

Exercise — To identify the functional group in given organic sample.

|    | Experiment  | Observation                        | Inference                       |
|----|---|------------------------------------|---------------------------------|
| 1. | Sodium Metal Test<br>Add small piece of sodium metal in the given sample.                                       | Evolution of bubbles of $H_2$ gas. | Alcoholic group may be present. |
| 2. | Esterification Test<br>Organic sample + 1 ml of acetic acid & 1-2 drops of conc. $H_2SO_4$<br>Heat the content. | Formation of fruity smell.         | Alcoholic group is present.     |

Result - The organic sample contains alcoholic group.