QUALIFICATION FILE

Biomedical Equipment Maintenance Assistant

☒ Short Term Training (STT) ☐ Long Term Training (LTT) ☐ Apprenticeship

☐ Upskilling ☐ Dual/Flexi Qualification ☐ For ToT ☐ For ToA

☒General ☐ Multi-skill (MS) ☐ Cross Sectoral (CS) ☐ Future Skills ☐ OEM

NCrF/NSQF Level: 3

Submitted By:

NATIONAL INSTITUTE OF ELECTRONICS AND INFORMATION TECHNOLOGY

Plot No. 3, PSP Pocket, Sector-8,
Dwarka, New Delhi-110077

Table of Contents

Section 1: Basic Details

1.	**Qualification Name**	**Biomedical Equipment Maintenance Assistant**	
2.	**Sector/s**	**Electronics**	
3.	**Type of Qualification: ☒ New ☐ Revised ☐ Has Electives/Options ☐OEM**	**NQR Code & version of existing/previous qualification:**	**Qualification Name of existing/previous version: --**
4.	**a. OEM Name** **b. Qualification Name** (*Wherever applicable)*	--	
5.	**National Qualification Register (NQR) Code &Version** (*Will be issued after NSQC approval)*	QG-03-EH-01966-2024-V1-NIELIT	**6. NCrF/NSQF Level:** *3*
7.	**Award (Certificate/Diploma/Advanced Diploma/ Any Other** *(Wherever applicable specify multiple entry/exits also & provide details in annexure)*	Certificate	
8.	**Brief Description of the Qualification**	The course delves into the tools and techniques used for servicing and maintaining medical equipment, including soldering, de-soldering, and the use of test and measuring instruments. It explores the fundamental concepts of electrical current, voltage, and power, enabling learners to understand the working principles of passive components like resistors, capacitors, and inductors. Active components, such as semiconductors and integrated circuits, are also covered in detail, providing insights into their design, testing, and applications in medical instrumentation. Biomedical instrumentation and measurement form a crucial part of the course, covering topics such as the man-instrument system, physiological systems of the human body, sources of bio-electric potentials, and the use of microscopes. ECG machines, pH meters, patient monitors, and diagnostic equipment are thoroughly examined, including their working principles, testing procedures, and calibration techniques. The course concludes with a focus on employability skills, preparing learners for success in the medical equipment and devices industry.	
9.	**Eligibility Criteria for Entry for Student/Trainee/Learner/Employee**	**a. Entry Qualification & Relevant Experience:**	

		S. No. / **Academic/Skill Qualification (with Specialization - if applicable)** / **Required Experience (with Specialization - if applicable)** 1. Grade 10th pass — NA 2. Grade 8th pass with two years of (NTC/ NAC) after 8th — NA **b. Age:** 18
10.	**Credits Assigned to this Qualification, Subject to Assessment** *(as per National Credit Framework (NCrF))*	10 Credits **11. Common Cost Norm Category (I/II/III)** *(wherever applicable)***:** **Category** II
12.	**Any Licensing requirements for Undertaking Training on This Qualification** *(wherever applicable)*	NA
13.	**Training Duration by Modes of Training Delivery** *(Specify **Total Duration** as per selected training delivery modes and as per the requirement of the qualification)*	**☒Offline ☐Online ☐Blended** **Classroom (Offline)**: Theory (Hours) **90**; Practical (Hours) **120**; OJT Mandatory (Hours) **60**; ES (Hours) **30**; Total (Hours) **300**
14.	**Aligned to NCO/ISCO Code/s** *(if no code is available, mention the same)*	3211.0501 (Medical Equipment Technician)
15.	Progression path after attaining the qualification (Please show Professional and Academic progression)	Academic: Vertical Progression: Repair and Maintenance Technician (Hospital Equipment) (Level-4) Professional: Assistant-> Technician

