QUALIFICATION FILE

Solar PV Installer (Suryamitra) (Divyangjan) - SHI

☒ 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: 4

Submitted By:
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Table of Contents

Section 1: Basic Details 3
Section 2: Module Summary 6
NOS/s of Qualifications 6
Mandatory NOS/s 6
Assessment - Minimum Qualifying Percentage 8
Section 3: Training Related 9
Section 4: Assessment Related 9
Section 5: Evidence of the need for the Qualification 10
Section 6: Annexure & Supporting Documents Check List 11
Annexure 1: Evidence of Level 12
Annexure 2: Tools and Equipment (Lab Set-Up) 20
Annexure 3: Detailed Assessment Criteria 27
Annexure 4: Assessment Strategy 46
Annexure 5: Acronym and Glossary 48

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\Section 1: Basic Details

1.	**Qualification Name**	Solar PV Installer (Suryamitra) (Divyangjan) - SHI	
2.	**Sector/s**	PWD	
3.	**Type of Qualification: ☐New☒Revised ☐** **Has Electives/Options** **☐OEM**	**NQR Code & version of existing/previous qualification: QG-04-PWD-01608-2023-V1.1-SCPWD V2.0**	**Qualification Name of existing/previous version:** Solar PV Installer (Suryamitra) V2.0
4.	**a. OEM Name** **b. Qualification Name** (*Wherever applicable)*	NA	
5.	**National Qualification Register (NQR) Code &Version** (*Will be issued after NSQC approval)*	QG-04-PD-04275-2025-V2-SCPWD	**6. NCrF/NSQF Level:** 4
7.	**Award (Certificate/Diploma/Advance Diploma/ Any Other** *(Wherever applicable specify multiple entry/exits also & provide details in annexure)*	Certificate	
8.	**Brief Description of the Qualification**	Solar PV Installer checks, adapts, implements, configures, installs, inspects, tests and commissions different components of photovoltaic systems, that meet the performance and reliability needs of customers by incorporating quality craftsmanship and complying with all applicable codes, standards and safety requirements	
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.	12th grade pass with science stream or Equivalent	No experience
2.	10th or Equivalent	3 years of Renewable energy/power sector experience
3.	Previous relevant Qualification of NSQF Level 3.5 (Solar PV Site Survey Assistant)	1.5 years of Renewable energy/power sector experience
4.	Previous relevant Qualification of NSQF Level 3.0 (Assistant Technician – Solar Panel Installation)	3 years of Renewable energy/power sector experience
5.	10th grade pass	No experience- in addition to Notional Hours, OJT of 12 months

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		6. Previous relevant Qualification of NSQF Level 3.5 — No experience- in addition to Notional Hours, OJT of 6 months 7. Previous relevant Qualification of NSQF Level 3.0 — No experience- in addition to Notional Hours, OJT of 12 months
10.	**Credits Assigned to this Qualification, Subject to Assessment** *(as per National Credit Framework (NCrF))*	14 **11. Common Cost Norm Category (I/II/III)** *(wherever applicable)* **I**
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 requirement of the qualification)*	☐**Offline** ☐**Online** ☒ **Blended**

Training Delivery Modes	Theory (Hours)	Practical (Hours)	Employability Skills	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)
Classroom (online)	210	-	70		-	520
Offline	-	180	-	60	-	

14.	**Aligned to NCO/ISCO Code/s** *(if no code is available mention the same)*	NCO-2015/7421.1401
15.	**Progression path after attaining the qualification** *(Please show Professional and Academic progression)*	Vertical Progression: Solar Photovoltaic Entrepreneur
16.	**Other Indian languages in which the Qualification & Model Curriculum are being submitted**	English & Hindi
17.	**Is similar Qualification(s) available on NQR-if yes, justification for this qualification**	☐ **Yes** ☒ **No URLs of similar Qualifications:** Non duplication has been ensured by the Domain SSC.
18.	**Is the Job Role Amenable to Persons with Disability**	☐ **Yes** ☒ **No** **If "Yes", specify applicable type of Disability:** Speech &Hearing Impairment (SHI)
19.	**How Participation of Women will be Encouraged**	Involvement of Women with disabilities in learning skills is not just about addressing their needs; it's about recognizing their potential, strengths and contributions to the Society. The Council endeavors to create safe & collaborative inclusive learning environments which can address their unique challenges and needs. Counselling support is provided so that they can set their own goals, make preferences and participate in learning like their male counterparts. The staff of such organizations is sensitized to the needs of the women with

