







## **Model Curriculum**

## **Cardiac Care Technician**

**SECTOR: HEALTHCARE** 

**SUB-SECTOR: ALLIED HEALTH & PARAMEDICS** 

OCCUPATION: CARDIAC CARE TECHNICIAN

**REF ID: HSS/Q0101, VERSION 1.0** 

**NSQF LEVEL: 4** 















## Certificate

### CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

HEALTHCARE SECTOR SKILL COUNCIL

for the

#### MODEL CURRICULUM

Complying to National Occupational Standards of Job Role/ Qualification Pack: '<u>Cardiac Care Technician</u>' QP No. '<u>HSS/Q 0101 NSQF Level 4</u>'

Date of Issuance:

November 30th, 2015

Valid up to:

November 29th, 2016

\* Valid up to the next review date of the Qualification Pack

Authorised Signatory
(Healthcare Sector Skill Council)









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### **CURRICULUM / SYLLABUS**

This program is aimed at training candidates for the job of a "Cardiac Care Technician", in the "Healthcare" Sector/Industry and aims at building the following key competencies amongst the learner

Program Name	<cardiac care="" technician=""></cardiac>		
Qualification Pack Name & Reference ID.	HSS/Q0101, version 1.0	)	
Version No.	1.0	Version Update Date	15 – 12 – 2015
Pre-requisites to Training	Class XII in Science		
	Or		
	Level 3 ECG Technician w	ith Experience of minimum 3 Ye	ears
Training Outcomes	<ul> <li>Independently han diagnosis &amp; treatm</li> <li>Know and apply the control and aseptic</li> <li>Perform invasive at therapeutic interversupervision</li> <li>Ensure availability</li> <li>Identify and know procedures</li> <li>Acquire sound know</li> </ul>	e principles of sterilization, c	evant to heart diseases, lisinfection, infection  xaminations and lood vessels under  pplies ent used in different s and able to assist in all.









This course encompasses 17 out of 17 National Occupational Standards (NOS) of "Cardiac Care Technician" Qualification Pack issued by "SSC: Healthcare Sector Skill Council".

S.No	Module	Key Learning Outcomes	<b>Equipment Required</b>
2.	Function of the Cardiac department in a variety of settings (hospital, clinic, diagnostic center, mobile service)  Theory Duration (hh:mm) 05:00  Practical Duration (hh:mm) 05:00  Corresponding NOS Code Introduction  Introduction To Human Body; Structure & Function  Theory Duration (hh:mm) 30:00  Practical Duration (hh:mm) 10:00  Corresponding NOS Code HSS/ N 0101, 0102, 0103, 0104, 0105	<ul> <li>Basic understanding of Healthcare Service Providers (primary, secondary &amp; tertiary)</li> <li>Basic understanding of cardiac department in a hospital</li> <li>Basic understanding of Cath lab, CCU, invasive and non invasive labs and various department pertaining to heart ailments/diagnosis/treatment</li> <li>Understanding different parts of body</li> <li>Basic sensitization towards different types of body systems</li> </ul>	Self learning and understanding Mannequin, chart and poster demonstration, heart impressions for easy learning and understanding  Self learning and understanding  Mannequin, chart and poster demonstration, heart impressions for easy learning and understanding
3.	Role of Cardiac Care Technician  Theory Duration (hh:mm) 20:00	<ul> <li>To develop broad understanding of the functions to be performed by CCT</li> <li>To understand various types of procedures carried out in the cardiac catheterization laboratory and other labs carrying out diagnostic services in cardiology</li> <li>To gain broad understanding regarding:</li> </ul>	Self learning and understanding Mannequin, chart and poster demonstration, heart impressions for easy learning and understanding









S.No	Module	Key Learning Outcomes	<b>Equipment Required</b>
	Practical Duration (hh:mm) 20:00  Corresponding NOS Code HSS/ N 0101, 0102, 0103, 0104, 0105, 0106, 0107, 0108, 9602	<ul> <li>Type of Sample</li> <li>Sample Handling</li> <li>different equipment useful &amp; correct method for blood sample collection</li> <li>correct procedure of sample transportation.</li> <li>To exhibit Ethical Behavior and understanding of administrative functions of CCT</li> <li>To understand the need for counselling patient and family before, during and after the procedure(s)</li> <li>To understand the need for engagement and interaction with other providers in order to maintain quality and continuous care.</li> </ul>	
4.	Personnel Hygiene Theory Duration (hh:mm) 10:00  Practical Duration (hh:mm) 10:00  Corresponding NOS Code HSS / N / 5204, HSS/N 5201, HSSC/N 5206	<ul> <li>To develop understanding of the concept of Healthy Living</li> <li>To develop understanding &amp; procedures of Hand Hygiene</li> <li>To develop techniques of Grooming</li> <li>To be equipped with Techniques of use of PPE</li> <li>To ensure vaccination against common Infectious Diseases.</li> </ul>	Self learning and understanding Mannequin, chart and poster demonstration, heart impressions for easy learning and understanding
5.	Role of CCT- Sanitation , Safety & First Aid  Theory Duration (hh:mm) 30:00  Practical Duration (hh:mm) 30:00	<ul> <li>To understand regarding environmental safety</li> <li>To understand regarding major safety and security requirement at a health care unit</li> <li>To develop an understanding for handling the hazardous situation safely.</li> <li>Describe basics of first aidTo develop understanding and precautions to ensure self safety</li> <li>To understand the role of an CCT in monitoring healthy and safe environment.</li> <li>To understand the safety measures for disabled, pediatric &amp; geriatric patients</li> <li>To understand the impact of medical negligence in clinical management and their</li> </ul>	Patient safety tools such as wheel chairs, trolleys, side rails, PPE, First Aid kit, betadine, cotton, bandages, sanitizers, disinfectants etc