16.	**Other Indian languages in which the Qualification & Model Curriculum are being submitted**	Only English	
17.	**Is similar Qualification(s) available on NQR-if yes, justification for this qualification**	**☐ Yes ☒ No URLs of similar Qualifications:**	
18.	**Is the Job Role Amenable to Persons with Disability**	**☒ Yes ☐ No** **If "Yes", specify applicable type of Disability:** a. Locomotor Disability ● Leprosy Cured Person ● Dwarfism ● Muscular Dystrophy ● Acid Attack Victims b. Visual Impairment ● Low Vision	
19.	**How Participation of Women will be Encouraged**	Through funding from the Government under various schemes and projects.	
20.	**Are Greening/ Environment Sustainability Aspects Covered** *(Specify the NOS/Module which covers it)*	**☐ Yes ☒ No**	
21.	**Is Qualification Suitable to be Offered in Schools/Colleges**	**Schools ☒ Yes ☒ No Colleges ☒ Yes ☐ No**	
22.	Name and Contact Details of Submitting / Awarding Body SPOC (In case of CS or MS, provide details of both Lead AB & Supporting ABs)	**Name:** Saket Saurabh **Email:** srv.saket@nielit.gov.in **Contact No.:** 011-25308300 **Website:** https://nielit.gov.in/	
23.	**Final Approval Date by NSQC: 31.01.2024**	**24. Validity Duration: 3 Years**	**25. Next Review Date: 31.01.2027**

Section 2: Module Summary

NOS/s of Qualifications

1. Introduction to healthcare delivery systems and role of medical equipment and devices
2. Electronics Fundamentals and Laboratory Techniques
3. Biomedical Diagnostics: Instrumentation and Analysis

Mandatory NOS/s:

Duration and assessment criteria at NOS/ Module level. For further details refer to the curriculum document.

***Th**.-Theory **Pr.**-Practical **OJT**-On the Job **Man.**-Mandatory Training **Rec.**-Recommended **Proj.**-Project*

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/ NSQF Level	Credits as per NCrF	Training Duration (Hours)			Assessment Marks			
						Th.	Pr.	Total	Th.	Pr.	Total	Weightage (%) *(if applicable)*
1.	Introduction to healthcare delivery systems and role of medical equipment and devices	Code: NIE/ELE/N0808 Version- 1.0	Core	3	1	10	20	30	20	0	20	5.71
2.	Electronics Fundamentals and Laboratory Techniques	Code: NIE/ELE/N0809 Version- 1.0	Core	3	2	20	40	60	80	40	120	34.28
3.	Biomedical Diagnostics: Instrumentation and Analysis	Code: NIE/ELE/N0807 Version- 1.0	Core	3	4	60	60	120	100	50	150	42.85
	Sub-total (A)				**7**	**90**	**120**	**210**	200	90	290	82.84
4.	Employability Skills	Code: DGT/VSQ/N0101	Non-Core	3	1			30			30	8.58

		Version- 1.0										
5.	Project/ OJT		Non-Core	3	2			60			30	8.58
	Total (A+B)				**10**	**90**	**120**	**300**	**200**	**90**	**350**	**100**

Assessment Components	**NOS Included**	**Duration (in mins)**	**Marks**
Theory Paper 1 – Electronics Fundamentals and Laboratory Techniques	1,2	90	100
Theory Paper 2 – Biomedical Instrumentation	3	90	100
Practical Paper 1- Repair and Maintenance of Hospital Equipment	1,2,3	90	90
Employability Skills			30
OJT/Project	2,3		30
		Total	**350**

******Assessment strategy shall be as per NIELIT Norms prevailing at times***.

Minimum Pass Percentage – The pass percentage is 50% in each assessment component (as mentioned in the above table) with the aggregate pass percentage be 50%

Section 3: Training Related

1.	**Trainer's Qualification and experience in the relevant sector (in years)** *(as per NCVET guidelines)*	3 Years Diploma after class 10th /12th in Electronics/ Electrical with minimum 1 year of experience in relevant domain 12th Pass with 2 years of experience in the relevant domain
2.	**Master Trainer's Qualification and experience in the relevant sector (in years)** *(as per NCVET guidelines)*	3 Years Diploma after class 10th /12th in Electronics/ Electrical with minimum 5 year of experience in relevant domain 12th Pass with 6 years of experience in the relevant domain

3.	**Tools and Equipment Required for Training**	☒Yes ☐No (*If "Yes", details to be provided in Annexure)* *Details available in Annexure II*
4.	**In Case of Revised Qualification, Details of Any Upskilling Required for Trainer**	Nil

