

QUALIFICATION FILE–Standalone NOS

Vulnerability Assessment and Penetration Testing and IAM Essentials

☐ Horizontal/Generic ☐ Vertical/Specialization

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

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

NCrF/NSQF Level: 5

Submitted By:

National Institute of Electronics and Information Technology (NIELIT)

NIELIT Bhawan,
Plot No. 3, PSP Pocket, Sector-8,
Dwarka, New Delhi-110077,
Phone: - 91-11-25308300
e-mail: - contact@nielit.gov.in

Table of Contents

Section 1: Basic Details	3
Section 2: Training Related.....	6
Section 3: Assessment Related	7
Section 4: Evidence of the Need for the Standalone NOS.....	7
Section 5: Annexure & Supporting Documents Check List.....	8
Annexure-I: Evidence of Level.....	8
Annexure II: Tools and Equipment (lab set-up).....	10
Annexure III: Industry Validations/ Government Recognition Summary	11
Annexure IV : Training Details	11
Annexure V: Blended Learning.....	12
Annexure VI : Standalone NOS- Performance Criteria details	12
Annexure VII: Assessment Criteria.....	15
Annexure VIII: Assessment Strategy	16
Annexure IX : Acronym and Glossary	17

Section 1: Basic Details

1.	NOS-Qualification Name	Vulnerability Assessment and Penetration Testing and IAM Essentials	
2.	Sector/s	IT-ITeS	
3.	Type of Qualification <input checked="" type="checkbox"/> New <input type="checkbox"/> Revised	NQR Code & version of the existing /previous qualification: NA	Qualification Name of the existing/previous version: NA
4.	National Qualification Register (NQR) Code & Version	NG-05-IT-01429-2023-V1-NIELIT	5. NCrF/NSQF Level: 5
6.	Brief Description of the Standalone NOS	<p>This upskilling course provides a comprehensive exploration of cybersecurity techniques focused on identifying and addressing vulnerabilities within computer systems. Participants gain hands-on experience in conducting vulnerability assessments and penetration tests, learning to identify potential weaknesses and proactively secure systems against cyber threats. This course is essential for cybersecurity professionals and IT practitioners seeking to enhance their skills in safeguarding digital environments, ensuring they are well-equipped to detect and mitigate potential security risks.</p> <p>It is designed to equip participants with essential knowledge and skills in Identity and Access Management (IAM). It covers key IAM concepts, including user authentication, authorization, and directory services. Participants learn to implement IAM best practices, ensuring secure access controls and effective management of user identities within organizational systems. This course is crucial for IT professionals and security practitioners aiming to strengthen their expertise in IAM, contributing to enhanced cybersecurity and compliance with data protection regulations.</p>	

