TECHNICAL &
VOCATIONAL
EDUCATION &
TRAINING
AUTHORITY

National Competency Standard for

Phlebotomist Standard Code:

SOC28s18v1

PREFACE

The ADB Loan 2028 MLD, Employment Skills Training Project's (ESTP) objective is to increase the number of Maldivians, men and women, actively participating in the labor force, employed and self-employed. The Project will support the expansion of demand driven employment-oriented skills training in priority occupations and improve the capacity to develop and deliver Competency Based Skill Training (CBST). The Project aims to (i) provide youth with employment-oriented skills training; (ii) improve public perception of training and employment in locally available skills-oriented occupations; (iii) make available employment-related information to more Maldivians; and (iv) strengthen the capacity for labor administration and for labor market analysis.

The objective of the project is to deliver CBST programs to satisfy employer demand-driven needs. The National Competency Standards (NCS) provide the base for this training. Initially training will be focused on five key sectors: tourism, fisheries and agriculture, transport, construction and the social sectors. These sectors are included as priority sectors in the national development plan and play a vital role in the continued economic growth of the country.

The NCS are developed in consultation with Employment Sector Councils representing employers. They are designed using a consensus format endorsed by the Maldives Accreditation Board (MAB) to maintain uniformity of approach and the consistency of content amongst occupations. This single format also simplifies benchmarking the NCS against relevant regional and international standards.

NCS specify the standards of performance of a competent worker and the various contexts in which the work may take place. NCS also describes the knowledge, skills and attitudes required in a particular occupation. They provide explicit advice to assessors and employers regarding the knowledge, skills and attitudes to be demonstrated by the candidates seeking formal recognition for the competency acquired following training or through work experience. By sharing this information, all participants in the training process have the same understanding of the training required and the standard to be reached for certification. Certification also becomes portable and can be recognized by other employers and in other countries with similar standards.

NCS are the foundation for the implementation of the Technical and Vocational Education and Training (TVET) system in Maldives. They ensure that all skills, regardless of where or how they were developed can be assessed and recognized. They also form the foundation for certifying skills in the Maldives National Qualification Framework (MNQF).

NCS are developed by the TVET Section of Ministry of Higher Education, Employment and Social Security. The NCS are endorsed by the Employment Sector Councils of the respective sectors and validated by the Maldives Accreditation Board.

KEY FOR CODING

Coding Competency Standards and Related Materials

DESCRIPTION	REPRESENTED BY
Industry Sector as per ESC (Three letters)	Construction Sector **(CON)** Fisheries and Agriculture Sector **(FNA)** Transport sector (**TRN)** Tourism Sector **(TOU)** Social Sector **(SOC)** Foundation **(FOU)**
Competency Standard	**S**
Occupation with in a industry Sector	**Two digits 01-99**
Unit	**U**
Common Competency	**1**
Core Competency	**2**
Optional/ Elective Competency	**3**
Assessment Resources Materials	**A**
Learning Resources Materials	**L**
Curricula	**C**
Qualification	**Q1, Q2 etc**
MNQF level of Qualification	**L1, L2 etc**
Version Number	**V1, V2 etc**
Year of endorsement of standard, qualification	**By two digits Example- 07**

2. Endorsement Application for Qualification 01

2. NATIONAL CERTIFICATE III IN PHLEBOTOMIST

2. Qualification code: SOC28Q1L318	**Total Number of Credits: 48**

3. Purpose of the qualification

The holders of this qualification are expected to work as phlebotomist by following the guideline of world health organization.

4. Regulations for the qualification	National Certificate III in Phlebotomist will be awarded to those who are competent in units 1 to 8.