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		disabilities as they face dual challenges-of gender bias in addition to their disability.	
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:** Mr. Ravindra Singh **Email:** ravindra.singh@scpwd.in **Contact No.:** + 91-011-2808558-59 **Website:** www.scpwd.in	
23.	**Final Approval Date by NSQC: 08.05.2025**	**24. Validity Duration: 4 Years, ,** one year beyond' the validity of the original qualifications of the domain SSCs	**25. Next Review Date : 29.05.2028**

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Section 2: Module Summary

NOS/s of Qualifications

(In exceptional cases these could be described as components)

Mandatory NOS/s:

Specify the training duration and assessment criteria at NOS/ Module level. For further details, refer 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/NS QF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
1.	Bridge Modules (PWD)	PWD/M/SHI/01 V1.0	-	4	-	60:00	30:00	-	-	90	-	-	-	-	-	-
2.	Site survey for installation of solar PV system	SGJ/N0101 Version 4.0	Core	4	2	30:00	30:00	-	-	60	57	43	-	-	100	20
3.	Procure Solar PV system components	SGJ/N0102 Version 4.0	Core	4	2	30:00	30:00	-	-	60	32	18	-	-	50	10
4.	Install civil and mechanical parts of Solar PV system	SGJ/N0103 Version 4.0	Core	4	1	15:00	15:00	-	-	30	20	30	-	-	50	10
5.	Installation of electrical components of a solar PV system	SGJ/N0104 Version 4.0	Core	4	1	15:00	15:00	-	-	30	25	25	-	-	50	10

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6.	Test and commission Solar PV system	SGJ/N0105 Version 4.0	Core	4	1	15:00	15:00	-	-	30	20	30	-	-	50	10
7.	Maintain Solar Photovoltaic Power System	SGJ/N0622 Version 2.0	Core	4	1	15:00	15:00	-	-	30	25	25	-	-	50	10
8.	Maintain Personal Health & Safety at project site	SGJ/N0106 Version 5.0	Core	4	1	15:00	15:00	-	-	30	25	25	-	-	50	10
9.	Customer orientation for Solar PV System	SGJ/N0107 Version 3.0	Core	4	1	15:00	15:00	-	-	30	31	19	-	-	50	10
10.	Employability Skills for Persons with Disabilities (70 hours)	PWD/N0501 Version 1.0	Non-Core	4	2	70	00	0	0	70	40	60	-	-	100	10
11.	On the Job Training			4	2	-	-	-	-	60	-	-	-	-	-	-
Duration (in Hours) / Total Marks					**14**	**280**	**180**	**60**	-	-	**275**	**275**	-	-	**550**	**100**

Assessment - Minimum Qualifying Percentage

Please specify any one of the following:

Minimum Pass Percentage – Aggregate at qualification level: 70 % *(Every Trainee should score specified minimum aggregate passing percentage at qualification level to successfully clear the assessment.)*

Minimum Pass Percentage – NOS/Module-wise: 70 % *(Every Trainee should score specified minimum passing percentage in each mandatory and selected elective NOS/Module to successfully clear the assessment.)*

