

INTERNSHIP PROGRAM SYLLABUS

PHLEBOTOMY AND BLOOD COLLECTION TECHNIQUES (60 HOURS)

Title: Phlebotomy and Blood Collection Techniques (60 Hours)

Duration: 60 Hours

Mode: Classroom

Target Group: Undergraduate General Arts/ Commerce/ Science Students (No prior medical exposure)

1. Introduction & Orientation (4 Hours)

- Introduction to Healthcare System & Role of Phlebotomist
- Overview of Laboratory & Diagnostic Services
- Importance of Safe & Ethical Blood Collection
- Internship Guidelines, Safety & Professional Behavior

2. Basic Human Anatomy & Physiology (8 Hours)

(Simplified for non-medical background)

- Introduction to Circulatory System
- Structure of Blood (Plasma, RBC, WBC, Platelets)
- Functions of Blood in Human Body
- Common Veins used in Blood Collection (Median Cubital, Cephalic, Basilic)
- Basic introduction to Infection & Immunity

3. Introduction to Phlebotomy (6 Hours)

- Definition and Scope of Phlebotomy
- History & Evolution of Blood Collection
- Roles & Responsibilities of Phlebotomist
- Ethical Considerations & Patient Rights
- Communication Skills: Interacting with Patients (especially anxious ones)

4. Safety & Infection Control (6 Hours)

- Universal Precautions in Phlebotomy
- Personal Protective Equipment (Gloves, Masks, Aprons)
- Hand Hygiene & Sanitization Techniques
- Needle Stick Injury: Prevention & First Aid
- Biomedical Waste Disposal (Color-coded bins, sharps disposal)

5. Blood Collection Equipment & Materials (6 Hours)

- Introduction to Syringes, Needles, Vacutainers, Tourniquet, Cotton, Alcohol Swabs
- Different Types of Tubes (EDTA, Citrate, Heparin, Plain)
- Use of Lancets & Capillary Tubes (for finger prick)
- Labeling & Identification of Blood Samples

6. Blood Collection Techniques (Theory + Demonstration) (10 Hours)

- Preparing the Patient & Workstation
- Venipuncture Procedure (Step-by-Step Demonstration)
- Finger Prick & Heel Prick Methods
- Order of Draw (for multiple tube collection)
- Post-Collection Care (Bandaging, Patient Comfort)
- Common Difficulties (small veins, collapsed veins, nervous patients)

7. Practical Skill Training (Hands-On Practice) (14 Hours)

- Practice on Training Models / Simulated Arms
- Identifying Suitable Veins
- Applying Tourniquet & Preparing Site
- Collecting Blood Sample (with Vacutainer/Syringe Method)
- Finger Prick & Capillary Collection
- Safe Disposal of Sharps & Materials
- Recording & Labeling of Samples

8. Troubleshooting & Emergency Management (4 Hours)

- Managing Patient Anxiety / Fainting
- Handling Complications (Hematoma, Excessive Bleeding, Needle Blockage)
- Safety Measures in Case of Accidental Exposure
- Do's & Don'ts in Phlebotomy

9. Documentation & Professional Ethics (2 Hours)

- Recording Patient Information
- Maintaining Blood Collection Registers
- Confidentiality & Patient Data Protection
- Professionalism in Workplace

REVIEW, ASSESSMENT & FEEDBACK

- (i) **Written/Oral Quiz** on Basics of Phlebotomy (10%)
- (ii) **Practical Assessment** on Blood Collection Technique (60%)
- (iii) **Attendance, Participation & Professional Behavior** (30%)
- (iv) Group Discussion & Experience Sharing

LEARNING OUTCOMES

By the end of the program, students will be able to:

- *Understand the basics of human blood and circulation.*
- *Identify veins suitable for phlebotomy.*
- *Perform safe and ethical blood collection under supervision.*
- *Apply infection control and safety protocols.*
- *Handle patients and documentation responsibly.*