S.No	Module	Key Learning Outcomes	<b>Equipment Required</b>
	Corresponding NOS Code HSS/ N 9609, 9603, 9606, 9610	<ul> <li>different types</li> <li>To understand Surgical Site Infection and measures to prevent them</li> <li>To understand various strategies which can be initiated for minimizing risk for patients</li> <li>To develop broad understanding regarding role of hospital on the occurrence of a disaster</li> <li>To understand fire prevention strategies and electrical safety measures which should be known to health worker</li> </ul>	
6.	Bio Medical Waste Management  Theory Duration (hh:mm) 10:00  Practical Duration (hh:mm) 10:00  Corresponding NOS Code HSS/N 5201, HSS/N 5202, HSS/N 5203, HSS/N 5205, HSS/N 5206	<ul> <li>To gain understanding of importance of proper and safe disposal of bio-medical waste &amp; treatment</li> <li>To gain understanding of categories of biomedical waste</li> <li>To learn about disposal of bio-medical waste – colour coding, types of containers, transportation of waste, etc.</li> <li>To gain broad understanding of standards for bio-medical waste disposal</li> <li>To gain broad understanding of means of biomedical waste treatment</li> <li>To understand the role of an infection control team</li> </ul>	Different coded color bins, different variety of bio medical waste management, Visit to treatment plan of bio medical waste etc.
7	Soft Skills & Communication-I  Theory Duration (hh:mm) 05:00  Practical Duration (hh:mm) 15:00  Corresponding NOS Code HSS / N/9603, HSS/N/9604 & HSS/N/9605	<ul> <li>Understand art of effective communication</li> <li>Able to handle effective communication with Patients &amp; Family</li> <li>Able to handle effective Communication with Peers/ colleagues using medical terminology in communication</li> <li>Learn basic reading and writing skills</li> <li>Learn sentence formation</li> <li>Learn grammar and composition</li> <li>Learn how to enhance vocabulary</li> <li>Learn problem solving</li> <li>Understand need for customer service and service excellence in Medical service</li> <li>Understand work ethics in hospital set up</li> </ul>	Self-learning and understanding









S.No	Module	Key Learning Outcomes	<b>Equipment Required</b>
		Learn Goal setting, team building, team work, time management, thinking and reasoning & communicating with others	
8.	Anatomy and physiology of the cardiovascular system - Detailed anatomy and physiology of the heart  Theory Duration (hh:mm) 20:00  Practical Duration (hh:mm) 10:00  Corresponding NOS Code HSS/ N 0101, 0102, 0103, 0105, 0104, 0106, 0107	<ul> <li>To develop an understanding of Cardiovascular System</li> <li>Basic understanding regarding size, shape, location and different layers of the heart</li> <li>Basic understanding of SA node and its functional significance</li> <li>To understand the coronary circulation</li> <li>What all are the different sounds produced in the heart and what is its significance</li> </ul>	Mannequin, E-modules, charts of different body parts
9	Introduction to common heart diseases their processes and terminology  Theory Duration (hh:mm) 40:00  Practical Duration (hh:mm) 10:00  Corresponding NOS Code HSS/N 0101, 0102, 0103, 0105, 0104, 0106, 0107	<ul> <li>To understand cardiovascular diseases &amp; risk factors behind occurrence of cardiac abnormalities</li> <li>To develop an understanding regarding various diseases of heart</li> <li>To understand the significance of coronary circulation, systemic circulation, types of vessels etc.</li> <li>To Identify the warning signs and symptoms of heart related disease condition</li> </ul>	Mannequin, E-modules, charts of different body parts









S.No	Module	Key Learning Outcomes	Equipment Required
10	Electrocardiography and Echocardiography Theory Duration (hh:mm) 20:00 Practical Duration (hh:mm) 30:00  Corresponding NOS Code HSS/ N 0101, 0104, 0104, 0105, 9604, 9602, 0108, 9603	<ul> <li>To develop understanding regarding ECG &amp; it's procedure</li> <li>Basic understanding of different wave forms in ECG &amp; common interpretation</li> <li>To understand the Tilt Table Testing</li> <li>Enumerate the measures to be taken before, after and during ECG procedure</li> <li>To develop an understanding regarding Echocardiography</li> <li>Explain the position of transducersTo understand the role of CCT while assisting cardiologist during Echocardiography / cardiac ultrasound</li> </ul>	Patient Couch, ECG Machine, leads, pads, gauges, tissue paper, Tilt Table for test, mannequin, hand sanitizer, PPE, ECHO machine access, transducer, patient jelly
11.	Infection Control Measures - Policies and Procedures  Theory Duration (hh:mm) 15:00  Practical Duration (hh:mm) 15:00  Corresponding NOS Code HSS/ N 9610	<ul> <li>To understand the importance of hand washing and its steps</li> <li>To understand; Needle Stick Injuries (NSI)</li> <li>To gain understanding regarding transmission based precautions and &amp; its types</li> <li>To understand the meaning of ventilation and state it's clinical significance</li> <li>To understand the principles of linen management</li> <li>To understand the process of cleaning, sterilization and disinfection of equipment and lab along with it's significance</li> <li>To understand various occupational hazards for a health worker</li> </ul>	Hand sanitizers, PPE, Hand washing techniques, steriliser, disinfectants, policies and procedures for infection control
12.	Basic Life Support  Theory Duration (hh:mm) 15:00  Practical Duration (hh:mm) 15:00  Corresponding NOS Code HSS/ N 9610	<ul> <li>Sensitization &amp; overview regarding Cardiac Arrest</li> <li>To understand regarding fundamentals of early defibrillation</li> <li>To understand principles of BLS (Adult chain of survival, CABD's of giving CPR),</li> <li>To understand operation of AED</li> <li>Principles of Adult BLS/Child BLS/Infant BLS</li> </ul>	Emergency kits, mannequins, defibrillator, AED's