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Section 3: Training Related

1.	**Trainer's Qualification and experience in the relevant sector (in years)** *(as per NCVET guidelines)*	ITI /Diploma Electrical, Electronics, Civil, Mechanical, Fitter, Instrumentation with Minimum 3 years of relevant industry experience for ITI/Diploma (Electrical, Electronics, Civil, Mechanical, Fitter, Instrumentation) Or B. Tech (Civil/Mechanical /Electrical/ Instrumentation / Electronics / Electrical and Electronics Eng.) or MSc Physics With Minimum 2 years of relevant industry experience for B.Tech (Civil/Mechanical/Electrical/ Instrumentation / Electronics / MSc Physics As per the Relevant Craft Instructor Training Scheme (CITS) In addition to Domain SSC (as above) Disability specific additional requirement for the trainer are: **Disability Specific Top Up Module-**The Inclusive Trainer should be certified by SCPwD with minimum qualifying score of 80% as per SCPwD guidelines in Disability Specific Top Up Training / QP of Trainer-PwD. The Indian Sign Language Interpreter should be mandatory during the training, counselling and placement of Persons with Speech and Hearing Impairment. A Certification by Indian Sign Language Research and Training Centre (ISLRTC) or Ali Yavar Jung National Institute of Speech and Hearing Disabilities (Divyangjan) (AYJNISHD(D)) will be desirable. For Sign Language Interpreter 2/3 Years of experience in their own field of training will be desirable.
2.	**Master Trainer's Qualification and experience in the relevant sector (in years)** *(as per NCVET guidelines)*	Engineering Graduate with 5 years of experience in (Civil/Mechanical /Electrical/ Instrumentation / Electronics / Electrical and Electronics Eng.) post their ToT Certification.
3.	**Tools and Equipment Required for the Training**	☒ Same as for training ☒ Yes ☐No (*If "Yes", details to be provided in Annexure)*
4.	**In Case of Revised Qualification, Details of Any Upskilling Required for Trainer**	NA

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Section 4: Assessment Related

1.	**Assessor's Qualification and experience in relevant sector (in years)** *(as per NCVET guidelines)*	Engineering Graduate with 3 years of experience in (Civil/Mechanical /Electrical/ Instrumentation / Electronics / Electrical and Electronics Eng.) Or Certified under relevant Craft Instructor Training Scheme (CITS) course. * The education qualification can be relaxed in case of extraordinary relevant field experience.
2.	**Proctor's Qualification and experience in relevant sector (in years)** *(as per NCVET guidelines) wherever applicable*	Engineering Graduate with 3 years of experience in (Civil/Mechanical /Electrical/ Instrumentation / Electronics / Electrical and Electronics Eng.) Or Certified under relevant Craft Instructor Training Scheme (CITS) course. * The education qualification can be relaxed in case of extraordinary relevant field experience.
3.	**Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years)** *(as per NCVET guidelines) wherever applicable*	Engineering Graduate with 10 years of experience in (Civil/Mechanical /Electrical/ Instrumentation / Electronics / Electrical and Electronics Eng.) post their ToA Certification Or Certified under relevant Craft Instructor Training Scheme (CITS) course. * The education qualification can be relaxed in case of extraordinary relevant field experience.
4.	**Assessment Mode** *(Specify the assessment mode)*	Offline/Online
5.	**Tools and Equipment Required for Assessment**	☒ Same as for training ☐ Yes☐ No *(details to be provided in Annexure-if it is different for Assessment)*

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):** No (As per Domain)
2.	**Latest Market Research Reports or any other source (not older than 2 years) (Yes/No):** No (As per Domain)
3.	**Government /Industry initiatives/ requirement (Yes/No):** Yes (As per Domain)
4.	**Number of Industry validation provided:** N.A
5.	**Estimated nos. of persons to be trained and employed:**
6.	**Evidence of Concurrence/Consultation with Line Ministry/State Departments:** If "No", why: Yes

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Section 6: Annexure & Supporting Documents Check List