5. Schedule of Units

Unit Title	**Unit Title**	**Code**
1.	Communication, social and stress management skills	$SOC_{28}S_1U_{01}V_1$
2.	Health care delivery system and medical terminology	$SOC_{28}S_1U_{02}V_1$
3.	Infection control and safety in accordance with defined policies and procedures	$SOC_{28}S_1U_{03}V_1$
4.	Anatomy and physiology of body systems	$SOC_{28}S_1U_{04}V_1$
5.	Introduction to phlebotomy	$SOC_{28}S_1U_{05}V_1$
6.	Apply quality system and continuous improvement process	$SOC_{28}S_1U_{06}V_1$
7.	Specimen packing, transportation and processing	$SOC_{28}S_1U_{07}V_1$
8.	Introduction to basic laboratory investigations required to evaluate a patient's pathologic conditions	$SOC_{28}S_1U_{08}V_1$

6.Accreditation requirements	The training provider should have a Medical Laboratory or similar training facility to provide the trainees the hands-on experience related to this qualification
7.Recommended sequencing of units	

UNITS DETAILS

Unit Title	Unit Title	Code	Level	No of credits
1	Communication, social and stress management skills	$SOC_{28}S_1U_{01}V_1$	3	3
2	Health care delivery system and medical terminology	$SOC_{28}S_1U_{02}V_1$	3	3
3	Infection control and safety in accordance with defined policies and procedures	$SOC_{28}S_1U_{03}V_1$	3	6
4	Anatomy and physiology of body systems	$SOC_{28}S_1U_{04}V_1$	3	6
5	Introduction to phlebotomy	$SOC_{28}S_1U_{05}V_1$	3	12
6	Apply quality system and continuous improvement process	$SOC_{28}S_1U_{06}V_1$	3	6
7	Specimen packing, transportation and processing	$SOC_{28}S_1U_{07}V_1$	3	6
8	Introduction to basic laboratory investigations required to evaluate a patient's pathologic conditions	$SOC_{28}S_1U_{08}V_1$	3	6

Packaging of National Qualifications:

National Certificate III in Phlebotomist will be awarded to those who are competent in units 1+2+3+4+5+6+7+8

Qualification Code: SOC28Q1L318

COMPETENCY STANDARD FOR PHLEBOTOMY

Unit No	Unit Title
1.	Communication, social and stress management skills
2.	Health care delivery system and medical terminology
3.	Infection control and safety in accordance with defined policies and procedures
4.	Anatomy and physiology of body systems
5.	Introduction to phlebotomy
6.	Apply quality system and continuous improvement process
7.	Specimen packing, transportation and processing
8.	Introduction to basic laboratory investigations required to evaluate a patient's pathologic conditions

Description of a phlebotomist

Phlebotomist in the Maldivian context is a service provider in the field of medical field, who are trained to draw blood from patients for medical testing. Giving appropriate information's according to the investigations requested by the medical doctors are also the responsibilities of the phlebotomist. Phlebotomists are expected to work individually and as a group depending on the situations and handling the critical situations with best of their ability by following proper guidelines.

Competency Standard Development Process

The competencies will be determined based on the analysis of the tasks expected to perform by the phlebotomist. The task analysis will be based on the existing documents prepared among the experts in the medical field and on the advice of the experts in the field. Competency standards used for similar type of training in other countries were also examined

UNIT 1

UNIT 1	Communication, social and stress management skills				
DESCRIPTOR	This unit of competency covers the ability to understand the basic concept of communication, stress management, decision making, problem solving and conflict and demonstrate effective interpersonal skills.				
CODE	SOC28S1U01V1	Level	3	Credit	3

