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## **List of Equipments for Chemistry Laboratory of NISER**

1. Analytical balances - Single pan - (100g - 0.1 mg, 500g - 1mg)
2. Colorimeter/Visible Spectrophotometer - (~400nm - 800nm, class room type)
3. UV-Visible Spectrophotometer - 200 - 900 nm (Scanning facility with temperature controlled cell block, class room type)
4. UV-visible - NIR Spectrophotometer (200nm - 1800nm, with scanning facility and thermostable cell block, research type)
5. Constant temperature bath ( $10^{\circ}$  -  $100^{\circ}\text{C}$ , with digital display of temperature, 15-20 lt. ,  $\pm 0.05^{\circ}\text{C}$  or  $\pm 0.1^{\circ}\text{C}$  precision with liquid circulation facility, for research)
6. Digital electronic stop watch
7. Stop clock (with display of time in minutes and hour)
8. Constant temperature bath (ambient to  $100^{\circ}\text{C}$ ) with liquid circulation facility (class room type, 15-20 lt capacity)
9. Hot plate with magnetic stirrer (with Teflon coated stirring bead)
10. Magnetic stirrer (with Teflon coated stirring bead)
11. Melting point apparatus
12. Hot air oven (with digital display of temperature)
13. pH/Ion Meter (Specs: Precision  $\pm 0.01$  PH with (both conventional & microprocessor based\_ - indigenous )
14. PH/ION Meter Orion/Radio Meter PH Meter (Specs: Precision  $\pm 0.002\text{PH}$  /  $\pm 0.005$  units (Imported))

15. Voltage Stabilizer - Servo Controlled (2 K watt, 5 K watt)
16. Heating mantle - 1 litre, 500ml, 250ml
17. UV Chamber – TLC
18. Water Distillation assembly 20L/h Double distillation - All Borosil or Pyrex glass  
(Capacity ~ 10 liters/hr of doubly distilled water.
19. Safety Glasses
20. Water Bath : Cu. make with six holes
21. Single type Cu. make with rings.
22. Fume Hood
23. Vacuum Pump (oil free)
24. Ice make refrigerator
25. A stopped flow spectrophotometer with rapid scan and temperature jump  
attachment
26. Magnetic Balance: Faraday
27. Infra red Spectrophotometer