



UGC RECOGNIZED

PDEU PANDIT
DEENDAYAL
ENERGY
UNIVERSITY

Formerly Pandit Deendayal Petroleum University (PDPU)



SCHOOL OF ENERGY TECHNOLOGY

Department of Chemistry

Name of Laboratory : B.Sc. , M.Sc. , B.Tech. Lab.

www.pdeu.ac.in

NAME OF EQUIPMENT :
pH Meter

TECHNICAL SPECIFICATIONS :

- **Make :** Eutech
- **Model :** pH 700
- **Meter Type :** Benchtop
- **pH Range :** 0 to 14
- **Accuracy :** ± 0.05 pH
- **Calibration Points :** 5
- **Temp. Comp :** ATC
- **Power Source :** 230 V AC



NAME OF EQUIPMENT :

Microprocessor Based Conductivity/TDS Meter

TECHNICAL SPECIFICATIONS :

- **Make :** Esico
- **Model :** 1601
- **Conductivity Range :** 0-20, 0-200 μ S, 0-2, 0-20, 0-200mS
- **Accuracy :** $\pm 0.5\%$ FS ± 1 Digit
- **Resolution :** 0.01 μ S
- **Cell Constant :** Adjustable (0.05-10.5)
- **Temp. Comp. :** Auto/Manual (0-50 $^{\circ}$ C)
- **Temp. Coefficient :** 0.1-4.0 %
- **Temp. Range :** 0 – 100 $^{\circ}$ C
- **TDS Range :** 0-20, 0-200 ppm, 0-2,0-20,0-200 ppt
- **Accuracy :** $\pm 0.5\%$ FS ± 1 Digit
- **Resolution :** 0.01 ppm
- **Temp. Range :** 0 – 100 $^{\circ}$ C
- **Power Source :** 230 V AC



NAME OF EQUIPMENT :

Colorimeter

TECHNICAL SPECIFICATIONS :

- **Make** : Systronics
- **Model** : 115
- **Measuring Mode** : %T & Abs., Conc. and K-factor
- **Sample volume** : 1 ml
- **Accuracy** : ± 0.05 pH
- **Display** : 2 Line 16 Character LCD
- **Light source** : White LED
- **Optical filters** : Eight Optical filters on a turret to cover 400 – 700 nm
- **Power Source** : 230 V AC



NAME OF EQUIPMENT :

Potentiometer

TECHNICAL SPECIFICATIONS :

- **Make** : Systronics
- **Model** : 318
- **Measurement range** : 0 to ± 1999 mV
- **Resolution** : 1 mV
- **Display** : 3 digit LED display
- **Magnetic stirrer** : In-built magnetic stirrer
- **Power Source** : Operates on 230 V AC, 50 Hz



NAME OF EQUIPMENT :

Digital Polarimeter

TECHNICAL SPECIFICATIONS :

- **Make :** ARICO
- **Model :** D-G-POL:PS
- **Measurement range :** $\pm 45^\circ$ (angular rotation) with 0.001° resolution and repeatability $\pm 0.035^\circ$
- **Light source :** Sodium lamp
- **Maximum tube length :** 200 mm
- **Display :** LCD
- **Power Source :** 230 V AC



NAME OF EQUIPMENT :

Weight Balance

TECHNICAL SPECIFICATIONS :

- **Make :** Aczet
- **Model :** CG203L Precision Balance
- **Weighing capacity :** 200 g
- **Repeatability :** ± 0.001 g.
- **Calibration :** External calibration
- **Pan size :** 90mm \varnothing
- **Response time :** 2–3 seconds
- **Power Source :** 230 V AC



NAME OF EQUIPMENT :

UV-Visible Spectrophotometer

TECHNICAL SPECIFICATIONS :

- **Make** : Labindia Analytical
- **Model** : UV3000+
- **Meter Type** : Benchtop
- **Beam** : Double beam UV-Visible spectrophotometer
- **Wavelength range** : 190–1100 nm
- **Cell holder** : Automatic 8-cell holder for sample analysis.



NAME OF EQUIPMENT :

Water Bath

TECHNICAL SPECIFICATIONS :

- **Make :** NOVA
- **Model :** NV-8520E
- **Temperature range :** + 5 °C to 95 °C
- **Resolution :** 0.1 °C
- **Indicator :** Digital temperature indicator
- **Controller :** Digital temperature controller
- **Body :** Double-walled body with stainless-steel inner chamber
- **Power Source :** 230 V AC, 50 Hz



NAME OF EQUIPMENT :

Fume Hood

TECHNICAL SPECIFICATIONS :

- **Make** : Pricillab equipments
- **Dimension** : 1800X1050/2300mm
- **Features** : Chemical fume hood Equipped with sliding toughened glass sash and internal lighting.
- **Airflow velocity** : 0.4 - 0.6 m/s with exhaust blower system



NAME OF EQUIPMENT :

Hot Air Oven

TECHNICAL SPECIFICATIONS :

- **Make** : Sun Instruments PVT. LTD
- **Model** : Labline
- **Dimension** : 18"X18"X18"
- **Temperature range** : 50 °C to 150 °C with thermostat
- **Controller** : Digital temperature controller for accurate heating.
- **Power Source** : 220–230 V AC, 50 Hz