ELEMENTS OF COMPETENCIES	**PERFORMANCE CRITERIA**
1. Sender-Receiver communication	1.1. Listen attentively to instructions and respond appropriately 1.2. Clarify instructions to ensure a complete understanding of the task 1.3. Receive verbal and written messages and respond appropriately 1.4. Record and convey information so that messages are understood
2. Demonstrate appropriate interpersonal skills and Provide appropriate information	2.1 Follow workplace procedures which reflect equal opportunity, anti-discrimination and non-harassment legislative requirements 2.2 Demonstrate effective

	interpersonal skills during everyday interactions 2.3 Deal with inquiries in accordance with enterprise customer service requirements by providing proper information's. 2.4 Redirect inquiries to relevant personnel for resolution if beyond own area of responsibility Access and provide relevant information that meets own authorisation and confidentiality requirements 2.5 Organise and provide information so that it is readily understood by others 2.6 Redirect inquiries to relevant personnel for resolution if beyond own area of responsibility 2.7 Complete all workplace documents legibly and accurately in accordance with enterprise procedures
3. Stress management in work place	3.1. Understand stress and Eustress 3.2. Understand the influence of positive and negative stress in

	our lives 3.3. Know the things that can be done to maximize the positive stress and to minimize the negative stress. 3.4. Recognise the sign and symptoms of stress and decide the actions can be done according to the situation. 3.5. Understand Three A's approach for managing stress

RANGE STATEMENT

Procedures included

- Customer service, telephone protocols
- Anti-discrimination, Equal Opportunity and anti-harassment legislative requirements
- Communication with supervisors and managers
- Communication with other laboratory and production personnel
- Communication with members of the public, customers and clients.
- Technical tasks

Tools, equipment and materials required may include:

- telephone, mobile phone, computer (email)
- direct display readouts
- On-line information systems.

ASSESSMENT GUIDE

Form of assessment

- Assessment for the unit needs to be holistic and observed during assessment of other units of competency which forms the qualification.
- Any written or oral examinations may include questions related to communicate with other people standard.

Assessment context

Assessment may be done in workplace or a simulated work environment.

Critical aspects

It is essential that competence is fully observed and there is ability to transfer competence to changing circumstances and to respond to unusual situations in the critical aspects of:

- Communicate effectively with people at different organisational levels and from diverse cultural backgrounds
- Work effectively with people under stressful conditions
- Maximise the positive stress when working with people of different cultural back ground.
- Use available communication equipment (eg, telephone, on-line and hard copy directories, email, fax, intranet and Internet)
- Listen attentively and clarify messages and instructions to confirm their meaning locate relevant sources of information
- Provide accurate information in an effective and timely manner
- Understand colloquial, scientific and technical terminology appropriate to their expected level of knowledge and their workplace
- Complete relevant workplace documents legibly and accurately respond to calls and messages within accepted enterprise timelines promote cooperation through personal interactions.

Assessment conditions

- Theoretical assessment of this unit must be carried out in an examination room where proper examination rules are followed.
- Assessment of Communicate with other people must be constantly evaluated.

UNDERPINNING KNOWLEDGE AND SKILLS

Underpinning knowledge	**Underpinning skills**
• Knowledge of Communicating with other people standard • General knowledge of common terminologies used in Communicating with other people • Interpersonal interactions, equal opportunity, anti-discrimination, anti-harassment requirements communication protocols and the completion of workplace documentation. • Knowledge of different types of stress and how to manage stress • knowledge of sign and symptoms of stressfulness when dealing with other people	• Competent to work to meet requirements for Communicate with other people • Communication skills • Technical tasks • Interpersonal skills • Stress management skill

UNIT 2

UNIT 2	Health care delivery system and medical terminology				
DESCRIPTOR	The Introduction to Medical Terminology Course is designed prepare students to understand, analyse, pronounce the elements of medical terminology, and so increase their confidence on a day to day basis.				
CODE	SOC28S1U02V1	Level	3	Credit	3

ELEMENTS OF COMPETENCIES	**PERFORMANCE CRITERIA**
1. Medical terminology	1.1 Identify the four-word elements (Word Roots, Combining Forms, Suffixes and Prefixes) are used to build medical words 1.2 Divide the medical words into their component parts and State the meanings of most commonly used root words, suffixes and prefixes, in medical terms. 1.3 Interpret the terminologies associated with different parts of the bodies and various diseases. 1.4 Explains the techniques of medical word-building using basic word elements 1.5 Link combining forms and word roots to suffixes. 1.6 Identify adjective, noun, and diminutive suffixes. 1.7 Define and identify planes of the body.

