

MODERN TECHNICAL EDUCATION SOCIETY

QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR ALLIED HEALTHCARE

What are Occupational Standards(OS)?

- ☐ OS describe what individuals need to do, know and understand in order to carry out a particular job role or function
- ☐ OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding



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Introduction

Qualifications Pack- Cardiac Care Technician

SECTOR: HEALTHCARE

SUB-SECTOR: Allied Healthcare & Paramedics

OCCUPATION: Cardiac Care Technician

REFERENCE ID: HSS/Q0101

ALIGNED TO: NCO-2004/NIL Cardiac Care Technician (CCT) is a health care specialist

who supports cardiologist in diagnosing and treatment of ailments of the human heart. Cardiac care technician in the health Industry is also known as a cardio graphic technician or cardiovascular technician.

Brief Job Description: Individuals in this job assist in performing invasive and noninvasive diagnostic examinations and therapeutic interventions of the heart and/or blood vessels at the request or direction of a provider.

Personal Attributes: This job requires individuals to work as a part of a multidisciplinary team and should demonstrate motivation and an innovative approach. The individual should have good organisational and time management skills and should have understanding of the anatomy and physiology human body, particularly related to cardio vascular system.



Qualifications Pack For Cardiac Care Technician

Job Details	Qualifications Pack Code	HSS/Q0101		
	Job Role	Cardiac Care Technician		
	Credits (NSQF)	TBD	Version number	1.0
	Sector	Health	Drafted on	12/05/2013
	Sub-sector	Allied Health & Paramedics	Last reviewed on	22/05/2013
	Occupation	Cardiac Care Technician	Next review date	22/12/2016
	NSQC Clearance on	19/05/2015		

Job Role	Cardiac Care Technician
Role Description	Individuals in this job role assist in performing invasive and non-invasive diagnostic examinations and therapeutic interventions of the heart and/or blood vessels at the request or direction of provider
NSQF level	4
Minimum Educational Qualifications*	Class XII in Science or Level 3 ECG Technician with Experience of minimum 3 Years.
Maximum Educational Qualifications*	Not Applicable
Training (Suggested but not mandatory)	Not Applicable
Minimum Job Entry Age	18 years
Experience	Not Applicable
Applicable National Occupational Standards (NOS)	Compulsory: 1. HSS/ N 0101: Monitor patients' heart rate and rhythm using electrocardiogram (ECG) equipment. 2. HSS/N0102: Perform Treadmill Test (TT) to assess cardiovascular response 3. HSS/N0103: Assist cardiologist in assessing cardiac structure and function using cardiac ultrasound 4. HSS/N0104: Assist with transesophageal cardiac ultrasound studies 5. HSS/N0105: Assist with pericardiocentesis procedure by echocardiography 6. HSS/N0106: Assist with implant of pacemakers by establishing



Qualifications Pack For Cardiac Care Technician

	lead integrity 7. HSS/N0107: Assist with insertion of temporary pacemakers 8. HSS/N0108: Demonstrate proficiency in using equipment 9. HSS/N9602: Ensure availability of medical and diagnostic supplies 10. HSS/N9603: Act within the limits of one's competence and Authority 11. HSS/N9604: Work effectively with others 12. HSS/N9605: Manage work to meet requirements 13. HSS/N9606: Maintain a safe, healthy, and secure working Environment 14. HSS/N9607: Practice Code of conduct while performing duties 15. HSS/N9609: Follow biomedical waste disposal protocols 16. HSS/N9610: Follow infection control policies and procedures 17. HSS.N9611: Monitor and assure quality Optional N.A
Performance Criteria	As described in the relevant OS units



Keywords /Terms	Description
Core Skills/Generic Skills	Core Skills or Generic Skills are a group of skills that are essential to learning and working in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
ECG	Electrocardiogram a graphic tracing of the variations in electrical potential caused by the excitation of the heart muscle and detected at the body surface.
Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of OS.
Echocardiograph	Echocardiography is a diagnostic test that uses ultrasound waves to create an image of the heart muscle.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Knowledge and Understanding	Knowledge and Understanding are statements that together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
National Occupational Standards (NOS)	NOS are Occupational Standards that apply uniquely in the Indian context.
Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the knowledge and understanding they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Organisational Context	Organisational Context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Pacemaker	Pacemaker is an electrical device that is temporarily or permanently implanted in the body to improve the heart rate by using electric impulses to stimulate the heart muscles.
Performance Criteria	Performance Criteria are statements that together specify the standard of performance required when carrying out a task.
Pericardiocentesis	Pericardiocentesis is the removal by needle of pericardial fluid from the sac surrounding the heart for diagnostic or therapeutic purposes.
Qualifications Pack Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack.
Qualifications Pack(QP)	Qualifications Pack comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification pack code.



Scope	Scope is the set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on the quality of performance required.
Sector	Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-functions	Sub-functions are sub-activities essential to fulfil the achieving the objectives of the function.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Technical Knowledge	Technical Knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Unit Code	Unit Code is a unique identifier for an OS unit, which can be denoted with 'N'.
Unit Title	Unit Title gives a clear overall statement about what the incumbent should be able to do.
Vertical	Vertical may exist within a sub-sector representing different domain areas or the client industries served by the industry.
Keywords /Terms	Description
ACLS	Advanced cardiac life support
AV	Atrio ventricular
BP	Blood pressure
CABG	Coronary artery bypass graft
ECG	Electrocardiogram
TT	Treadmill Test
MET	Metabolic equivalent
MSDS	Material safety data sheet
NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
OS	Occupational Standards
QP	Qualification Pack
RA	Right Atrium
RV	Right ventricle



HSS/N0101 Monitor patients' heart rate and rhythm using electrocardiogram (ECG) equipment

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Overview

This Occupational Standard describes about Cardiac care technician monitoring patients' blood pressure and heart rate using electrocardiogram (ECG) equipment during diagnostic or therapeutic procedures to notify the physician if something appears wrong.



HSS/N0101 Monitor patients' heart rate and rhythm using electrocardiogram (ECG) equipment

National Occupational Standard

Unit Code	HSS/N0101
Unit Title	Monitor patient's heart rate and rhythm using electrocardiogram (ECG) equipment
Description	This OS unit is about Cardiac care technician monitoring patients' heart rate and rhythm using electrocardiogram (ECG) equipment during diagnostic or therapeutic procedures to notify the provider if something appears wrong
Scope	This unit/task covers the following: Monitor the patient using ECG for any cardiac abnormalities , Assisting provider in performing various diagnostic and therapeutic procedures for cardiac care
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
	To be competent, the user/individual on the job must be able to: PC1. Set the room for taking the ECG readings PC2. Attach, connect, and operate electrodes from specified body areas to leads from electrocardiograph machine PC3. Review patient's record and instructs patients prior to procedures PC4. Set the ECG machines and explain the ECG procedures clearly to the patient PC5. Monitor patient during procedures and report any abnormal findings PC6. Edit and forward results to attending physician for analysis and interpretation PC7. Maintains ECG equipment and supplies
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: KA1. How to perform their roles and responsibilities based on organization working methods KA2. How to be familiar with institution, association and profession's code of ethics and standards of practice
B. Technical Knowledge	The user/individual on the job needs to know and understand: KB1. How to apply sensors (electrodes) and secure. Connect lead wires to monitor/ recorder KB2. How to record rhythm strip and/or lead tracing (where applicable) to ensure correct calibration, lead placement (sufficient amplitude of the R wave) and good connections (electrodes, leads and battery) KB3. How to Identify ECG waveforms checking for technical accuracy, ensure artefact free tracing and correct lead placement KB4. How to remove leads and sensors (electrodes), clean sensor sites and provide any assistance required in dressing KB5. How to prepare tracing for interpretation by physician per institution protocol
Skills (S)	
A. Core Skills/	Writing Skills



HSS/N0101 Monitor patients' heart rate and rhythm using electrocardiogram (ECG) equipment

Generic Skills	The user/ individual on the job needs to: SA1. Know how to record patient data like demographics and vitals SA2. Know the local language SA3. Review and enter data into computer analyser including age, name, medications, date and time of recording, indication for test, symptoms obtained from diary, referral source
	Reading Skills
	The user/individual on the job needs to know and understand how to: SA4. Reads the readings on the ECG monitors SA5. Read the instructions given by provider SA6. Read the instruction on the ECG equipment
	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA7. Interact with the patient in the local language SA8. Give clear instructions to the patient and listen patiently SA9. Explain the purpose and clarify requirements of the patient during the test procedure SA10. Communicate with other people around the patient and give them clear instructions about their safety
B. Professional Skills	Decision Making
	The user/individual on the job needs to know and understand how to: SB1. Make arrangements for appropriate transfer of patient according to results
	Plan and Organize
	The user/individual on the job needs to know and understand: SB2. How to plan and organise activities that are assigned
	Customer Centricity
	The user/individual on the job needs to know and understand how to: SB3. Communicate effectively with patients and family, physicians, and other members of the health care team to take measures for improving patient's health
	Problem Solving
	The user/individual on the job needs to know and understand how to: SB4. Inspect equipment to ensure proper working order and take any corrective actions as required
	Analytical Thinking
	The user/individual on the job needs to: SB5. Assist in diagnosing or identifying possible reasons of particular condition a patient is suffering from
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB6. Apply and evaluate the information gathered from the report



HSS/N0101 Monitor patients' heart rate and rhythm using electrocardiogram (ECG) equipment

NOS Version Control

NOS Code	HSS/N0101		
Credits (NSQF)	TBD	Version number	1.0
Industry	Health	Drafted on	12/05/13
Industry Sub-sector	Allied Health and Paramedics	Last reviewed on	24/07/13
Occupation	Cardiac Care Technician	Next review date	24/12/16



MODERN TECHNICAL EDUCATION SOCIETY



Overview

This Occupational Standard describes the knowledge, understanding and skills required of a Cardiac Care Technician to perform Exercise Tolerance Test (ETT) to assess cardiovascular response.



HSS/N0102

Perform treadmill test (TT) to assess cardiovascular response

National Occupational Standard

Unit Code	HSS/N0102
Unit Title (Task)	Perform treadmill test (TT) to assess cardiovascular response
Description	This OS unit is about the Cardiac Care technician performing treadmill test (TT) on patient to assess cardiovascular response when heart is working hard (or stressed).
Scope	This unit/task covers assisting cardiologist in the following: Following required procedures for testing using a prescribed exercise testing protocols , identifying Cardiovascular response during TT
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
	To be competent, the user/individual on the job must: PC1. Take consent from patient base on ECG results PC2. Prepare patient for test PC3. Ensure patient identification and review indication for procedure PC4. Take pertinent patient history including cardiac risk factors and medications PC5. Explain purpose and procedure to the patient and clarify requirements of them for the test PC6. Continually observe the patient's condition and reactions, monitor ECG and take required measurements and recordings, at intervals appropriate to patient's symptoms and/or test protocol PC7. Assist in evaluating test results
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand how to: KA1. Inform if any untoward incidence happens during the procedure based on organisational guidelines KA2. Communicate and whom to communicate in case of emergency
B. Technical Knowledge	The user/individual on the job needs to know and understand how to: KB1. Set up and calibrate the equipment according to specific procedures KB2. Follow required procedures for testing using a variety of exercise testing protocols KB3. Identify associated workload measurements such as METs and aerobic impairment KB4. Use appropriate skin preparation, prepare sensor sites and apply sensors KB5. Attach required equipment to record blood pressure, oxygen saturation, as per facility protocol KB6. Follow established absolute indicators to cancel or discontinue the test KB7. Recognize positive, negative, false positive and false negative results KB8. Remove leads and sensors (electrodes) and clean sensor sites
Skills (S)	



HSS/N0102

Perform treadmill test (TT) to assess cardiovascular response

A. Core Skills/ Generic Skills	Writing Skills
	The user/ individual on the job needs to know and understand: SA1. How to enter required patient demographics and data, including pre-test blood pressure measurements
	Reading Skills
	The user/individual on the job needs to know and understand: SA2. The equipment instructions and read the test results
	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA3. Instruct and demonstrate the use of the equipment to the patient keeping safety in mind
B. Professional Skills	Decision Making
	The user/individual on the job needs to know and understand how to: SB1. Instruct, monitor, assess and reassure patient and take appropriate actions as required by patient's symptoms or test findings
	Plan and Organize
	The user/individual on the job needs to: SB2. Adapt their plans to deal with frequent interruptions such as emergency repairs and refits and changes
	Customer Centricity
	The user/individual on the job needs to know and understand how to: SB3. Communicate effectively with patients and their family SB4. Explain and demonstrate the use of equipment to patient for safety purpose SB5. Review important points and evaluate patient's ability to comprehend and comply with expectations
	Problem Solving
	The user/individual on the job should be able to: SB6. Recognize patient risk factors associated with exercise tolerance testing such as cardiovascular, skeletal/muscular limitations, psychological response and anticipate potential problems
	Analytical Thinking
	The user/individual on the job needs to know and understand how to: SB7. Assess patients' physical and psychological health
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB8. Analyse, evaluate and apply the information gathered from observation, experience, reasoning, or communication to act efficiently



HSS/N0102 Perform treadmill test (TT) to assess cardiovascular response

NOS Version Control

NOS Code	HSS/N0102		
Credits (NSQF)	TBD	Version number	1.0
Industry	Health	Drafted on	12/05/13
Industry Sub-sector	Allied Health and Paramedics	Last reviewed on	24/07/13
Occupation	Cardiac Care Technician	Next review date	24/12/16





HSS/N0103

Assist cardiologist in assessing cardiac structure and function using cardiac ultrasound

MODERN TECHNICAL EDUCATION SOCIETY



Overview

This Occupational Standard describes the knowledge, understanding and skills required of a cardiac care technician for assisting the cardiologist in assessing cardiac structure and functioning using cardiac ultrasound.