S.No	Module	Key Learning Outcomes	Equipment Required
13.	Soft Skills And Communication II  Theory Duration (hh:mm) 10:00  Practical Duration (hh:mm) 10:00  Corresponding NOS Code Introductory	<ul> <li>Learn objection handling</li> <li>Learn Telephone and Email etiquettes</li> <li>Learn Basic computer working like feeding the data, saving the data and retrieving the data.</li> <li>Learn to analyze, evaluate and apply the information gathered from observation, experience, reasoning, or communication to act efficiently</li> <li>Learn planning and organization of work</li> <li>Learn identification of rapidly changing situations and adapt accordingly</li> <li>Learn decision making ability</li> </ul>	Self-Learning and understanding
14.	An introduction to the components, function, and proper use of the EKG/ECG machine Normal anatomy of the chest wall for proper lead placement  Theory Duration (hh:mm) 05:00  Practical Duration (hh:mm) 15:00  Corresponding NOS Code (HSS /N 0101)	<ul> <li>To understand about ambulatory ECG and it's significance</li> <li>To understand regarding different types of Ambulatory ECG</li> <li>To understand how to prepare and position the patient for ECG</li> <li>Understand proper placement of leads on chest wall for ECG</li> <li>To understand the various complications associated with Exercise ECG</li> </ul>	Patient Couch, ECG Machine, leads, pads, gauges, tissue paper, Tilt Table for test, mannequin, hand sanitizer, PPE, ECHO machine access, transducer, patient jelly
15.	Treadmill Test  Theory Duration (hh:mm) 20:00  Practical Duration (hh:mm) 20:00	<ul> <li>To develop an understanding regarding treadmill test</li> <li>To understand regarding different type of Stress TEST</li> <li>To understand the procedure for carrying out stress Echo including the placement of leads during the test</li> <li>To understand how to prepare the patient for a cardiac stress echo, DSE, etc.</li> </ul>	TMT Machine, sample reports, mannequins, visit to healthcare facility etc, couch, ECG Machine, leads, pads, gauges, tissue paper, Tilt Table for test, mannequin, hand sanitizer, PPE









S.No	Module	Key Learning Outcomes	<b>Equipment Required</b>
	Corresponding NOS Code (HSS /N 0102)	<ul> <li>Understand various differences in the findings of a normal and an ischemic heart</li> <li>To understand the working &amp; procedure of an isotope stress test</li> <li>To develop broad understanding regarding necessary precautions which to be taken while performing an isotope stress test</li> </ul>	
16.	Role Of CCT During Trans Esophageal Cardiac Ultrasound Studies  Theory Duration (hh:mm) 20:00  Practical Duration (hh:mm) 20:00  Corresponding NOS Code HSS/ N 0104	<ul> <li>To understand regarding Trans esophageal echocardiography, it's types, scope, indication for procedure &amp; associated complications</li> <li>To gain broad understanding regarding findings which is to be expected during the procedure</li> <li>To understand the safety &amp; privacy aspect of this procedure for the patient</li> <li>To understand the roles and responsibilities of a technician during the procedure</li> </ul>	Echo Machine, sample reports, mannequins, visit to healthcare facility etc
17	Introduction To Pacemaker & Leads  Theory Duration (hh:mm) 20:00  Practical Duration (hh:mm) 10:00  Corresponding NOS Code HSS/ N 0106	<ul> <li>To gain understanding regarding the artificial pacemaker &amp; temporary pacemakers</li> <li>To understand the significance behind the implantation of an artificial pacemaker</li> <li>To understand the meaning of an implantable cardioverter defibrillator and it's significance</li> <li>To carry out initial assessment of patient before the implantation of a pace maker</li> <li>To understand factors which to be considered when the patient is on a pacemaker</li> <li>To gain broad understanding regarding warning signs of pacemaker infection</li> </ul>	Different types of pacemakers such as ICD, CRT-D, CRT-P, Dual chamber PPI, Single Chamber PPI, leads, programmer etc
18	Role Of CCT During Implant Of Temporary Pacemakers  Theory Duration (hh:mm) 30:00	<ul> <li>To differentiate between artificial and temporary pacemaker implantation procedure</li> <li>To understand regarding temporary trans venous pacing</li> <li>To understand the common problems which may occur during the insertion of pacemaker</li> </ul>	Mannequins, patient unit, leads, ECG machine, Different types of pacemakers such as ICD, CRT-D, CRT-P, Dual chamber PPI, Single Chamber PPI, leads,









S.No	Module	Key Learning Outcomes	<b>Equipment Required</b>
	Practical Duration (hh:mm) 10:00	To understand the meaning of pace maker syndrome To gain understanding regarding complications to be expected during the procedure	programmer etc
	Corresponding NOS	To understand the significance of investigations which should be carried out pre and post implantation.  To go in understanding recognition in displace.	
	Code HSS/ N 0107	<ul> <li>To gain understanding regarding indication for a temporary pace making.</li> <li>To understand the significance of elective</li> </ul>	
		pace making	
		To understand procedure for applying an external pacemaker	
		To understand common complication during implantation of temporary pacemaker	
		To understand the emergency measures which is to be taken in case of pacemaker failure	
19	Intent Inventory	To understand to whom to contact in case if there is a need of replenishing supplies	All kinds of inventory
	Theory Duration (hh:mm)	To understand the guidelines for medical and diagnostic supplies and content of the kit	
	05:00	To develop an understanding regarding need of maintaining record of supplies	
	Practical Duration (hh:mm)	or maintaining record or supplies	
	05:00		
	Corresponding NOS Code HSS/ N 9602		
20.	Introduction To Cardiac Related	To enlist the commonly used cath lab equipment	All equipment related to cardiac facility such as ECG
	Equipment	<ul> <li>Describes and differentiate and understand the use of following equipment:</li> </ul>	machine, all kinds of pacemakers, TMT
	Theory Duration (hh:mm)	• C arm & u arm	machine, ECHO machine, Leads etc
	10:00	<ul><li>x ray tube</li><li>X ray detecting device</li></ul>	
	Practical Duration	x ray switching and pulse controller,	
	(hh:mm) 20:00	<ul><li>Digital image processor,</li><li>Fluoroscopic imaging system,</li></ul>	
		Physiologic recorder,	









