

#### pH Meter

The pH of a solution can be defined as the concentration of hydronium ions in a solution. The pH of the solution is very crucial for biological and chemical analyses. In biological science, it is very important to maintain the pH where one is performing an analysis (eg. Enzyme catalysis), since fluctuation in the pH may lead variations in the results. The pH of a solution can be measured using a pH strip or a pH meter.



### Colorimeter

A colorimeter is an instrument that compares the amount of light getting through a solution with the amount that can get through a sample of pure solvent. It is based on the principle that certain compounds in solution possess the ability to absorb particular wavelength of light, when it passes through them. In biological science, the instrument is used in measurements of transmittance and absorbance of biological compounds.



### **Projection Microscope with Phone Mount**

A microscope is a device used to observe minute objects, such as cells and microscopic organisms. The object is magnified through a combination of lens and magnified several folds. A Phone Microscope Attachment is a universal adapter for attaching your mobile phone to a microscope. It connects your phone to your microscope eyepiece or phototube equipped with an eyepiece, so you can view and capture images and video through the eyepiece.



# **Digital Ultrasonic Cleaner**

Ultrasonic cleaners use high frequency wave to create cavitation bubbles in the cleaning liquids. When the ultrasonic cavitation bubbles collapse, they create a cleaning action that can remove debris, dirt, grease, and other deposits from surfaces. The instrument is used to facilitate or enhance the removal of foreign contaminants from surfaces submerged in an ultrasonically activated liquid.



#### **Rotary Flask Shaker**

Rotary Flask Shaker is an instrument used for mixing solutions (commonly microbial growth media) used in biological science laboratories. It provides rigorous agitation allowing continuous mixing of solutions and media in flasks or beakers. The instrument has various applications in microbiological, cell culture & other life science experimentations.



## **Orbital Incubator Shaker**

Orbital Incubator Shaker is an instrument used for mixing solutions (commonly microbial growth media) in a controlled temperature environment. They are designed for precise temperature control and simultaneous agitation and mixing that is required for cell and microbial growth, fermentations studies, enzyme reactions, tissue culture and other biotechnology experiments.



## A BOD (Biochemical Oxygen Demand) Incubator

BOD incubator is a specialized laboratory equipment used in measuring the amount of oxygen consumed by microorganisms in water or wastewater samples. They are used in laboratory and research facilities for storage, testing of Bacteria, fungi and other micro-organisms. These incubators detect the amount of dissolved oxygen required by aerobic biological organisms in a body of water. Apart from these, the instrument has various other application, ranging from environmental and industrial monitoring to various biotechnological research.



**Hot Water Bath** 

A water bath is a laboratory equipment that is used to incubate experimental samples at a constant temperature over a long period of time. Water bath is a preferred heat source for heating flammable chemicals instead of an open flame to prevent ignition. Other applications include warming of reagents, melting of substrates, or incubation of cell cultures.



## Water Distillation Unit

Water Distillation Unit is an instrument used for distillation of water required for various biological and chemical experimentations. This distilled water is used in various areas of biology, including biochemistry, molecular biology, tissue culture, etc.



## Polyacrylamide gel electrophoresis (PAGE) Unit

PAGE is technique used for analysis of proteins in biochemistry, molecular biology biotechnology laboratories. The technique can also be used for separation of nucleic acids. Proteins are analyzed through separation in the gel matrix based on the size and charge of the proteins under study. The unit consist of a glass slabs for casting the gel, buffer tank and power supply system.



Biosafety Cabinets

Biosafety cabinet is a containment instrument used for protection against biohazardous or infectious agents. It also helps maintain aseptic environment while working biological samples. The instrument has various applications in microbiological, cell and tissue culture & other biological science experimentations.