HSS/N0103

Assist cardiologist in assessing cardiac structure and function using cardiac ultrasound

National Occupational Standard

Unit Code	HSS/N0103
Unit Title (Task)	Assist cardiologist in assessing cardiac structure and function using cardiac ultrasound
Description	This OS unit is about the cardiac care technician assisting cardiologist in assessing cardiac structure and function using cardiac ultrasound.
Scope	This unit/task covers: Assisting cardiologist in obtaining images of the heart to help diagnose and monitor diseases that affect the structure and function of heart including heart valves and/or muscle
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
	To be competent, the user/individual on the job must: PC1. Ensure patient identification and explain procedure to the patient PC2. Record patient's demographic data and vitals PC3. Activate machine, calibrate if required PC4. Know about heart function and anatomy PC5. Prepare patients for ultrasound
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company/ organization and its processes)	The user/individual on the job needs to know and understand: KA1. The profession's Code of conduct, standards of Practice, policies and procedures as set out by the organization KA2. The designated roles and responsibilities KA3. All procedures and should be able to take accurate measurements and recordings
B. Technical Knowledge	The user/individual on the job needs to know and understand how to: KB1. Prepare and position patients for testing KB2. Activate machine, calibrate it if required KB3. Attach ECG sensors using modified lead II and position patient KB4. Apply transducer gel to designated test sites KB5. Utilize various transducer positions to maintain optimum views of the structures and functioning of the heart, KB6. Adjusting equipment and controls according to physicians' orders or established protocol KB7. Observe ultrasound display screen and listen to signals to record vascular information such as blood pressure, limb volume changes, oxygen saturation and cerebral circulation KB8. Observe gauges, recorder, and video screens of data analysis system during imaging of cardiovascular system. KB9. Detach equipment and clean test areas KB10. Performs administrative duties involving inventory control as required and Identify and acquire the supply of equipment and other materials in a timely cost effective manner
Skills (S)	



Assist cardiologist in assessing cardiac structure and function using cardiac ultrasound

A. Core Skills/ Generic Skills	Writing Skills
	The user/ individual on the job needs to know and understand how to: SA1. Report measurement findings using required forms and formats SA2. Record patient's data and history
	Reading Skills
	The user/individual on the job needs to know and understand how to: SA3. Take the readings and read the manuals for using the equipment SA4. Read the equipment instructions Oral Communication (Listening and Speaking skills)
B. Professional Skills	The user/individual on the job needs to know and understand how to: SA5. Interact with the patient SA6. Give clear instructions to the patient SA7. Explain test procedures to patient to obtain cooperation and to reduce anxiety Decision Making
	Not Applicable
	Plan and Organize
	The user/individual on the job needs to know and understand: SB1. How to plan and organise activities in order to be efficient and rapid without compromising on patient care
	Customer Centricity
	The user/individual on the job needs to know and understand how to: SB2. Communicate effectively with patients and their family, physicians, and other members of the health care team SB3. Maintain patient confidentiality
	Problem Solving
	The user/individual on the job should be able to: SB4. Inspect equipment to ensure proper working order and take any corrective actions as required
	Analytical Thinking
	The user/individual on the job needs to know and understand how to: SB5. Assess patients' physical and psychological health
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB6. Analyse, evaluate and apply the information gathered from observation, experience, reasoning, or communication to act efficiently



HSS/N0103 Assist cardiologist in assessing cardiac structure and function using cardiac ultrasound

NOS Version Control

NOS Code	HSS/N0103		
Credits (NSQF)	TBD	Version number	1.0
Industry	Health	Drafted on	12/05/13
Industry Sub-sector	Allied Health and Paramedics	Last reviewed on	24/07/13
Occupation	Cardiac Care Technician	Next review date	24/12/16



MODERN TECHNICAL EDUCATION SOCIETY



Overview

This Occupational Standard describes the knowledge, understanding and skills required of a cardiac care technician for assisting with transesophageal cardiac ultrasound studies.



HSS/N0104

Assist with Transesophageal cardiac ultrasound studies

National Occupational Standard

Unit Code	HSS/N0104
Unit Title (Task)	Assist with transesophageal cardiac ultrasound studies
Description	This OS unit is about the cardiac care technician assist with transesophageal cardiac ultrasound studies. A specialized probe containing an ultrasound transducer at its tip is passed into the patient's esophagus. As esophagus is close to the heart this method allows for clearer images of the heart and helps find the abnormalities. This unit/task covers assisting cardiologist in the following:
Scope	Assessing the overall function of patient heart's valves and chambers , Determining the presence of many types of heart disease, such as valve disease, myocardial disease, pericardial disease, infective endocarditis, cardiac masses and congenital heart disease by using ultrasound images .Evaluating the effectiveness of valve surgery using ultrasound studies Evaluating abnormalities of the left atrium
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
	To be competent, the user/individual on the job must: PC1. Ensure patient identification PC2. Obtain patient's informed consent if required as per the protocols PC3. Review indication and explain the procedure and requirements to patient PC4. Arrange the set up for transesophageal ultrasound PC5. Assemble tray for procedure, including intravenous setup, and draw up medication as required
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company/ organization and its processes)	The user/individual on the job needs to know and understand: KA1. The profession's Code of conduct, standards of Practice, policies and procedures as set out by the organization KA2. The designated roles and responsibilities KA3. All procedures and should be able to take accurate measurements and recordings
B. Technical Knowledge	The user/individual on the job needs to know and understand how to: KB1. Place the electrodes (small, flat, sticky patches) on patient's chest KB2. Attach the electrode to an electrocardiograph (ECG) monitor to chart patient heart's electrical activity KB3. Place blood pressure cuff on patient arm to monitor blood pressure KB4. Attach a small clip to a pulse oximeter to monitor the oxygen level of patient blood KB5. Spray an anesthetic (pain-relieving medication) at the back of patient throat KB6. Assist the doctor in injecting medications into IV KB7. Remove secretions by placing a dental suction tip in patient mouth KB8. Monitor heart rate, blood pressure and oxygen level of patient blood during and immediately after the exam KB9. Assist in bubble study if required by drawing up saline KB10. Clean patient and sterilize equipment KB11. Assess patient recovery by monitoring BP, ECG, and oxygen levels



HSS/N0104

Assist with Transesophageal cardiac ultrasound studies

Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	The user/ individual on the job needs to know and understand how to: SA1. Record various images and equipment readings
	Reading Skills
	The user/individual on the job needs to know and understand how to: SA2. Take the readings from blood pressure, oximeter and ultrasound equipment SA3. Read the equipment instructions
	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA4. Interact with the patient and listen to them patiently SA5. Explain test procedures to patient to obtain cooperation and reduce anxiety
B. Professional Skills	Decision Making
	The user/individual on the job needs to know and understand how to: SB1. Instruct, monitor, assess and reassure patient and take appropriate actions as required by patient's symptoms or test findings
	Plan and Organize
	The user/individual on the job needs to: SB2. Plan and schedule cardiac ultrasound procedures for inpatients and out patients, when there is a question of whether there is availability or when the schedule is booked
	Customer Centricity
	The user/individual on the job needs to know and understand how to: SB3. Communicate effectively with patients and their family, physicians, and other members of the health care team SB4. Maintain patient confidentiality
	Problem Solving
	The user/individual on the job needs to know and understand how to: SB5. Maintain all echo equipment to solve minor operating problems. Difficult or complex problems are referred to the echo supervisor
	Analytical Thinking
	The user/individual on the job needs to know and understand how to: SB6. Assess the situation and implement appropriate intervention under the guidance of provider
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB7. Analyse, evaluate and apply the information gathered from observation, experience, reasoning, or communication to act efficiently

HSS/N0104 Assist with Transesophageal cardiac ultrasound studies

NOS Version Control

NOS Code	HSS/N0104		
Credits (NSQF)	TBD	Version number	1.0
Industry	Health	Drafted on	12/05/13
Industry Sub-sector	Allied Health and Paramedics	Last reviewed on	24/07/13
Occupation	Cardiac Care Technician	Next review date	24/12/16



MODERN TECHNICAL EDUCATION SOCIETY



Overview

This Occupational Standard describes the knowledge, understanding and skills required of a cardiac care technician for assisting with pericardiocentesis procedure by echocardiography.

HSS/N0105

Assist with pericardiocentesis procedure by echocardiography

National Occupational Standard

Unit Code	HSS/N0105
Unit Title (Task)	Assist with pericardiocentesis procedure by echocardiography This OS unit is about the cardiac care technician assisting cardiologist with pericardiocentesis procedure by echocardiography
Description	This unit/task covers assisting cardiologist in the following:
Scope	Determining cause of fluid around the heart , Obtaining fluid for appropriate biochemical, cytologic, bacteriologic, and immunologic analysis , Assessment of hemodynamic after pericardial pressure has been lowered to exclude effusive constrictive pericarditis , Relief of tamponade, when present
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
	To be competent, the user/individual on the job must: PC1. Ensure patient identification and obtain patient's informed consent PC2. Explain the indication for the test and the procedure to the patient PC3. Set up pericardiocentesis tray
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: KA1. Organization policies related to conducting pericardiocentesis KA2. Importance of taking informed consent before the procedure KA3. Protocol for reverse isolation/sterile procedure KA4. Roles and responsibilities as designated by the provider
B. Technical Knowledge	The user/individual on the job needs to know and understand how to: KB1. Assist physician with sterile gown and gloves KB2. Use 2-D echo, locate the optimal echocardiographic window for needle insertion as per the directions of cardiologist KB3. Assist physician, ensuring entry site is sterilized and covered KB4. Clean and sterilize equipment
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills The user/ individual on the job needs to know and understand how to: SA1. Obtain patient data and complete worksheets SA2. Record the amount of fluid aspirated from the pericardial sac
	Reading Skills The user/individual on the job needs to know and understand how to: SA3. Read the organisational and departmental protocols and new additions SA4. Read new clinical protocols and orders given by medical officer or any other provider institute SA5. Read the equipment instructions
	Oral Communication (Listening and Speaking skills)



HSS/N0105

Assist with pericardiocentesis procedure by echocardiography

	The user/individual on the job needs to know and understand how to: SA6. Interact with the patient and listen to the instructions attentively SA7. Explain test procedures to patient to obtain cooperation and reduce anxiety
B. Professional Skills	Decision Making
	Not Applicable
	Plan and Organize
	The user/individual on the job needs to know:
	SB1. How to plan and organise the procedure
	Customer Centricity
	The user/individual on the job needs to know and understand how to:
	SB2. Communicate effectively with patients and their family, physicians, and other members of the health care team
	SB3. Maintain patient confidentiality
	Problem Solving
	The user/individual on the job needs to know and understand how to:
	SB4. Identify basic potential troubleshooting techniques when an inaccurate system is identified
	SB5. Assist in Identifying potential complications
	Analytical Thinking
	The user/individual on the job needs to know and understand how to:
	SB6. Assess the situation and implement appropriate intervention under the guidance of provider
	Critical Thinking
	The user/individual on the job needs to know and understand how to:
	SB7. Analyse, evaluate and apply the information gathered from observation, experience, reasoning, or communication to act efficiently

NOS Version Control

NOS Code	HSS/N0105		
Credits (NSQF)	TBD	Version number	1.0
Industry	Health	Drafted on	12/05/13
Industry Sub-sector	Allied Health and Paramedics	Last reviewed on	24/07/13
Occupation	Cardiac Care Technician	Next review date	24/12/16



MODERN TECHNICAL EDUCATION SOCIETY



Overview

This Occupational Standard describes the knowledge, understanding and skills required of a Cardiac care technician assisting provider during implantation of pacemakers by establishing lead integrity.



