& Technical, 1989.

## END SEMESTER EXAMINATION QUESTION PAPER PATTERN

Max. Marks: 100
Exam Duration: 3 Hrs.
PART A: Evaluation Based on the class performance and Laboratory book
50Marks
PART B: Viva Examination based conducted experiments

