



Model Curriculum

QP Name: Phlebotomist

QP Code: HSS/Q0501

QP Version: 4.0

NSQF Level: 4

Model Curriculum Version: 1.0

Healthcare Sector Skill Council || Healthcare Sector Skill Council, 520, DLF Tower A, 5th Floor, Jasola
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Training Parameters

Sector	Healthcare
Sub-Sector	Allied Health & Paramedics
Occupation	Diagnostic
Country	India
NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	NCO-2015/ 3212.0601
Minimum Educational Qualification and Experience	12th Grade Pass with Science Or 12th Grade pass (with non-science subjects) with 1.5 years of relevant experience in the healthcare sector Or 10th Grade Pass with 3 years' relevant experience in healthcare sector Or Previous relevant Qualification of NSQF Level 3.5 (Emergency care assistant or equivalent) and with 1.5-year relevant experience in the healthcare sector Or Previous relevant qualification of NSQF Level 3 (Dresser medical, General duty aide or equivalent) with 3 years of relevant experience in healthcare sector
Pre-Requisite License or Training	Not Applicable
Minimum Job Entry Age	18 Years
Last Reviewed On	12/03/2026
Next Review Date	12/03/2029
NSQC Approval Date	12/03/2026
QP Version	4.0

Model Curriculum Creation Date	12/03/2026
Model Curriculum Valid Up to Date	12/03/2029
Model Curriculum Version	1.0
Minimum Duration of the Course	600 Hrs.
Maximum Duration of the Course	600 Hrs.

Program Overview

This section summarizes the end objectives of the program along with its duration.

Training Outcomes

At the end of the program, the learner should have acquired the listed knowledge and skills.

- Prepare for site visits while following visit etiquettes.
- Organize pre-procedural requirements of sample collection such as necessary equipment and supplies, labelling the sample containers, etc.
- Instruct the patients in collecting varied types of collection of samples such as urine, stool, sputum, blood, swab, etc.
- Perform sample collection following best practices.
- Prepare the patient for special sample collection.
- Carry out packaging and transfer of samples as per guidelines.
- Carry out storage of samples as per guidelines.
- Maintain documentation manually and electronically as applicable.
- Maintain professional behaviour with co-workers, patients and their families.
- Apply health, safety and security protocols at the workplace such as effective infection control protocols to ensure the safety of self, patient and colleagues.
- Follow infection control, sanitization, disinfection and bio medical waste protocols.

Compulsory Modules

The table lists the modules and their duration corresponding to the Compulsory NOS of the QP.

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
HSS/N0510: Perform pre-procedural activities of sample collection	50:00	40:00	90:00	00:00	180:00
Module 1: Introduction to healthcare systems & laboratory services	10:00	10:00	25:00	00:00	45:00
Module 2: Roles and responsibilities of a phlebotomist	10:00	10:00	25:00	00:00	45:00
Module 3: Structure and Function of Human Body	10:00	10:00	20:00	00:00	40:00
Module 4: Pre-procedural activities of sample collection	20:00	10:00	20:00	00:00	50:00
HSS/N0511: Perform procedural activities of sample collection	30:00	20:00	40:00	00:00	90:00

Module 5: Procedural activities of sample collection	30:00	20:00	40:00	00:00	90:00
HSS/N0512: Perform post- procedural activities of sample collection	70:00	45:00	50:00	00:00	165:00
Module 6: Post- procedural activities of sample collection	40:00	15:00	20:00	00:00	75:00
Module 7: Basic sensitization on preanalytical laboratory errors	10:00	15:00	15:00	00:00	40:00
Module 8: Inventory management, Reporting and Documentation	20:00	15:00	15:00	00:00	50:00
HSS/N9619: Follow etiquette for site visits	60:00	15:00	00:00	00:00	75:00
Module 9: Prepare for sample collection at varied settings	30:00	07:00	00:00	00:00	37:00
Module 10: Follow etiquette for site visits	30:00	08:00	00:00	00:00	38:00
HSS/N9624: Maintain a safe and secure working environment	05:00	05:00	20:00	00:00	30:00
Module 11: Maintain conducive Environment in Emergency Situations	03:00	02:00	10:00	00:00	15:00
Module 12: Basic Life Support and First Aid	02:00	03:00	10:00	00:00	15:00
HSS/N9620: Comply with infection control and biomedical waste disposal policies	15:00	15:00	00:00	00:00	30:00
Module 13: Infection control policies and procedures	05:00	05:00	00:00	00:00	10:00

Module 14: Bio Medical Waste Management	05:00	05:00	00:00	00:00	10:00
Module 15: Personal Hygiene	05:00	05:00	00:00	00:00	10:00
Total	230:00	140:00	200:00	00:00	570:00
Module 16: Employability Skills DGT/VSQ/N010 1 (30 hours)	30:00	00:00	00:00	00:00	30:00
Total	260:00	140:00	200:00	00:00	600:00

Module Details

Module 1: Introduction to healthcare systems & laboratory services

Mapped to: HSS/N0510

Terminal Outcomes:

- Describe the basic structure and function of medical Laboratory Services.
- Describe medical and ethical issues related to the function in the hospital environment.
- Understanding various accreditation norms related to Laboratory Services limited to preanalytical services.
- Sensitize about various departments and fields in the laboratory.
- Explain about various samples.