HSS/N0106

Assist with implant of pacemakers by establishing lead integrity

National Occupational Standard

Unit Title (Task)	HSS/N0106 Assist with implant of pacemakers by establishing lead integrity
Description	This OS unit is about cardiac care technician assisting with implantation of pacemakers by establishing lead integrity as pacemaker can have one wire leading to the RV or two wire, one to the right atrium (RA), and another one to the RV and hence paces both right heart chambers in sequence This unit/task covers the following:
Scope	Assisting cardiologist in implanting permanent pacemaker which continuously monitors heart's natural rhythm and will stimulate the heart to beat when it senses that heart rhythm is too slow
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
	To be competent, the user/individual on the job must be able to: PC1. Confirm identity of patient PC2. Explain procedure and have patient sign informed consent PC3. Prepare table and assist in patient transfer PC4. Follow the instructions to determine the type of the lead to be used
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to: KA1. Take appropriate action and/or assist in situations which require immediate response KA2. The profession's Code of conduct, Standards of Practice and policies and procedures as set out by the organization KA3. The roles and responsibilities as designated
B. Technical Knowledge	The user/individual on the job needs to know how to: KB1. Establish intrinsic rate and set paced rate, assisting with temporary pacing procedures when required KB2. Measures capture threshold, lead impedance, current drain, and sensitivity KB3. Check if second lead is required KB4. Assess diaphragmatic stimulation and micro lead dislodgement as per protocol KB5. Constantly monitor and record data and advise accordingly KB6. Complete documentation, including registration of leads and generator as well as required reports for the chart KB7. Re-establish rhythm by following institute protocols KB8. Assist with lead ex-plants as per facility protocol
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills The user/ individual on the job needs to: SA1. Record and assess cardiac activity and provide preliminary reports Reading Skills



	The user/individual on the job needs to know and understand how to: SA2. Read the organisational and departmental protocols and new additions SA3. Read new clinical protocols and orders given by medical officer or any other provider institute
	Oral Communication (Listening and Speaking skills) The user/individual on the job needs to know and understand how to: SA4. Interact with patients to make them comfortable and to collect information SA5. Explain procedures to the patient and answer patient's queries SA6. Instruct medication and other post-procedure care to patient SA7. Comfort patient suffering discomfort during a procedure
B. Professional Skills	Decision Making
	The user/individual on the job needs to know and understand: SB1. How to take decisions regarding information received from physician
	Plan and Organize
	The user/individual on the job needs to know and understand: SB2. How to take appropriate action and/or assist in situations which require immediate response
	Customer Centricity
	The user/individual on the job needs to provide appropriate education to the patient and family about: SB3. Placement of the pacemaker generator and leads in relation to the heart SB4. How the pacemaker works and the rate at which it is set SB5. Battery replacement and battery life and replacement procedures SB6. How to take and record the pulse rate SB7. Incision care and signs of infection SB8. Avoid wearing tight-fit clothing over the pacemaker site to reduce irritation and avoid skin breakdown SB9. Carrying the pacemaker identification card at all times SB10. Not to hold or use certain electrical devices over the pacemaker site, including household appliances or tools, garage door openers, antitheft devices, or burglar alarms SB11. Maintaining follow-up care with the physician as recommended
	Problem Solving
	The user/individual on the job needs to know and understand how to: SB12. Use experience and training to respond to the diverse needs of patients
	Analytical Thinking
	The user/individual on the job needs to: SB13. Accurately assess patient's condition, noting level of distress
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB14. Analyse, evaluate and apply the information gathered from observation, experience, reasoning, or communication to act efficiently

HSS/N0106 Assist with implant of pacemakers by establishing lead integrity

NOS Version Control

NOS Code	HSS/N0106		
Credits (NSQF)	TBD	Version number	1.0
Industry	Health	Drafted on	12/05/13
Industry Sub-sector	Allied Health and Paramedics	Last reviewed on	24/07/13
Occupation	Cardiac Care Technician	Next review date	24/12/16



MODERN TECHNICAL EDUCATION SOCIETY



Overview

This Occupational Standard describes the knowledge, understanding and skills required of a Cardiac care technician assisting with insertion of temporary pacemakers.

HSS/N0107

Assist with insertion of temporary pacemakers

National Occupational Standard

Unit Title (Task)	HSS/N0107 Assist with insertion of temporary pacemakers
Description	This OS unit is about cardiac care technician assisting with insertion of temporary pacemakers
	This unit/task covers the following :
Scope	Assisting cardiologist in pacemaker insertion which continuously monitors heart's natural rhythm and will stimulate the heart to beat when it senses that heart rhythm is too slow
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
	To be competent, the user/individual on the job must: PC1. Ensure patient identification PC2. Explain procedure and take informed consent PC3. Prepare table and assist in patient transfer PC4. Ensure that a defibrillator and other resuscitation equipment are immediately accessible PC5. Ensure that strict aseptic technique is used like using a mask, gown and gloves
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to: KA1. The profession's Code of conduct, Standards of Practice and policies and procedures as set out by the organisation KA2. The roles and responsibilities as designated
B. Technical Knowledge	The user/individual on the job needs to know how to: KB1. Prepare insertion site (groin or neck) and drape patient with sterile sheets KB2. Connect cable to pacemaker once pacing lead wire is positioned KB3. Establish a sensing threshold and capture threshold KB4. Assist in setting milli ampere output, sensing and heart rate according to findings KB5. Assist with dismantling of sterile field and clean equipment KB6. Transport patient to designated area while on defibrillator monitor KB7. Position pacing wire correctly and remove the introducer sheath carefully KB8. Perform a chest X-ray to confirm a satisfactory position of the wire and to exclude a pneumothorax
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	The user/ individual on the job needs to: SA1. Record and assess cardiac activity and provide preliminary reports
	Reading Skills



HSS/N0107

Assist with insertion of temporary pacemakers

	The user/individual on the job needs to know and understand how to: SA2. Read the organisational and departmental protocols and new additions SA3. Read new clinical protocols and orders given by medical officer or any other provider institute
	Oral Communication (Listening and Speaking skills) The user/individual on the job needs to know and understand how to: SA4. Interact with patients to make them comfortable and to collect information SA5. Explain procedures to the patient and answer patient's queries SA6. Instruct medication and other post-procedure care to patient SA7. Comfort patient suffering discomfort during a procedure
B. Professional Skills	Decision Making
	The user/individual on the job needs to know and understand: SB1. How to take decisions regarding information received from physician
	Plan and Organize
	The user/individual on the job needs to know and understand: SB2. How to take appropriate action and/or assist in situations which require immediate response
	Customer Centricity
	The user/individual on the job needs to provide appropriate teaching to the patient and family about: SB3. State risks and benefits where applicable SB4. Educate patients' so they can assess their condition and know when to seek assistance
	Problem Solving
	The user/individual on the job needs to know and understand how to: SB5. Use experience and training to respond to the diverse needs of patients
	Analytical Thinking
	The user/individual on the job needs to: SB6. Accurately assess patient's condition, noting level of distress
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB7. Analyse, evaluate and apply the information gathered from observation, experience, reasoning, or communication to act efficiently



Assist with insertion of temporary pacemakers

NOS Version Control

NOS Code	HSS/N0107		
Credits (NSQF)	TBD	Version number	1.0
Industry	Health	Drafted on	12/05/13
Industry Sub-sector	Allied Health and Paramedics	Last reviewed on	24/07/13
Occupation	Cardiac Care Technician	Next review date	24/12/16



Demonstrate proficiency in using equipment

MODERN TECHNICAL EDUCATION SOCIETY



Overview

This Occupational Standard describes the knowledge, understanding and skills required of a Cardiac care technician to use equipment proficiently.

Demonstrate proficiency in using equipment

Unit Code	HSS/N0108
Unit Title (Task)	Demonstrate proficiency in using equipment This OS unit is about cardiac care technician demonstrating proficiency in using equipment.
Description	This unit/task covers the following :
Scope	Selecting, setting up, calibrating, operating, maintaining and troubleshooting a range of commonly used equipment
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
	To be competent, the user/individual on the job must be able to: PC1. Prepare the cardiovascular equipment and hemodynamic monitoring system in preparing for various diagnostic procedure treatment PC2. Prepare the physiologic and analytical equipment during diagnostic and therapeutic procedures performed by the physician PC3. Assists in the performance of diagnostic cardiac equipment PC4. Interpret pressure waveforms and operates all physiological recording equipment PC5. Perform procedures on equipment such as: Calipers Computers/keyboards/databases Single-channel and three channel electrocardiographs Ambulatory ECG recorder/monitor Ambulatory ECG analysis systems Oscilloscopes Treadmills and stress system recording devices Ergometer and bicycle Digital, mercury, aneroid Sphygmomanometers Oxygen saturation devices External pacemakers External defibrillators External pacing systems ECG management systems ECG/BP computer systems Simulators Intravenous pumps Tilt table Stethoscope Resuscitation cart Transtelephonic recorders Oxygen regulators Suction devices Ambulatory blood pressure recorders/monitors Pacing leads Esophageal pacing leads

Demonstrate proficiency in using equipment

	Temporary pacemakers Pacemaker minclinic Pacemaker magnet All types of electrodes Pacemaker system analysers PC6. Identify new equipment and accessories that are needed PC7. Review technical specifications of equipment required PC8. Compare cost/benefits of equipment to assist in purchasing recommendation
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: KA1. Follow protocols for procedure KA2. Regulatory framework for medical equipment KA3. Equipment acquisition within the organisation
B. Technical Knowledge	The user/individual on the job needs to know and understand: KB1. How to use the equipment KB2. The technical specification of equipment KB3. How to properly lift and move various types of equipment
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	The user/ individual on the job needs to: SA1. Note the start and stop time of an equipment during procedure
	Reading Skills
	The user/individual on the job needs to know and understand how to: SA2. Read the instructions on the equipment SA3. Read the different alerts that are displayed on some equipment while operating SA4. Read MSDS
	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA5. Explain equipment's test procedures to patient to obtain cooperation and reduce anxiety
B. Professional Skills	Decision Making
	The user/individual on the job needs to know and understand: SB1. Which equipment to use as per the requirement
	Plan and Organize
	The user/individual on the job needs to know and understand: SB2. How to plan and organise activities that are assigned
	Customer Centricity
	The user/individual on the job needs to know and understand how to: SB3. Communicate effectively with patients and their family, physicians, and other members of the health care team

Demonstrate proficiency in using equipment

	SB4. Maintain patient confidentiality
	Problem Solving
	The user/individual on the job needs to know and understand how to: SB5. Inspect equipment to ensure proper working order and take any corrective actions as required
	Analytical Thinking
	The user/individual on the job needs to: SB6. Know how to perform the procedure
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB7. Analyse, evaluate and apply the information gathered from observation, experience, reasoning, or communication to act efficiently

NOS Version Control

NOS Code	HSS/N0108		
Credits (NSQF)	TBD	Version number	1.0
Industry	Health	Drafted on	12/05/13
Industry Sub-sector	Allied Health and Paramedics	Last reviewed on	24/07/13
Occupation	Cardiac Care Technician	Next review date	24/12/16

Ensure availability of medical and diagnostic supplies

MODERN TECHNICAL EDUCATION SOCIETY



Overview

This Occupational Standard describes the knowledge, understanding and skills required of an allied health professional to ensure adequate availability of diagnostic kits, primary care medicines, treatment and other medical supplies at all times.

Ensure availability of medical and diagnostic supplies

Unit Code	HSS/N9602
Unit Title (Task)	Ensure availability of medical and diagnostic supplies
Description	This OS unit is about ensuring availability of medical and diagnostic supplies to meet actual and anticipated demand. This OS unit is applicable to all allied health professionals required to maintain a supply of medical or diagnostic materials This unit/task covers the following :
Scope	Anticipating demand and ensuring availability of adequate medical and diagnostic supplies
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
	To be competent, the user/individual on the job must be able to: PC1. Maintain adequate supplies of medical and diagnostic supplies PC2. Arrive at actual demand as accurately as possible PC3. Anticipate future demand based on internal, external and other contributing factors as accurately as possible PC4. Handle situations of stock-outs or unavailability of stocks without compromising health needs of patients/ individuals
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: KA1. Centres for restocking supplies KA2. Guidelines on anticipating demand for medical and diagnostic supplies KA3. Contents of all diagnostic and medical kits KA4. Guidelines on procurement and storage of medical and diagnostic kits
B. Technical Knowledge	The user/individual on the job needs to know and understand: KB1. How to arrive at actual demand for medical and diagnostic supplies KB2. How to anticipate demand KB3. How to maintain/ safely store existing supplies KB4. How to maintain records of available supplies KB5. How to request additional supplies
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills The user/ individual on the job needs to know and understand how to: SA1. Write at least one local/ official language used in the local community SA2. Write well enough to be classified as literate SA3. Record availability of supplies SA4. Provide written requests for additional supplies when required
	Reading Skills The user/individual on the job needs to know and understand how to: SA5. Read well enough to be classified as literate SA6. Read records and registers for medical supplies SA7. Read instructions and pamphlets provided as part of training for ordering or

Ensure availability of medical and diagnostic supplies

	maintaining
	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA8. Speak at least one local language SA9. Communicate effectively to request additional supplies when required
B. Professional Skills	Decision Making
	The user/individual on the job needs to know and understand how to: SB1. Decide on the level of anticipated demand SB2. Decide when to procure additional supplies SB3. Decide quantities of medical supplies to request
	Plan and Organize
	The user/individual on the job needs to know and understand: SB4. How to plan availability of medical supplies SB5. How to place requests for supplies ahead of time in order to have adequate supplies at all times
	Customer Centricity
	The user/individual on the job needs to know and understand how to: SB6. Cater to the need of patients/ individuals for specific medical supplies
	Problem Solving
	The user/individual on the job needs to know and understand how to: SB7. Handle non-availability of medical supplies or diagnostic kits when required
	Analytical Thinking
	Not applicable
	Critical Thinking
	Not applicable

NOS Version Control

NOS Code	HSS/N9602		
Credits (NSQF)	TBD	Version number	1.0
Industry	Health	Drafted on	12/05/13
Industry Sub-sector	Allied Health and Paramedics	Last reviewed on	24/07/13
Occupation	Cardiac Care Technician	Next review date	24/12/16

MODERN TECHNICAL EDUCATION SOCIETY



Overview

This Occupational Standard describes the knowledge, understanding, skills required of an Allied Health Professional to recognise the boundaries of the role and responsibilities and working within the level of competence in accordance with legislation, protocols and guidelines.