S.No	Module	Key Learning Outcomes	<b>Equipment Required</b>
	Corresponding NOS Code HSS/ N 0108	<ul> <li>Contrast powder injector ray table</li> <li>Crash cart and defibrillator</li> <li>Intubation equipment,</li> <li>Central vein catheter,</li> <li>Cardiac drugs',</li> <li>Sterile equipment and supplies,</li> <li>Liquid cooling system, etc.</li> <li>To develop broad understanding regarding major equipment used in the cath lab setting and its operating methods</li> <li>To understand the technical specification of common equipment in cath lab</li> <li>Understand the regulatory framework for medical equipment</li> </ul>	
21.	To develop an understanding regarding Pericardiocentesis and it's types  Theory Duration (hh:mm) 30:00  Practical Duration (hh:mm) 20:00  Corresponding NOS Code HSS/ N 0105	<ul> <li>To develop an understanding regarding Pericardiocentesis and it's types</li> <li>To understand procedure for Pericardiocentesis and requisite equipment</li> <li>To understand indications and complications of needle peri-cardiocentesis</li> <li>To understand indications and complications of open pericardiocentesis</li> <li>To understand role of a technician while carrying out the procedure</li> </ul>	Pericardiocentesis equipment's such as , gauge, wires, balloons, sheath etc
22.	Act Within The Limits Of Competence And Authority  Theory Duration (hh:mm) 10:00  Practical Duration (hh:mm) 10:00	<ul> <li>Understand the meaning of relations and types of relationship</li> <li>To understand effective working relationships with the people external to the team, with which the individual works on a regular basis</li> <li>To understand the effect of boundary violation in technician client relationships</li> <li>To understand the code of ethics for cardiac care technicians</li> </ul>	Internet use for learning and adopting best practices









S.No	Module	Key Learning Outcomes	<b>Equipment Required</b>
	Corresponding NOS Code HSS/ N 9603		
23.	Work Effectively With Others  Theory Duration (hh:mm) 10:00  Practical Duration (hh:mm) 10:00  Corresponding NOS Code  HSS/ N 9604	<ul> <li>Understand the importance of a team and team work</li> <li>To understand the types of team in health care organization</li> <li>To understand the elements and principles of team work and team based health care</li> <li>Understand how to manage the conflict in health care facility</li> </ul>	Internet use for learning and adopting best practices
24.	Manage Work To Meet Requirements  Theory Duration (hh:mm) 10:00  Practical Duration (hh:mm) 10:00  Corresponding NOS Code HSS/ N 9605	<ul> <li>To develop broad understanding regarding management of work so as to meet professional expectations</li> <li>To understand the significance of keeping the hospital clean</li> <li>To understand the significance of maintaining confidentiality in work environment</li> <li>To understand how to manage stress</li> </ul>	Internet use for learning and adopting best practices
25.	Monitor And Assure Quality  Theory Duration (hh:mm) 30:00  Practical Duration (hh:mm) 20:00  Corresponding NOS Code  HSS/ N 9611	<ul> <li>To understand the significance of quality, perception &amp; its dimension</li> <li>To understand the components of quality system</li> <li>Enumerate the stages &amp; elements quality system</li> <li>Understand the process of quality system</li> <li>To understand the significance of attending CME's for technician</li> <li>To develop a broad understanding regarding</li> <li>1) Hospital Information System</li> <li>2) Quality Improvement Plan</li> <li>3) Total Quality Management</li> <li>To understand difference between quality control and assurance</li> </ul>	Internet use for learning and adopting best practices









S.No	Module	Key Learning Outcomes	Equipment Required
		To understand the factors which influences quality of care	
26.	Consent,	Understand guidelines for documentation	Internet use for learning and adopting best
	Documentation & Records	<ul> <li>Learn various types of records of importance for Cardiac Care Technician</li> </ul>	practices
	Theory Duration (hh:mm)	Understand use and importance of records and consent	
	20:00	Understand abbreviations and symbols	
	Practical Duration (hh:mm)	<ul> <li>Enter, transcribe, record, store, or maintain information in written or electronic/magnetic form</li> </ul>	
	10:00 Corresponding NOS Code HSS/N5114, 5115, 9605		
27.	Basic Computer Knowledge	To gain broad understanding about Application of computers in laboratory Practice	Computer/Internet
	Theory Duration (hh:mm)	<ul> <li>Give Introduction to Computers:</li> <li>Block diagram</li> <li>Input and Output devices</li> </ul>	
	05:00	<ul> <li>Storage devices</li> <li>Give Introduction to operating systems</li> </ul>	
	Practical Duration (hh:mm)	<ul> <li>Need of Operating systems (OS)</li> <li>Function of OS</li> <li>Windows 2000 – Utilities and basic</li> </ul>	
	15:00	<ul> <li>operations</li> <li>Microsoft office 2000 – MS Word, MS Excel</li> </ul>	
	Corresponding NOS Code Introductory		
	<b>Total Duration</b>	Unique Equipment Required: Patient Couch, A floor or intensifier, Set of viewing monitors, Realtime ECG/Bloc	
	Theory Duration	Saturation measurements with software to record and needed, Injector Pump used for imaging the Left Vent	
	(hh:mm) 455:00	for the recording and playback of the Fluoroscopy run	s acquired during the
	Practical Duration	procedure, Diagnostic Catheters, Guide catheters, Guide Balloons, stents (drug eluting and bare metal), sheaths nursing supplies, defibrillator, drugs, recovery bays, re	s, closure devices, general
	(hh:mm) 385:00	Class Room equipped with following arrangements:	, 5 ,
		Interactive lectures & Discussion	
	OJT Duration	Brain Storming	
	(hh:mm) 660:00	Charts & Models	
		• Activity	









S.No	Module	Key Learning Outcomes	<b>Equipment Required</b>
		Video presentation	
		Visit to Primary Health Centre, Hospital set-up	and Cardiac Centre

Grand Total Course Duration: 1500:00 Hours (840 Hours for Class Room & Skill Lab Training + 660 Hours OJT/Internship/Clinical or Laboratory Training)

(This syllabus/ curriculum has been approved by SSC: Healthcare Sector Skill Council









## Trainer Prerequisites for Job role: "Cardiac Care Technician" mapped to Qualification Pack: "HSS/Q0101, version 1.0"

Sr. No.	Area	Details
1	Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack <u>"HSS/Q0101"</u> .
2	Personal Attributes	Aptitude for conducting training, and pre/ post work to ensure competent, employable candidates at the end of the training. Strong communication skills, interpersonal skills, ability to work as part of a team; a passion for quality and for developing others; well-organised and focused, eager to learn and keep oneself updated with the latest in the mentioned field.
3	Minimum Educational Qualifications	<ul> <li>MBBS doctor with one year experience in cardiac department or B.Sc Nurse with five years' experience in cardiac department</li> <li>or</li> <li>cardiac care technician/cath lab technician with five years' experience in cardiac department</li> </ul>
4a	Domain Certification	Certified for Job Role: "Cardiac Care Technician" mapped to QP: "HSS/Q0101" version 1.0. with scoring of minimum 85%.
4b	Platform Certification	Recommended that the Trainer is certified for the Job Role: "Trainer", mapped to the Qualification Pack: "SSC/Q1402" with scoring of minimum 90%.
5	Experience	<ul> <li>Experience in teaching Cardiac Care Technician course (HSS/Q0101, version 1.0)</li> <li>5 years of experience for Level 4 certified Cardiac Care Technician (HSS/Q0101, version 1.0)</li> </ul>