Duration: 10:00	Duration: 10:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
• Describe the basic structure and function of healthcare facilities available at various levels. • Discuss various departments of medical laboratories in the hospital. • Discuss about various accreditation agencies related to medical laboratory services. • Describe the diagnostic centers and medical lab facilities at different levels (national, state and district). • Explain the appropriate use of laboratory related medical terminology in daily activities with colleagues, patients and family. • Differentiate between the collection centres and medical laboratories.	• Prepare a chart listing various departments of medical laboratories, accreditation agencies related to medical laboratories. • Plan a visit to collection centres and medical laboratories and prepare a reflective report. • Prepare a list of various samples and their methods of collection. • Prepare a report analyzing key points from ISO 15189 and ISO 20658.
Fundamental of medical laboratory • Explain the basics of inorganic and organic chemistry. • Discuss various types of departments and tests conducted in respective departments, (without going into analytical skills). • Explain the basics of haematology. • Explain the basics of coagulation mechanisms in brief. • Discuss about different types of samples of blood, urine, stool, sputum, semen, CSF (Cerebro Spinal Fluid) and other body fluids like pleural fluid, pericardial fluid, peritoneal fluid, synovial fluid, ascitic fluid. • Describe the Good Clinical Laboratory Practices (GCLP) recommended by the World Health Organization (WHO). • Describe the key points of applicable and	

current standard on sample collection. - Describe comprehensive laboratory safety policies and protocols, - Explain the key relevant points of standard ISO 15189 and ISO 20658 (current version).	
Classroom Aids:	
Computer with internet, Video presentation	
Tools, Equipment and Other Requirements	
Reference guideline charts and WHO, ICMR, ISO 15189 and ISO 20658	

Module 2: Roles and responsibilities of a phlebotomist

Mapped to: HSS/N0510

Terminal Outcomes:

- Identify the roles and responsibilities of Phlebotomist.

Duration: 10:00	Duration: 10:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
- Discuss the role and responsibilities of a phlebotomist. - Discuss a phlebotomist's role in the process of quality improvement limited to his/her scope and limits of competency and authority. - Discuss the relevant legal responsibilities of a phlebotomist related to patient safety confidentiality, specimen collection and handling. - Discuss the role of a phlebotomist in ensuring comfort and safety of patients and self while collecting samples. - Describe how to maintain inventory. - Discuss how to organize and maintain sample collection unit. - Understand the importance of maintaining good ethical behaviour and practices at the workplace. - Describe the general and specific etiquettes to be observed at the workplace. - Explain the importance of effective utilization of resources in the laboratories - Discuss the role of phlebotomists in transferring samples from one lab to other lab as per defined time. - Discuss the additional roles and responsibilities in standalone collection center: - - How to attend patients call at reception. - How to manage billing and basic sample preparation. - Discuss the infection control and first aid control management.	- Prepare a chart depicting roles and responsibilities of a phlebotomist at different sites. - Enlist the general and specific etiquettes to be observed at the workplace. - Demonstrate to maintain sample collection unit. - Demonstrate in a role play for a work at a standalone collection center: - - How to attend patients call at reception. - How to manage billing - How to prepare for basic sample preparation. - Prepare a chart on infection control and first aid control management.
Classroom Aids:	

Charts, Models, Video presentation, Flip Chart, White-Board/Smart Board, Marker, Duster, AV Aids for Understanding Human Body Structure and Function

Tools, Equipment and Other Requirements

NA

Module 3: Structure and Function of Human Body

Mapped to: HSS/N0510

Terminal Outcomes:

- Describe basic structure and function of the human body.

Duration: 10:00	Duration: 10:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
- Explain the organization of body cells, tissues, organs, organ systems, membranes and glands in the human body. - Describe cells and various types of tissues. - Describe different types of organ systems. - Describe different types of body fluids, secretions and excretions. - Describe the structure of circulatory system, structure of veins, arteries, capillaries, and its location.	- Identify various body parts/organs using 3D models of human organ system. - Design various working models depicting functioning of each human body system. - Make a chart on the different types of body fluids and organ systems. - Identify different parts of the body using charts and models.
Classroom Aids:	
Charts, Models, Video presentation, Flip Chart, White-Board/Smart Board, Marker, Duster, AV Aids for Understanding Human Body Structure and Function	
Tools, Equipment and Other Requirements	
3D models of human body and accessory organs, model human skeletal system, organ specimen.	

Module 4: Pre-procedural activities of sample collection

Mapped to: HSS/N0510

Terminal Outcomes:

- Identify the different types of samples to be taken in the medical laboratory.
- Explain the correct process of sample handling.
- Demonstrate the various pre-procedural activities to be performed before sample collection.

Duration: 20:00	Duration: 10:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
• Enumerate various types of blood collection devices, vacutainers, additives, and collection materials and other equipment required such as syringe, evacuated tubes, different gauged needles, tourniquet etc. • Explain the process of interpretation about identifiers, barcode system of the test request forms correctly. • Explain the correct method of preparing and labelling the blood sample for test, procedures and identification purposes. • Describe the correct method of assisting the patient before collecting the blood specimen. • Enumerate common pre-analytical errors and complications of sample collection. • Enumerate different types of needle gauges with their color codes. • Discuss the importance of collecting information regarding some common symptoms, medications, past medical history, vital parameters and associated documentation as per test request forms before sample collection. • Differentiate between Sample collection method using vacutainers, syringes, gauge needles, butterfly needles, IV fluid site etc. General and special considerations: - • Discuss the instructions to be given to the patients after sample collections • Describe the aseptic precautions to be taken before sample collection. • Discuss how to handle various medical emergencies that may arise before sample collection such as hematoma, seizures, fainting, vomiting etc.	• Prepare a chart on various types of samples, vacutainers, additives, and collection materials, syringe, evacuated tubes, different gauged needles etc. • Demonstrate the correct method of sample site preparing in a phlebotomy arm. • Prepare a chart on the various responsibilities of a phlebotomist to be performed before sample collection. • During a field visit to a lab, study the barcode system of the test request forms. • Demonstrate methods if preparing and labelling the sample in a skill lab. • Demonstrate the types of needle gauges with their color codes. • Demonstrate First Aid measures in a role play in general during Pre-procedural activities of sample collection.
Classroom Aids: Charts, Models, Video presentation, Flip Chart, White-Board/Smart Board, Marker, Duster, AV Aids for Understanding Human Body Structure and Function.	
Tools, Equipment and Other Requirements	