NAME OF EQUIPMENT :

Hot Plate

TECHNICAL SPECIFICATIONS :

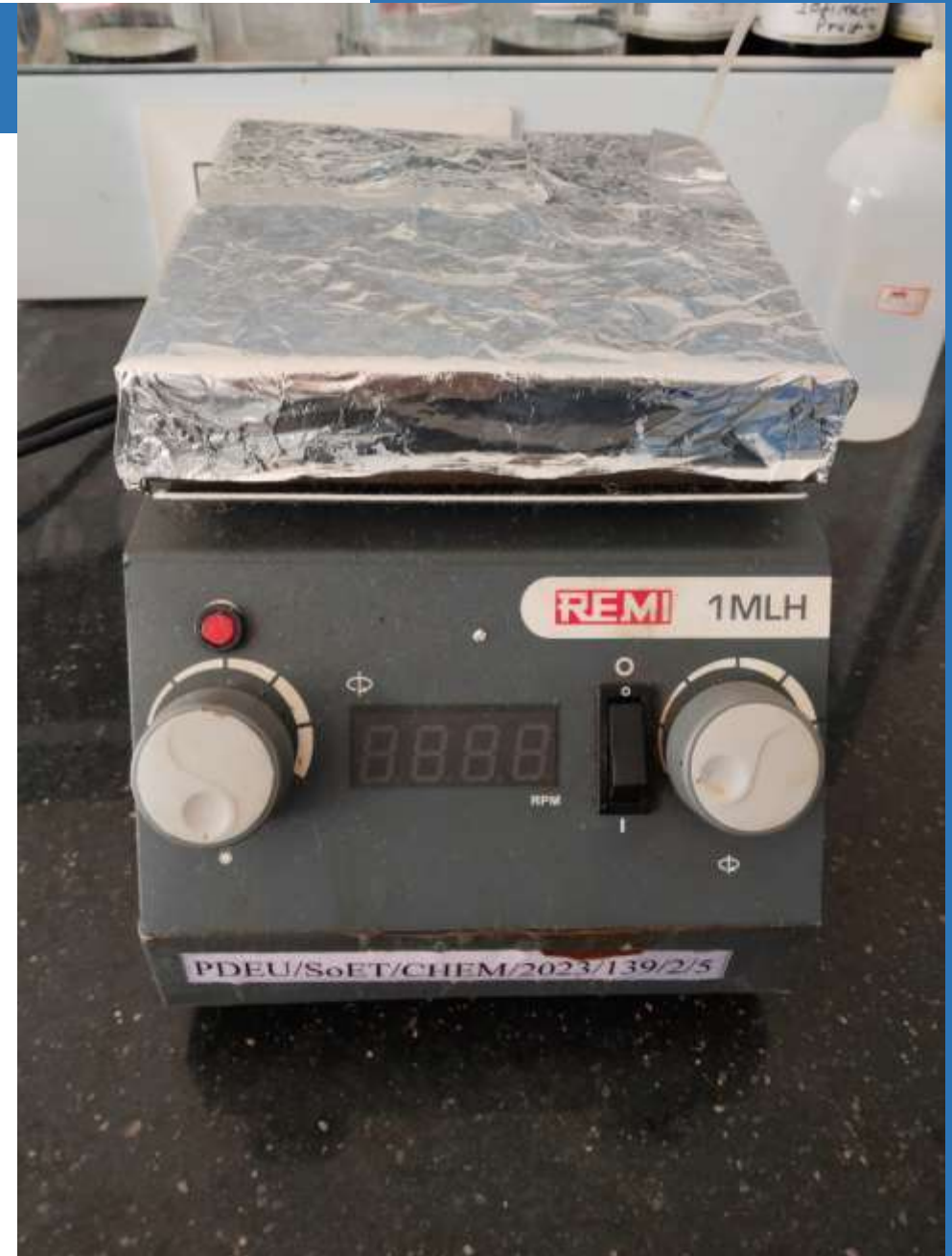
- **Make** : Patel Scientific Instrument
- **Heating surface size** : 18 × 24 cm
- **Plate** : cast iron / stainless-steel top plate for uniform heating of laboratory samples
- **Power Source** : 230 V AC power supply with temperature control regulator



NAME OF EQUIPMENT :
Magnetic Stirrer

TECHNICAL SPECIFICATIONS :

- **Make :** Remi
- **Model :** 1MLH
- **Stirring capacity :** Up to 1 litre with variable speed control
- **RPM :** 1200 rpm for uniform mixing of solutions
- **Heating capacity :** 150 W hot plate
- **Power Source :** 220–240 V AC, 50 Hz



NAME OF EQUIPMENT :
Diaphragm Vacuum Pump

TECHNICAL SPECIFICATIONS :

- **Make :** Rocker
- **Model :** Rocker 300
- **Vacuum capacity :** Oil-free diaphragm vacuum pump with maximum vacuum 99 mbar
- **Flow rate :** 20 L/min
- **Noise :** ~50 dB
- **Overflow/overheat protection :** In-built overflow/overheat protection.
- **Power Source :** 220–240 V AC, 50 Hz

