

Department of Botany, Kanya Maha Vidyalaya, Jalandhar

List of Equipments

Spectrophotometer: Spectrophotometers are the science and instruments used to identify or confirm the chemical species, chemical structure, or concentration of substances in a sample.

Diode array technology speeds up spectral data acquisition

- Simultaneous measurement of all wavelengths increases productivity, scan time as short as 3 seconds
- Multiple measurement modes for broad application compatibility
- Color touch screen and user-friendly interface make setup easy

Grant: DBT



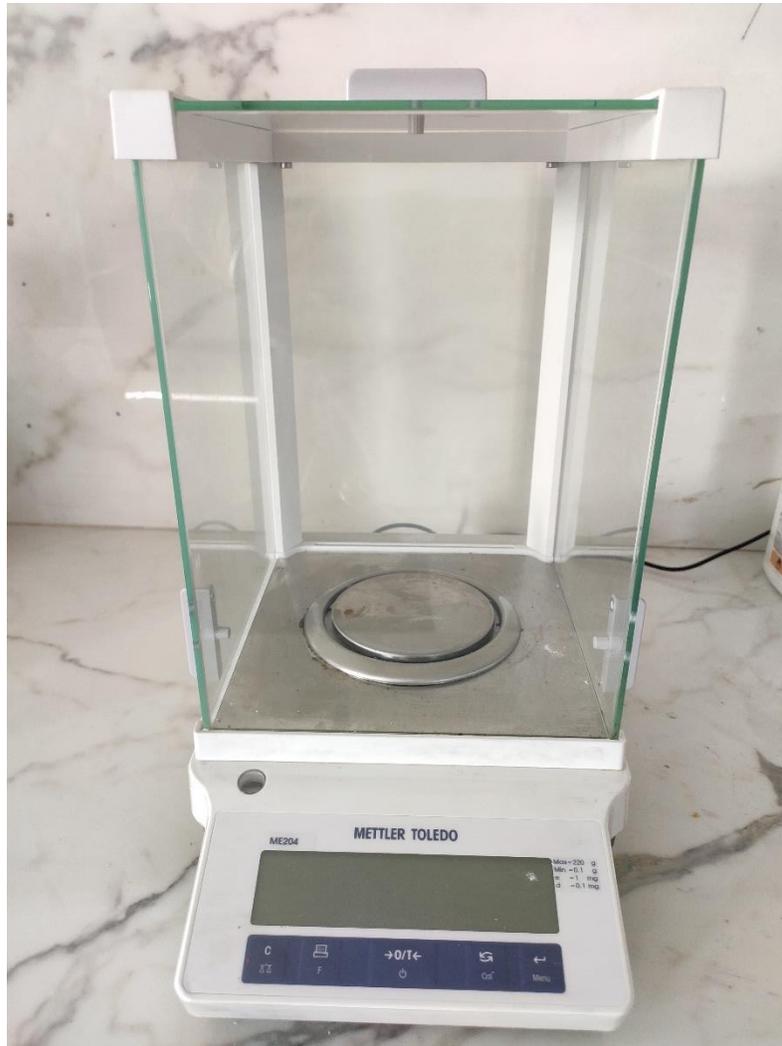
Analytical Weighing Balance: Analytical balances are precise balances with readability to .01g (5 decimal places).

Affordable analytical balances for precise weighing of small samples

Three-door glass draft shield provides easy access inside the weighing chamber

Weighing modes include parts counting, percent weighing and check weighing

Grant: DBT



Growth Chamber:

Plant growth chambers are special type of environmental test chambers which are designed to perform plant growth experiments inside laboratory. The aim of a plant growth chamber is to create such atmospheric conditions responsible for effective plant germination and growth. In such chambers or cabinets, humidity, temperature and lights are controlled in such a way that you can create desired environment essential for examining growth of a particular plant.

Grant: DBT



Incubator-Orbital Shaker: Incubator used for mixing of biological liquids as well as for incubation and cultivation of biological liquids according to the operator set program.

Easy to operate, with very straightforward setup of temperature, speed and time, using the two-line set-up and status display, which clearly indicates both set and actual values for each of the three parameters.

- Growing cell cultures in flasks and other laboratory glassware;
- Extracting tissue samples at physiological temperatures;
- Other sample preparation processes.

Grant: DBT



Bioreactor: Instrument to culture cells or ferment metabolites.

Uses: Grow cells or tissues in the context of cell culture.

- For growth of anther pollen culture
- To grow algae bed for biofuel production
- Production of secondary metabolites from plant cell

Grant: CPE



Microprocessor Flame photometer: It is an ideal instrument for the determination of Sodium, Potassium, Calcium and Lithium. It uses the latest microcontroller technology and advanced engineering techniques so as to give enhanced and reproducibility.

Grant: CURIE



Analytical Weighing Balance: It is a precise balances with readability to 0.01g (5 decimal places). Affordable analytical balances for precise weighing of small samples. It is a highly accurate and versatile weighing instrument with a flat top pan for placing samples. Its precision, readability, digital display, taring function, and suitability for various applications make it an indispensable tool in scientific research, quality control, and industrial processes where precise measurement of mass is essential.

Grant: CURIE



Autoclave: It is a machine that uses steam under pressure to kill harmful bacteria, viruses, fungi, and spores on items that are placed inside a pressure vessel. The items are heated to an appropriate sterilization temperature for a given amount of time. Its top-loading design that saves valuable bench-top space. The slim profile creates a small footprint that maximizes floor space, and the large capacity fits all types of lab media, glassware, liquids, agar, etc. Vertical autoclaves are preferred in many research labs for their affordability and space-saving features.

Grant: CURIE



Magnetic Stirrer with Hot Plate: It is used for mixing and heating aqueous solutions for a great variety of chemical reactions such as synthesis. It is an accurate, precise and safe hot plate magnetic stirrer. Wide temperature range of upto 320 C and a maximum RPM of 2200. Its PT1000 probe accurately measures temperature of media.

Grant: CURIE



Deep Freezer: It is used to safe storage of reagents, frozen vaccines and other temperature sensitive specimens for research purposes that require freezing temperature up to -20 degree.

Grant: CURIE



Cooling Centrifuge Machine: A refrigerated centrifuge is a laboratory equipment used for the separation of microliter temperature-sensitive heterogeneous mixtures or samples. This device works by spinning the samples loaded in a rotor at high speed.

Grant: CURIE