sample test request forms, test formats, slides, cover slips, tuberculin syringes, urine and stool collection containers.

Module 5: Procedural activities of sample collection

Mapped to: HSS/N0511

Terminal Outcomes:

- Perform correct method of preparing an appropriate site for obtaining blood samples.
- Carry out blood specimens from patients.
- Carry out preparing and labelling the blood sample for test, procedures and identification purposes.
- Assisting the patient before, during and after collecting the blood specimen.
- Carry out sample collections other than blood samples.

Duration: 30:00	Duration: 20:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
Blood sample • Explain the order of draw (for the tube types). • Describe the usage of tourniquet and its duration of application. • Describe the process of identifying the site for obtaining the blood samples. • Describe the method of preparing a site for obtaining blood samples. • Explain the inversion method of drawing blood specimens from patients. • Discuss the dos and don'ts related to sample collection and handling. • Explain the method of assisting the patient during collecting the blood specimen. • Discuss the dos and don'ts of sample collection (EDTA mixing, discard of clots). • Discuss about common errors related to Patient Identification and how to minimize. • Understand the various specimen collection technique Errors (e.g., Haemolysis, Incomplete Fill, Clotting). • Discuss about Errors arise due to incorrect Order of Draw and how to minimize it • Discuss dos and don'ts related to Specimen Handling and Transport and common errors associated with it and how to minimize it • Discuss Documentation and Communication Errors and how to minimize it	• Demonstrate the method of sample site preparation. • Demonstrate the correct method of sample collection in a phlebotomy arm. • Demonstrate the sample collection process of various samples. • Prepare a chart on common errors and ways to prevent it • Make a chart on dos and don'ts of sample collection. - Patient Identification - Specimen Collection Technique (e.g., Haemolysis, Incomplete Fill, Clotting). - Order of Draw - Specimen Handling and Transport - Documentation and Communication • Demonstrate the instructions to be given to the patients after sample collections. • Demonstrate in a group when to resort to Butterfly or syringe collection. • Demonstrate the urine sample collection method using container, catheters & urinary bag. • Demonstrate the method of obtaining samples while dealing with Paediatric, Obese, thin skinned, geriatric, cancer patients and other difficult conditions. • Demonstrate the method of sputum and semen sample collection. • Demonstrate First Aid measures in a role play in general during procedural activities of sample collection.
Timed collection: -(24 hrs collection, time) • Describe specific timed test protocols and Patient Preparation. • Discuss factors influencing timed test results.	

General and special considerations

- Discuss the instructions to be given to the patients after sample collections
- Describe the aseptic precautions to be taken during sample collection.
- Discuss the applicable rules and regulation of obtaining samples of susceptible or known cases of HIV, hepatitis, other blood transmitted disease or pandemic cases.
- Discuss method of obtaining samples while dealing with Paediatric, Obese, thin skinned, geriatric, cancer patients and other difficult conditions.
- Discuss when to resort to vacutainers, syringes, gauge needles, butterfly needles, IV fluid site etc for sample collection.
- Explain the cause of haemolysis and the process of preventing the same.
- Discuss how to handle various medical emergencies that may arise during sample collection: hematoma, seizures, fainting, vomiting etc.
- Discuss general rejection and acceptance criteria for samples.

Other sample collection

- Explain the process of sampling of sputum, urine, stool, swab.
- Explain the process of guiding the patient for collection of semen samples.
- Discuss urine sample collection method using container, catheters & urinary bag.
- Describe dos and don'ts while taking various urine samples using containers, catheters & urinary bags.

Classroom Aids:

Charts, Models, Video presentation, Flip Chart, White-Board/Smart Board, Marker, Duster, AV Aids for Understanding Human Body Structure and Function

Tools, Equipment and Other Requirements

Needle of various gauges, isopropyl alcohol, tourniquet, cotton swab, gauze pieces, sample test request forms, stopwatch, filter paper, tuberculin vials, swab sticks, blotting paper for BT, capillary tube for CT test formats, slides, Lancet and Micro collection devices

Module 6: Post-procedural activities of sample collection

Mapped to: HSS/N0512

Terminal Outcomes:

- Demonstrate the correct techniques of Sample labelling, packaging and transporting.
- Demonstrate the correct method of assisting the patient after collecting the blood specimen.
- Demonstrate the correct technique of various sample storage.

