

**Name of Instrument and Make:** Double beam UV-Vis Spectrophotometer (Systronics-AU 2701)

**Cost (in Rs.):** 4,50,000/- (approximately)



**Photograph:**

**Specifications & Use:**

Double beam UV-Vis Spectrophotometer (Systronics-AU 2701)

To measure and compare the absorbance of different solutions in UV-VIS region

To measure and compare transmittance and concentration of different solutions in UV-VIS region

**Name of Instrument and Make:** Flame Photometer (Systronics)

**Cost (in Rs.):** 58,000/- (Approximately)



**Photograph:**

**Specifications & Use:**

Flame Photometer (Systronics)

Flame photometry is analytical technique which provides information about the composition and concentration of elements in a sample.

**Name of Instrument and Make:** Muffle Furnance (Metrex)

**Cost (in Rs.):** 58,000/- (Approximately)



**Photograph:**

**Specifications & Use:**

A muffle furnace is used for the isolation of materials from the fuel and the products of combustion, involving gases and flying ash.

**Name of Instrument and Make:** Weighing Balance (A&D Company)

**Cost (in Rs.):** 32,000/- (Approximately)



**Photograph:**

**Specifications & Use:** Weighing Balance (A&D Company)

Weighing balance is used to measure weight and mass of the chemicals.

**Name of Instrument and Make:** Polarimeter (Popular Trader)

**Cost (in Rs.):** 30,000/- (Approximately)



**Photograph:**

**Specifications & Use:** Polarimeter (Popular Trader)

Polarimeter is used to determine optical activity of the compound by determining its optical rotation

**Name of Instrument and Make:** Digital Melting Point apparatus (Popular Trader)

**Cost (in Rs.):** 19,000/- (approximately)



**Photograph:**

**Specifications & Use:**

Digital Melting Point apparatus (Popular Trader)

To measure and compare the melting point and purity of the compounds.

**Name of Instrument and Make:** Magnetic Stirrer (Moxcare)

**Cost (in Rs.):** 86,000/- (approximately)



**Photograph:**

**Specifications & Use:** Magnetic Stirrer (Moxcare)

A magnetic stirrer is used in chemistry to stir small volumes.

**Name of Instrument and Make:** Fume Hood (ACCO)

**Cost (in Rs.):** 60,000/- (approximately)



**Photograph:**

**Specifications & Use:** Fume Hood (ACCO)

Fume hoods protect laboratory users from exposure to hazardous materials. It provides a safe, enclosed work area for chemical manipulations and provides critical ventilation.

**Name of Instrument and Make:** UV-Visible Spectrophotometer (Shimadzu)

**Cost (in Rs.):**2,12,450 /- (approximately)



**Photograph:**

**Specifications & Use:**

UV-Visible Spectrophotometer (Shimadzu)

To measure and compare the absorbance of different solutions in UV-VIS region  
To measure and compare transmittance and concentration of different solutions in UV-VIS region

**Name of Instrument and Make:** Ultrasonic Cell Crusher Noise Isolating Chamber (Athena Technology)

**Cost (in Rs.):** 1,49,950/- (approximately)



**Photograph:**

**Specifications & Use:** Ultrasonic Cell Crusher Noise Isolating Chamber (Athena Technology)

It is widely used in the synthesis of nano-particles and nanocomposites.

**Name of Instrument and Make:** Optical Microscope (Rescholar)

**Cost (in Rs.):** 2,53,700/- (approximately)



**Photograph:**

**Specifications & Use:** Optical Microscope (Rescholar)

Optical microscope is essential tool used in magnifying and examining small scale structures.

**Name of Instrument and Make:** Microprocessor based pH meter (Systronics)

**Cost (in Rs.):** 85,000/- (approximately)



**Photograph:**

**Specifications & Use:** Microprocessor based pH meter (Systronics)

It is used to determine pH (acidity and alkalinity) of the compounds.