Section 4: Assessment Related

1.	**Assessor's Qualification and experience in relevant sector (in years)** *(as per NCVET guidelines)*	The assessor carries out theory online assessments through the remote proctoring methodology. Theory examination would be conducted online and the paper comprises MCQ. Conduct of assessment is through trained proctors. Once the test begins, remote proctors have full access to the candidate's video feeds and computer screens. Proctors authenticate the candidate based on registration details, pre-test image captured and I-card in possession of the candidate. Proctors can chat with candidates or give warnings to candidates. Proctors can also take screenshots, terminate a specific user's test session, or re-authenticate candidates based on video feeds.
2.	**Proctor's Qualification and experience in relevant sector (in years)** *(as per NCVET guidelines)*	
3.	**Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years)** *(as per NCVET guidelines)*	External Examiners/ Observers (Subject matter experts) are deployed including NIELIT scientific officers who are subject experts for evaluation of Practical examination/ internal assessment / Project/ Presentation/ assignment and Major Project (if applicable). Qualification is generally B.Tech
4.	**Assessment Mode** *(Specify the assessment mode)*	Online for Theory Online/ Offline/ Blended for other assessment components depending on the region where the assessment is conducted
5.	**Tools and Equipment Required for Assessment**	☒ Same as for training ☒ Yes ☐ No (D*etails to be provided in Annexure-II)*

Section 5: Evidence of the need for the Qualification

Provide Annexure/Supporting documents name.

1.	**Latest Skill Gap Study (not older than 2 years) (Yes/No):** Yes, Available in Annexure-A: Evidence of Need
2.	**Latest Market Research Reports or any other source (not older than 2 years) (Yes/No):** Yes, Available at Annexure-A: Evidence of Need
3.	**Government /Industry initiatives/ requirement (Yes/No):** Yes, Available at Annexure-A: Evidence of Need

4.	**Number of Industry validation provided:** 5
5.	**Estimated no. of persons to be trained and employed:** 500 persons per year shall be trained.
6.	**Evidence of Concurrence/Consultation with Line Ministry/State Departments:** NIELIT is recognized as AB and AA under Government Category. NIELIT is an HRD arm of MeitY, therefore, the Line Ministry Concurrence is not required.

Section 6: Annexure & Supporting Documents Checklist

1.	**Annexure:** NCrF/NSQF level justification based on NCrF level/NSQF descriptors *(Mandatory)*	Available at Annexure-I: Evidence of Level
2.	**Annexure:** List of tools and equipment relevant for qualification *(Mandatory, except in case of online course)*	*Available at Annexure-II: Tools and Equipment*
3.	**Annexure:** Detailed Assessment Criteria *(Mandatory)*	*Available at Annexure-VI: Detailed Assessment Criteria*
4.	**Annexure:** Assessment Strategy *(Mandatory)*	*Available at Annexure-VII: Detailed Assessment Strategy*
5.	**Annexure:** Blended Learning *(Mandatory, in case selected Mode of delivery is "Blended Learning")*	*NA*
6.	**Annexure:** Industry Validation Summary	Available at Annexure-III: Industry Validation
7.	**Annexure:** Multiple Entry-Exit Details *(Mandatory, in case qualification has multiple Entry-Exit)*	*NA*
8.	**Annexure:** Acronym and Glossary *(Optional)*	*Available at Annexure-VIII: Acronym and Glossary*
9.	**Supporting Document:** Model Curriculum *(Mandatory – Public view)*	*Available at Annexure-B Model Curriculum*
10.	**Any other document you wish to submit:**	*Annexure A-Evidence of Need*

Annexure I: Evidence of Level

NCrF/NSQF Level Descriptors	Key requirements of the job role/ outcome of the qualification	How the job role/ outcomes relate to the NCrF/NSQF level descriptor	NCrF/NSQF Level
Professional Theoretical Knowledge/Process	Understanding Healthcare Systems: • Demonstrate comprehensive knowledge of the structure and functions of the healthcare delivery system in India. • Analyze the theoretical foundations of biomedical instrumentation and its evolution, understanding the symbiotic relationship between instruments and human physiological systems. Bio-Electric Potentials and Cardiovascular Analysis: • Explain the sources, measurements, and fundamentals of bio-electric potentials, resting and action potentials, and their relevance in biomedical diagnostics. • Analyze the cardiovascular system, including blood pressure dynamics, characteristics of blood flow, and the methods used for measuring physical parameters of the heart.	The outlined outcomes encompass a broad and specialised theoretical understanding involving biomedical instrumentation, electrical safety, and healthcare system structures. It requires the application of this theoretical knowledge in varying routine and non-routine contexts within the healthcare and biomedical domains.	3
Professional and Technical Skills/ Expertise/ Professional Knowledge	Medical Equipment and Devices: • Identify and analyze the basic medical equipment and devices used in healthcare. • Demonstrate expertise in utilizing tools and aids for servicing, maintenance, and calibration. Technical Proficiency: • Use and operate various instruments such as multimeters, oscilloscopes, signal	It imparts comprehensive factual and theoretical knowledge in the field of healthcare systems, medical devices, electrical concepts, and biomedical instrumentation. This knowledge is applied in a wide range of practical contexts, encompassing troubleshooting, repair, and maintenance procedures.	3