Act within the limits of one's competence and authority

Unit Code	HSS/N9603
Unit Title (Task)	Act within the limits of one's competence and authority
Description	This OS unit is about recognizing the boundaries of the role and responsibilities and working within the level of competence in accordance with legislation, protocols and guidelines This is applicable to all Allied Health Professionals working in an organised, regulated environment This unit/task covers the following:
Scope	Acting within the limit of one's competence and authority; Knowing one's job role Knowing one's job responsibility Recognizing the job role and responsibilities of co workers Reference: 'This National Occupational Standard is from the UK Skills for Health suite [SFHGEN63, Act within the limits of your competence and authority] It has been tailored to apply to healthcare in India and has been reproduced with their Permission'.
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
	To be competent, the user/individual on the job must be able to: PC1. Adhere to legislation, protocols and guidelines relevant to one's role and field of practice PC2. Work within organisational systems and requirements as appropriate to one's role PC3. Recognise the boundary of one's role and responsibility and seek supervision when situations are beyond one's competence and authority PC4. Maintain competence within one's role and field of practice PC5. Use relevant research based protocols and guidelines as evidence to inform one's practice PC6. Promote and demonstrate good practice as an individual and as a team member at all times PC7. Identify and manage potential and actual risks to the quality and safety of practice PC8. Evaluate and reflect on the quality of one's work and make continuing improvements
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: KA1. The relevant legislation, standards, policies, and procedures followed in the organization KA2. The medical procedures and functioning of required medical equipment KA3. Role and importance of assisting other healthcare providers in delivering care



HSS/N9603

B. Technical

Act within the limits of one's competence and authority

Knowledge	The user/individual on the job needs to know and understand: KB1. The boundaries of one's role and responsibilities and other team members KB2. The reasons for working within the limits of one's competence and authority KB3. The importance of personally promoting and demonstrating good practice KB4. The legislation, protocols and guidelines effecting one's work KB5. The organisational systems and requirements relevant to one's role KB6. The sources of information that can be accessed to maintain an awareness of research and developments in one's area of work KB7. The difference between direct and indirect supervision and autonomous practice, and which combination is most applicable in different circumstances KB8. The risks to quality and safety arising from: - o Working outside the boundaries of competence and authority - o Not keeping up to date with best practice - o Poor communication - o Insufficient support - o Lack of resources KB9. The importance of individual or team compliance with legislation, protocols, and guidelines and organisational systems and requirements KB10. How to Report and minimise risks KB11. The principle of meeting the organisation's needs, and how this should enable one to recognise one's own limitations and when one should seek support from others KB12. The processes by which improvements to protocols/guidelines and organisational systems/requirements should be reported KB13. The procedure for accessing training, learning and development needs for oneself and/or others within one's organisation KB14. The actions that can be taken to ensure a current, clear and accurate understanding of roles and responsibilities is maintained, and how this affects the way one work as an individual or part of a team
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	The user/ individual on the job needs to know and understand how to: SA1. Document reports, task lists, and schedules SA2. Prepare status and progress reports SA3. Record daily activities SA4. Update other co-workers
	Reading Skills
	The user/individual on the job needs to know and understand how to: SA5. Read about changes in legislations and organizational policies SA6. Keep updated with the latest knowledge
	Oral Communication (Listening and Speaking skills)



Act within the limits of one's competence and authority

	The user/individual on the job needs to know and understand how to: SA7. Discuss task lists, schedules, and work-loads with co-workers SA8. Give clear instructions to patients and co-workers SA9. Keep patient informed about progress SA10. Avoid using jargon, slang or acronyms when communicating with a patient
B. Professional Skills	Decision Making
	The user/individual on the job needs to know and understand how to: SB1. Make decisions pertaining to the concerned area of work in relation to job role
	Plan and Organize
	Not applicable
	Customer Centricity
	The user/individual on the job needs to know and understand how to: SB2. Communicate effectively with patients and their family, physicians, and other members of the health care team SB3. Be responsive and listen empathetically to establish rapport in a way that promotes openness on issues of concern SB4. Be sensitive to potential cultural differences SB5. Maintain patient confidentiality SB6. Respect the rights of the patient(s)
	Problem Solving
	Not applicable
	Analytical Thinking
	Not applicable
	Critical Thinking
	Not applicable

Act within the limits of one's competence and authority

NOS Version Control

NOS Code	HSS/N9603		
Credits (NSQF)	TBD	Version number	1.0
Industry	Health	Drafted on	12/05/13
Industry Sub-sector	Allied Health and Paramedics	Last reviewed on	24/07/13
Occupation		Next review date	24/12/16



MODERN TECHNICAL EDUCATION SOCIETY



Overview

This Occupational Standard describes the knowledge, understanding, skills required of an Allied Health Professional to work effectively with other people and integrate one's work the work of other people



Work effectively with others

Unit Code	HSS/N9604
Unit Title (Task)	Work effectively with others
Description	This OS unit is about working effectively with other people who can be part of the immediate team, organisation or external to the team or organisation This OS unit applies to all Allied health professionals working in a team or collaborative environment
Scope	This unit/task covers the following: Working with other people to meet requirements , Sharing information with others to enable efficient delivery of work , Communicating with other team members and people internal or external to the organisation
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
	To be competent, the user/ individual on the job must be able to: PC1. Communicate with other people clearly and effectively PC2. Integrate one's work with other people's work effectively PC3. Pass on essential information to other people on timely basis PC4. Work in a way that shows respect for other people PC5. Carry out any commitments made to other people PC6. Reason out the failure to fulfil commitment PC7. Identify any problems with team members and other people and take the initiative to solve these problems PC8. Follow the organisation's policies and procedures
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	To be competent the user/ individual on the job needs to know and understand: KA1. The people who make up the team and how they fit into the work of the organisation KA2. The responsibilities of the team and their importance to the organisation KA3. The business, mission, and objectives of the organisation KA4. Effective working relationships with the people external to the team, with which the individual works on a regular basis KA5. Procedures in the organisation to deal with conflict and poor working relationships
B. Technical Knowledge	To be competent the user/ individual on the job needs to know and understand: KB1. The importance of communicating clearly and effectively with other people and how to do so face-to-face, by telephone and in writing KB2. The essential information that needs to be shared with other people KB3. The importance of effective working relationships and how these can contribute towards effective working relationships on a day-to-day basis KB4. The importance of integrating ones work effectively with others KB5. The types of working relationships that help people to work well together and the types of relationships that need to be avoided KB6. The types of opportunities an individual may seek out to improve relationships with others KB7. How to deal with difficult working relationships with other people to sort out



Work effectively with others

	problems
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	To be competent, the user / individual on the job needs to know and understand how to: SA1. Communicate essential information in writing SA2. Write effective communications to share information with the team members and other people outside the team
	Reading Skills
	To be competent, the user/individual on the job needs to know and understand how to: SA3. Read and understand essential information
B. Professional Skills	Oral Communication (Listening and Speaking skills)
	To be competent, the user/ individual on the job needs to know and understand how to: SA4. Communicate essential information to colleagues face-to-face or through telecommunications SA5. Question others appropriately in order to understand the nature of the request or compliant
	Decision Making
	To be competent, the user/ individual on the job needs to know and understand how to: SB1. Make decisions pertaining to work
	Plan and Organize
	To be competent, the user/ individual on the job needs to know and understand how to: SB2. Plan and organise files and documents
	Customer Centricity
	To be competent, the user/ individual on the job needs to know and understand how to: SB3. Communicate effectively with patients and their family, physicians, and other members of the health care team SB4. Be capable of being responsive, listen empathetically to establish rapport in a way that promotes openness on issues of concern SB5. Be sensitive to potential cultural differences SB6. Maintain patient confidentiality SB7. Respect the rights of the patient(s)
	Problem Solving
	To be competent, the user/ individual on the job needs to know and understand how to: SB8. Identify problems while working with others and devise effective solutions
	Analytical Thinking
	Not applicable

Work effectively with others

	Critical Thinking
	Not applicable

NOS Version Control

NOS Code	HSS/N9604		
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Industry	Health	Drafted on	12/05/13
Industry Sub-sector	Allied Health and Paramedics	Last reviewed on	24/07/13
Occupation		Next review date	24/12/16



MODERN TECHNICAL EDUCATION SOCIETY



Overview

This Occupational Standard describes the knowledge, understanding, skills required of an Allied Health professional to plan and organise work to meet requirements



Manage work to meet requirements

Unit Code	HSS/N9605
Unit Title	Manage work to meet requirements
Description	This OS unit is about planning and organising work and developing oneself further in the organisation This unit applies to all Allied Health professionals
Scope	This unit/task covers the following: Establishing and managing requirements ,Planning and organising work, ensuring accomplishment of the requirements
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
	To be competent, the user/ individual on the job must be able to: PC1. Clearly establish, agree, and record the work requirements PC2. Utilise time effectively PC3. Ensure his/her work meets the agreed requirements PC4. Treat confidential information correctly PC5. Work in line with the organisation's procedures and policies and within the limits of his/her job role
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	To be competent, the user / individual on the job needs to know and understand: KA1. The relevant policies and procedures of the organisation KA2. The information that is considered confidential to the organisation KA3. The scope of work of the role
B. Technical Knowledge	To be competent, the user/individual on the job needs to know and understand: KB1. The importance of asking the appropriate individual for help when required KB2. The importance of planning, prioritising and organising work KB3. The importance of clearly establishing work requirement KB4. The importance of being flexible in changing priorities when the importance and urgency comes into play KB5. How to make efficient use of time, and to avoid things that may prevent work deliverables from being expedited KB6. The importance of keeping the work area clean and tidy KB7. Areas of work that are not a priority and why it is necessary to keep one's effort in that direction to a minimum KB8. To change work plans when necessary KB9. The importance of confidentiality KB10. The importance in completing work on time
Skills (S)	
A. Core Skills/	Writing Skills



Manage work to meet requirements

Generic Skills	To be competent, the user/ individual on the job needs to know and understand how to: SA1. Report progress and results SA2. Record problems and resolutions
	Reading Skills
	To be competent, the user / individual on the job needs to know and understand how to: SA3. Read organisational policies and procedures SA4. Read work related documents and information shared by different sources
	Oral Communication (Listening and Speaking skills) To be competent, the user/ individual on the job needs to know and understand how to: SA5. Report progress and results SA6. Interact with other individuals SA7. Negotiate requirements and revised agreements for delivering them
B. Professional Skills	Decision Making To be competent, the user/ individual on the job needs to know and understand how to: SB1. Make decisions pertaining to the work
	Plan and Organize To be competent, the user/ individual on the job needs to know and understand how to: SB2. Plan and organise files and documents
	Customer Centricity To be competent, the user/ individual on the job needs to know and understand how to: SB3. Communicate effectively with patients and their family, physicians, and other members of the health care team SB4. Be sensitive to potential cultural differences SB5. Maintain patient confidentiality SB6. Respect the rights of the patient(s)
	Problem Solving To be competent, the user/ individual on the job needs to know and understand how to: SB7. Understand problems and suggest an optimum solution after evaluating possible solutions
	Analytical Thinking
	Not applicable
	Critical Thinking
	Not applicable

Manage work to meet requirements

NOS Version Control

NOS Code	HSS/N9605		
Credits (NSQF)	TBD	Version number	1.0
Industry	Health	Drafted on	12/05/13
Industry Sub-sector	Allied Health and Paramedics	Last reviewed on	24/07/13
Occupation		Next review date	24/12/16



Maintain a safe, healthy, and secure working environment

MODERN TECHNICAL EDUCATION SOCIETY



Overview

This Occupational Standard describes the knowledge, understanding, skills required of an Allied Health Professional to monitor the working environment, and making sure it meets health, safety and security requirements.