2. Health care delivery system	2.1 Identify the basic components of health care delivery system 2.2 Describe the structure and function of health care team 2.3 Describe the different types of health care providers 2.4 Describe the various type of available range of services 2.5 Identify the general roles and responsibilities of the individual members of the health care team

RANGE STATEMENT

General education elective

Tools, equipment and material used in this unit may include

Relevant tools and equipment's

ASSESSMENT GUIDE

Forms of assessment

- Written/oral questioning to assess underpinning knowledge of medical terminologies and health care delivery system (questions will be appropriate to candidate's language and literacy levels)
- Feedback from peers and supervisors

- Online quizzes and assignments

Assessment context

Assessment may be conducted out of the workplace preferably in a computer classroom

Critical aspects (for assessment)

It is essential that competence is fully observed and there is ability to transfer competence to changing circumstances and to respond to unusual situations in the critical aspects of:

- Describe and analyse the component part of a medical term.
- Use basic prefixes, suffixes, and combining forms to build medical terms
- Formation, pronunciation, and spelling of medical terms
- Basic component of health care system
- Types of health care providers and their roles and responsibilities in providing services

Assessment conditions

Assessment must reflect and events processes that occur over a period of time

UNDERPINNING KNOWLEDGE AND SKILLS

Underpinning knowledge	**Underpinning skills**
• Knowledge of building medical words using 4-word elements • Knowledge of interpreting terminologies associated with various diseases and various part of body • Knowledge identifying adjective, noun, and diminutive suffixes • Knowledge of basic components, structure and function of health	• Building medical words using four-word element's • Interpret the terminologies associated with various diseases and various part of body • Identifying adjective, noun, and diminutive suffixes

care system • Knowledge of responsibilities of health care provider	

UNIT 3

UNIT 3	Infection control and safety in accordance with defined policies and procedures				
DESCRIPTOR	This unit of competency concerns the ability to apply standard procedures and safe working practices to maintain own health and the health of others in the workplace. It also includes the application of risk control measures to minimise environmental threats and spread of infections.				
CODE	SOC28S1U03V1	Level	3	Credit	6

ELEMENTS OF COMPETENCIES	**PERFORMANCE CRITERIA**
1 Maintain the safe work environment and Establish safe work practice and procedures to maintain safe system of work	1.1. Keep all work areas clean and free from obstacles 1.2. Maintain personal hygiene at all times 1.3. Recognise the hazardous work situations 1.4. Recognize hazard warning and safety sigh and follow accordance with labelling, and manufacturer's instructions 1.5. Clean and decontaminate equipment and work areas regularly using recommended procedures
2 Maintain personal health in workplace	2.1 Use appropriate equipment and procedures to avoid personal contamination and contamination of others 2.2 Avoid risk behaviour that impacts on own work practices and those of other workers

3 Infection control	3.1 Understand that infections are major safety and health hazard 3.2 Understand that standard precautions applied to situations when heath care providers are in contact with blood, all body fluids, broken skin and mucus membrane. 3.3 Understand how to prevent infection in health facilities and in the home 3.4 Understand specific measures to take for patients, caregivers, health and other essential staff 3.5 Understand that a risk assessment must be performed to determine PPE usage 3.6 Understand the practices (wearing gloves, masks, washing hands) to be taken in order comply the standards 3.7 Understand how to manage waste and how to handle the deceased

Range Statement

- Cleaning work areas and/or equipment surfaces contaminated with blood, faeces, urine or microorganisms in accordance with standard precautions
- Specialised procedures for cleaning equipment, surfaces and spills for example:

  - treatments required for killing/deactivating microorganisms
  - treatment required for killing spores

- Correct disposal of infected materials (such as pipette tips, disposable containers, gloves and tubes).