7.	Eligibility Criteria for Entry for a Student/Trainee/Learner/Employee	a. Entry Qualification &Relevant Experience:							
		<table><tr><th>S. No.</th><th>Academic/Skill Qualification (with Specialization - if applicable)</th><th>Relevant Experience (with Specialization - if applicable)</th></tr><tr><td>1</td><td><p>Pursuing^ Final Year B.Tech in any branch of Engineering*</p><p>Or</p><p>Pursuing^ Final Year MCA</p><p>Or</p><p>Pursuing^ Final Year B.Sc. in any branch of Sciences*</p><p>Or</p><p>Pursuing^ Final Year B.Sc. in IT/CS/Electronics/allied subjects</p><p>*Students should have relevant knowledge of data analysis and programming concepts.</p><p>#Students with the above entry requirements are eligible to take the course subject to clearing the written test comprising of Analytical Reasoning, Mathematics and English</p><p>^Passout students in the above entry requirements are also eligible for the course.</p></td><td>NA</td></tr></table>	S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Relevant Experience (with Specialization - if applicable)	1	<p>Pursuing^ Final Year B.Tech in any branch of Engineering*</p> <p>Or</p> <p>Pursuing^ Final Year MCA</p> <p>Or</p> <p>Pursuing^ Final Year B.Sc. in any branch of Sciences*</p> <p>Or</p> <p>Pursuing^ Final Year B.Sc. in IT/CS/Electronics/allied subjects</p> <p>*Students should have relevant knowledge of data analysis and programming concepts.</p> <p>#Students with the above entry requirements are eligible to take the course subject to clearing the written test comprising of Analytical Reasoning, Mathematics and English</p> <p>^Passout students in the above entry requirements are also eligible for the course.</p>	NA	
S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Relevant Experience (with Specialization - if applicable)							
1	<p>Pursuing^ Final Year B.Tech in any branch of Engineering*</p> <p>Or</p> <p>Pursuing^ Final Year MCA</p> <p>Or</p> <p>Pursuing^ Final Year B.Sc. in any branch of Sciences*</p> <p>Or</p> <p>Pursuing^ Final Year B.Sc. in IT/CS/Electronics/allied subjects</p> <p>*Students should have relevant knowledge of data analysis and programming concepts.</p> <p>#Students with the above entry requirements are eligible to take the course subject to clearing the written test comprising of Analytical Reasoning, Mathematics and English</p> <p>^Passout students in the above entry requirements are also eligible for the course.</p>	NA							
8.	Credits Assigned to this NOS-Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	3	9. Common Cost Norm Category (I/II/III) (wherever applicable): Category-II						
10.	Any Licensing Requirements for Undertaking Training on This Qualification (wherever applicable)	Not Applicable							

11. Training Duration by Modes of Training Delivery (Specify Total Duration as per selected training delivery modes and as per requirement of the qualification)	<input checked="" type="checkbox"/> Offline <input type="checkbox"/> Online <input type="checkbox"/> Blended <table border="1" data-bbox="965 236 2067 339"> <thead> <tr> <th>Training Delivery Mode</th> <th>Theory (Hours)</th> <th>Practical (Hours)</th> <th>Total (Hours)</th> </tr> </thead> <tbody> <tr> <td>Classroom (offline)</td> <td>40</td> <td>50</td> <td>90</td> </tr> </tbody> </table> <p>The mode of delivery shall be based on the regional demand and can be offered in any of the above modes mentioned.</p>	Training Delivery Mode	Theory (Hours)	Practical (Hours)	Total (Hours)	Classroom (offline)	40	50	90				
Training Delivery Mode	Theory (Hours)	Practical (Hours)	Total (Hours)										
Classroom (offline)	40	50	90										
12. Assessment Criteria	<table border="1" data-bbox="965 491 2067 595"> <thead> <tr> <th>Theory (Marks)</th> <th>Practical (Marks)</th> <th>Project (Marks)</th> <th>Viva (Marks)</th> <th>Total (Marks)</th> <th>Passing %age</th> </tr> </thead> <tbody> <tr> <td>100</td> <td>0</td> <td>0</td> <td>0</td> <td>100</td> <td>50</td> </tr> </tbody> </table> <p>The centralised online assessment is conducted by the Examination Wing, NIELIT Headquarters.</p>	Theory (Marks)	Practical (Marks)	Project (Marks)	Viva (Marks)	Total (Marks)	Passing %age	100	0	0	0	100	50
Theory (Marks)	Practical (Marks)	Project (Marks)	Viva (Marks)	Total (Marks)	Passing %age								
100	0	0	0	100	50								
13. Is the NOS Amenable to Persons with Disability	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If “Yes”, specify applicable type of Disability: <ul style="list-style-type: none"> a. Locomotor Disability: Leprosy Cured Person, Dwarfism, Muscular Dystrophy and Acid Attack Victims b. Visual Impairment: Low Vision 												
14. Progression Path After Attaining the Qualification, wherever applicable	Penetration Tester Security Analyst Security Consultant Security Auditor Incident Responder IAM Specialist												
15. How will the participation of women be encouraged?	Participation by women can be ensured through Government Schemes. Occasionally, exclusive batches for women would be run for the proposed courses. Funding is available for women’s participation under other schemes launched by the Government from time to time.												
16. Other Indian languages in which the Qualification & Model Curriculum are being submitted	Qualification files available in English & Hindi Language.												
17. Is similar NOS available on NQR-if yes, justification for this qualification	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No												