Maintain a safe, healthy, and secure working environment

National Occupational Standard

Unit Code	HSS/N9606
Unit Title (Task)	Maintain a safe, healthy, and secure working environment This OS unit is about monitoring the working environment and ensuring a safe, healthy, secure and effective working conditions
Description	This OS unit applies to all Allied Health professionals working within an organised workplace This unit covers the following:
Scope	Complying the health, safety and security requirements and procedures for Workplace Handling any hazardous situation with safely, competently and within the limits of authority Reporting any hazardous situation and breach in procedures to ensure a safe, healthy, secure working environment
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
	To be competent, the user/ individual on the job must be able to: PC1. Identify individual responsibilities in relation to maintaining workplace health safety and security requirements PC2. Comply with health, safety and security procedures for the workplace PC3. Report any identified breaches in health, safety, and security procedures to the designated person PC4. Identify potential hazards and breaches of safe work practices PC5. Correct any hazards that individual can deal with safely, competently and within the limits of authority PC6. Promptly and accurately report the hazards that individual is not allowed to deal with, to the relevant person and warn other people who may get affected PC7. Follow the organisation's emergency procedures promptly, calmly, and efficiently PC8. Identify and recommend opportunities for improving health, safety, and security to the designated person PC9. Complete any health and safety records legibly and accurately
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	To be competent, the user/ individual on the job needs to know and understand: KA1. The importance of health, safety, and security in the workplace KA2. The basic requirements of the health and safety and other legislations and regulations that apply to the workplace KA3. The person(s) responsible for maintaining healthy, safe, and secure workplace KA4. The relevant up-to-date information on health, safety, and security that applies to the workplace KA5. How to report the hazard KA6. The responsibilities of individual to maintain safe, healthy and secure workplace



HSS/N9606

Maintain a safe, healthy, and secure working environment

B. Technical

Knowledge	To be competent, the user / individual on the job needs to know and understand: KB1. Requirements of health, safety and security in workplace KB2. How to create safety records and maintaining them KB3. The importance of being alert to health, safety, and security hazards in the work environment KB4. The common health, safety, and security hazards that affect people working in an administrative role KB5. How to identify health, safety, and security hazards KB6. The importance of warning others about hazards and how to do so until the hazard is dealt with
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	To be competent, the user/ individual on the job needs to know and understand how to: SA1. Report and record incidents
	Reading Skills
	To be competent, the user/ individual on the job needs to know and understand how to: SA2. Read and understand company policies and procedures
B. Professional Skills	Oral Communication (Listening and Speaking skills)
	To be competent, the user/ individual on the job needs to know and understand how to: SA3. Clearly report hazards and incidents with the appropriate level of urgency
	Decision Making
	To be competent, the user/ individual on the job needs to know and understand how to: SB1. Make decisions pertaining to the area of work
	Plan and Organize
	To be competent, the user / individual on the job needs to know and understand how to: SB2. Plan for safety of the work environment
	Customer Centricity
	To be competent, the user / individual on the job needs to know and understand: SB3. Communicate effectively with patients and their family, physicians, and other members of the health care team SB4. Be capable of being responsive, listen empathetically to establish rapport in a way that promotes openness on issues of concern
	Problem Solving
	To be competent, the user/ individual on the job needs to know and understand how to: SB8. Identify hazards, evaluate possible solutions and suggest effective solutions

Maintain a safe, healthy, and secure working environment

	Analytical Thinking
	To be competent, the user needs to know and understand how to: SB9. Analyse the seriousness of hazards
	Critical Thinking
	To be competent, the user needs to know and understand how to: SB10. Analyse, evaluate and apply the information gathered from observation, experience, reasoning, or communication to act efficiently

NOS Version Control

NOS Code	HSS/N9606		
Credits (NSQF)	TBD	Version number	1.0
Industry	Health	Drafted on	12/05/13
Industry Sub-sector	Allied Health and Paramedics	Last reviewed on	24/07/13
Occupation		Next review date	24/12/16

MODERN TECHNICAL EDUCATION SOCIETY



Overview

This Occupational Standard describes the knowledge, understanding and skills required of an Allied Health professional to practice code of conduct setup by the healthcare provider.



Practice code of conduct while performing duties

Unit Title (Task)	HSS/N9607 Practice code of conduct while performing duties
Description	This OS unit is about following the rules, regulations and the code of conduct setup by the healthcare provider. The Allied health professional must adhere to the protocols and guidelines relevant to the field and practice. This OS unit applies to all Allied health professionals working in an organized environment and to whom specific regulations and codes of conduct apply. This unit covers the following:
Scope	Recognizing the guidelines and protocols relevant to the field and practice Following the code of conduct as described by the healthcare provider Demonstrating best practices while on the field
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
	To be competent, the user/individual on the job must be able to: PC1. Adhere to protocols and guidelines relevant to the role and field of practice PC2. Work within organisational systems and requirements as appropriate to the role PC3. Recognise the boundary of the role and responsibility and seek supervision when situations are beyond the competence and authority PC4. Maintain competence within the role and field of practice PC5. Use protocols and guidelines relevant to the field of practice PC6. Promote and demonstrate good practice as an individual and as a team member at all times PC7. Identify and manage potential and actual risks to the quality and patient safety PC8. Maintain personal hygiene and contribute actively to the healthcare ecosystem
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	To be competent, the user/ individual on the job needs to know and understand: KA1. Relevant legislation, standards, policies, and procedures followed in the hospital KA2. How to engage and interact with other providers in order to deliver quality and maintain continued care KA3. Personal hygiene measures and handling techniques
B. Technical Knowledge	To be competent, the user / individual on the job needs to know and understand: KB1. The limitations and scope of the role and responsibilities along with an understanding of roles and responsibilities of others KB2. The importance of working within the limits of one's competence and authority KB3. The detrimental effects of non-compliance KB4. The importance of personal hygiene KB5. The importance of intercommunication skills KB6. The legislation, protocols and guidelines related to the role KB7. The organisational systems and requirements relevant to the role KB8. The sources of information and literature to maintain a constant access to upcoming research and changes in the field KB9. The difference between direct and indirect supervision and autonomous



Practice code of conduct while performing duties

	practice, and which combination is most applicable in different circumstances KB10. Implications to quality and safety arising from: - Working outside the boundaries of competence and authority not keeping up to date with best practice - poor communication - insufficient support - lack of resources KB11. The organizational structure and the various processes related to reporting and monitoring KB12. The procedure for accessing training, learning and development needs
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	To be competent, the user/ individual on the job needs to know and understand how to: SA1. Document reports, task lists, and schedules with co-workers SA2. Prepare status and progress reports related to patient care SA3. Update the physician and the other co-workers
	Reading Skills
	To be competent, the user/ individual on the job needs to know and understand how to: SA4. Read about procedures, regulations and guidelines related to the organization and the profession SA5. Keep updated with the latest knowledge by reading internal communications and legal framework changes related to roles and responsibilities
	Oral Communication (Listening and Speaking skills)
	To be competent, the user/ individual on the job needs to know and understand how to: SA6. Interact with patients SA7. Give clear instructions to patients, patients relatives and other healthcare providers SA8. Avoid using jargon, slang or acronyms, while communicating with a patient
	Decision Making
	To be competent, the user/ individual on the job needs to know and understand how to: SB1. Make decisions based on applicable regulations and codes of conduct when possible conflicts arise SB2. Act decisively by balancing protocols and work at hand
B. Professional Skills	Plan and Organize
	Not applicable
	Customer Centricity
	To be competent, the user / individual on the job needs to know and understand how to: SB3. Communicate effectively with patients and their family, physicians, and other members of the health care team SB4. Maintain patient confidentiality



Practice code of conduct while performing duties

	SB5. Respect the rights of the patient(s)
	SB6. Respond patients' queries and concerns
	SB7. Maintain personal hygiene to enhance patient safety
	Problem Solving
	Not applicable
	Analytical Thinking
	Not applicable
	Critical Thinking
	Not applicable

NOS Version Control

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Follow biomedical waste disposal protocols

MODERN TECHNICAL EDUCATION SOCIETY



Overview

This Occupational Standard describes the knowledge, understanding and skills required of an Allied Health professional to manage biomedical waste



Follow biomedical waste disposal protocols

Unit Code	HSS/N9609
Unit Title (Task)	Follow biomedical waste disposal protocols This OS unit is about the safe handling and management of health care waste.
Description	This unit applies to all Allied Health professionals. This unit/task covers the following:
Scope	Classification of the Waste Generated, Segregation of Biomedical Waste , Proper collection and storage of Waste Reference : 'The content of this National Occupational Standard is drawn from the UK Skills for Health NOS [SFHCHS212 Disposal of clinical and non-clinical waste within healthcare and SFHCHS213 Implement an audit trail for managing waste within healthcare]'
Performance Criteria(P C) w.r.t. the Scope	
Element	Performance Criteria
	To be competent, the user/individual on the job must be able to: PC1. Follow the appropriate procedures, policies and protocols for the method of collection and containment level according to the waste type PC2. Apply appropriate health and safety measures and standard precautions for infection prevention and control and personal protective equipment relevant to the type and category of waste PC3. Segregate the waste material from work areas in line with current legislation and organisational requirements PC4. Segregation should happen at source with proper containment, by using different color coded bins for different categories of waste PC5. Check the accuracy of the labelling that identifies the type and content of waste PC6. Confirm suitability of containers for any required course of action appropriate to the type of waste disposal PC7. Check the waste has undergone the required processes to make it safe for transport and disposal PC8. Transport the waste to the disposal site, taking into consideration its associated risks PC9. Report and deal with spillages and contamination in accordance with current legislation and procedures PC10. Maintain full, accurate and legible records of information and store in correct location in line with current legislation, guidelines, local policies and protocols
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and	The user/individual on the job needs to know and understand: KA1. Basic requirements of the health and safety and other legislations and regulations that apply to the organization KA2. Person(s) responsible for health, safety, and security in the organization KA3. Relevant up-to-date information on health, safety, and security that applies to the organization KA4. Organization's emergency procedures and responsibilities for handling



Follow biomedical waste disposal protocols

its processes)	hazardous situations
B. Technical Knowledge	The user/individual on the job needs to know and understand: KB1. How to categorise waste according to national, local and organisational guidelines KB2. The appropriate approved disposal routes for waste KB3. The appropriate containment or dismantling requirements for waste and how to make the waste safe for disposal KB4. The importance to adhere to the organisational and national waste management principles and procedures KB5. The hazards and risks associated with the disposal and the importance of risk assessments and how to provide these KB6. The personal protective equipment required to manage the different types of waste generated by different work activities KB7. The importance of working in a safe manner when carrying out procedures for biomedical waste management in line with local and national policies and legislation KB8. The required actions and reporting procedures for any accidents, spillages and contamination involving waste KB9. The requirements of the relevant external agencies involved in the transport and receipt of your waste KB10. The importance of segregating different types of waste and how to do this KB11. The safe methods of storage and maintaining security of waste and the permitted accumulation times KB12. The methods for transporting and monitoring waste disposal and the appropriateness of each method to a given scenario KB13. How to report any problems or delays in waste collection and where to seek advice and guidance KB14. The importance of the organisation monitoring and obtaining an assessment of the impact the waste has on the environment KB15. The current national legislation, guidelines, local policies and protocols which affect work practice KB16. The policies and guidance that clarify your scope of practice, accountabilities and the working relationship between yourself and others
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	The user/ individual on the job needs to know and understand how to: SA1. Report and record incidents
	Reading Skills
	The user/individual on the job needs to know and understand how to: SA2. Read and understand company policies and procedures for managing biomedical waste
	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA3. Report hazards and incidents clearly with the appropriate level of urgency
B. Professional Skills	Decision Making



Follow biomedical waste disposal protocols

	The user/individual on the job needs to know and understand how to: SB1. Make decisions pertaining to the area of work SB2. Exhibit commitment to the organization and exert effort and perseverance
	Plan and Organize
	The user/individual on the job needs to know and understand how to: SB3. Organize files and documents SB4. Plan for safety of the work environment SB5. Recommend and implement plan of action
	Customer Centricity
	The user/individual on the job needs to know and understand: SB6. How to make exceptional effort to keep the environment and work place clean
	Problem Solving
	The user/individual on the job needs to know and understand how to: SB7. Identify hazards and suggest effective solutions to identified problems of waste management
	Analytical Thinking
	The user/individual on the job needs to know and understand how to: SB8. Analyse the seriousness of hazards and proper waste management
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB9. Evaluate opportunities to improve health, safety and security SB10. Show understanding and empathy for others

NOS Version Control

NOS Code	HSS/N9609		
Credits (NSQF)	TBD	Version number	1.0
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Industry Sub-sector	Allied Health and Paramedics	Last reviewed on	24/07/13
Occupation		Next review date	24/12/16

Follow infection control policies and procedures

MODERN TECHNICAL EDUCATION SOCIETY



Overview

This Occupational Standard describes the knowledge, understanding, skills required of an Allied Health professional to comply with infection control policies and procedures