	generators, and LCR meters for diagnostics and analysis. • Acquire practical skills in soldering, de-soldering techniques, resistance, capacitors, inductors, and semiconductor theory.		
Employment Readiness & Entrepreneurship **Skills & Mind-set/Professional Skill**	Employment Readiness: • Demonstrate readiness for employment in the healthcare and biomedical instrumentation sectors. • Develop an entrepreneurial mindset through understanding the development and evolution of biomedical instrumentation. Safety Protocols and Responsible Practice: • Implement electrical safety protocols in a healthcare setting, ensuring patient and equipment safety. • Conduct ECG analysis, pH measurement, and patient monitoring while ensuring accurate and safe procedures. Skills & Mind-set/Professional Skill: • Critical Thinking and Problem-Solving: • Apply critical thinking in troubleshooting, calibration, and maintenance procedures for various healthcare devices and instruments. • Develop problem-solving skills essential for resolving technical issues in medical equipment and devices.	The course cultivates a diverse skill set essential for employment readiness in the healthcare sector. It encourages problem-solving skills, critical thinking, and practical applications to generate solutions within the field of biomedical instrumentation and healthcare technology. Additionally, it fosters an entrepreneurial mindset by exploring the development and integration of technology in healthcare.	3
Broad Learning Outcomes/Core Skill	Comprehensive Learning: • Acquire a broad understanding of diverse	Students develop good logical and mathematical skills through the	3

	healthcare services, from monitoring to diagnostic procedures. • Cultivate a wide skill set, ranging from technical expertise to safety protocols and ethical practices in healthcare settings.	understanding and application of electrical principles, medical equipment functionality, and biomedical diagnostics. It also involves comprehension of social, political, and natural environmental factors, honing communication and presentation skills within the healthcare domain.	
Responsibility	• Conduct routine inspections, basic repairs, and maintenance on biomedical equipment while ensuring safety protocols are followed. • Assist in calibration, documentation, and inventory management, collaborating with senior technicians for complex repair tasks and compliance adherence.	The individuals are responsible for the output in the development, repair, and maintenance of biomedical equipment and systems. This includes adherence to safety protocols, ensuring accurate diagnostics, and the effective functioning of medical devices for the benefit of patient care.	3

Annexure II: Tools and Equipment (Lab Set-Up)

LIST OF EQUIPMENT (For a batch of 20 students)

	Description	Qty	Specifications
1	Classroom	1	30 Sq.m
2	Student Chair	20	
3	Student Table	20	
4	LCD Projector	1	
5	Trainer Chair & Table	1	
6	White Board	1	

7	Soldering and de-soldering station	3	
8	Electronic components and tools	As per requirement	Resistance, Capacitors, Transistors, Diodes, Linear and Digital IC's, PCB's, Soldering material, Screw Driver sets, pliers, Cutters, wires, equipments for repair
9	Multimeters	3	
10	Pulse Oxymeter, Patient monitor, Microscope, B.P. Apparatus and Stethoscope, pH - meter	One each	

Anexure III: Industry Validations Summary

S. No	Organization Name&	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID
1	Unispeed Pharmacuticals Pvt Ltd..	Mr. Ajay Sharma	Plant Head	445/2, Behind Wrigley's Village Katha, Baddi , Solan (H.P.) – 173205	7807779031	uspbaddi@gmail.com
2	Biogem Scientific	Mr. Deepak Sharma	Executive	Vill. Raghan, Oachghat Solan	7018870951	biogem.scientific@gmail.com
3	Auraya Healthcare	Mr. Vipul Sharma	Partner	Plot No 80E, EPIP, Phase –I, Jharmajari, Baddi, Distt. Solan(HP)	9218600568	vipul@ayrya.in
4	GMH Laboratory	Mr. Chnader Bhandari	General Manager	Plot No 13, Ind. Township bBhatoli Kalan, Baddi, Distt. Solan(HP)	921854081	info@gmhlaboratories.com
5	Aspee Sons (Unit-II)	Mr. Umesh Thakur	General Manager	Kh. No 615-617, Vill Kuranwala, Tehsil Baddi, Distt. Solan(HP)	9857707001	aspeesons@aspeegroup.com

