

# Contents

|  |           |
|--|-----------|
| <i>Acknowledgement</i> .....   | <i>ix</i> |
| 1. Introduction of the Laboratory Safety.....  | 1         |
| 2. To the Knowledge About the Basic Glassware are Used<br>in the Laboratory .....                                    | 10        |
| 3. To Knowledge About the Laboratory Techniques<br>of Recrystallization .....  | 15        |
| 4. To Obtain Pure Components from a Mixture of Organic Compounds<br>Using Steam Distillation .....                   | 22        |
| 5. To Determine and Report the Melting Point of the Given Sample<br>Naphthalene and Benzoic Acid .....               | 26        |
| 6. To Determine and Report the Boiling Point of the Given Sample<br>(Benzaldehyde and Benzene).....                  | 30        |
| 7. To Determine and Report the Solubility Behaviour<br>of the Given Sample.....                                      | 34        |
| 8. To Determine and Report the Elements Present in the Given Sample<br>(Sulphur, Nitrogen, Carbon and Halogens)..... | 37        |
| 9. To Prepare and Submit 2, 4, 6 – Tribromophenol (Picric Acid)<br>from Phenol and Report its Melting Point .....    | 44        |
| 10. Synthesis and Characterization of Phenyl Benzoate from Phenol<br>by Acetylation Reaction .....                   | 49        |
| 11. Synthesis and Characterization of Acetanilide from Aniline<br>by Acetylation Reaction .....                      | 53        |
| 12. To Identify and Report the Functional Groups Present in the Given Sample<br>(Aldehyde and Ketone) .....          | 58        |
| 13. Synthesis and Characterization of Iodoform.....  | 63        |

|   |    |
|---|----|
| 14. Synthesis and Characterization of Flurosene Dye .....                                       | 67 |
| 15. Synthesis and Characterization of Phenyl Urea.....  | 72 |
| 16. Synthesis and Characterization of Benzanilide from Aniline<br>by Acetylation Reaction ..... | 76 |
| 17. Synthesize and Characterize Methyl Orange .....   | 80 |
| <i>References</i> .....   | 84 |