Follow infection control policies and procedures

Unit Code	HSS/N9610
Unit Title (Task)	Follow infection control policies and procedures This OS unit is about complying with infection control policies and procedures. It is applicable to workers who are responsible for workplace procedures to maintain Infection control.
Description	This unit applies to all Allied Health professionals. This unit/task covers the following:
Scope	Complying with an effective infection control protocols that ensures the safety of the patient (or end-user of health-related products/services) Maintaining personal protection and preventing the transmission of infections from person to person
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
	To be competent, the user/individual on the job must be able to: PC1. Perform the standard precautions to prevent the spread of infection in accordance with organisation requirements PC2. Perform the additional precautions when standard precautions alone may not be sufficient to prevent transmission of infection PC3. Minimise contamination of materials, equipment and instruments by aerosols and splatter PC4. Identify infection risks and implement an appropriate response within own role and responsibility PC5. Document and report activities and tasks that put patients and/or other workers at risk PC6. Respond appropriately to situations that pose an infection risk in accordance with the policies and procedures of the organization PC7. Follow procedures for risk control and risk containment for specific risks PC8. Follow protocols for care following exposure to blood or other body fluids as required PC9. Place appropriate signs when and where appropriate PC10. Remove spills in accordance with the policies and procedures of the organization PC11. Maintain hand hygiene by washing hands before and after patient contact and/or after any activity likely to cause contamination PC12. Follow hand washing procedures PC13. Implement hand care procedures PC14. Cover cuts and abrasions with water-proof dressings and change as necessary PC15. Wear personal protective clothing and equipment that complies with Indian Standards, and is appropriate for the intended use PC16. Change protective clothing and gowns/aprons daily, more frequently if soiled and where appropriate, after each patient contact PC17. Demarcate and maintain clean and contaminated zones in all aspects of health care work PC18. Confine records, materials and medicaments to a well-designated clean zone

Follow infection control policies and procedures

	PC19. Confine contaminated instruments and equipment to a well-designated contaminated zone PC20. Wear appropriate personal protective clothing and equipment in accordance with occupational health and safety policies and procedures when handling waste PC21. Separate waste at the point where it has been generated and dispose of into waste containers that are colour coded and identified PC22. Store clinical or related waste in an area that is accessible only to authorised persons PC23. Handle, package, label, store, transport and dispose of waste appropriately to minimise potential for contact with the waste and to reduce the risk to the environment from accidental release PC24. Dispose of waste safely in accordance with policies and procedures of the organisation and legislative requirements PC25. Wear personal protective clothing and equipment during cleaning procedures PC26. Remove all dust, dirt and physical debris from work surfaces PC27. Clean all work surfaces with a neutral detergent and warm water solution before and after each session or when visibly soiled PC28. Decontaminate equipment requiring special processing in accordance with quality management systems to ensure full compliance with cleaning, disinfection and sterilisation protocols PC29. Dry all work surfaces before and after use PC30. Replace surface covers where applicable PC31. Maintain and store cleaning equipment
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: KA1. The organization's infection control policies and procedures KA2. Organization requirements relating to immunization, where applicable KA3. Standard precautions KA4. Good personal hygiene practice including hand care
B. Technical Knowledge	The user/individual on the job needs to know and understand: KB1. Additional precautions KB2. Aspects of infectious diseases including: - opportunistic organisms - pathogens KB3. Basic microbiology including: - bacteria and bacterial spores - fungi - viruses legislation KB8. The required actions and reporting procedures for any accidents, spillages and contamination involving waste KB9. The requirements of the relevant external agencies involved in the transport and receipt of your waste KB10. The importance of segregating different types of waste and how to do this



	KB4. How to clean and sterile techniques KB5. The path of disease transmission: - paths of transmission including direct contact and penetrating injuries - risk of acquisition - sources of infecting microorganisms including persons who are carriers, in the incubation phase of the disease or those who are acutely ill KB6. Effective hand hygiene: - procedures for routine hand wash - procedures for surgical hand wash - when hands must be washed KB7. Good personal hygiene practice including hand care KB8. Identification and management of infectious risks in the workplace KB9. How to use personal protective equipment such as: - guidelines for glove use - guidelines for wearing gowns and waterproof aprons - guidelines for wearing masks as required - guidelines for wearing protective glasses KB10. Susceptible hosts including persons who are immune suppressed, have chronic diseases such as diabetes and the very young or very old KB11. Surface cleaning: - cleaning procedures at the start and end of the day - managing a blood or body fluid spill - routine surface cleaning KB12. Sharps handling and disposal techniques KB13. The following: - Follow infection control guidelines - Identify and respond to infection risks - Maintain personal hygiene - Use personal protective equipment - Limit contamination - Handle, package, label, store transport and dispose of clinical and other waste - Clean environmental surfaces
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	The user/ individual on the job needs to know and understand how to:
	SA1. Consistently apply hand washing, personal hygiene and personal protection protocols
	SA2. Consistently apply clean and sterile techniques
	SA3. Consistently apply protocols to limit contamination
	Reading Skills
	The user/individual on the job needs to know and understand how to:
	SA4. Follow instructions as specified in the protocols
	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to:
	SA5. Listen patiently
	SA6. Provide feedback (verbal and non-verbal) to encourage smooth flow of



Follow infection control policies and procedures

	information
B. Professional Skills	Decision Making
	The user/individual on the job needs to know and understand how to: SB1. Take into account opportunities to address waste minimization, environmental responsibility and sustainable practice issues SB2. Apply additional precautions when standard precautions are not sufficient
	Plan and Organize
	The user/individual on the job needs to: SB3. Consistently ensure instruments used for invasive procedures are sterile at time of use (where appropriate) SB4. Consistently follow the procedure for washing and drying hands SB5. Consistently limit contamination SB6. Consistently maintain clean surfaces and manage blood and body fluid spills
	Customer Centricity
	The user/individual on the job needs to know and understand how to: SB7. Be a good listener and be sensitive to patient SB8. Avoid unwanted and unnecessary communication with patients SB9. Maintain eye contact and non-verbal communication
	Problem Solving
	The user/individual on the job needs to know and understand how to: SB10. Communicate only facts and not opinions SB11. Give feedback when required
	Analytical Thinking
	The user/individual on the job needs to know and understand how to: SB12. Coordinate required processes effectively
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB13. Apply, analyse, and evaluate the information gathered from observation, experience, reasoning, or communication, as a guide to belief and action SB14. Take into account opportunities to address waste minimisation, environmental responsibility and sustainable practice issues

Follow infection control policies and procedures

NOS Version Control

NOS Code	HSS/N9610		
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Occupation		Next review date	24/12/16



MODERN TECHNICAL EDUCATION SOCIETY



Overview

This Occupational Standard describes the knowledge, understanding, skills required of an Allied Health professional to monitor and assure quality



Monitor and assure quality

Unit Code	HSS/N9611
Unit Title (Task)	Monitor and assure quality This OS unit is about Assuring quality in all procedures. This unit applies to all Allied Health professionals.
Description	This unit/task covers the following:
Scope	Monitor treatment process/outcomes , Identify problems in treatment process/outcomes , Solve treatment process/outcome problems , Attend class/read publications to continue industry education , Identify needs and expectations of patient/health care professionals
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
	To be competent, the user/individual on the job must be able to: PC1. Conduct appropriate research and analysis PC2. Evaluate potential solutions thoroughly PC3. Participate in education programs which include current techniques, technology and trends pertaining to the dental industry PC4. Read Dental hygiene, dental and medical publications related to quality consistently and thoroughly PC5. Report any identified breaches in health, safety, and security procedures to the designated person PC6. Identify and correct any hazards that he/she can deal with safely, competently and within the limits of his/her authority PC7. Promptly and accurately report any hazards that he/she is not allowed to deal with to the relevant person and warn other people who may be affected PC8. Follow the organisation's emergency procedures promptly, calmly, and efficiently PC9. Identify and recommend opportunities for improving health, safety, and security to the designated person PC10. Complete any health and safety records legibly and accurately
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: KA1. Basic requirements of the health and safety and other legislations and regulations that apply to the organisation KA2. Person(s) responsible for health, safety, and security in the organisation KA3. Relevant up-to-date information on health, safety, and security that applies to the organisation KA4. Organisation's emergency procedures and responsibilities for handling hazardous situations
B. Technical Knowledge	The user/individual on the job needs to know and understand how to: KB1. Evaluate treatment goals, process and outcomes KB2. Identify problems/deficiencies in dental hygiene treatment goals, processes and outcomes KB3. Accurately identify problems in dental hygiene care KB4. Conduct research KB5. Select and implement proper hygiene interventions KB6. Obtain informed consent KB7. Conduct an honest self-evaluation to identify personal and professional

Monitor and assure quality

	strengths and weaknesses KB8. Access and interpret medical, and scientific literature KB9. Apply human needs/motivational theory KB10. Provide thorough and efficient individualised care KB11. Employ methods to measure satisfaction
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	The user/ individual on the job needs to know and understand how to: SA1. Report and record incidents
	Reading Skills
	The user/individual on the job needs to know and understand how to: SA2. Read and understand company policies and procedures
	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA3. Report hazards and incidents clearly with the appropriate level of urgency
B. Professional Skills	Decision Making
	The user/individual on the job needs to know and understand how to: SB1. Make decisions pertaining to the area of work SB2. Exhibit commitment to the organisation and exert effort and perseverance
	Plan and Organize
	The user/individual on the job needs to know and understand how to: SB3. Organise files and documents SB4. Plan for safety of the work environment SB1. Recommend and implement plan of action
	Customer Centricity
	The user/individual on the job needs to know and understand: SB2. How to make exceptional effort to meet patient needs and resolve conflict to patient satisfaction
	Problem Solving
	The user/individual on the job needs to know and understand how to: SB3. Identify hazards and suggest effective solutions to identified problems
	Analytical Thinking
	The user/individual on the job needs to know and understand how to: SB4. Analyse the seriousness of hazards
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB5. Evaluate opportunities to improve health, safety and security SB6. Show understanding and empathy for others

Monitor and assure quality

NOS Version Control

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Occupation		Next review date	24/12/16





CRITERIA FOR ASSESSMENT OF TRAINEES

Job Role Cardiac Care Technician

Qualification Pack HSS/Q0101

Sector Skill Council Healthcare Sector Skill Council

Guidelines for Assessment

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC
3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below)
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criteria
5. To pass the Qualification Pack, every trainee should score as per assessment grid.
6. In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack

Grand Total-1 (Subject Domain)	400
Grand Total-2 (Soft Skills and Communication)	100
Grand Total-(Skills Practical and Viva)	500
Passing Marks (80% of Max. Marks)	400
Grand Total-1 (Subject Domain)	80
Grand Total-2 (Soft Skills and Communication)	20
Grand Total-(Theory)	100
Passing Marks (50% of Max. Marks)	50
Grand Total-(Skills Practical and Viva + Theory)	600
Overall Result	Criteria is to pass in both theory and practical individually. If fail in any one of them, then candidate is fail Skills Practical & Viva
Detailed Break Up of Marks	



Subject Domain		Pick any 2 NOS each of 200 marks totaling 400			
Assessable Outcomes	Assessment Criteria for the Assessable Outcomes	Total Marks (400)	Out Of	Marks Allocation	
				Viva	Skills Practical
1. HSS/ N 0101 Monitor patients' heart rate and rhythm using electrocardiogram (ECG) equipment	PC1. Set the room for taking the ECG readings	200	20	5	15
	PC2. Attach, connect, and operate electrodes from specified body areas to leads from electrocardiograph machine		60	20	40
	PC3. Review patient's record and instructs patients prior to procedures		40	10	30
	PC4. Set the ECG machines and explain the ECG procedures clearly to the patient		40	10	30
	PC5. Monitor patient during procedures and report any abnormal findings		20	10	10
	PC6. Edit and forward results to attending physician for analysis and interpretation		10	5	5
	PC7. Maintains ECG equipment and supplies		10	5	5
	Total		200	65	135
2.HSS/ N 0102: Perform treadmill test (TT) to assess cardiovascular response	PC1. Take consent from patient base on ECG results	200	20	5	15
	PC2. Prepare patient for test		20	5	15
	PC3. Ensure patient identification and review indication for procedure		20	5	15
	PC4. Take pertinent patient history including cardiac risk factors and medications		30	10	20
	PC5. Explain purpose and procedure to the patient and clarify requirements of them for the test		20	10	10
	PC6. Continually observe the patient's condition and reactions, monitor ECG and take required measurements and recordings, at intervals appropriate to patient's symptoms and/or test protocol		60	20	40
	PC7. Assist in evaluating test results		30	10	20
	Total		200	65	135
3.HSS/ N 0103: Assist cardiologist	PC1. Ensure patient identification and explain procedure to the patient	200	20	10	10



Qualifications Pack For Cardiac Care Technician

in assessing cardiac structure and function using cardiac ultrasound	PC2. Record patient's demographic data and vitals		50	20	30
	PC3. Activate machine, calibrate if required		50	20	30
	PC4. Know about heart function and anatomy		30	30	0
	PC5. Prepare patients for ultrasound		50	10	40
	Total		200	90	110
4.HSS/ N 0104: Assist with transesophageal cardiac ultrasound studies	PC1. Ensure patient identification	200	20	10	10
	PC2. Obtain patient's informed consent if required as per the protocols		20	10	10
	PC3. Review indication and explain the procedure and requirements to patient		40	20	20
	PC4. Arrange the set up for transesophageal ultrasound		60	20	40
	PC5. Assemble tray for procedure, including intravenous setup, and draw up medication as required		60	20	40
	Total		200	80	120
5.HSS/ N 0105: Assist with pericardiocentesis procedure by echocardiography	PC1. Ensure patient identification and obtain patient's informed consent	200	40	20	20
	PC2. Explain the indication for the test and the procedure to the patient		60	20	40
	PC3. Set up pericardiocentesis tray		100	20	80
	Total		200	60	140
6.HSS/ N 0106: Assist with implant of pacemakers by establishing lead integrity	PC1. Confirm identity of patient	200	20	10	10
	PC2. Explain procedure and have patient sign informed consent		40	10	30
	PC3. Prepare table and assist in patient transfer		80	20	60
	PC4. Follow the instructions to determine the type of the lead to be used		60	20	40
	Total		200	60	140
7.HSS/ N 0107: Assist with insertion of temporary pacemakers	PC1. Ensure patient identification	200	20	10	10
	PC2. Explain procedure and take informed consent		30	10	20
	PC3. Prepare table and assist in patient transfer		70	30	40
	PC4. Ensure that a defibrillator and other resuscitation equipment are immediately accessible		40	10	30
	PC5. Ensure that strict aseptic technique is used like using a mask, gown and gloves		40	10	30
	Total		200	70	130



