

## Al-Mustaqbal University Department of Medical Instrumentation Engineering Techniques Second Class

Laboratory Medical Instrumentation I
Lecturer: Luban H. Hameed
1sterm – Lect9 Medical Laboratory Instruments and Tools 2

## **Medical Laboratory Instruments and Tools 2**

They include basic items used in nearly every diagnostic or research lab setting. Here is a list of commonly used **medical laboratory tools**:

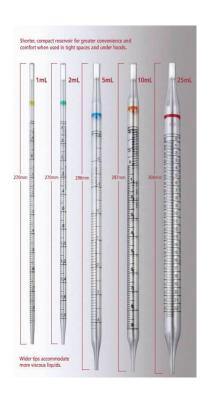
#### 1. Pipettes

② Used for measuring and transferring volumes of liquids.

#### 2. Test Tubes and Vials

☑ Tubes: Blood collection tubes with different additives (e.g., EDTA, heparin) to prepare blood samples for various tests.





### 3. Slides and Cover Slips

② **Microscope Slides**: Flat glass or plastic surfaces where specimens are mounted for microscopic analysis.

② Cover Slips: Thin glass pieces placed over the specimen on a microscope slide to protect the sample and improve image clarity.



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## **Droppers**

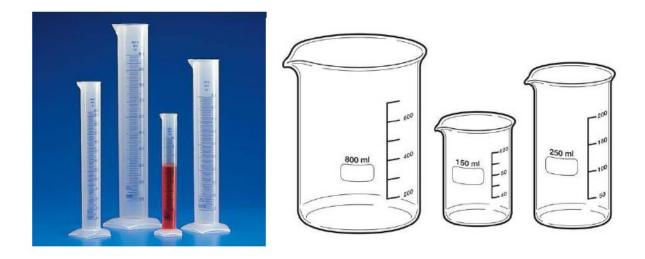
② **Droppers**: Used for adding small quantities of liquid to a solution or reaction.



## 5. Graduated Cylinders and Beakers

2 Graduated Cylinders: Measure the volume of liquids accurately.

2 Beakers: Multi-purpose containers for stirring, mixing, and heating liquids.





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## 6. Spatulas and Scoops

2 Spatulas: Used to transfer small amounts of solid or semi-solid substances.

2 **Spoons/Scoops**: Ideal for measuring out powdered chemicals.



#### 7. Bunsen Burner

2 Provides a controlled flame for heating substances, sterilizing tools, or preparing slides.





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### 8. PH Strips and Meters

2 **PH Strips**: Used for quick and approximate pH testing of a solution.

2 PH Meters: Electronic devices for accurately measuring the acidity or alkalinity of a solution.



### 9. Disposable Gloves and PPE (Personal Protective Equipment)

② Essential for maintaining a sterile environment and protecting laboratory personnel from contamination or hazardous substances.

## **10. Laboratory Glassware Brushes**

② Brushes of various sizes are used to clean glassware like test tubes, beakers, and flasks to maintain sterility and accuracy in experiments.