Tools, equipment and material used may include

Relevant tools and equipment's

ASSESSMENT GUIDE

Form of assessment

- Observation of the candidate's techniques for cleaning, decontamination, disinfection and/or removal of spillages and waste disposal
- Questioning to assess underpinning knowledge of regulations and procedures where direct observation is difficult (such as dealing with hazards) and choice of reagents and equipment. Questioning techniques should be appropriate to the candidate's language and literacy levels.

Assessment context

This unit of competency is to be assessed in the workplace or simulated workplace environment.

Critical aspects

Competency must be demonstrated by the ability to safely follow work procedures relating to laboratory cleaning. In particular, the assessor should look to see that the candidate can:

- Safely clean work preparation areas and equipment using appropriate cleaning agents and equipment
- Safely remove spillages and dispose of wastes
- Disinfect and/or decontaminate work areas and equipment as required minimise the risk of contamination of self, others and the laboratory safely store laboratory equipment and materials
- Report potential hazards.

Assessment Conditions

Assessment must reflect and events processes that occur over a period of time

UNDERPINNING KNOWLEDGE AND SKILLS

Underpinning knowledge	**Underpinning skills**
Competency includes the ability to apply and explain workplace procedures and protocols relating to the: • Cleaning, decontamination and/or disinfection of work surfaces • Cleaning, decontamination and/or disinfection and storage of equipment • Minimization and disposal of waste	• To know how to clean working area according to the protocols • To deal with areas where urine, blood, and other body fluids, are spilled • To keep everything in working order.

UNIT 4	Anatomy and physiology of body system				
DESCRIPTOR	The purpose of this unit is to introduce the students the basic concepts of anatomy and physiology. The subject will provide the students with the knowledge of the structures and functions of the body. Additionally, this subject enables the students to apply the anatomy and physiology when collecting blood.				
CODE	SOC28S1U04V1	**Level**	3	**Credit**	6

ELEMENTS OF COMPETENCIES	**PERFORMANCE CRITERIA**
1. Anatomical terms, components, location and general structure	1.1. Understand the common anatomical terms 1.2. State the levels of structural organization with in the body 1.3. List different tissues and function 1.4. Know the different major systems, glands of body and its function
2. Haematological and cardiovascular system	2.1 Understand the role of haematology laboratory 2.2 List the constituents of blood and its function 2.3 Review the basic structure and function of cardiovascular system 2.4 Explain the structure and function of heart and blood vessels

RANGE STATEMENT

- Definition of anatomy and physiology and common terminologies.
- Identifying Anatomy of different part of body and know the function of each part

- Structure and function of CVD and haematological system

Tools, equipment and materials required may include:

Flash cards, posters, text book, internet.

ASSESSMENT GUIDE

Form of assessment

- Observation of the candidate's performances in Online class room quizzes, Mastering A&P quizzes, Assignments class room exercises and final exam.

Assessment context

Assessment of this unit must be completed in online classes and submitting assignments on time

Critical aspects (for assessment)

Competency must be demonstrated by the ability to know the following related to body. the assessor should look to see that the candidate can:

- Understand the common anatomical terminologies
- Know the different systems and its function
- Know CVS and haematological system structures and functions.

UNDERPINNING KNOWLEDGE AND SKILLS

Underpinning Knowledge	**Underpinning Skills**
• Knowledge of common anatomical terms • Knowledge of body's different systems and its function • Knowledge of major structures of cardiovascular systems and hematological system.	• Know how to identify the different structures of body

UNIT 5

UNIT 5	Introduction to phlebotomy				
DESCRIPTOR	This unit of competency concerns the ability to apply standard procedures and safe working practices when samples are collected and received to laboratory. And also improve the quality of specimen and safety of phlebotomy for health professionals and patients by promoting best practices in phlebotomy				
CODE	SOC28S1U05V1	**Level**	3	**Credit**	12