Duration: 40:00	Duration: 15:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
• Explain the correct method of assisting the patient after collecting the blood specimen. • Describe the aseptic precautions to be taken after sample collection. • Discuss the instructions to be given to the patients after sample collections. • Discuss the FAQs and their answer as per organization's protocols. • Discuss the cleaning and disinfection protocols for Safety equipment, refrigerator, centrifuges, micro-pipettes/droppers, autoclave, miscellaneous glassware and plastic wares. Sample Preparation • Explain the correct method of preparing the collected sample using various methods such as centrifugation. • Describe the process of preparation of blood serum and plasma. • Discuss Handle Spill in centrifuge • Discuss the safety actions during Aerosol generation Sample storage • Explain the correct method of storage of various collected samples other than blood. • Explain the process of sample storage after centrifugation. • Explain various standard operating procedures for sample storage with reference to temperature, humidity, leak proofing (triple layer packaging, rechecking screw caps) etc. Sample transportation • Explain the correct procedure of sample transportation. • Explain various standard operating procedures for sample transportation with reference to temperature, humidity, leak proofing (triple layer packaging, rechecking screw caps) etc. • Explain the key relevant points of standard	• Demonstrate the correct techniques of Sample labelling, packaging and transporting. • Demonstrate the correct method of assisting the patient after collecting the blood specimen. • Demonstrate the correct technique of various sample storage. • Demonstrate the instructions to be given to patients to prevent vertigo, fainting, non-stoppage of bleeding, swelling, haematoma. • Demonstrate the correct method of preparing the collected sample using various methods such as centrifugation. • Perform sample transportation. • Carry out sample storage. • Perform sample handling. • Carry out Inventory management. • Demonstrate venous and arterial blood collection method. • Prepare blood serum and plasma from blood. • Prepare a list of various tests conducted from blood sample. • Demonstrate the the correct procedure of sample transportation. • Discuss in a group the various standard operating procedures for sample storage with reference to temperature, humidity, leak proofing (triple layer packaging, rechecking screw caps) etc.

ISO 20658 that focused on the transport of samples. • Discuss the protocols related to special transport of samples like air travel. Special consideration: - • Explain the process for pooled sample collection (for e.g. blood testing, disease diagnostics). • Discuss general rejection and acceptance criteria for samples. • Discuss how to handle various medical emergencies that may arise after sample collection: hematoma, seizures, fainting, vomiting etc. • Discuss the Indications for resampling.	
Classroom Aids:	
Charts, Models, Video presentation, Flip Chart, White-Board/Smart Board, Marker, Duster, AV Aids for Understanding Human Body Structure and Function	
Tools, Equipment and Other Requirements	
Sample forms and formats, sample transport bags	

Module 7: Basic sensitization on preanalytical laboratory errors

Mapped to: HSS/N5012

Terminal Outcomes:

- Identify different physiological preanalytical variables.
- To enumerate physiological and technical variables.
- Able to describe common error causes.
- Enumerate various documents necessary for recording preanalytical errors.

Duration: 10:00	Duration: 15:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
• Explain various quality indicators of the pre-analytical errors. • Enumerate different physiological preanalytical variables. • Describe different physiological preanalytical variables. • Describe the common causes of preanalytical errors. • Explain the process of reporting preanalytical errors to appropriate authority as per organizational policies. • Enumerate various documents necessary for recording preanalytical errors.	• Prepare a list of various documents necessary for recording preanalytical errors. • Prepare a chart on preanalytical errors, ways to prevent preanalytical errors, corrective actions to be taken in case of preanalytical errors. • Prepare a chart related to different physiological preanalytical variables.
Classroom Aids:	
Charts, Models, Video presentation, Flip Chart, White-Board/Smart Board, Marker, Duster, AV Aids for Understanding Human Body Structure and Function	
Tools, Equipment and Other Requirements	
case studies.	

Module 8: Inventory management, Reporting and Documentation

Mapped to: HSS/N5012,

Terminal Outcomes:

- Demonstrate technical skills of storage and retention and retrieval of database and records.
- Maintain confidentiality of records.
- Demonstrate skills in maintaining inventory.

Duration: 20:00	Duration: 15:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
• Define the handing and taking over process of samples and its associated documents or other related items to and from laboratory. • Define reporting matrix and steps of reporting as per organizational policy • Discuss the importance of maintenance of inventory as per scope of work. • Discuss the process of organizing stocks in collection centres or sites as per organizational practices. • Enumerate various records to be maintained by phlebotomists such as Daily handover, inventory of materials, any information received. • Understand the directory of services including packages, profiles of laboratory and turnaround time of reports as per organizational policies. • Explain the importance of maintaining various types of records and their component • Discuss the sample report on as per accreditation standards (temperature, centrifugation, patient, spill records). • Discuss the importance of confidentiality inpatient report information • Discuss the application of computers. • Differentiate between the hardware and software. • Differentiate between the input and output devices. • Discuss the foundation concept of operating systems and their functions. • Discuss the latest version of software such as updated versions of Windows,	• In a skill lab, enter data in various forms and format according to the standard guidelines in a computer system. • Create a sample set of documents to record procedure related information of client. • Demonstrate the use of dummy LMIS to prepare a sample record on client information. • Carry out proper and secure filing of accounts, funds and other related documents physically and electronically • Demonstrate the skills required for maintaining balance sheet and cashflow • Prepare a sample report on NABL standards • Demonstrate the use of browser functions to surf on the Internet. • Demonstrate the sample report on as per accreditation standards (temperature, centrifugation, patient, spill records).

LIMS/HIS, other applicable software and applications.	
Classroom Aids:	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Duster.	
Tools, Equipment and Other Requirements	
Sample formats of reports and hospital documents, various forms of consent, Centrifuge, refrigerator.	

Module 9: Prepare for sample collection at varied settings

Mapped to: HSS/N9619

Terminal Outcomes:

- Perform site visits preparation.