Specify Annexure Name / Supporting document file name

1.	**Annexure:** NCrF/NSQF level justification based on NCrF level/NSQF descriptors *(Mandatory)*	Annexure 1-Evidence of level (As per Domain)
2.	**Annexure:** List of tools and equipment relevant for qualification *(Mandatory, except in case of online course)*	Annexure 2-Tools and Equipment (As per Domain)
3.	**Annexure:** Detailed Assessment Criteria *(Mandatory)*	Annexure 3-Tools and Equipment (As per Domain)
4.	**Annexure:** Assessment Strategy *(Mandatory)*	Annexure 4-Tools and Equipment (As per Domain)
5.	**Annexure:** Blended Learning *(Mandatory, in case selected Mode of delivery is "Blended Learning")*	Yes (As per Domain)
6.	**Annexure:** Multiple Entry-Exit Details *(Mandatory, in case qualification has multiple Entry-Exit)*	NA
7.	**Annexure:** Acronym and Glossary *(Optional)*	Yes (As per Domain)
8.	**Supporting Document:** Model Curriculum *(Mandatory – Public view)*	Solar PV Installer (Suryamitra) (Divyangjan) - SHI
9.	**Supporting Document:** Career Progression *(Mandatory – Public view)*	Yes (As per Domain) – SCPwD being horizontal follows the same Career Progression
10.	**Supporting Document:** Occupational Map *(Mandatory)*	Yes (As per Domain) – SCPwD being horizontal follows the same Occupational Map
11.	**Supporting Document:** Assessment SOP *(Mandatory)*	NA
12.	**Any other document you wish to submit:**	NA

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Annexure 1: 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	• The individual is expected to checks, adapts, implements, configures, installs, inspects, tests and commissions different components of photovoltaic systems, that meet the performance and reliability needs of customers by incorporating quality workmanship and complying with all applicable codes, standards and safety requirements.	• The individual independently performs familiar, predictable, routine situation of clear choice such as periodically checking the integrity and working condition of all connection, fuses, cables, earthing and lightening protection systems, solar modules, inverters, etc. through visual inspection and by measuring parameters like current, voltage output etc. Hence, role qualifies as a Level 4 role. • Since the role does not involve several choices to be made even in a familiar context like creating the maintenance schedule, choosing amongst various types of equipment or products, taking decisions regarding replacement equipment, etc., the role does not qualify for Level 5. • This role requires the job holder to work in a familiar, predictable, routine of clear choice and the activities that h/she is expected to perform are not limited in range. For example, s/he is expected to inspect and interpret the integrity of various electrical components in the solar PV power plant, measure the compare the current and voltage	4

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		parameters and take steps like regular cleaning, tightening of connections, cleaning of inverter fans to ensure proper functioning of electrical components, etc. S/he also has to ensure that the work area is safe and hygienic for working. Hence it cannot be placed at level 3.	
Professional and Technical Skills/ Expertise/ Professional Knowledge	• The individual is expected to be exhibit the knowledge of basic electrical concepts, typical specifications, functioning, operating principle and installation procedures of various types of solar PV plant components, working drawings of electrical equipment, maintenance and operations requirement and handling procedures of electrical components of solar PV power plant and common methods of identifying and rectifying common faults that can occur in solar PV power plant.	• The job holder is expected to exhibit an understanding factual knowledge of the field of electrical maintenance. For example, s/he is expected to know the various types of faults that can occur in any electrical component of solar PV power plant, various types of tools, measuring equipment involved in maintenance and troubleshooting of electrical parts of solar PV power plant, various methods of fault prevention like regular cleaning of modules and inverter fans, periodical tightening and checking of connections. Further, s/he should know about the risks and hazards/ safe working practices/ materials and equipment needed/ tasks and activities to the required standard. S/he should also have the ability to speak read and write in the local vernacular language and English. • Since all the above mentioned areas are related to factual knowledge in the field of electrical, civil installation of solar PV power plant, the role qualifies for Level 4. • The job holder is expected to know	4