18.	Name and Contact Details Submitting / Awarding Body SPOC <i>(In the case of CS or MS, provide details of both Lead AB & Supporting ABs)</i>	A. Name: SHRI NILADRI DAS Position in the organization: Scientist E Address: NIELIT Agartala Tel number(s): 8794028299 E-mail address: niladridas@nielit.gov.in B. Name: SHRI BINOY DAS Position in the organization: Senior Technical Officer Address: NIELIT Agartala Tel number(s): 8794822459 E-mail address: erbinoy@nielit.gov.in	
19.	Final Approval Date by NSQC: 30/11/2023	20. Validity Duration: 3 years	21. Next Review Date: 30/11/2026

Section 2: Training Related

1.	Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	B.Tech or Equivalent as per NCrf with 15+ years of experience
2.	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	B.Tech or Equivalent as per NCrf with 15+ years of experience
3.	Tools and Equipment Required for the Training	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Available at Annexure-II
4.	In Case of Revised NOS, details of Any Upskilling Required for Trainer	Not Applicable

Section 3: Assessment Related

1.	Assessor's Qualification and experience in relevant sector (in years) <i>(as per NCVET guidelines)</i>	B.Tech or Equivalent as per NCrf with 15+ years of experience
2.	Proctor's Qualification and experience in relevant sector (in years) <i>(as per NCVET guidelines), (wherever applicable)</i>	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.
3.	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) <i>(as per NCVET guidelines)</i>	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 <i>(Specify the assessment mode)</i>	Centralized online examination will be conducted
5.	Tools and Equipment Required for Assessment	Same as for training <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Section 4: Evidence of the Need for the Standalone NOS

1.	Government /Industry initiatives/ requirement (Yes/No): Yes.
2.	Number of Industry validation provided: 4
3.	Estimated number of people to be trained: 1000 persons per year shall be trained.
4.	Evidence of Concurrence/Consultation with Line/State Departments (In case of regulated sectors): No NIELIT is recognised as AB and AA under the Government Category. NIELIT is the HRD arm of MeitY, GoI.

Section 5: Annexure & Supporting Documents Check List

Specify Annexure Name / Supporting document file name

1.	Annexure: NCrF/NSQF level justification based on NCrF/NSQF descriptors (<i>Mandatory</i>)	<i>Available at Annexure-I: Evidence of Level</i>
2.	Annexure: List of tools and equipment relevant for NOS (<i>Mandatory, except in case of online course</i>)	<i>Available at Annexure-II: Tools and Equipment</i>
3.	Annexure: Industry Validation	<i>Available at Annexure-III: Industry Validation</i>
4.	Annexure: Training Details	<i>Available at Annexure-IV: Training Details</i>
5.	Annexure: Blended Learning (<i>Mandatory, in case the selected Mode of delivery is Blended Learning</i>)	<i>Available at Annexure-V: Blended Learning</i>
6.	Annexure/Supporting Document: Standalone NOS- Performance Criteria Details Annexure/Document with PC-wise detailing as per NOS format (Mandatory- Public view)	<i>Available at Annexure-VI: Performance Criteria</i>
7.	Annexure: Performance and Assessment Criteria (<i>Mandatory</i>)	<i>Available at Annexure-VII: Detailed Assessment Criteria</i>
8.	Annexure: Assessment Strategy (<i>Mandatory</i>)	<i>Available at Annexure-VIII: Assessment Strategy</i>
9.	Annexure: Acronym and Glossary (<i>Optional</i>)	<i>Available at Annexure-IX: Acronym and Glossary</i>
10.	Supporting Document: Model Curriculum	<i>Available at Annexure-A: Model Curriculum</i>