Duration: 30:00	Duration: 07:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
• Define varied settings (for e.g. Home, corporate offices, camps, sample collection centres). • State the importance of being on time. • Explain phone etiquettes to be followed with the client while organizing a site visit. • Identify patient demographics, sample types, and essential equipment for home visits. • Explain the rationale behind specific collection protocols (e.g., fasting requirements) and potential pre-analytical variables. • Discuss how to assess the quality of collected samples for integrity and proper labelling. • Discuss the patient's comfort and adherence to post-collection instructions. • Explain the process of appointment management in line with protocol of related sample collection. • Understanding the specific sample required (blood, urine, stool, saliva, etc.), appropriate collection techniques, and immediate storage conditions (e.g., temperature, light sensitivity). • State the importance of making the necessary preparations using checklist before a site-visit. • Describe the process to be followed in case of delay in reaching client site. • State the importance of establishing the patient's needs and expectation to ensure good quality service at the site. • Discuss the importance of maintaining privacy of the patient. • Describe the importance of carrying self-identification documents and introducing oneself to the patient on arrival. • Describe common expectations while visiting patient's residential facilities. • Explain how to plan the route for site visit and determine travel time for reaching the site on time.	• Practice role plays on site visits and its preparation. • Demonstrate proficiency in new collection devices and software updates. • Demonstrate how to plan the route for site visit and determine travel time for reaching the site on time. • Demonstrate how to assess the quality of collected samples for integrity and proper labelling. • Discuss in a role play the common expectations while visiting patient's residential facilities. • Demonstrate in a group the importance of making the necessary preparations using checklist before a site- visit. • Discuss in a group Inform about arrangements for sample collection as per the size of target audience during medical camps • Prepare a self-checklist to be followed while preparing for sample collection at varied settings

• Explain the salient points of personal grooming standards. • Discuss the importance of pre analyse the arrangements for sample collection as per the size of target audience during medical camps.	
Classroom Aids:	
Charts, Models, Video presentation, Flip Chart, White-Board/Smart Board, Marker, Duster, AV Aids for Understanding Human Body Structure and Function.	
Tools, Equipment and Other Requirements	
Checklist of equipment for site visit, syringe, needles, disposable container, tourniquet, isopropyl alcohol, cotton swab, gauze pieces, permanent marker pen, adhesive tape, evacuated/ non-evacuated tubes.	

Module 10: Follow etiquette for site visits

Mapped to: HSS/N9619

Terminal Outcomes:

- Carry out site visits etiquettes during visit.

Duration: 30:00	Duration: 08:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
- Describe the steps to be followed before accessing and using patient facilities, resources and areas. - List the steps to ensure that patient facilities are not soiled or littered, and its importance. - Describe the procedure to follow in case there is an accident or mishap at the patient premises. - Explain the importance of coordination, collecting landmarks, address, time and site from the collection center. - Define various best practices of site visit such as taking prior permission. - Discuss the process of handling queries (for e.g. addressing delays, accidents or errors to ensure patient Satisfaction) as per organizational policy. - Understand how to perform billing after procedures are carried out, leveraging knowledge of TPA, PSU, or CGHS benefits or organizations' discount policy and ensuring all required documents are collected. - Discuss how to maintain cash management and basic accounting principles. - Explain the process of waste disposal as per waste disposal guidelines. - Explain the process and protocols as per organization related to Add-on tests request from customers during sample collection - Discuss the follow-up procedures post sample collection - Understand the limits of competence and authority such as reaching out to supervisor in case of any request from customer other than prescheduled one.	- Demonstrate the site visits etiquettes. - Demonstrate the method to be followed up after site visit - Demonstrate the correct waste disposal technique at the site. - Demonstrate the method of Billing process. - Discuss in a group of various best practices of site visit such as taking prior permission. - Discuss in a group how to perform billing after procedures are carried out, leveraging knowledge of TPA, PSU, or CGHS benefits or organizations' discount policy and ensuring all required documents are collected. - Demonstrate how to maintain or perform billing after procedures are carried out, leveraging knowledge of TPA, PSU, or CGHS benefits or organizations' discount policy.
Classroom Aids:	
Charts, Models, Video presentation, Flip Chart, White-Board/Smart Board, Marker, Duster, AV Aids for Understanding Human Body Structure and Function	
Tools, Equipment and Other Requirements	
Educational videos of case studies.	

Module 11: Maintain conducive Environment in Emergency Situations

Mapped to: HSS/N9624

Terminal Outcomes:

- Encourage for safety at workplace.
- Follow safety protocols at workplace!
- Perform Basic Life Support or basic first aid in medical emergency situations, as and when required
- Respond to institutional emergencies safely and appropriately
- Perform basic first aid in medical emergency situations, as and when required.
- Respond to institutional emergencies safely and appropriately
- Perform Basic Life Support or basic first aid in medical emergency situations, as and when required

Duration: 03:00	Duration: 02:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
• Describe things necessary to make the patient feel safe and comfortable. • Describe the impact of comfort on one's health. • Describe the importance and methodology of cleanliness, and hygiene environment. • Describe variation of patient's environment according to settings: road, home, ambulance, hospital, etc. Introduction to institutional emergencies • Definition of types of institutional emergencies. • Understand the importance of preparedness and response planning. • Identify the hospital emergency codes. • Apply standard procedures to be followed in case of institutional emergencies. • Explain the use of protective devices such as restraints and safety devices. Fire safety management • Understanding fire hazards in healthcare settings - Common causes of fire in hospitals. - Fire prone areas (ICUs, Operation theatres , Labs, Electrical panels etc.) • Describe Fire prevention measures - Safe handling of flammable materials - Proper use and maintenance of electrical equipment • Fire safety equipment and procedures - Fire extinguisher types and usages - Fire alarm and sprinkler system - emergency exit and evacuation routes Fire evacuation plan & patient safety - Ensuring safe patient evacuation (including bedridden and critical patients). - Coordination with fire safety officers and hospital staff. - Assisting in patient relocation and communication. Security management in healthcare institutions	• Demonstrate usage of hospital emergency codes and basic first aid in a mock drill depicting an institutional emergency. • Create a chart depicting different types of protective devices such as restraints and safety devices. • Demonstrate managing a fire evacuation scenario.