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		more than basic facts and principles, such as, understanding of the as built electrical drawings, the details of the manufacturer's instructions to use the equipment and tools, the various faults which can occur in the electrical equipment parts and their rectification, etc. Since this role requires factual knowledge of field of installation and O&M of solar PV power plant, it cannot be pegged at level 3. • Further, since the job holder is not expected to be aware of principles/ process & general concepts in the field of installation and O&M as a whole, hence the role can't be pegged at level 5. For example, this role is not expected to have knowledge about the civil/mechanical installation and day to day operation of solar PV power plant	
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	• The job holder is expected to operate/ use screw driver, inspection fixtures, wire cutter, pliers, testers, spanner, etc., plan and organize the regular installation activities to be conducted at the solar PV power plant. Further, the job holder must be able to take the day to day decisions and solve problem/s at work. The job holder should also be able to critically analyse the information gathered from different channels like current, voltage readings, observations made by helpers, etc. to identify the possible faults which can occur and take pro-active action.	• The job holder is expected to recall and demonstrate practical skills, which are routine and repetitive in a narrow range of application such as checking the integrity and working conditions of connections, fuses, circuit breakers through visual inspection and checking the working condition of cables, modules, inverters, earthing and lightening protection systems through measurement of the relevant parameters like string current, output voltages, etc. and carrying out routine	4

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		cleaning and maintenance activities to ensure long life and stability of solar PV power plant. The incumbent further analyses the fault prone areas like connections, joints, earthing, etc., using standard techniques like measuring resistance, etc. takes steps to prevent faults. Further, the incumbent refers to and uses defined rules in SOP manual and tools as per organization's guidelines to conduct various types of maintenance activities • Since all the above-mentioned professional skill are related to demonstrating practical skills, which are routine and repetitive in a narrow range and using appropriate rule and tool, the role qualifies for Level 4. • The Job holder is expected to possess professional skills more than just demonstrating practical skills, which are routine and repetitive in a narrow range but also using appropriate rules & tools to analyse & interpret information. For example, S/he is expected to use quality concepts such as analysing the parameters like current, voltage and resistance to interpret working of electrical components. Also, the incumbent analyses the state of electrical equipment through visual inspection and other methods and takes steps to	

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		rectify the same. Hence, the job holder can't be placed at Level 3. • Further the job holder doesn't require to use much cognitive skills to accomplish tasks and solve problems at the workplace. The activities performed primarily practical skill. Hence s/he can't be placed at level 5.	
Broad Learning Outcomes/Core Skill	• The individual is expected to exhibit effective communication skills by communicating clearly with the O&M Engineer and helpers and understanding the instructions given by the supervisors. Further, the individual is expected to perform respective record maintaining work and use basic arithmetic/ algebraic principles like summation, multiplication, etc. to compute resistance, voltages, etc. to identify common faults in the electrical equipment. The individual should also possess basic understanding of natural environment to understand the common faults and issues which can occur at the solar PV power plant.	• The job holder is expected to exhibit effective oral communication skills (including awareness of vernacular language) so as to understand the instructions of the supervisor as well as clearly instruct helpers while carrying out day to day maintenance activities. The job holder is also expected to possess reading and writing skills so as to read and understand equipment manuals, health and safety instructions, various signage and standard code and concepts well as well as maintain records as per organisation policies. The job holder is also expected to display basic arithmetic/ algebraic awareness to analyse and interpret the evaluation parameters of electrical equipment such as the standard current, voltage level, the accepted resistance levels for different components, etc. The incumbent must understand the social, political of the local environment so as to communicate effectively with solar project helpers who primarily belong to the surrounding regions and natural	4

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		environment so as to identify common issues and faults which can affect the health of electrical parts in the solar PV power plant. • Since all the above mentioned core skills are related to exhibiting effective oral, written communication skills along with basic understanding of the arithmetic principles as well as understanding of the social, political and natural environment such as clarifying the client's understanding and expectation prior to commencement of treatment the role qualifies for Level 4. • The Job holder expected to possess core skills more than just demonstrating minimum clarity in oral & written communication such as getting specific instructions from the supervisor and carrying out activity or reporting to supervisor specific observations from the solar PV power plant. Hence, the role can't be placed at Level 3. • Further since the job holder doesn't require to use detailed mathematical skill or skill of collecting & organizing information such as collecting information regarding plant operating parameters, getting information from sub- ordinates and peers to identify possible issues and faults, s/he can't be placed at level 5	