Qualifications Pack For Cardiac Care Technician

8. HSS/ N 0108: Demonstrate proficiency in using equipment	PC1. Prepare the cardiovascular equipment and hemodynamic monitoring system in preparing for various diagnostic procedure treatment	200	20	10	10
	PC2. Prepare the physiologic and analytical equipment during diagnostic and therapeutic procedures performed by the physician		20	10	10
	PC3. Assists in the performance of diagnostic cardiac equipment		16	6	10
	PC4. Interpret pressure waveforms and operates all physiological recording equipment		18	6	12
	PC5. Perform procedures on equipment such as:				
	· Calipers		2	0	2
	· Computers/keyboards/databases		2	0	2
	· Single-channel and three channel electrocardiographs		2	0	2
	· Ambulatory ECG recorder/monitor		2	0	2
	· Ambulatory ECG analysis systems		2	0	2
	· Oscilloscopes		2	0	2
	· Treadmills and stress system recording devices		2	0	2
	· Ergometer and bicycle		2	0	2
	· Digital, mercury, aneroid		2	0	2
	· Sphygmomanometers		2	0	2
	· Oxygen saturation devices		2	0	2
	· External pacemakers		2	0	2
	· External defibrillators		2	0	2
	· External pacing systems		2	0	2
	· ECG management systems		2	0	2
	· ECG/BP computer systems		2	0	2
	· Simulators		2	0	2
	· Intravenous pumps		2	0	2
	· Tilt table		2	0	2
	· Stethoscope		2	0	2
	· Resuscitation cart		2	0	2
	· Transtelephonic recorders		2	0	2
	· Oxygen regulators		2	0	2
	· Suction devices		2	0	2
	· Ambulatory blood pressure recorders/monitors		2	0	2
	· Pacing leads		2	0	2
	· Esophageal pacing leads				



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	· Temporary pacemakers		2	0	2
	· Pacemaker minclinic		2	0	2
	· Pacemaker magnet		2	0	2
	· All types of electrodes		2	0	2
	· Pacemaker system analysers		2	0	2
	PC6. Identify new equipment and accessories that are needed		20	10	10
	PC7. Review technical specifications of equipment required		20	10	10
	PC8. Compare cost/benefits of equipment to assist in purchasing recommendations		22	20	2
	Total		200	72	128
9. HSS/ N 9610 (Follow infection control policies and procedures)	PC1. Preform the standard precautions to prevent the spread of infection in accordance with organisation requirements	200	5	0	5
	PC2. Preform the additional precautions when standard precautions alone may not be sufficient to prevent transmission of infection		5	0	5
	PC3. Minimise contamination of materials, equipment and instruments by aerosols and splatter		5	5	0
	PC4. Identify infection risks and implement an appropriate response within own role and responsibility		20	10	10
	PC5. Document and report activities and tasks that put patients and/or other workers at risk		5	0	5
	PC6. Respond appropriately to situations that pose an infection risk in accordance with the policies and procedures of the organization		5	0	5
	PC7. Follow procedures for risk control and risk containment for specific risks		10	0	10
	PC8. Follow protocols for care following exposure to blood or other body fluids as required		10	0	10
	PC9. Place appropriate signs when and where appropriate		20	10	10
	PC10. Remove spills in accordance with the policies and procedures of the organization		5	0	5
	PC11. Maintain hand hygiene by washing hands before and after patient contact and/or after any activity likely to cause contamination		5	0	5
	PC12. Follow hand washing procedures		5	0	5
	PC13. Implement hand care		5	0	5



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	procedures PC14. Cover cuts and abrasions with water-proof dressings and change as necessary				
	PC15. Wear personal protective clothing and equipment that complies with Indian Standards, and is appropriate for the intended use		5	5	0
	PC16. Change protective clothing and gowns/aprons daily, more frequently if soiled and where appropriate, after each patient contact		5	0	5
	PC17. Demarcate and maintain clean and contaminated zones in all aspects of health care work		5	0	5
	PC18. Confine records, materials and medicaments to a well-designated clean zone		20	10	10
	PC19. Confine contaminated instruments and equipment to a well- designated contaminated zone		5	0	5
	PC20. Wear appropriate personal protective clothing and equipment in accordance with occupational health and safety policies and procedures when handling waste		5	0	5
	PC21. Separate waste at the point where it has been generated and dispose of into waste containers that are colour coded and identified		5	5	0
	PC22. Store clinical or related waste in an area that is accessible only to authorised persons		5	0	5
	PC23. Handle, package, label, store, transport and dispose of waste appropriately to minimise potential for contact with the waste and to reduce the risk to the environment from accidental release		5	5	0
	PC24. Dispose of waste safely in accordance with policies and procedures of the organisation and legislative requirements		5	0	5
	PC25. Wear personal protective clothing and equipment during cleaning procedures		5	0	5
	PC26. Remove all dust, dirt and physical debris from work surfaces		5	0	5
	PC27. Clean all work surfaces with a neutral detergent and warm water solution before and after each session or when visibly soiled		5	0	5



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	PC28. Decontaminate equipment requiring special processing in accordance with quality management systems to ensure full compliance with cleaning, disinfection and sterilisation protocols		5	0	5
	PC29. Dry all work surfaces before and after use		5	0	5
	PC30. Replace surface covers where applicable		5	0	5
	PC31. Maintain and store cleaning equipment		5	5	0
	Total		200	55	145
Soft Skills and Communication		Pick one field from both parts each carrying 50 marks totaling 100			
Assessable Outcomes	Assessment Criteria for the Assessable Outcomes	Total Marks (100)	Out Of	Marks Allocation	
				Viva	Observation/ Role Play
Part 1 (Pick one field randomly carrying 50 marks)					
1. Attitude					
HSS/ N 9603 (Act within the limits of one’s competence and authority)	PC1. Adhere to legislation, protocols and guidelines relevant to one’s role and field of practice	30	2	0	2
	PC2. Work within organisational systems and requirements as appropriate to one’s role		2	0	2
	PC3. Recognise the boundary of one’s role and responsibility and seek supervision when situations are beyond one’s competence and authority		8	4	4
	PC4. Maintain competence within one’s role and field of practice		2	0	2
	PC5. Use relevant research based protocols and guidelines as evidence to inform one’s practice		4	2	2
	PC6. Promote and demonstrate good practice as an individual and as a team member at all times		4	2	2
	PC7. Identify and manage potential and actual risks to the quality and safety of practice		4	2	2
	PC8. Evaluate and reflect on the quality of one’s work and make continuing improvements		4	2	2



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			30	12	18
HSS/ N 9607 (Practice Code of conduct while performing duties)	PC1. Adhere to protocols and guidelines relevant to the role and field of practice	20	3	1	2
	PC2. Work within organisational systems and requirements as appropriate to the role		3	1	2
	PC3. Recognise the boundary of the role and responsibility and seek supervision when situations are beyond the competence and authority		3	1	2
	PC4. Maintain competence within the role and field of practice		1	0	1
	PC5. Use protocols and guidelines relevant to the field of practice		4	2	2
	PC6. Promote and demonstrate good practice as an individual and as a team member at all times		1	0	1
	PC7. Identify and manage potential and actual risks to the quality and patient safety		1	0	1
	PC8. Maintain personal hygiene and contribute actively to the healthcare ecosystem		4	2	2
			20	7	13
Attitude Total		50	50	19	31
2. Work Management					
HSS/ N 9602 (Ensure availability of medical and diagnostic supplies)	PC1. Maintain adequate supplies of medical and diagnostic supplies	25	5	5	0
	PC2. Arrive at actual demand as accurately as possible		5	3	2
	PC3. Anticipate future demand based on internal, external and other contributing factors as accurately as possible		10	5	5
	PC4. Handle situations of stock-outs or unavailability of stocks without compromising health needs of patients/ individuals		5	5	0
			25	18	7
HSS/ N 9605 (Manage work to meet requirements)	PC1. Clearly establish, agree, and record the work requirements	25	10	5	5
	PC2. Utilise time effectively		3	0	3
	PC3. Ensure his/her work meets the		3	0	3
	agreed requirements		3	3	0
	PC4. Treat confidential information correctly		6	3	3
	PC5. Work in line with the organisation's procedures and policies and within the limits of his/her job role		25	11	14



Work Management Total		50	50	29	21	
Part 2 (Pick one field as per NOS marked carrying 50 marks)						
1. Team Work						
HSS/ N 9604 (Work effectively with others)	PC1. Communicate with other people clearly and effectively	50	3	0	3	
	PC2. Integrate one’s work with other people’s work effectively		3	0	3	
	PC3. Pass on essential information to other people on timely basis		3	0	3	
	PC4. Work in a way that shows respect for other people		3	0	3	
	PC5. Carry out any commitments made to other people		6	6	0	
	PC6. Reason out the failure to fulfil commitment		6	6	0	
	PC7. Identify any problems with team members and other people and take the initiative to solve these problems		16	8	8	
	PC8. Follow the organisation’s policies and procedures		10	4	6	
			50	24	26	
	2. Safety management					
HSS/ N 9606 (Maintain a safe, healthy, and secure working environment)	PC1. Identify individual responsibilities in relation to maintaining workplace health safety and security requirements	50	6	2	4	
	PC2. Comply with health, safety and security procedures for the workplace		4	0	4	
	PC3. Report any identified breaches in health, safety, and security procedures to the designated person		4	3	1	
	PC4. Identify potential hazards and breaches of safe work practices		6	4	2	
	PC5. Correct any hazards that individual can deal with safely, competently and within the limits of authority		6	4	2	
	PC6. Promptly and accurately report the hazards that individual is not allowed to deal with, to the relevant person and warn other people who may get affected		6	4	2	
	PC7. Follow the organisation’s emergency procedures promptly, calmly, and efficiently		6	2	4	
	PC8. Identify and recommend opportunities for improving health, safety, and security to the designated person		6	4	2	



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	PC9. Complete any health and safety records legibly and accurately		6	2	4
			50	25	25
3. Waste Management					
HSS/ N 9609 (Follow biomedical waste disposal protocols)	PC1. Follow the appropriate procedures, policies and protocols for the method of collection and containment level according to the waste type	50	6	2	4
	PC2. Apply appropriate health and safety measures and standard precautions for infection prevention and control and personal protective equipment relevant to the type and category of waste		8	4	4
	PC3. Segregate the waste material from work areas in line with current legislation and organisational requirements		4	0	4
	PC4. Segregation should happen at source with proper containment, by using different colour coded bins for different categories of waste		8	4	4
	PC5. Check the accuracy of the labelling that identifies the type and content of waste		4	2	2
	PC6. Confirm suitability of containers for any required course of action appropriate to the type of waste disposal		4	4	0
	PC7. Check the waste has undergone the required processes to make it safe		4	4	0
	PC8. Transport the waste to the disposal site, taking into consideration its associated risks		4	4	0
	PC9. Report and deal with spillages and contamination in accordance with current legislation and procedures		4	4	0
	PC10. Maintain full, accurate and legible records of information and store in correct location in line with current legislation, guidelines, local policies and protocols		4	4	0
			50	32	18
4. Quality Assurance					
HSS/ N 9611: Monitor and assure quality	PC1. Conduct appropriate research and analysis	50	6	2	4
	PC2. Evaluate potential solutions thoroughly		8	4	4



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	PC3. Participate in education programs which include current techniques, technology and trends pertaining to the dental industry		4	0	4
	PC4. Read Dental hygiene, dental and medical publications related to quality consistently and thoroughly		8	4	4
	PC5. Report any identified breaches in health, safety, and security procedures to the designated person		4	2	2
	PC6. Identify and correct any hazards that he/she can deal with safely, competently and within the limits of his/her authority		4	4	0
	PC7. Promptly and accurately report any hazards that he/she is not allowed to deal with to the relevant person and warn other people who may be affected		4	4	0
	PC8. Follow the organisation's emergency procedures promptly, calmly, and efficiently		4	4	0
	PC9. Identify and recommend opportunities for improving health, safety, and security to the designated person		4	4	0
	PC10. Complete any health and safety records legibly and accurately		4	4	0
				50	32
Detailed Break Up of Marks		Theory			
Subject Domain		Pick all NOS totalling 80 marks			
National Occupational Standards (NOS)	Assessment Criteria for the Assessable Outcomes	Weightage	Marks Allocation		
			Theory		
1. HSS/ N 0101 Monitor patients' heart rate and rhythm using electrocardiogram (ECG) equipment	PC1. Set the room for taking the ECG readings	9	9		
	PC2. Attach, connect, and operate electrodes from specified body areas to leads from electrocardiograph machine				
	PC3. Review patient's record and instructs patients prior to procedures				
	PC4. Set the ECG machines and explain the ECG procedures clearly to the patient				
	PC5. Monitor patient during procedures and report any abnormal findings				



