

## List of equipment required for First Degree Programme (BSc) in Chemistry/Industrial Chemistry

The following equipment & safety measures are necessary for the Undergraduate Chemistry Laboratory Course for the smooth and efficient conducting of practical for the First Degree Programme (BSc) in Chemistry, Industrial Chemistry & all other Programmes with Chemistry as major subject.

| Sl.No | Equipment  | No. | Remark   |
|-------|--|-----|--|
| 1     | Electric Centrifuge  | 3   | Qualitative analysis of ions                             |
| 2     | Computer with internet facility, Graphical tool-excel and Origin-Chemistry related software: Chem Sketch, Chem Draw etc. | 5   | Familiarise with graphical tools, structural drawing etc |
| 3     | Hot air Oven   | 1   | Drying of precipitates                                   |
| 4     | Bunsen Burner  | 15  | Heating purpose  |
| 5     | Electric Bunsen Burner   | 15  | Gravimetric analysis                                     |
| 6     | Vacuumpump   | 1   | Organic preparations                                     |
| 7     | Electronic balance(4 digit)  | 1   | Measurement of mass                                      |
| 8     | Conductivity meter   | 2   | Conductometry  |
| 9     | Potentiometer  | 2   | Potentiometry  |
| 10    | Abbe Refractometer   | 2   | Refractometric analysis                                  |
| 11    | Stalagmometer  | 2   | Surface tension  |
| 12    | Ostwald viscometer   | 2   | Viscosity  |
| 13    | Sensitive Thermometer  | 10  | Temperature measurement                                  |
| 14    | Spectrophotometer/Colourimeter   | 1   | Colourimetric experiments                                |
| 15    | RB flask & water condenser   | 10  | Organic preparations                                     |
| 16    | Refrigerator & ice maker   | 1   | Storing chemicals & Ice for organic preparation          |
| 17    | IR lamp  | 2   | Drying samples   |
| 18    | Water analyser (for BSc Industrial Chemistry)  | 1   | Water analysis   |
| 19    | Emergency eye wash   | 1   | Safety mandate   |
| 20    | Class ABC (dry) fire extinguishers   | 2   | Safety mandate   |
| 21    | Class B Carbon dioxide type fire extinguisher  | 1   | Safety mandate   |
| 22    | First aid kit  | 1   | Safety mandate   |