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	Professionals undertaking this course are required to possess a solid theoretical foundation in cybersecurity concepts, including vulnerability analysis, penetration testing methodologies, and knowledge of common cybersecurity threats. Similarly, participants in the "IAM Essentials" course need a comprehensive theoretical understanding of Identity and	This course is aligned with higher NSQF/NCrF levels, indicating a need for advanced theoretical knowledge and practical	5

	Access Management principles, encompassing user authentication, authorization mechanisms, and directory services, to effectively implement secure access controls and manage user identities within organizational systems.	application in the specialized field of Vulnerability Assessment and Penetration Testing.	
Professional and Technical Skills/ Expertise/ Professional Knowledge	Professionals completing this course will acquire technical skills in identifying and addressing cybersecurity vulnerabilities through hands-on experience in conducting vulnerability assessments and penetration tests. In contrast, participants in the "IAM Essentials" course will develop professional skills in implementing Identity and Access Management best practices, ensuring secure access controls, and acquiring technical proficiency in managing user identities within organizational systems.	Individuals completing this qualification are likely to possess the expertise required for roles demanding advanced and specialized knowledge in the field of Vulnerability Assessment and Penetration Testing.	5
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	Completion of this course enhances employment readiness by equipping professionals with sought-after cybersecurity skills, making them valuable assets in roles focused on safeguarding digital environments. Similarly, participants in the "IAM Essentials" course gain entrepreneurship skills by understanding how to implement secure access controls and manage user identities effectively, contributing to a cybersecurity-focused entrepreneurial mindset that prioritizes data protection and compliance.	Candidates will be learning effective communications which will make them smart in communicating with various companies and people.	5
Broad Learning Outcomes/Core Skill	This course delivers broad learning outcomes by providing professionals with technical proficiency in identifying and addressing cybersecurity vulnerabilities, fostering a comprehensive understanding of cybersecurity threats and countermeasures. In the "IAM Essentials" course, participants gain broad learning outcomes by acquiring knowledge and skills in Identity and Access Management principles, enabling them to implement secure access controls and effectively manage user identities, contributing to enhanced cybersecurity practices and compliance.	Candidate can perform well under supervision of team lead	5
Responsibility	Imparting comprehensive knowledge and practical skills in cybersecurity, equipping professionals to detect and mitigate vulnerabilities in digital systems, ensuring robust defense against cyber threats. Similarly, the "IAM Essentials" course bears the responsibility of providing participants with essential knowledge and skills in Identity and Access Management, fostering an understanding of secure access controls and effective user identity management, contributing to	Takes complete responsibility for delivery and quality of own work and output as also the subordinates. Shares responsibility for the group tasks.	5

	heightened cybersecurity and compliance within organizational settings.		
--	---	--	--

Annexure II: Tools and Equipment (lab set-up)

List of Tools and Equipment

Batch Size: 30

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
1	Classroom	1 (30 Sq.m)	30
2	Students Chair	30	30
3	Students Table	30	30
4	Desktop computer with accessories	GUI based Operating System, CentOS/Ubuntu Linux, Kali Linux Windows 10, VirtualBox, Open-Source Antivirus, Open Source or Native Firewall Software	30
5	Deskjet printer	1 No.	Paper-A4

Classroom Aids for offline and blended mode of training:

The aids required to conduct sessions in the classroom are:

1. LCD Projector/Smart Board
2. Pin-up Board
3. WhiteBoard, Markers

Annexure III: Industry Validations/ Government Recognition Summary

S. No	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID
1	Software World	Amrita Saha	Proprietor	Ujan Abhoynagar, Manipuripara, Agartala, Tripura(West)	7005261744	support@softwareworld.co.in
2	Bada Biplab Power Solution LLP	Iduli Debbarma	Designated Partner	Agartala West Tripura, Pin: 799003	9436740983	bbpsllp@gmail.com
3	Krishna Industrial Services	Debajit Dey	Proprietor	Badharghat Chowmuhani Agartala, Pin: 799003	9862770077	jbyacademy@gmail.com
4	JB Youth Computer Solution & Educational Society	Nishi Kanta Das	Project Coordinator	Badharghat Chowmuhani, Siddi Ashram, Agartala	9436740983	jbyacademy@gmail.com

Annexure IV : Training Details

Training Projections:

Year	Estimated Training # of Total Candidates	Estimated training# of Women	Estimated training# of People with Disability
2023-24	1000	200	20
2024-25	1000	200	20
2025-26	1000	200	20

Data to be provided year-wise for next 3 years.