6	Glass India	Kuldeep Kumar	Executive	153/154, Kh. No 159, Buranwala, Baddi Distt. Solan(HP)	9816038386	gopallifesciences@gmail.com
7	Gopal life Sciences (Unit-II)	Kuldeep Kumar	Executive	Hill Top Industrial Estate, Near Export Zone, Jharmajari, Baddi Distt. Solan(HP)	9816038386	gopallifesciences@gmail.com
8	Hinggs Healthcare (Unit-III)	Mr. Jitendra Singh	Plant Head	Kh. No 1013/672/449 & 1015/672/449, Dharmpur ward No 7, Baddi (HP)	8699558377	higgshealthcare@gmail.com
9	Ultra Drugs Pharmaceutical Pvt. Ltd.	Mr. Sanjeev Kumar	Account Manager	Vill Manakpur, Manpura, Distt. Solan (HP)	9318628405	director@ultradrugs.co.in finance@ultradrugs.co.in
10	Penguin Electronics Pvt. Ltd.	Mr Manoj Sharma	Director Manufacturing & supply Chain	Sallewal, Bharatgarh, Road Tehsil Nalkagarh, Distt. Solan (HP)	9816064344	gm.manojsharma@penguinindia.com
11	FMCG Home Hygine Pvt. Ltd.	Mr. Akhil Mahajan	Head, Q&A	Kh. No 440/1, Katha Industrial Area, Baddi, Distt, Solan (HP)	8626852036	Akhilmahajan096@gmail.com

&The Documents are available at Annexure-B

Annexure IV: Training & Employment Details

Training and Employment Projections:

Year	Total Candidates		Women		People with Disability	
	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities
2023-24	50	100	10	20	10	20
2024-25	100	200	30	50	10	20
2025-26	100	200	30	50	10	20

Annexure V: Blended Learning

Blended Learning Estimated Ratio & Recommended Tools: NA

Annexure VI: Detailed Assessment Criteria

Detailed assessment criteria for each NOS/Module are as follows:

NOS/Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	Th.	Pr.	Total
NOS 1: Introduction to healthcare delivery systems and role of medical equipment and devices NOS Code: NIE/ELE/N0808	After completion of the module, the students shall be able to: • Prepare a report summarizing the observations about the basic structure and function of the healthcare delivery system in India. • Spot the basic medical devices and medical equipment	20	0	20
NOS 2: Electronics Fundamentals and Laboratory Techniques NOS Code: NIE/ELE/N0809	After completion of the module, the students shall be able to: • Understand voltage and current waveforms • Use of multimeters, CRO. • Identify and calculate values, using passive components. • Idea about magnetism, transformer, and its use. • Identify, test, and use various active components. • Perfectly solder and de-solder on PCBs	80	40	120
NOS 3: Biomedical Diagnostics: Instrumentation and Analysis	After completion of the module, the students shall be able to: Fundamentals Biomedical Engineering: • Understand the interconnected growth between human physiology and instrumental advancements.	100	50	150

NOS Code: NIE/ELE/N0807	Bio-electric Potentials: • Identify sources and methods for measuring bio-electric potentials in living cells and tissues. • Explain the concepts of resting and action potentials and their relevance, including the application of bio-potential electrodes. Cardiovascular Analysis: • Analyze the cardiovascular system, exploring blood pressure dynamics, heart sounds, and blood flow characteristics. • Understand the utilization of electrodes and sensors in measuring various physical parameters of the heart. Microscopic Examination: • Explain the significance and usage of microscopes in biomedical diagnostics. • Understand their role in analyzing biological samples for diagnostic purposes. Computing in Biomedical Instrumentation: • Explore the integration of digital computing and microprocessors in medical instruments. • Understand the diverse applications of computing in the biomedical field. Electrical Safety Protocols: • Identify the physiological effects of electrical current and potential hazards. • Implement safety measures to ensure patient and equipment safety. ECG Analysis: • Analyze ECG signals, electrode placement, and different types of leads. • Understand ECG machine operations, troubleshooting, calibration, and maintenance procedures.			
NOS4: Employability Skills NOS Code: DGT/VSQ/N0101	• Employability Skills Insight: Understand the current job market's demands and explore pertinent learning resources and market trends. • Constitutional and Civic Values: Recognize the importance of constitutional values, ethical responsibilities, and environmental awareness. • Modern Professionalism: Acknowledge and apply 21st-century skills for personal development and employment. • Language Proficiency: Utilize English for varied communications and			30

