MEDICAL CHEMISTRY LABORATORY MANUAL




NO SMOKING



Chemical contact should be washed immediately with copious amounts of water to notify the instructor.



- Avoid inhaling any fumes. When necessary, a substance may be smelt by wafting (fanning) its vapor gently towards your face. Containers emitting noxious fumes should be placed in the hood (fume cupboard).



- Whenever a reagent is discarded in the sink it should be flushed down the drain with copious amounts of water. Noxious gases may evolve from residual reagents in the drain.



- Never point a test-tube of boiling liquid at your neighbor. It may bump.



- Develop the habit of keeping your hands away from your mouth, nose and eyes. This will reduce the possibility of self-contamination.



- Electrical equipment and connections should not be handled with wet hands, nor should electrical equipment be used after a liquid has been spilled on it



- Always switch off electrical apparatus at the mains when not on use. Switching off the apparatus by its own switch is not satisfactory.



- Hand washing is mandatory on leaving the laboratory



- **General instructions**

- It is the responsibility of each student to study the experiment before his lab time and to answer the questions of a pre-lap quiz
- Attendance at laboratory is compulsory
- Read the label twice before taking anything from a bottle.
- Do not lay the stopper of a bottle down.
- Leave the reagent battles at the side benches. Bring test tubes or beakers to the bench for transferring chemicals and carrying them to your bench.
- Reagents bottles are provided with their own pipettes or dropers. Do not insert your own pipette or dropper into the reagent bottle.
- Glasswares are cleaned by washing carefully with a brush, and detergent, then rinsed thoroughly with tap water and finally rinsed once again with a small quantity of distilled water

- **<u>Aims of the chemistry Laboratory</u>**

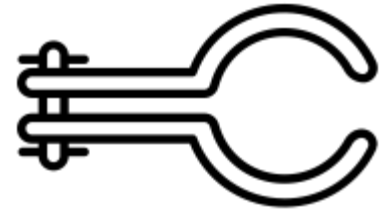
- To give you the chance to observe firsthand some of the substances & reactions discussed in the lectures & textbooks .
- To learn some of skills & techniques used by chemist in their works such as analytical work & chemical synthesis .
- To offer you training in the careful & complete observation of the certain phenomena & in the recording of data about them . Data gathering is followed by analysis of these data . determination of the significance of the data & then your decision of what you can conclude from your data . This is shown in the report written at the end of each experiment.



porcelain crucible and cover



beaker



pinch clamp



screw clamp



crucible tongs



pipet



pipet bulb



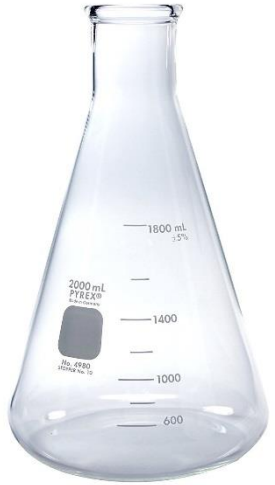
eyedropper



evaporating dish



watch glass



conical flask or
Erlenmeyer flask



Florence flask



test tube



graduated cylinder



glass funnel



burette



test tube holder



test tube brush



glass stirring rod and rubber
policeman



forceps



ring clamp and stand clamp



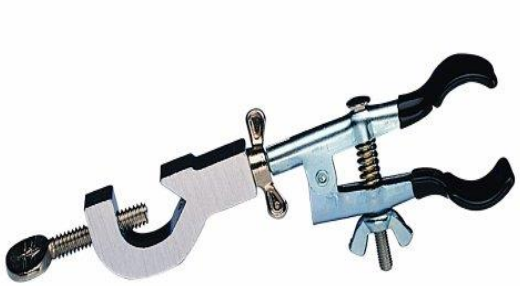
funnel support



litmus paper



Bunsen burner



utility clamp



triangle



test tube rack



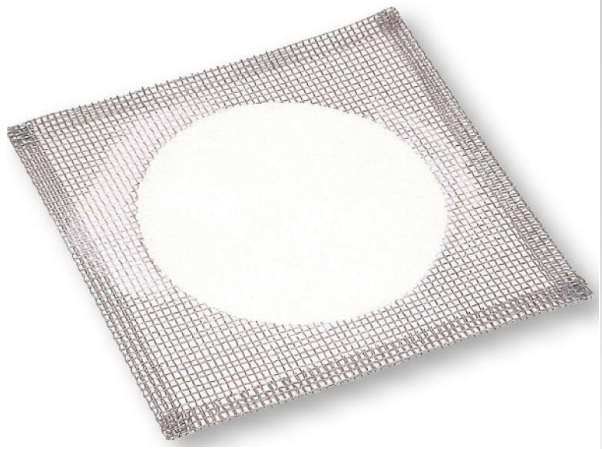
burette clamp



volumetric flask



wash bottle



wire gauze



mortar and pestle



spatula