Annexure V: Blended Learning

Blended Learning Estimated Ratio & Recommended Tools:

Refer NCVET “Guidelines for Blended Learning for Vocational Education, Training & Skilling” available on:

S. No.	Select the Components of the NOS	List Recommended Tools – for all Selected Components	Offline: Online Ratio
1	Theory/ Lectures - Imparting theoretical and conceptual knowledge	Online interaction platforms like JitSi Meet, Bharat VC, Google Meet, MS Teams, etc.	60:40
2	Imparting Soft Skills, Life Skills and Employability Skills /Mentorship to Learners	NA	NA
3	Showing Practical Demonstrations to the learners	Online interaction platforms like JitSi Meet, Bharat VC, Google Meet, MS Teams, etc.	60:40
4	Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	PCs/Laptops	100:0
5	Tutorials/ Assignments/ Drill/ Practice	Online interaction platforms like JitSi Meet, Bharat VC, Google Meet, MS Teams, etc.	50:50
6	Proctored Monitoring/ Assessment/ Evaluation/ Examinations	NIELIT Online Examination	Online: 100% Theory
7	On the Job Training (OJT)/ Project Work Internship/ Candidate Training	NA	NA

Annexure VI : Standalone NOS- Performance Criteria details

1. Description:

This course provides hands-on training in cybersecurity, teaching participants to identify and address vulnerabilities through assessments and penetration tests. On the other hand, the "IAM Essentials" course focuses on imparting essential knowledge and skills in Identity and Access Management, covering authentication, authorization, and directory services to ensure secure access controls and effective user identity management.

2. Scope:

The scope covers the following:

- In-demand cybersecurity skills to identify and address vulnerabilities, making professionals crucial in fortifying digital infrastructures against cyber threats.
- Essential for organizations to implement secure identity and access controls, IAM professionals play a key role in ensuring data security, regulatory compliance, and effective user management.
- Proficiency in both VAPT and IAM enhances a professional's ability to comprehensively secure digital environments, making them valuable assets in the ever-evolving landscape of cybersecurity.

3. Elements and Performance Criteria

Elements	Performance Criteria
Vulnerability and Penetration skilling	<p>PC1: Ability to identify and categorize common vulnerabilities in various systems and applications, showcasing a comprehensive understanding of potential security weaknesses.</p> <p>PC2: Applying advanced techniques and tools to exploit common vulnerabilities, demonstrating proficiency in the execution of security testing and penetration testing methodologies.</p> <p>PC3: Utilizing a range of security tools and techniques effectively to assess and exploit vulnerabilities, showcasing practical skills in cybersecurity practices.</p> <p>PC4: Producing comprehensive and clear reports detailing identified vulnerabilities, exploited weaknesses, and recommendations for remediation, demonstrating proficiency in communicating security findings.</p> <p>PC5: Ensuring compliance with legal and regulatory requirements while performing vulnerability assessments and exploitation, exhibiting a strong understanding of the ethical and legal aspects of cybersecurity practices.</p>
Identity and Access Management	<p>PC1: Demonstrates the ability to understand and implement authentication basics, showcasing competence in verifying and validating user identities within an Identity and Access Management (IAM) system.</p> <p>PC2: Exhibits proficiency in designing and implementing robust authorization and access control mechanisms, ensuring that users have appropriate permissions and restrictions based on their roles and responsibilities.</p> <p>PC3: Displays expertise in managing directory services, illustrating a comprehensive understanding of directory structures, user attributes, and the effective organization of identity-related information.</p> <p>PC4: Demonstrates the capability to establish secure identity federation, allowing for the seamless and secure sharing of identity information across multiple systems and domains.</p> <p>PC5: Exhibits proficiency in implementing Identity and Access Management in cloud environments, demonstrating the ability to navigate and leverage IAM services in cloud platforms effectively.</p>