	comprehend routine information accurately. • Career Development & Goal Setting: Set career goals based on skills and interests, formulating a detailed career plan. • Effective Communication: Master verbal and non-verbal communication for professional interactions and active listening in teamwork. • Diversity and Inclusion: Practice sensitivity and respond to diversity in gender, disability, and workplace harassment. • Financial and Legal Literacy: Understand financial institutions, perform safe transactions, and comprehend salary components and legal rights. • Digital Proficiency: Operate digital devices securely, use online tools responsibly, and manage digital documents. • Entrepreneurial Vision: Identify entrepreneurial types, conduct research, develop business plans, and navigate funding sources for business opportunities.			
Project/OJT	Project/OJT			30
	Grant Tota-350	**200**	**90**	**350**

Annexure VII: Assessment Strategy

- Assessment of the qualification evaluates candidates to ascertain that they can integrate knowledge, skills and values for carrying out relevant tasks as per the
- defined learning outcomes and assessment criteria.
- The underlying principle of assessment is fairness and transparency. The evidence of the outcomes and assessment criteria. competence acquired by the candidate
- can be obtained by conducting Theory (Online), Practical assessment, Internal assessment, Project/Presentation/ Assignment, Major Project. The emphasis is on the

- practical demonstration of skills & knowledge gained by the candidate through the training. Each OUTCOME is assessed & marked separately. A candidate is
- required to pass all OUTCOMES individually based on the passing criteria.
- About Examination Pattern:
- 1. The question papers for the theory and practical exams are set by the Examination wing (assessor) of NIELIT HQS.
- 2. The assessor assigns roll number
- 3. The assessor carries out theory online assessments through remote proctoring methodology. Theory examination would be conducted online and the paper comprise of MCQ. Conduct of assessment are through trained proctors. Once the test begins, remote proctors have full access to candidate's video feeds and computer screens. Proctors authenticate the candidate based on registration details, pre-test image captured and I- card in possession of the candidate. Proctors can chat with candidates or give warnings to candidates. Proctors can also take screenshots, terminate a specific user's test session, or re-authenticate candidates based on video feeds.
- 4. An External Examiner/ Observer may be deployed including NIELIT officials for evaluation of Practical examination/ internal assessment / Project/ Presentation/. Major Project (if applicable) would be evaluated preferably by external/ subject expert including NIELIT officials.
- 5. Pass percentage would be 50% marks in each component.
- 6. Candidates may apply for re-examination within the validity of registration (only in the assessment component in which the candidate failed).
- 7. For re-examination prescribed examination fee is required to be paid by the candidate only for the assessment component in which the candidate wants to reappear.
- 8. There would be no exemption for any paper/module for candidates having similar qualifications or skills.
- 9. The examination will be conducted in English language only.

- Quality assurance activities: A pool of questions is created by a subject matter expert and moderated by other SME. Test rules are set beforehand. Random set of questions which are according to syllabus appears which may differ from candidate to candidate. Confidentiality and impartiality are maintained during all the examination and evaluation processes.

Annexure: Acronym and Glossary

Acronym

Acronym	Description
AA	Assessment Agency
AB	Awarding Body
ISCO	International Standard Classification of Occupations
NCO	National Classification of Occupations
NCrF	National Credit Framework
NOS	National Occupational Standard(s)
NQR	National Qualification Register
NSQF	National Skills Qualifications Framework
OJT	On the Job Training

Glossary

Term	Description
National Occupational Standards (NOS)	NOS defines the measurable performance outcomes required from an individual engaged in a particular task. They list down what an individual performing that task should know and also do.
Qualification	A formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards
Qualification File	A Qualification File is a template designed to capture necessary information of a Qualification from the perspective of NSQF compliance. The Qualification File will be normally submitted by the awarding body for the qualification.
Sector	A grouping of professional activities on the basis of their main economic function, product, service or technology.
Long Term Training	Long-term skilling means any vocational training program undertaken for a year and above. https://ncvet.gov.in/sites/default/files/NCVET.pdf