ELEMENTS OF COMPETENCIES	**PERFORMANCE CRITERIA**
1 Collection of blood	1.1 Define the terms phlebotomy 1.2 Understand the Issues related to phlebotomy like risk of blood borne infections, poorly collected sampling, events linked with phlebotomy, injuries from sharps. 1.3 Identify the general categories of additives used in blood collection, additive function volume and specimen considerations to be flowed for each of the various colour code tubes. 1.4 Know the most common type of anticoagulant like

	EDTA, Citrate, heparin, oxalates and how each of them works. 1.5 Know the purpose and principle of special used anticoagulants like acid citrate dextrose, citrate phosphate dextrose 1.6 Understand the concept of clot activators and types of activators 1.7 List the general blood collection equipment's and supplies (phlebotomy chair, gloves, antiseptics, disinfectants, cotton, bandage, needle sharps disposable container, biohazard bags ,tube holder) 1.8 Know the appropriate conditions in blood collection station. 1.9 Know the venepuncture equipment's like tourniquet , needles, tube systems used in blood collection 1.10 List and Describe

	evacuated tube system and syringe system components 1.11 Understand how evacuated tube system and syringe system components works and how to determine which system and components to use 1.12 Know the Common errors made during phlebotomy procedure 1.13 Understand the patient identification procedure 1.14 Understand how to select proper equipment in phlebotomy and use it accordingly 1.15 Know the order of blood draw according to given investigations 1.16 Understand the concept of closed and open systems 1.17 Understand the practical guidance on blood sampling system like recommended needle gauge, needle and syringe

	1.18 Name the various type of needles used in syringe system
2 Best practice in phlebotomy	2.1 Know the factors involve in best practice in phlebotomy (planning a head, using appropriate location, quality control, quality of laboratory sampling and standard for quality care for patients and phlebotomists) 2.2 Understand the importance of specimen collection in health care system 2.3 Providing of appropriate location for sample collection 2.4 Providing clear instructions to the patients 2.5 Understand the correct procedure for drawing blood and the correct order of blood draw. 2.6 Describe the safe and infectious control procedures 2.7 Define quality and performance improvement measurements as they related to phlebotomy 2.8 List and describe the components of quality assurance programme and identify areas in phlebotomy subject to quality control 2.9 Know the 3 phase of laboratory testing as pre analytical, analytical and post analytical errors 2.10 Identify the major pre analytical errors (patient identification, technique,

	procedure, transport and processing errors) that can occur during blood collection and transport 2.11 Identify and explain the ways in which pre analytical errors can be prevented 2.12 Know the actions to be taken to reduce potential pre analytical errors associated with blood collection and transport
3 Paediatric, neonatal and capillary sampling	3.1 Importance of uniform sampling technique when paediatric and neonatal sampling 3.2 Understand the choice of procedure and site 3.3 Know the preferred method of blood sampling as venepuncture 3.4 Understand the procedure of figure and heel prick 3.5 Importance of capillary sample when that requires small quantity of blood 3.6 Demonstrate the proper techniques to perform capillary sampling
4 Professional ethics	4.1 Understand the importance of professional ethics and ethics related to patient interactions. 4.2 Understand the importance of confidentiality and appropriate actions to maintain client confidentiality 4.3 Describe the ethical issues related to blood collection and transport 4.4 Describe the things to do in order to Maintain the dignity and respect of the

	profession and maintain a reputation of honesty, integrity and reliability 4.5 Know the legal implications of not maintaining the confidentiality of patients 4.6 Know the code of ethics in relation to duty of the patient, duty to the colleague and profession and duty to society

RANGE STATEMENT

This unit of competency includes the following types of information sources and documentation:

- SOPs
- set up and pre-use checks of laboratory equipment
- Methods, recipes, procedures and protocols.