#### **Annexure: Assessment Criteria**

Assessment Criteria for Cardiac Care technician				
Job Role	Cardiac Care Technician			
Qualification Pack Code	HSS/Q 0101, version 1.0			
Sector Skill Council	Healthcare Sector Skill Council			

Sr. No.	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
7.	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
8.	The assessment for the theory part will be based on knowledge bank of questions created by the SSC









Skills Practical and Viva (80% wei	ghtage)
	Marks Allotted
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
Theory (20% weightage)	
	Marks Allotted
Grand Total-1 (Subject Domain)	80
Grand Total-2 (Soft Skills and Comunication)	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
Detailed Break Up of Marks	Skills Practical & Viva
Subject Domain	Pick any 2 NOS each of 200 marks totaling 400









		Total	Out Of	Marks Allocation	
Assessable Outcomes	Assessment Criteria for the Assessable Outcomes	Mark s (400)		Viva	Skills Practica I
1. HSS/ N 0101	PC1. Set the room for taking the ECG readings		20	5	15
Monitor patients'	PC2. Attach, connect, and operate electrodes from				
heart rate and	specified body areas to leads from electrocardiograph		60	20	40
rhythm using	machine				
electrocardiogra	PC3. Review patient's record and instructs patients prior to		40	10	30
m (ECG)	procedures		40	10	30
equipment	PC4. Set the ECG machines and explain the ECG	200	40	10	30
	procedures clearly to the patient		40	10	30
	PC5. Monitor patient during procedures and report any		20	10	10
	abnormal findings		20	10	10
	PC6. Edit and forward results to attending physician for		10	5	5
	analysis and interpretation		10	3	J
	PC7. Maintains ECG equipment and supplies		10	5	5
	Total		200	65	135
2.HSS/ N 0102:	PC1. Take consent from patient base on ECG results	k	20	5	15
Perform	PC2. Prepare patient for test		20	5	15
treadmill test (TT)	PC3. Ensure patient identification and review indication		20	_	1.5
to assess	for procedure		20	5	15
cardiovascular	PC4. Take pertinent patient history including cardiac risk		20	10	20
response	factors and medications		30	10	20
	PC5. Explain purpose and procedure to the patient and		20	10	10
	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		60	20	40
	and recordings, at intervals appropriate to patient's		00	20	40
	symptoms and/or test protocol				
	PC7. Assist in evaluating test results		30	10	20
	Total		200	65	135
3.HSS/ N 0103:	PC1. Ensure patient identification and explain procedure		20	10	10
Assist	to the patient		20	10	10
cardiologist in	PC2. Record patient's demographic data and vitals	200	50	20	30
assessing cardiac	PC3. Activate machine, calibrate if required	200	50	20	30
structure and	PC4. Know about heart function and anatomy		30	30	0
function using	PC5. Prepare patients for ultrasound		50	10	40
cardiac					
ultrasound	Total		200	90	110
4.HSS/ N 0104:	PC1. Ensure patient identification	<b>↓</b>	20	10	10
Assist with	PC2. Obtain patient's informed consent if required as per	200	20	10	10
transesophageal	the protocols			_	
cardiac	PC3. Review indication and explain the procedure and		40	20	20
ultrasound	requirements to patient				
studies	PC4. Arrange the set up for transesophageal ultrasound		60	20	40
	PC5. Assemble tray for procedure, including intravenous		60	20	40
	setup, and draw up medication as required				
= 1166 (A) =	Total		200	80	120
5.HSS/ N 0105:	PC1. Ensure patient identification and obtain patient's	200	40	20	20









Assessable	Assessment Criteria for the Assessable Outcomes	Total	Out Of	Marks Allocation		
Assessable Outcomes		Mark s (400)		Viva	Skills Practica I	
Assist with	informed consent					
pericardiocentesi	PC2. Explain the indication for the test and the procedure	1	60	20	40	
s procedure by	to the patient		60	20	40	
echocardiograph	PC3. Set up pericardiocentesis tray		100	20	80	
у	Total		200	60	140	
6.HSS/ N 0106:	PC1. Confirm identity of patient		20	10	10	
Assist with	PC2. Explain procedure and have patient sign informed consent		40	10	30	
implant of	PC3. Prepare table and assist in patient transfer	200	80	20	60	
pacemakers by	PC4. Follow the instructions to determine the type of the	1	- 00		00	
establishing lead integrity	lead to be used		60	20	40	
lintegrity	Total	I	200	60	140	
7.HSS/ N 0107:	PC1. Ensure patient identification		20	10	10	
Assist with	PC2. Explain procedure and take informed consent		30	10	20	
insertion of	PC3. Prepare table and assist in patient transfer		70	30	40	
temporary pacemakers	PC4. Ensure that a defibrillator and other resuscitation equipment are immediately accessible	200	40	10	30	
pacemaners	PC5. Ensure that strict aseptic technique is used like using		40	10	30	
	a mask, gown and gloves		200	70	120	
8. HSS/ N 0108:	Total   PC1. Prepare the cardiovascular equipment and	1	200	70	130	
Demonstrate	hemodynamic monitoring system in preparing for various diagnostic procedure treatment		20	10	10	
proficiency in using equipment	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	200	2	0	2	
	· Ambulatory ECG recorder/monitor	200	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	