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Responsibility	• The individual is primarily responsible to gain knowledge about standard protocols and SOPs regarding installation and commissioning in solar PV power plant. S/he is also expected to update self with the solar PV power plant and functioning through equipment manuals, books, etc.	• The solar PV maintenance technician is responsible for his/ her own work and learning. S/he is expected to update self with the standard protocols and SOPs using the available equipment manuals, etc. S/he is also expected to have significant on the job learning about the equipment and their maintenance procedures. S/he works under some supervision but primarily carries out his/her day to day activities independently. Thus s/he can be placed at level 4. Since s/he is neither expected to be responsible of other's work and learning , s/he can't be placed at level 5 Also as is evident from the above examples that the incumbent is fully responsible for responsible for his/ her own work and learning rather than being responsible in defined limit since s/he gathers the practical skills/ techniques required to perform a task in the on the job, s/he analyses & interprets how to utilize the acquired skills & techniques while executing the maintenance activities and enhances his/her knowledge base about use of several tools, equipment's and materials for a given task therefore s/he can't even be placed at Level 3. • Also as is evident from the above examples that the incumbent is fully responsible for responsible for his/ her own work and learning rather than being responsible in defined limit since	4

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		s/he gathers the practical skills/ techniques required to perform a task in the on the job, s/he analyses & interprets how to utilize the acquired skills & techniques while executing the maintenance activities and enhances his/her knowledge base about use of several tools, equipments and materials for a given task therefore s/he can't even be placed at Level 3	

Annexure 2: Tools and Equipment (Lab Set-Up)

List of Tools and Equipment Batch Size: 30 trainees

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
1	SPV Module above 400 Wp	Nos	4
2	Ongrid Inverter 1.5 -2 KVA	Nos	1
3	Mounting structure in two tables	Nos	1
4	Battery 12V , 75 AH	Nos	2
5	Battery Stand	Nos	1
6	Battery Interconnection wires & Lugs	meter	10
7	Solar Irradiation Meter	Nos	1
8	MC 4 series connectors	Nos	50
9	MC 4 parallel connectors Branch	Nos	5
10	Solar Grade DC cable 4 SQ mm	meter	20
11	Green yellow Earthing wire 6 sq. mm	meter	20
12	Cable ties UV protected 50,100,mm	packs	2
13	ACDB	Nos	1

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14	DCDB (3 in 3 out) with SPD	Nos	1
15	Solar Panel 75 W,12 V	Nos	4
16	Charge Controler (12 V ,5 A)	Nos	2
17	Battery (12V, 20Ah)	Nos	2
18	LED bulb (5 W)	Nos	4
19	Solar Lantern 5-10W	Nos	2
20	Connecting Wires (10 mtr)	meter	2
21	Mechanical Fixtures Required For Panel Installatio(Set)	set	2
22	AC wire 3 core ACDB to Inverter	Meter	5
23	AC 3 core cable 2.5 sq. mm	meter	30
24	Screw & PVC buffer for mounting ACDB & DCDB	Nos	100
25	Petroleum jelly for Battery terminal small	packs	10
26	Water level tube with holder	Meter	10
27	Sprit level Magnetic base	Nos	3
28	Inclinometer Magnetic base	Nos	3
29	30-meter fiber tape	Nos	3
30	Hammer screw driver	Nos	3
31	Tri square 8 inches	Nos	3
32	Metal measuring tape with level 5 m	Nos	3
33	Self adjusting Wire Stripping pliers 1.5 - 6mm²	Nos	5
34	30-meter (LNE three wire) Extension wire	Nos	2
35	Flat & Ring Spanner set	Nos	2
36	Torque wrench with adopter	Nos	1
37	Ball pin Hammer	Nos	3
38	Digital Multimeter	Nos	3
39	Digital AC & DC Clamp meter	Nos	2
40	Crimping Tool (0.5mm² to 16mm²)	Nos	2