• Importance of security in hospitals - Protecting patients' staff and visitors - Preventing unauthorized access • Role of individual in security - Assisting in patient identification and visitors' management - Reporting suspicious activities or security threats.	
Classroom Aids:	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Duster.	
Tools, Equipment and Other Requirements	
fire extinguisher, evacuation plan	

Module 12: Basic Life Support and First Aid

Mapped to: HSS/N9624

Terminal Outcomes:

- Perform CPR in medical emergency situations, as and when required.

Duration: 02:00	Duration: 03:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
Introduction • Describe common emergency conditions and what to do in medical emergencies Identification of cardiac arrest • Describe identification of cardiac arrest • Understand Principles of basic life support (Adult chain of survival, CABDs of giving CPR) Cardiopulmonary resuscitation and First Aid • Describe the correct protocol of chest compression, ventilation and assessment steps • Differentiate the single rescuer and two rescuer CPR • Describe the conditions when choking occurs • Describe the protocol of giving life support while choking • Explain the basics of first aid. • Identify precautions to take for personal safety. • Perform basic life support (BLS) as and when required. • Explain about Cardiopulmonary Resuscitation • Explain CPR in the presence of two rescuers.	• Demonstrate the correct technique of CPR. • Demonstrate the correct technique of chest compression and ventilation with single rescuer and two rescuers. • Demonstrate the correct technique of abdominal thrust and CPR during choking. • Demonstrate the hands on assisting a patient who has fainted in a waiting area. • Perform a role play on responding to a minor burn injury in the hospital premises.
Classroom Aids:	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Duster.	
Tools, Equipment and Other Requirements	
Crash cart trolley, first aid box, CPR nursing manikin, Ambu bag with mask adult, torch, physical restraints, fire extinguisher	

Module 13: Infection Control and Prevention

Mapped to: HSS/N9620,

Terminal Outcomes:

- Apply infection control policies and procedures during daily activities

Duration: 05:00	Duration: 05:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
• Identify deviation from normal health • Understand management of different types of spillage and their management • Understanding of hand hygiene: infection control/exposure control/ PPE • Understand hospital/ emergency borne infections • Understand prevention and treatment of needle stick injury or sharp injury • Understand about incident reporting, documentation and provisions of post exposure prophylaxis. Importance of Infection control • Explain the concept of healthy living. • Describe the importance of infection control and prevention. • List strategies for preventing transmission of pathogenic organisms. • Describe the nosocomial infections. • Explain the importance of incident reporting. Immunization and vaccination • Explain the concept of immunization. • Explain various vaccinations against common infectious diseases. • Discuss the importance of maintaining compliance with immunization policies for healthcare professionals. Special consideration: - • Discuss the point of phlebotomist in sample of epidemic /pandemic .	• Demonstrate the steps of spill management. • Demonstrate the procedures of hand hygiene. • Demonstrate the process of donning and doffing of PPE. • Demonstrate the steps of spill management.
Classroom Aids:	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Duster.	
Tools, Equipment and Other Requirements	
E-modules depicting sanitization, infection control and waste disposal practices	

Module 14: Bio Medical Waste Management

Mapped to: HSS/N9620

Terminal Outcomes:

- Dispose of different types of biomedical waste in appropriate color-coded bins/containers.
- Apply local guidelines of biomedical waste disposal system during daily activities.

Duration: 05:00	Duration: 05:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
• Categorize the different types of biomedical waste and segregation as per colour coding and state guidelines. • Identify the various types of colour coded bins/containers used for disposal of biomedical waste. • Explain the importance and mechanism of proper and safe storage, transportation, pre-treatment, final disposal, of bio-medical waste as per state guidelines. • Explain the steps of waste audit. • Explain the importance of following local guidelines of biomedical waste disposal. • Enlist the Equipment and PPE specific to biomedical waste.	• Segregate biomedical waste applying the local guidelines. • Create a chart depicting different types of biomedical waste and various types of colour coded bins/containers used for disposal of biomedical waste. • Prepare a report on the observations from field assignment related to proper and safe storage, transportation, pre-treatment, final disposal, of bio-medical waste as per state guidelines • Prepare a chart on steps of waste audit. • Sort the equipment and PPE specific to biomedical waste in a skill lab.
Classroom Aids:	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Duster.	
Tools, Equipment and Other Requirements	
Different coded color bins, chart for color coding of bins Visit to biomedical waste treatment plant for field assignment	

Module 15: Personal Hygiene

Mapped to: HSS/N9620

Terminal Outcomes:

- Develop techniques of self-hygiene.