4. Knowledge and Understanding (KU):

The individual on the job needs to know and understand:

- KU1. Imparts Knowledge of cybersecurity techniques, covering the identification and mitigation of vulnerabilities through hands-on assessments and penetration testing.
- KU2. Gain insights into the methodologies and tools used in vulnerability assessments, equipping them to proactively secure digital systems against potential cyber threats.
- KU3. Covering authentication, authorization, and directory services to ensure secure access controls and effective user identity management.
- KU4. Acquiring a comprehensive understanding of IAM best practices, enabling them to implement robust identity management solutions and contribute to organizational Cybersecurity.
- KU5: Collectively equip participants with the KU needed to address cybersecurity challenges, from identifying vulnerabilities to implementing secure access controls, fostering expertise in safeguarding digital environments.

5. Generic Skills (GS):

User/individual on the job needs to know how to:

- GS1. Follow instructions, guidelines and procedures
- GS2. Listen effectively and communicate information accurately
- GS3. Apply formatting features to achieve the desired results

Annexure VII: Assessment Criteria

Detailed PC-wise assessment criteria and assessment marks for the NOS are as follows:

S. No.	Assessment Criteria for Performance Criteria	Theory Marks	Practical Marks	Project Marks	Viva Marks
Vulnerability and Penetration skilling	<p>PC1: Ability to identify and categorize common vulnerabilities in various systems and applications, showcasing a comprehensive understanding of potential security weaknesses.</p> <p>PC2: Applying advanced techniques and tools to exploit common vulnerabilities, demonstrating proficiency in the execution of security testing and penetration testing methodologies.</p> <p>PC3: Utilizing a range of security tools and techniques effectively to assess and exploit vulnerabilities, showcasing practical skills in cybersecurity practices.</p> <p>PC4: Producing comprehensive and clear reports detailing identified vulnerabilities, exploited weaknesses, and recommendations for remediation, demonstrating proficiency in communicating security findings.</p> <p>PC5: Ensuring compliance with legal and regulatory requirements while performing vulnerability assessments and exploitation, exhibiting a strong understanding of the ethical and legal aspects of cybersecurity practices.</p>	50	-	-	-
Identity and Access Management	<p>PC1: Demonstrates the ability to understand and implement authentication basics, showcasing competence in verifying and validating user identities within an Identity and Access Management (IAM) system.</p> <p>PC2: Exhibits proficiency in designing and implementing robust authorization and access control mechanisms, ensuring that users have appropriate permissions and restrictions based on their roles and responsibilities.</p> <p>PC3: Displays expertise in managing directory services, illustrating a comprehensive understanding of directory structures, user attributes, and the effective organization of identity-related information.</p> <p>PC4: Demonstrates the capability to establish secure identity federation, allowing for the seamless and secure sharing of identity information across multiple systems and domains.</p>	50	-	-	-

	PC5: Exhibits proficiency in implementing Identity and Access Management in cloud environments, demonstrating the ability to navigate and leverage IAM services in cloud platforms effectively.				
Total Marks		100	-	-	-

Annexure VIII: Assessment Strategy

This section includes the processes involved in identifying, gathering, and interpreting information to evaluate the Candidate on the required competencies of the program.

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) examination.

About Examination Pattern:

1. The question papers for the theory 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. Theory examination would be conducted online and the paper comprise of MCQ
4. Pass percentage would be 50% marks.
5. 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 IX: Acronym and Glossary

Acronym

Acronym	Description
AA	Assessment Agency
AB	Awarding Body
NCrF	National Credit Framework
NOS	National Occupational Standard(s)
NQR	National Qualification Register
NSQF	National Skills Qualifications Framework

Glossary

Term	Description
National Occupational Standards (NOS)	NOS define 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.