

Class: B. Tech. 1st Semester
Branch: Common to all Branches
Course Title: Engineering Chemistry Lab
Course Code: CHM-103L

CHEMISTRY PRACTICALS:

1. Determine the percentage of CaCO_3 in precipitated chalk. You are provided with 1N HCl and 0.1N NaOH.
2. To analyse the given antacid tablets.
3. Determine Volumetrically the %age purity of given sample of Ferrous sulphate, x gms of which have been dissolved per litre provided N/10 KMnO_4
4. Determine Volumetrically the number of molecules of water of crystallization present in the given sample of Mohr's salt, x gms. of which have been dissolved per litre provided N/10 $\text{K}_2\text{Cr}_2\text{O}_7$ (using an external indicator).
5. Determine Volumetrically the percentage of Cu in a sample of CuSO_4 crystals, Z gms of which have been dissolved per litre, provided 0.1N $\text{Na}_2\text{S}_2\text{O}_3$.
6. To determine the coefficient of viscosity of an unknown liquid using Ostwald Viscometer.
7. Determine the surface tension of an unknown liquid using Stalagmometer.
8. Elemental Analysis
9. Purification of two given organic substances.
10. Determine the method of purification of organic compounds by column chromatography.

BOOKS RECOMMENDED:

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| 1. Experimental Engineering Chemistry | Shashi Chawla |
| 2. Lab. Manual on Engg. Chemistry | Basin, S K & Sudha Rani |
| 3. A Manual of Practical Engineering Chemistry | Dr. Rajinder Kumar |

Class: B. Tech. 1st Semester
Branch: Common to all Branches **Course Title: Engineering Mechanics Lab**
Course Code: M-104L

Lab work shall be based on theory course of Engineering Mechanics Paper