	Assessment Criteria for the Assessable Outcomes	Total	Out Of	Marks Allocation		
Assessable Outcomes		Mark s (400)		Viva	Skills Practica	
	· 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	1	2	0	2	
	· Pacing leads	1	2	0	2	
	· Esophageal pacing leads		2	0	2	
	· Temporary pacemakers		2	0	2	
	· Pacemaker minclinic	1	2	0	2	
	· Pacemaker magnet	1	2	0	2	
	· All types of electrodes	-	2	0	2	
	· Pacemaker system analysers	-	2	0	2	
	PC6. Identify new equipment and accessories that are	1				
	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	PC1. Preform the standard precautions to prevent the spread of infection in accordance with organisation requirements		5	0	5	
and procedures)	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	200	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	









		Total			larks ocation
Assessable Outcomes	Assessment Criteria for the Assessable Outcomes	Mark s (400)	Out Of	Viva	Skills Practica I
	PC12. Follow hand washing procedures		5	0	5
	PC13. Implement hand care procedures		5	0	5
	PC14. Cover cuts and abrasions with water-proof dressings		5	5	0
	and change as necessary				U
	PC15. Wear personal protective clothing and equipment that complies with Indian Standards, and is appropriate for the intended use		5	0	5
	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 PC18. Confine records, materials and medicaments to a				
	well-designated clean zone PC19. Confine contaminated instruments and equipment	20	10	10	
	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		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	0	5
	PC22. Store clinical or related waste in an area that is accessible only to authorised persons		5	5	0
	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	0	5
	PC24. Dispose of waste safely in accordance with policies and procedures of the organisation and legislative requirements		5	5	0
	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
	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	1	5	5	0
	Total		200	55	145
	Grand Total-1 (Subject Domain)			100	
				th parts totaling	









		Total			Marks Allocation	
Assessable Outcomes	Assessment Criteria for the Assessable Outcomes	Mark s (400)		Out	Viva	Skills Practica I
Part 1 (Pick one fi	eld randomly carrying 50 marks)					
1. Attitude						
HSS/ N 9603 (Act	PC1. Adhere to legislation, protocols and guidelines		2	0		2
within the limits	relevant to one's role and field of practice			· ·		
of one's	PC2. Work within organisational systems and		2	0		2
competence and	requirements as appropriate to one's role			Ů		
authority)	PC3. Recognise the boundary of one's role and					
	responsibility and seek supervision when situations are		8	4		4
	beyond one's competence and authority					
	PC4. Maintain competence within one's role and field of		2	0		2
	practice	30		Ŭ		
	PC5. Use relevant research based protocols and guidelines		4	2		2
	as evidence to inform one's practice					
	PC6. Promote and demonstrate good practice as an		4	2		2
	individual and as a team member at all times			2		2
	PC7. Identify and manage potential and actual risks to the		4	2		2
	quality and safety of practice		4			۷
	PC8. Evaluate and reflect on the quality of one's work and		4	2		2
	make continuing improvements		4	2		Z
			30	12		18
HSS/ N 9607	PC1. Adhere to protocols and guidelines relevant to the		2	1		2
(Practice Code of	role and field of practice		3	1		2
conduct while	PC2. Work within organisational systems and		2	1		2
performing	requirements as appropriate to the role		3	1		2
duties)	PC3. Recognise the boundary of the role and					
	responsibility and seek supervision when situations are		3	1		2
	beyond the competence and authority					
	PC4. Maintain competence within the role and field of			_		1
	practice		1	0		1
	PC5. Use protocols and guidelines relevant to the field of	20		_		
	practice		4	2		2
	PC6. Promote and demonstrate good practice as an		1			1
	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	1		_		2
	the healthcare ecosystem		4	2		2
		•	20	7		13
	Attitude Total	50	50	19		31
2. Work Managen				1		
HSS/ N 9602	PC1. Maintain adequate supplies of medical and					
(Ensure	diagnostic supplies		5	5		0
availability of	PC2. Arrive at actual demand as accurately as possible	25	5	3		2
medical and	PC3. Anticipate future demand based on internal, external	1 1	10	5		5









		Total			Marks Allocation	
Assessable Outcomes	Assessment Criteria for the Assessable Outcomes	Mark s (400)		Out	Viva	Skills Practica I
diagnostic	and other contributing factors as accurately as possible					
supplies)	PC4. Handle situations of stock-outs or unavailability of					
	stocks without compromising health needs of patients/ individuals		5	5		0
	individuals		25	18		7
HSS/ N 9605	PC1. Clearly establish, agree, and record the work		23	10		
(Manage work to	requirements		10	5		5
meet	PC2. Utilise time effectively	1	3	0		3
requirements)	PC3. Ensure his/her work meets the agreed requirements	25	3	0		3
requirements	PC4. Treat confidential information correctly	25	3	3		0
	· · · · · · · · · · · · · · · · · · ·	-	3	3		U
	PC5. Work in line with the organisation's procedures and		6	3		3
	policies and within the limits of his/her job role	1	2.5	4.4		1.4
		T	25	11		14
	Work Management Total	50	50	29		21
	eld as per NOS marked carrying 50 marks)					
1. Team Work						
HSS/ N 9604	PC1. Communicate with other people clearly and		3	0		3
(Work effectively	effectively			U		3
with others)	PC2. Integrate one's work with other people's work effectively		3	0		3
	PC3. Pass on essential information to other people on		2	0		2
	timely basis		3	0		3
	PC4. Work in a way that shows respect for other people	50	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
	1 contonon the organisation's ponetes and procedures	1	50	24		26
2. Safety manage	mont		30	27	1	20
HSS/ N 9606	PC1. Identify individual responsibilities in relation to					
(Maintain a safe,	·		6	2		4
healthy, and	maintaining workplace health safety and security requirements		O			4
secure working		- 1				
environment)	PC2. Comply with health, safety and security procedures		4	0		4
environment)	for the workplace				1	
	PC3. Report any identified breaches in health, safety, and		4	3		1
	security procedures to the designated person	- 1				
	PC4. Identify potential hazards and breaches of safe work	50	6	4		2
	practices					
	PC5. Correct any hazards that individual can deal with		6	4		2
	safely, competently and within the limits of authority	<b>↓</b>			1	_
	PC6. Promptly and accurately report the hazards that					
	individual is not allowed to deal with, to the relevant		6	4		2
	person and warn other people who may get affected					
	PC7. Follow the organisation's emergency procedures		6	2		4
	promptly, calmly, and efficiently		5			•