Duration: 05:00	Duration: 05:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
• Develop understanding of the concept of Healthy Living • Develop understanding & procedures of Hand Hygiene • Develop techniques of self-grooming and maintenance • Equip with techniques of use of PPE: the need for and types • Vaccinate against common infectious diseases: immunization to reduce the health risks for self, patients. • Understand mandated, highly recommended, and other vaccines for healthcare personnel workers. Hand hygiene and Personal protective equipment • Describe the hand-hygiene guidelines and procedures used in healthcare settings. • Explain the importance of using Personal Protective Equipment (PPE). • List the types of PPE. • Describe the process of wearing and removing each of the PPE.	• Demonstrate the procedures of hand hygiene. • Demonstrate the process of donning and doffing of PPE. • Play a role play on the importance of vaccination against common infectious diseases. • Demonstrate the steps of spill management.
Classroom Aids:	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Duster.	
Tools, Equipment and Other Requirements	
E-modules depicting sanitization, infection control and waste disposal practices	

Module 16: Employability Skills

Mapped to DGT/VSQ/N0101: Employability Skills (30 Hours)

Mandatory Duration: 30:00			
Location: On-Site			
S.N o.	Module Name	Key Learning Outcomes	Duration (hours)
1.	Introduction to Employability Skills	Discuss the importance of Employability Skills in meeting the job requirements.	1
2.	Constitutional values - Citizenship	- Explain constitutional values, civic rights, duties, citizenship, responsibility towards society etc. that are required to be followed to become a responsible citizen. - Show how to practice different environmentally sustainable practices.	1
3.	Becoming a Professional in the 21st Century	- Discuss 21st century skills. - Display positive attitude, self-motivation, problem solving, time management skills and continuous learning mindset in different situations.	1
4.	Basic English Skills	Use appropriate basic English sentences/phrases while speaking.	2
5.	Communication Skills	- Demonstrate how to communicate in a well-mannered way with others. - Demonstrate working with others in a team.	4
6.	Diversity & Inclusion	- Show how to conduct oneself appropriately with all genders and PwD. - Discuss the significance of reporting sexual harassment issues in time.	1
7.	Financial and Legal Literacy	- Discuss the significance of using financial products and services safely and securely. - Explain the importance of managing expenses, income, and savings. - Explain the significance of approaching the concerned authorities in time for any exploitation as per legal rights and laws.	4
8.	Essential Digital Skills	- Show how to operate digital devices and use the associated applications and features, safely and securely. - Discuss the significance of using the internet for browsing, accessing social media platforms, safely and securely.	3
9.	Entrepreneurship	Discuss the need for identifying opportunities for potential business, sources for arranging money and potential legal and financial challenges.	7
10.	Customer Service	- Differentiate between types of customers. - Explain the significance of identifying customer needs and addressing them. - Discuss the significance of maintaining hygiene and dressing appropriately.	4

11	Getting ready for apprenticeship & Jobs	• Create a biodata. • Use various sources to search for and apply for jobs. • Discuss the significance of dressing up neatly and maintaining hygiene for an interview. • Discuss how to search and register for apprenticeship	2
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LIST OF TOOLS & EQUIPMENT FOR EMPLOYABILITY SKILLS

S No.	Name of the Equipment	Quantity
1.	Computer (PC) with latest configurations – and Internet connection with standard operating system and standard word processor and worksheet software (Licensed) (all software should either be latest version or one/two version below)	As required
2.	UPS	As required
3.	Scanner cum Printer	As required
4.	Computer Tables	As required
5.	Computer Chairs	As required
6.	LCD Projector	As required
7.	White Board 1200mm x 900mm	As required

Note: Above Tools & Equipment not required, if Computer LAB is available in the institute.

Mandatory Duration: 200:00

Recommended Duration: 00:00

Module Name: On-the-Job Training

Location: On Site

Terminal Outcomes

- Demonstrate the correct techniques of blood sample collection.
- Demonstrate the correct method of sampling.
- Demonstrate the correct method of using tools and equipments in the laboratory.
- Demonstrate the correct techniques of Sample handling.
- Identify different types of useful equipment for blood sample collection.
- Demonstrate the correct method of sample site preparing.
- Demonstrate the correct method of sputum and semen sample collection.
- Demonstrate the correct techniques of Sample handling.
- Identify different types of useful equipment for blood sample collection.
- Demonstrate the correct method of sample site preparing.
- Demonstrate the correct method of sputum and semen sample collection
- Demonstrate the correct techniques of Sample labelling, packaging and transporting.
- Demonstrate the correct method of assisting the patient after collection of the blood specimen.
- Demonstrate the correct technique of various sample storage.
- Demonstrate the method of stock management.
- Carry out sample storage.
- Perform sample handling.
- Carry out Inventory management.
- Demonstrate venous and arterial blood collection method.
- Demonstrate correct method of sample recollection.
- Demonstrate the method of retrieval of sample/specimen, records of patient.
- Demonstrate the process of addressing discrepancies between personal values and difficult candidate / recipient situations.
- Demonstrate the site visits etiquettes.
- Demonstrate the method to be followed up after site visit
- Demonstrate the correct waste disposal technique at the site.
- Demonstrate the correct sequence of the procedure to be carried out.
- Demonstrate the method of Billing process.
- Demonstrate problem solving and decision-making skills in different situations.
- Demonstrate skills of teamwork and work prioritization in different team activities
- Demonstration of documentation and recording of equipment to hospital staff with data entry as per protocols including reading of instrument/equipment, recording and record maintenance
- Demonstrate handling of biomedical waste from its segregation in different coloured dustbin as per the protocol.
- Demonstrate spillage management with 1% hypochlorite solution.
- Demonstrate donning and doffing off PPE.