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41	Hammer Drill Machine 13mm 550Watt	Nos	2
42	Set of drill bit for Concrete	Set	3
43	Set of HSS drill bit for Metal	Set	3
44	Cutting wheel & Grinding wheel	Nos	3
45	Hot gun Gas / electric operated for sleeves	Nos	2
46	Pair of Solar MC 4 Connector Wrench Tools	Nos	3
47	Hydrometer	Nos	2
48	Battery Load tester	Nos	2
49	Digital Earth Tester	Nos	1
50	Cable Insulation tester (Megger)	Nos	1
51	Hand Gloves (PVC Gloves & Cotton Gloves)	Nos	10
52	Safety Jacket (PVC Coated & Reflective)	Nos	10
53	Safety Full body Harness	Nos	3
54	Anti-slip safety shoes	Nos	10
55	Safety Goggles (Spectacles, Goggles)	Nos	10
56	Head Helmet/Hard Hat	Nos	10
57	Anchor Lifeline	Nos	2
58	Safety Static Rope (9.0 mm)	Nos	2
59	First Aid Kit	Nos	3
60	First aid kit	Nos	1
61	Assistive Aid/Service	Nos	1
62	Ai-Live	Nos	1
63	Captions First	Nos	1
64	Captions 2020	Nos	1
65	Closed Capp	Nos	1
66	Let’s Talk	Nos	1
67	LCD TV	Nos	1

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68	Visual curricula	Nos	1
69	Computer	Nos	1

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Computer/Laptop
2. Projector
3. Whiteboard
4. Marker
5. Worktable

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Annexure: Industry Validations Summary

Provide the summary information of all the industry validations in table. This is not required for OEM qualifications

S. No	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID	LinkedIn Profile (if available)
NA	NA	NA	NA	NA	NA	NA	NA

Annexure: 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
2025-27	25	25			25	25

Data to be provided year-wise for next 3 years

Training, Assessment, Certification, and Placement Data for previous versions of qualifications

Qualification Version	Year	Total Candidates				Women				People with Disability			
		Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed
2.0		0	0	0	0	0	0	0	0	0	0	0	0

Applicable for revised qualifications only, data to be provided year-wise for past 3 years

List Schemes in which the previous version of Qualification was implemented:

1.

Content availability for previous versions of qualifications:

☒ Participant Handbook ☒ Facilitator Guide ☐ Digital Content ☐ Qualification Handbook ☐ Any Other:

Languages in which Content is available: NA

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Annexure: 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 Qualification	List Recommended Tools – for all Selected Components	Offline : Online Ratio
1	□Theory/ Lectures - Imparting theoretical and conceptual knowledge	NA	NA
2	□Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners	NA	NA
3	□Showing Practical Demonstrations to the learners	NA	NA
4	□Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	NA	NA
5	□Tutorials/ Assignments/ Drill/ Practice	NA	NA
6	□Proctored Monitoring/ Assessment/ Evaluation/ Examinations	NA	NA
7	□On the Job Training (OJT)/ Project Work Internship/ Apprenticeship Training	NA	NA

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Annexure 3 : Detailed Assessment Criteria