Assaults	Assessment Criteria for the Assessable Outcomes	Total			Marks Allocation	
Assessable Outcomes		Mark s (400)		Out Of		Skills Practica I
	PC8. Identify and recommend opportunities for improving		6	4		2
	health, safety, and security to the designated person					
	PC9. Complete any health and safety records legibly and accurately		6	2		4
	,	Į.	50	25		25
3. Waste Manager	ment				L	
HSS/ N 9609	PC1. Follow the appropriate procedures, policies and					
(Follow	protocols for the method of collection and containment		6	2		4
biomedical waste	level according to the waste type					
disposal	PC2. Apply appropriate health and safety measures and					
protocols)	standard precautions for infection prevention and control					_
	and personal protective equipment relevant to the type		8	4		4
	and category of waste					
	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		8	4		4
	different categories of waste					
	PC5. Check the accuracy of the labelling that identifies the	50				
	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 for transport and disposal		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		4	4		0
	current legislation, guidelines, local policies and protocols		-			-
	, p p	•	50	32		18
4. Quality Assurar	nce					-
HSS/ N 9611:	PC1. Conduct appropriate research and analysis		6	2		4
Monitor and	PC2. Evaluate potential solutions thoroughly		8	4		4
assure quality	PC3. Participate in education programs which include					
, , ,	current techniques, technology and trends pertaining to		4	0		4
	the dental industry					
	PC4. Read Dental hygiene, dental and medical					
	publications related to quality consistently and	50	8	4		4
	thoroughly		Ŭ			
	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		4	4		0
	authority			'		-
	1 * * * * * 7	l		<u> </u>		









Assessable Outcomes	Assessment Criteria for the Assessable Outcomes	Total		<b></b>	Marks Allocation	
		Mark s (400)		Out Of	Viva	Skills Practica I
	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		18
Gra	Grand Total-2 (Soft Skills and Communication)		100			
Detailed Break Up of Marks		Theory				
Subject Domain		Pick any 40 PCs each carrying 2 marks totaling 80				









Assessable		Total	Marks Allocation
Outcomes	Assessment Criteria for the Assessable Outcomes	Marks (80)	Theory
1. HSS/ N 0101 Monitor patients'	PC1. Set the room for taking the ECG readings		2
	PC2. Attach, connect, and operate electrodes from specified		2
heart rate and	body areas to leads from electrocardiograph machine		2
rhythm using electrocardiogram	PC3. Review patient's record and instructs patients prior to procedures		2
(ECG) equipment	PC4. Set the ECG machines and explain the ECG procedures clearly to the patient	14	2
	PC5. Monitor patient during procedures and report any abnormal findings		2
	PC6. Edit and forward results to attending physician for analysis and interpretation		2
	PC7. Maintains ECG equipment and supplies	Ī [	2
	Total		14
2.HSS/ N 0102:	PC1. Take consent from patient base on ECG results		2
Perform treadmill	PC2. Prepare patient for test	Ī [	2
test (TT) to assess cardiovascular	PC3. Ensure patient identification and review indication for procedure		2
response	PC4. Take pertinent patient history including cardiac risk factors and medications		2
	PC5. Explain purpose and procedure to the patient and clarify requirements of them for the test	14	2
	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		2
	PC7. Assist in evaluating test results	1	2
	Total		14
3.HSS/ N 0103: Assist cardiologist	PC1. Ensure patient identification and explain procedure to the patient		2
in assessing cardiac	PC2. Record patient's demographic data and vitals	] [	2
structure and	PC3. Activate machine, calibrate if required	10	2
function using	PC4. Know about heart function and anatomy		2
cardiac ultrasound	PC5. Prepare patients for ultrasound		2
	Total		10
4.HSS/ N 0104:	PC1. Ensure patient identification		2
Assist with transesophageal	PC2. Obtain patient's informed consent if required as per the protocols		2
cardiac ultrasound studies	PC3. Review indication and explain the procedure and requirements to patient	10	2
	PC4. Arrange the set up for transesophageal ultrasound	1	2
	PC5. Assemble tray for procedure, including intravenous setup, and draw up medication as required		2
	Total		10
5.HSS/ N 0105: Assist with	PC1. Ensure patient identification and obtain patient's informed consent		2
pericardiocentesis procedure by echo	PC2. Explain the indication for the test and the procedure to the patient	6	2
cardiography	PC3. Set up pericardiocentesis tray	<u> </u>	2









Assessable		Total	Marks Allocation
Outcomes	Assessment Criteria for the Assessable Outcomes	Marks (80)	Theory
	Total		6
6.HSS/ N 0106:	PC1. Confirm identity of patient		2
Assist with implant of pacemakers by	PC2. Explain procedure and have patient sign informed consent		2
establishing lead	PC3. Prepare table and assist in patient transfer	8	2
integrity	PC4. Follow the instructions to determine the type of the lead to be used		2
	Total		8
7.HSS/ N 0107:	PC1. Ensure patient identification		2
Assist with insertion	PC2. Explain procedure and take informed consent		2
of temporary	PC3. Prepare table and assist in patient transfer		2
pacemakers	PC4. Ensure that a defibrillator and other resuscitation equipment are immediately accessible	10	2
	PC5. Ensure that strict aseptic technique is used like using a mask, gown and gloves		2
	Total		10
8. HSS/ N 0108:	PC1. Prepare the cardiovascular equipment and		
Demonstrate proficiency in using	hemodynamic monitoring system in preparing for various diagnostic procedure treatment		2
equipment	PC2. Prepare the physiologic and analytical equipment during diagnostic and therapeutic procedures performed by the physician		2
	PC3. Assists in the performance of diagnostic cardiac equipment		2
	PC4. Interpret pressure waveforms and operates all		
	physiological recording equipment		2
	PC5. Perform procedures on equipment such as:  · Calipers		
	· Computers/keyboards/databases	1	
	Single-channel and three channel electrocardiographs		
	· Ambulatory ECG recorder/monitor	1	
	· Ambulatory ECG analysis systems	1	
	· Oscilloscopes	20	
	• Treadmills and stress system recording devices	1	
	· Ergometer and bicycle	1	
	· Digital, mercury, aneroid		
	· Sphygmomanometers		
	· Oxygen saturation devices		6
	· External pacemakers		
	· External pacemakers · External defibrillators	1	
	· External delibriliators  · External pacing systems	-	
	· ECG management systems	1	
	· ECG/BP computer systems		
ŀ	· Simulators	1	
ŀ	· Intravenous pumps		
ŀ	· Tilt table		
ŀ	· Stethoscope	1	
	· Resuscitation cart	1	