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
MD/DNB	Pathology/Microbiology/Laboratory Medicine/Biochemistry	1		0		
Medical Graduate	MBBS	3		0		2 year of working experience in Pathology Lab is mandatory
Ph.D.	PhD in Medical biochemistry/ Nursing	2		00		
M.Sc.	Nursing	3		0		2 year of working experience in Phlebotomy Unit is mandatory
Graduate	B.Sc. (Nursing)/ Post Basic Bsc Nursing/ Bsc MLT or equivalent	5		0		5 year of working experience in Pathology lab or Phlebotomy Unit is mandatory
Diploma	GNM (General Nursing Midwifery)/ Medical Laboratory Technician)	7		0		5 year of working experience in Phlebotomy Unit or Pathology lab is mandatory
NSQF-Certificate	Phlebotomist/Phlebotomy Technician	10				

Trainer Certification	
Domain Certification	Platform Certification
Certified for Job Role: “Phlebotomist “mapped to QP: “HSS/Q0501 v4.0” with minimum score of 70%.	Recommended that the Trainer is certified for the Job Role: “Trainer (VET and Skills)”, mapped to the Qualification Pack: “MEP/Q2601, v2.0” with minimum score of 70%.

Assessor Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
MD/DNB	Pathology/Microbiology/Laboratory Medicine/Biochemistry	1.5				6 months of training/assessment experience is desirable
Medical Graduate	MBBS	3.5				2 years of working experience in Pathology Lab is Mandatory & 6 months of training/assessment experience is desirable
Ph.D.	PhD in Medical biochemistry/ Nursing	2.5				6 months of training/assessment experience is desirable
M.Sc.	Nursing	3.5				2 years of working experience in Phlebotomy Unit is Mandatory & 6 months of training/assessment experience is desirable
Graduate	B.Sc. (Nursing)/ Post Basic Bsc Nursing/ Bsc MLT or equivalent	5.5				5 years of working experience in Pathology lab or Phlebotomy Unit is mandatory & 6 months of training/assessment experience is desirable
Diploma	GNM (General Nursing Midwifery)/ Medical Laboratory Technician)	7.5				5 years of working experience in Phlebotomy Unit or Pathology lab is Mandatory & 6 months of training/assessment experience is desirable
NSQF-Certificate	Phlebotomist/Phlebotomy Technician	10				

Assessor Certification	
Domain Certification	Platform Certification
Certified for Job Role: “Phlebotomist” mapped to QP: “HSS/Q0501 v4.0” with minimum score of 70%.	Recommended that the Assessor is certified for the Job Role: “Assessor (VET and Skills)”, mapped to the Qualification Pack:“ MEP/Q2701,V 2 . 0 ” with minimum score of 70%.

Assessment Strategy

The emphasis is on 'learning-by-doing' and practical demonstration of skills and knowledge based on the performance criteria. Accordingly, assessment criteria for each job role is set and made available in qualification pack.

The assessment papers for both theory and practical would be developed by Subject Matter Experts (SME) hired by Healthcare Sector Skill Council or with the HSSC accredited Assessment Agency as per the assessment criteria mentioned in the Qualification Pack. The assessments papers would also be checked for the various outcome-based parameters such as quality, time taken, precision, tools & equipment requirement etc.

Each NOS in the Qualification Pack (QP) is assigned a relative weightage for assessment based on the criticality of the NOS. Therein each Element/Performance Criteria in the NOS is assigned marks on relative importance, criticality of function and training infrastructure.

The On the Job (OJT) training component, which is a mandatory part of the training, done by the candidate at a healthcare organization has to be appropriately captured as per OJT logbook framework. This shall be assessed and would carry the weightage during final assessment done by HSSC as per assessment strategy defined for phlebotomist.

The following tools would be used for final assessment:

1. Practical Assessment: This comprises of a creation of mock environment in the skill lab which is equipped with all equipment required for the qualification pack.

Candidate's soft skills, communication, aptitude, safety consciousness, quality consciousness etc. is ascertained by observation and marked in observation checklist. The outcome is measured against the specified dimensions and standards to gauge the level of their skill achievements.

2. Viva/Structured Interview: This tool is used to assess the conceptual understanding and the behavioural aspects with regard to the job role and the specific task at hand. It also includes questions on safety, quality, environment and equipment etc.

3. Written Test: Question paper consisting of 100 MCQs (Hard:40, Medium:30 and Easy: 30) with questions from each element of each NOS. The written assessment paper is comprised of following types of questions:

- i. True / False Statements
- ii. Multiple Choice Questions
- iii. Matching Type Questions.
- iv. Fill in the blanks
- v. Scenario based Questions
- vi. Identification Questions

QA Regarding Assessors:

Assessors are selected as per the "eligibility criteria" laid down by HSSC for assessing each job role. The assessors selected by Assessment Agencies are scrutinized and made to undergo training and

introduction to HSSC Assessment Framework, competency based assessments, assessors guide etc. HSSC conducts “Training of Assessors” program from time to time for each job role and sensitize assessors regarding assessment process and strategy which is outlined on following mandatory parameters:

- 1) Guidance regarding NSQF
- 2) Qualification Pack Structure
- 3) Guidance for the assessor to conduct theory, practical and viva assessments
- 4) Guidance for trainees to be given by assessor before the start of the assessments.
- 5) Guidance on assessments process, practical brief with steps of operations practical observation checklist and mark sheet
- 6) Viva guidance for uniformity and consistency across the batch.
- 7) Mock assessments
- 8) Sample question paper and practical demonstration

References

Glossary

Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.

Acronyms and Abbreviations

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
CPR	Cardiopulmonary Resuscitation