Objective - Students will study about the removal of blood from the body, and therapeutic phlebotomy is the preferred treatment for blood disorders in which the removal of red blood cells or serum iron is the most efficient method for managing the symptoms and complications and study about the lab ethics.

UNIT - 1   **Phlebotomy:** the necessary lab equipment used for collection, how to assist patient, how to locate appropriate site for obtaining blood samples, types of veins used for blood collection, how to draw blood specimen from patient (syringe method), label sample, transport the sample to laboratory, maintenance of specimen identification, transport of specimen, effect of storage on blood cell morphology, universal precautions.

UNIT - 2   **Sample Handling and Processing:** Handling of specimens, preservation and storage of blood samples, Separation of plasma and serum from blood sample, difference between serum and plasma Anticoagulants, types of anticoagulants, merits and demerits, Order of Draw.

Specimen Collection (blood (vacutainer method), urine, sputum, stool etc.): characteristics of good phlebotomist, preparation of specimen collection, basics steps for drawing of blood specimen by vein puncture, complications of vein puncture, specimen rejection criteria for blood specimen, hemolysis of blood, blood collection by skin puncture (capillary puncture) arterial puncture and its complications.

UNIT - 3   **Lab ethics**: maintaining equipment, awareness of requisition form, specimen rejection record, data management, ethical consideration, train the technician, standard operating procedures, calibration, quality control.

Safety Measures in the Laboratory: Basics of accidents, common types of laboratory accidents, first aid in laboratory, human health and medical care in India, Medical laboratories of developing countries, Accident reporting, Issues while handling sharp, Immediate measures of Spill Management.

Recommended Books:

- success in phlebotomy, phlebotomy simplified, complete text book of phlebotomy]