Assessable		Total	Marks Allocation
Outcomes	Assessment Criteria for the Assessable Outcomes	Marks (80)	Theory
	· 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		2
	PC7. Review technical specifications of equipment required		2
	PC8. Compare cost/benefits of equipment to assist in		
	purchasing recommendations		2
	Total	l e	20
9. HSS/ N 9610	PC1. Preform the standard precautions to prevent the spread		
(Follow infection	of infection in accordance with organisation requirements		
control policies and	PC2. Preform the additional precautions when standard		
procedures)	precautions alone may not be sufficient to prevent		2
	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		2
	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		2
	for specific risks	36	
	PC8. Follow protocols for care following exposure to blood or		2
	other body fluids as required		
	PC9. Place appropriate signs when and where appropriate		2
	PC10. Remove spills in accordance with the policies and		2
	procedures of the organization	ļ	
	PC11. Maintain hand hygiene by washing hands before and		
	after patient contact and/or after any activity likely to cause		_
	contamination		2
	PC12. Follow hand washing procedures		
	PC13. Implement hand care procedures		
	PC14. Cover cuts and abrasions with water-proof dressings		2
	and change as necessary		<u>-</u>
	PC15. Wear personal protective clothing and equipment that		
	complies with Indian Standards, and is appropriate for the		2
	intended use		
	PC16. Change protective clothing and gowns/aprons daily,		









Assessable		Total	Marks Allocation
Outcomes	Assessment Criteria for the Assessable Outcomes	Marks (80)	Theory
	more frequently if soiled and where appropriate, after each		
	patient contact		
	PC17. Demarcate and maintain clean and contaminated	, F	
	zones in all aspects of health care work		
	PC18. Confine records, materials and medicaments to a well-		2
	designated clean zone		2
	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		2
	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		2
	colour coded and identified		
	PC22. Store clinical or related waste in an area that is		2
	accessible only to authorised persons		2
	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		2
	accidental release		2
	PC24. Dispose of waste safely in accordance with policies and		
	procedures of the organisation and legislative requirements		
	PC25. Wear personal protective clothing and equipment		2
	during cleaning procedures		2
	PC26. Remove all dust, dirt and physical debris from work		
	surfaces		
	PC27. Clean all work surfaces with a neutral detergent and		2
	warm water solution before and after each session or when		
	visibly soiled		
	PC28. Decontaminate equipment requiring special		
	processing in accordance with quality management systems		2
	to ensure full compliance with cleaning, disinfection and		2
	sterilisation protocols		
	PC29. Dry all work surfaces before and after use		
	PC30. Replace surface covers where applicable		2
	PC31. Maintain and store cleaning equipment		
	Total		36
	Grand Total-1 (Subject Domain)	80	80
	Soft Skills and Communication	Sele	ct each part each
Soft Skills and Communication		carrying	10 marks totaling 2









Assessable Outcomes	Assessment Criteria for the Assessable Outcomes	Total Marks (20)	Marks Allocation Theory
Part 1			
1. Attitude HSS/ N 9603 (Act within the	PC1. Adhere to legislation, protocols and guidelines relevant to one's role and field of practice		
limits of one's competence	PC2. Work within organisational systems and requirements as appropriate to one's role		
and authority)	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	2	2
	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	1	2
HSS/ N 9607 (Practice Code	PC1. Adhere to protocols and guidelines relevant to the role and field of practice		
of conduct while	PC2. Work within organisational systems and requirements as appropriate to the role		
performing duties)	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	2	2
	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 Manag	ement		
HSS/ N 9602	PC1. Maintain adequate supplies of medical and diagnostic supplies		
(Ensure availability of	PC2. Arrive at actual demand as accurately as possible PC3. Anticipate future demand based on internal, external and other	-	
medical and	contributing factors as accurately as possible	2	4
diagnostic	PC4. Handle situations of stock-outs or unavailability of stocks		
supplies)	without compromising health needs of patients/individuals		
	Total	_	4
HSS/ N 9605	PC1. Clearly establish, agree, and record the work requirements		
(Manage work to meet	PC2. Utilise time effectively PC3. Ensure his/her work meets the agreed requirements	2	2
requirements)	PC4. Treat confidential information correctly		









Assessable Outcomes	Assessment Criteria for the Assessable Outcomes	Total Marks (20)	Marks Allocation Theory
	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 1 Total	10	10
Part 2			
1. Team Work			
HSS/ N 9604	PC1. Communicate with other people clearly and effectively		
(Work	PC2. Integrate one's work with other people's work effectively		
effectively	PC3. Pass on essential information to other people on timely basis		
with others)	PC4. Work in a way that shows respect for other people		
	PC5. Carry out any commitments made to other people	2	2
	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
2. Safety mana	gement		L
HSS/ N 9606	PC1. Identify individual responsibilities in relation to maintaining		
(Maintain a	workplace health safety and security requirements		
safe, healthy,	PC2. Comply with health, safety and security procedures for the		
and secure	workplace		
working			
environment)	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	2	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		
	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 Mana	1.11		
HSS/ N 9609	PC1. Follow the appropriate procedures, policies and protocols for		
(Follow	the method of collection and containment level according to the		
biomedical	waste type		
waste disposal	PC2. Apply appropriate health and safety measures and standard		
protocols)	precautions for infection prevention and control and personal		
1	protective equipment relevant to the type and category of waste	4	4
	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,		









Assessable Outcomes	Assessment Criteria for the Assessable Outcomes	Total Marks (20)	Marks Allocation Theory
	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 Assu	rance		1
HSS/ N 9611:	PC1. Conduct appropriate research and analysis		
Monitor and	PC2. Evaluate potential solutions thoroughly		
assure quality	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	2	2
	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		
	Total		2
	Part 2 Total  Grand Total-2 (Soft Skills and Communication)		
	2	0	







### **Healthcare Sector Skill Council**

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