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	PC6. Edit and forward results to attending physician for analysis and interpretation		
	PC7. Maintains ECG equipment and supplies		
	Total		9
2.HSS/ N 0102: Perform treadmill test (TT) to assess cardiovascular response	PC1. Take consent from patient base on ECG results	9	9
	PC2. Prepare patient for test		
	PC3. Ensure patient identification and review indication for procedure		
	PC4. Take pertinent patient history including cardiac risk factors and medications		
	PC5. Explain purpose and procedure to the patient and clarify requirements of them for the test		
	PC6. Continually observe the patient's condition and reactions, monitor ECG and take required measurements and recordings, at intervals appropriate to patient's symptoms and/or test protocol		
	PC7. Assist in evaluating test results		
	Total		9
3.HSS/ N 0103: Assist cardiologist in assessing cardiac structure and function using cardiac ultrasound	PC1. Ensure patient identification and explain procedure to the patient	9	9
	PC2. Record patient's demographic data and vitals		
	PC3. Activate machine, calibrate if required		
	PC4. Know about heart function and anatomy		
	PC5. Prepare patients for ultrasound		
	Total		9
4.HSS/ N 0104: Assist with transesophageal cardiac ultrasound studies	PC1. Ensure patient identification	9	9
	PC2. Obtain patient's informed consent if required as per the protocols		
	PC3. Review indication and explain the procedure and requirements to patient		
	PC4. Arrange the set up for transesophageal ultrasound		
	PC5. Assemble tray for procedure, including intravenous setup, and draw up medication as required		
	Total		9
5.HSS/ N 0105: Assist with pericardiocentesis procedure by echocardiography	PC1. Ensure patient identification and obtain patient's informed consent	9	9
	PC2. Explain the indication for the test and the procedure to the patient		
	PC3. Set up pericardiocentesis tray		



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	Total		9
6.HSS/ N 0106: Assist with implant of pacemakers by establishing lead integrity	PC1. Confirm identity of patient	9	9
	PC2. Explain procedure and have patient sign informed consent		
	PC3. Prepare table and assist in patient transfer		
	PC4. Follow the instructions to determine the type of the lead to be used		
	Total		9
7.HSS/ N 0107: Assist with insertion of temporary pacemakers	PC1. Ensure patient identification	9	9
	PC2. Explain procedure and take informed consent		
	PC3. Prepare table and assist in patient transfer		
	PC4. Ensure that a defibrillator and other resuscitation equipment are immediately accessible		
	PC5. Ensure that strict aseptic technique is used like using a mask, gown and gloves		
	Total		9
8. HSS/ N 0108: Demonstrate proficiency in using equipment	PC1. Prepare the cardiovascular equipment and hemodynamic monitoring system in preparing for various diagnostic procedure treatment	9	9
	PC2. Prepare the physiologic and analytical equipment during diagnostic and therapeutic procedures performed by the physician		
	PC3. Assists in the performance of diagnostic cardiac equipment		
	PC4. Interpret pressure waveforms and operates all physiological recording equipment		
	PC5. Perform procedures on equipment such as:		
	· Calipers		
	· Computers/keyboards/databases		
	· Single-channel and three channel electrocardiographs		
	· Ambulatory ECG recorder/monitor		
	· Ambulatory ECG analysis systems		
	· Oscilloscopes		
	· Treadmills and stress system recording devices		
	· Ergometer and bicycle		
	· Digital, mercury, aneroid		
	· Sphygmomanometers		
	· Oxygen saturation devices		
	· External pacemakers		
	· External defibrillators		
	· External pacing systems		



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	· ECG management systems · ECG/BP computer systems · Simulators · Intravenous pumps · Tilt table · Stethoscope · Resuscitation cart · Transtelephonic recorders · Oxygen regulators · Suction devices · Ambulatory blood pressure recorders/monitors · Pacing leads · Esophageal pacing leads · Temporary pacemakers · Pacemaker minclinic · Pacemaker magnet · All types of electrodes · Pacemaker system analysers		
	PC6. Identify new equipment and accessories that are needed PC7. Review technical specifications of equipment required PC8. Compare cost/benefits of equipment to assist in purchasing recommendations		
	Total		9
9. HSS/ N 9610 (Follow infection control policies and procedures)	PC1. Perform the standard precautions to prevent the spread of infection in accordance with organisation requirements PC2. Perform the additional precautions when standard precautions alone may not be sufficient to prevent transmission of infection PC3. Minimise contamination of materials, equipment and instruments by aerosols and splatter PC4. Identify infection risks and implement an appropriate response within own role and responsibility PC5. Document and report activities and tasks that put patients and/or other workers at risk PC6. Respond appropriately to situations that pose an infection risk in accordance with the policies and procedures of the organization PC7. Follow procedures for risk control and risk containment for specific risks PC8. Follow protocols for care following exposure to blood or other body fluids as required	8	8



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PC9. Place appropriate signs when and where appropriate	
PC10. Remove spills in accordance with the policies and procedures of the organization	
PC11. Maintain hand hygiene by washing hands before and after patient contact and/or after any activity likely to cause contamination	
PC12. Follow hand washing procedures	
PC13. Implement hand care procedures	
PC14. Cover cuts and abrasions with water-proof dressings and change as necessary	
PC15. Wear personal protective clothing and equipment that complies with Indian Standards, and is appropriate for the intended use	
PC16. Change protective clothing and gowns/aprons daily, more frequently if soiled and where appropriate, after each patient contact	
PC17. Demarcate and maintain clean and contaminated zones in all aspects of health care work	
PC18. Confine records, materials and medicaments to a well-designated clean zone	
PC19. Confine contaminated instruments and equipment to a well-designated contaminated zone	
PC20. Wear appropriate personal protective clothing and equipment in accordance with occupational health and safety policies and procedures when handling waste	
PC21. Separate waste at the point where it has been generated and dispose of into waste containers that are colour coded and identified	
PC22. Store clinical or related waste in an area that is accessible only to authorised persons	
PC23. Handle, package, label, store, transport and dispose of waste appropriately to minimise potential for contact with the waste and to reduce the risk to the environment from accidental release	
PC24. Dispose of waste safely in accordance with policies and procedures of the organisation and legislative requirements	
PC25. Wear personal protective clothing and equipment during cleaning procedures	
PC26. Remove all dust, dirt and physical debris from work surfaces	



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	PC27. Clean all work surfaces with a neutral detergent and warm water solution before and after each session or when visibly soiled		
	PC28. Decontaminate equipment requiring special processing in accordance with quality management systems to ensure full compliance with cleaning, disinfection and sterilisation protocols		
	PC29. Dry all work surfaces before and after use		
	PC30. Replace surface covers where applicable		
	PC31. Maintain and store cleaning equipment		
	Total		
Soft Skills and Communication		Select each part each carrying 10 marks totalling 20	
National Occupational Standards (NOS)	Assessment Criteria for the Assessable Outcomes	Weightage	Marks Allocation
			Theory
Part 1 (Pick one field randomly carrying 50 marks)			
1. Attitude			
HSS/ N 9603 (Act within the limits of one’s competence and authority)	PC1. Adhere to legislation, protocols and guidelines relevant to one’s role and field of practice	2	2
	PC2. Work within organisational systems and requirements as appropriate to one’s role		
	PC3. Recognise the boundary of one’s role and responsibility and seek supervision when situations are beyond one’s competence and authority		
	PC4. Maintain competence within one’s role and field of practice		
	PC5. Use relevant research based protocols and guidelines as evidence to inform one’s practice		
	PC6. Promote and demonstrate good practice as an individual and as a team member at all times		
	PC7. Identify and manage potential and actual risks to the quality and safety of practice		
	PC8. Evaluate and reflect on the quality of one’s work and make continuing improvements		
	Total		2



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HSS/ N 9607 (Practice Code of conduct while performing duties)	PC1. Adhere to protocols and guidelines relevant to the role and field of practice	2	2
	PC2. Work within organisational systems and requirements as appropriate to the role		
	PC3. Recognise the boundary of the role and responsibility and seek supervision when situations are beyond the competence and authority		
	PC4. Maintain competence within the role and field of practice		
	PC5. Use protocols and guidelines relevant to the field of practice		
	PC6. Promote and demonstrate good practice as an individual and as a team member at all times		
	PC7. Identify and manage potential and actual risks to the quality and patient safety		
	PC8. Maintain personal hygiene and contribute actively to the healthcare ecosystem		
Total			2
Attitude Total		4	4
2. Work Management			
HSS/ N 9602 (Ensure availability of medical and diagnostic supplies)	PC1. Maintain adequate supplies of medical and diagnostic supplies	4	4
	PC2. Arrive at actual demand as accurately as possible		
	PC3. Anticipate future demand based on internal, external and other contributing factors as accurately as possible		
	PC4. Handle situations of stock-outs or unavailability of stocks without compromising health needs of patients/ individuals		
Total			4
HSS/ N 9605 (Manage work to meet requirements)	PC1. Clearly establish, agree, and record the work requirements	2	2
	PC2. Utilise time effectively		
	PC3. Ensure his/her work meets the agreed requirements		
	PC4. Treat confidential information correctly		
	PC5. Work in line with the organisation's procedures and policies and within the limits of his/her job role		
Total			2
Work Management Total		4	6
Part I Total		10	10
Part 2 (Pick one field as per NOS marked carrying 50 marks)			
1. Team Work			



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HSS/ N 9604 (Work effectively with others)	PC1. Communicate with other people clearly and effectively	2	2
	PC2. Integrate one’s work with other people’s work effectively		
	PC3. Pass on essential information to other people on timely basis		
	PC4. Work in a way that shows respect for other people		
	PC5. Carry out any commitments made to other people		
	PC6. Reason out the failure to fulfil commitment		
	PC7. Identify any problems with team members and other people and take the initiative to solve these problems		
	PC8. Follow the organisation’s policies and procedures		
	Total		
	2. Safety management		
HSS/ N 9606 (Maintain a safe, healthy, and secure working environment)	PC1. Identify individual responsibilities in relation to maintaining workplace health safety and security requirements	2	2
	PC2. Comply with health, safety and security procedures for the workplace		
	PC3. Report any identified breaches in health, safety, and security procedures to the designated person		
	PC4. Identify potential hazards and breaches of safe work practices		
	PC5. Correct any hazards that individual can deal with safely, competently and within the limits of authority		
	PC6. Promptly and accurately report the hazards that individual is not allowed to deal with, to the relevant person and warn other people who may get affected		
	PC7. Follow the organisation’s emergency procedures promptly, calmly, and efficiently		
	PC8. Identify and recommend opportunities for improving health, safety, and security to the designated person		
	PC9. Complete any health and safety records legibly and accurately		
	Total		2
3. Waste Management			
HSS/ N 9609 (Follow biomedical waste disposal)	PC1. Follow the appropriate procedures, policies and protocols for the method of collection and containment level according to the waste type	4	4



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protocols)	PC2. Apply appropriate health and safety measures and standard precautions for infection prevention and control and personal protective equipment relevant to the type and category of waste		
	PC3. Segregate the waste material from work areas in line with current legislation and organisational requirements		
	PC4. Segregation should happen at source with proper containment, by using different colour coded bins for different categories of waste		
	PC5. Check the accuracy of the labelling that identifies the type and content of waste		
	PC6. Confirm suitability of containers for any required course of action appropriate to the type of waste disposal		
	PC7. Check the waste has undergone the required processes to make it safe for transport and disposal		
	PC8. Transport the waste to the disposal site, taking into consideration its associated risks		
	PC9. Report and deal with spillages and contamination in accordance with current legislation and procedures		
	PC10. Maintain full, accurate and legible records of information and store in correct location in line with current legislation, guidelines, local policies and protocols		
Total			4
4. Quality Assurance			
HSS/ N 9611: Monitor and assure quality	PC1. Conduct appropriate research and analysis	2	2
	PC2. Evaluate potential solutions thoroughly		
	PC3. Participate in education programs which include current techniques, technology and trends pertaining to the dental industry		
	PC4. Read Dental hygiene, dental and medical publications related to quality consistently and thoroughly		
	PC5. Report any identified breaches in health, safety, and security procedures to the designated person		
	PC6. Identify and correct any hazards that he/she can deal with safely, competently and within the limits of his/her authority		
	PC7. Promptly and accurately report any hazards that he/she is not allowed to deal with to the relevant person and warn other people who may be affected		
	PC8. Follow the organisation's emergency procedures promptly, calmly, and efficiently		



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	PC9. Identify and recommend opportunities for improving health, safety, and security to the designated person		
	PC10. Complete any health and safety records legibly and accurately		
	Total		2
Part 2 Total		10	10