Workplace activities may include

- Providing instructions and sample receiving
- Registering the samples to the systems
- Set up the working area for sampling
- Sample collection using standard procedures

This unit of competency includes communication with relevant personnel to:

- work effectively with others in teams
- clarify individual responsibilities
- Modify work plan to cope with difficult times and producing quality results.

Tools, equipment and material used in this unit may include

Relevant tools and equipment's

ASSESSMENT GUIDE

Forms of assessment

Assessment for the unit needs to be continuous and holistic and must include real or simulated workplace activities. And also, can be assessed by online quizzes and assignments

Assessment context

This unit of competency is to be assessed in the workplace or simulated workplace environment. The candidate should be assessed in the context of performing routine technical tasks like giving proper information's to patients, collecting samples, receiving samples.

Critical aspects (for assessment)

Competency must be demonstrated in the ability to plan and achieve work objectives efficiently. In particular, the assessor should look to see that the candidate:

- clarifies job outcomes and recognises resource needs follows relevant procedures
- recognises non-standard behaviour in samples and equipment
- recognises potential disruptions or changed circumstances and modifies work plan in conjunction with relevant personnel
- compensates for a variety of working environments (eg, indoor, outdoor and night work)
- seeks assistance from relevant personnel when difficulties arise
- Achieves quality outcomes within timelines.

Assessment conditions

It is preferable that assessment reflects a process rather than an event and occurs over a period of time to cover varying circumstances.

This is a core unit that underpins effective performance in all other units and combined training and assessment may be appropriate

UNDERPINNING KNOWLEDGE AND SKILLS

Underpinning Knowledge	**Underpinning Skills**
Competency includes the ability to apply and explain workplace procedures covering: • customer service • quality • sample collection procedures • Technical work that the candidate routinely performs.	• A technical officer was required to perform a series of tasks including blood sample collection, giving proper information's to patients, receiving sample to laboratory

UNIT 6

UNIT 6	Apply quality systems and continuous improvement processes				
DESCRIPTOR	This unit of competency covers the exercise of good laboratory practice and effective participation in quality improvement teams.				
CODE	SOC28S1U06V1	**Level**	3	**Credit**	6

ELEMENTS OF COMPETENCIES	**PERFORMANCE CRITERIA**
1. Satisfy quality system requirements in daily work	1.1 Access information on quality system requirements for own job function 1.2 Record and report quality control data in accordance with quality system 1.3 Follow quality control procedures to ensure products, or data, are of a defined quality as an aid to acceptance or rejection 1.4 Recognise and report non-conformances or problems that affect productivity and quality 1.5 Conduct work in accordance with

	sustainable energy work practice 1.6 Promote sustainable energy principles and work practice to other workers
2. Analyze opportunities for corrective and/or optimization action	2.1 Compare current work practices, procedures and process or equipment performance with requirements and/or historical data or records 2.2 Recognise variances that indicate abnormal or sub- optimal performance 2.3 Collect and/or evaluate batch and/or historical records to determine possible causes for sub-optimal performance 2.4 Use appropriate quality improvement techniques to rank the probabilities of possible causes
3. Recommend corrective and/or optimization actions	3.1 Analyse cause(s) to predict likely impacts of change(s) and decide on the appropriate action(s) 3.2 Identify required change(s) to standards and procedures

	and training 3.3 Report recommendations to designated personnel
4. Participate in the implementation of recommended action(s)	4.1 Implement approved action(s) and monitor performance following change(s) to evaluate results 4.2 Implement change(s) to systems and procedures to eliminate possible causes 4.3 Document outcomes of actions and communicate them to relevant personnel.
5. Participate in the development of continuous improvement strategies	5.1 Review all relevant features of work practice to identify possible contributing factors leading to sub-optimal performance 5.2 Identify options for removing or controlling the risk of sub-optimal performance 5.3 Assess the adequacy of current controls, quality methods and systems 5.4 Identify opportunities to continuously improve performance 5.5 Develop recommendations for continual improvements of work practices, methods, procedures and

	equipment effectiveness 5.6 Consult with appropriate personnel to refine recommendations before implementation of approved improvement strategies 5.7 Document outcomes of strategies and communicate them to relevant personnel.

RANGE STATEMENT

Tools, equipment and materials required may include:

Relevant tools and equipment's

ASSESSMENT GUIDE

Forms of assessment

The assessor may select two of the following assessment methods to objectively assess the candidate:

- Observation
- Questioning
- Practical demonstration

Assessment context

Assessment may be conducted out of the workplace preferably in a computer classroom

Critical aspects (for assessment)

Assessment must show that the candidate:

- Selected and used hardware components correctly and according to the task requirement
- Identified and explain the functions of both hardware and software used, their general features and capabilities
- Produced accurate and complete data in accordance with the requirements
- Used appropriate devices and procedures to transfer files/data accurately

Assessment conditions

Assessment may be conducted out of the work environment and may include assignments and projects.

UNIT 7

UNIT 7	Specimen packing, transportation and processing				
DESCRIPTOR	This unit of competency covers the ability take care of specimen properly like proper sample collection, labelling, packing, storage for transportation.				
CODE	SOC28S1U07V1	Level	3	Credit	6

ELEMENTS OF COMPETENCIES	**PERFORMANCE CRITERIA**
1. Receive, label and store samples for transportation	1.1. Label laboratory samples to ensure all required information is transcribed accurately and legibly 1.2. Register samples into laboratory system 1.3. Record sample testing requirements 1.4. Maintain sample integrity and eliminate cross- contamination
2. Prepare sample for transportation	2.1. Identify materials to be tested, appropriate standard method and safety requirements 2.2. Use personal protective equipment as specified for standard method and material to be tested 2.3. Record sample description, compare with specification, record and report discrepancies 2.4. Prepare sample in accordance with appropriate standard methods

	2.5. Know the standard procedures to store pack and transport them to laboratory. 2.6. Understand the concept of triple packing system

Range Statement

Tools, equipment and material used in this unit may include:

Relevant tools and equipment's.

ASSESSMENT GUIDE

Forms of assessment

The assessor may select the following assessment methods to objectively assess the candidate:

- Observation
- Questioning
- Practical demonstration

Assessment context

Assessment must ensure:

Project or work activities that allow the candidate to demonstrate the application of knowledge to specific laboratory industry contexts and situations.

Assessment may be conducted out of the workplace preferably in a computer classroom

Assessment conditions

This is a core unit that underpins effective performance in all other units and combined training and assessment may be appropriate. Assessment may be conducted out of the work environment and may include assignments and projects.

UNIT 8

UNIT 8	Introduction to basic laboratory investigations required to evaluate a patient's pathologic conditions				
DESCRIPTOR	This unit of competency describes the basic laboratory investigations required and how to prepare in order to perform certain investigations.				
CODE	SOC28S1U08V1	Level	3	Credit	6

ELEMENTS OF COMPETENCIES	**PERFORMANCE CRITERIA**
1. Most commonly ordered laboratory investigations	1.1. Know the most commonly ordered investigations like complete blood count, basic metabolic panel and comprehensive metabolic panel 1.2. Know the investigations included in complete blood count, basic metabolic panel and comprehensive metabolic panel and the reason for each test 1.3. Understand the preparation procedure for common investigations like Blood glucose test, lipid profile etc.

Range Statement

Tools, equipment and materials required may include:

- Relevant tools and equipment's.

ASSESSMENT GUIDE

Form of assessment

- Assessment for this competency unit needs to be holistic and must include real or simulated workplace activities

Assessment context

The assessment of practical skills must take place on the job or in a simulated work environment

Assessment conditions

Assessments will take place under the direct supervision of assessors whose expertise is recognized by the Maldives Accreditation Board. Trainees will be permitted adequate time and they will be provided required materials and privacy.