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

NOS/ Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
SGJ/N0101: *Site survey for installation of Solar PV system*	*Roles and responsibilities of a Solar PV Installer*	**4**	**4**	-	-
	PC1. Explain about the roles and responsibilities of a solar PV Installer along with emerging jobs & entrepreneurial opportunities the sector offers.	1	2	-	-
	PC2. Illustrate the advantages of doing the course and opportunities for progression.	1	-	-	-
	PC3. Demonstrate how to maintain general discipline during the training program.	-	1	-	-
	PC4. Explain the importance of basic skills for effective communication; along with how to work effectively with others while respecting gender and disability concerns at project sites.	1	-	-	-
	PC5. Explain the importance of reading and interpreting signs, notices and/or cautions at project site.	1	-	-	-
	PC6. Demonstrate how to read and interpret sign, notice and cautions at project site.	-	1	-	-
	Discuss solar energy concepts	**4**	**7**	-	-
	PC7. Explain Ohm's law and fundamentals of power and energy	1	2	-	-
	PC8. Explain the basics of solar energy/ electricity and electrical concepts.	1	-	-	-
	PC9. Show how to perform simple calculations to illustrate the fundamental concepts of power and energy.	-	2	-	-
	PC10. Explain the relevance of diffused normal irradiance and global horizontal irradiance along with the differences in Irradiance & Irradiation.	1	2	-	-
	PC11. Illustrate the movement of the sun and assess its effect on the performance of the solar power plant and overall solar generation.	1	-	-	-
	PC12. Demonstrate how the movement of sun affects the performance of the solar power plant.	-	1	-	-
	Assess the site conditions	**6**	**8**	-	-

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	PC13. Assess the location of installations and optimize the route plan	1	1	-	-
	PC14. Assess the site level pre-requisites for solar panel installation	1	1	-	-
	PC15. Explain the importance of shading analysis and show hot to check for any shading obstacles	1	1	-	-
	PC16. Show how to perform system sizing calculations.	-	2	-	-
	PC17. Discuss how to decide on the type of mounting to be constructed and inform the customer for any civil construction to be undertaken for installing the panels	1	1	-	-
	PC18. Prepare a site map of the location where installation has to be carried out	1	1	-	-
	PC19. Perform feasibility for innovative energy solutions like portable, "plug and play" or "behind the meter system" for mounting solar panel where typical civil construction work is not required	1	1	-	-
	Identify load to be connected to solar PV system	**5**	**8**	**-**	**-**
	PC20. Assess the load to be run on solar power plant.	2	2	-	-
	PC21. Prepare a load profile.	1	2	-	-
	PC22. Document the site survey variables and complete the checklist/site survey form.	1	2	-	-
	PC23. Identify point of connection.	1	2	-	-
	Material conservation and use of environment friendly materials	**2**	**2**	**-**	**-**
	PC24. Identify processes where material utilization can be optimized and suggest that to relevant authority	1	1	-	-
	PC25. Identify and implement ways to monitor material use, conserve and re-use water.	1	1	-	-
NOS Total		**21**	**29**	**-**	**-**
NOS/ Module Name	**Assessment Criteria for Performance Criteria/Learning Outcomes**	**Theory Marks**	**Practical Marks**	**Project Marks**	**Viva Marks**
SGJ/N0102:	*Discuss system components and manufacturer specification sheet*	**9**	**10**	**-**	**-**

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Procure Solar PV system components	**PC1.** Explain various terminologies used in the solar industry and identify different components ofSolar PV system and explain its basic operation.	2	3	-	-
	PC2. Explain the working of different types of SolarPV systems including innovative behind the meter or plug & play system.	2	2	-	-
	PC3. Explain manufacturer's specification sheet of different components	3	3	-	-
	PC4. Describe and analyse the different types, sizes and specifications of modules, inverters,charge controllers, cables, conduits, junction boxes, solar batteries and allied accessories.	2	2	-	-
	Prepare Bill of Material	**7**	**8**	**-**	**-**
	PC5. Read and interpret the Single Line Diagram(SLD), civil/mechanical and electrical drawings	3	3	-	-
	PC6. Prepare Bill of Materials (BoM) from single line diagram, civil/mechanical and electrical drawings	2	3	-	-
	PC7. Prepare bill of materials including for portable and innovative energy solutions like plug and play or behind the meter system	2	2	-	-
	Procure the components	**17**	**24**	**-**	**-**
	PC8. Approach organization's warehouse/vendors, suppliers and/or manufacturers to place the order for components as per BoM	2	2	-	-
	PC9. Ensure quantity of modules / panels, inverter and batteries matches with voltage requirement ofthe system	2	3	-	-
	PC10. Identify and list variation in equipment specifications, if any	2	3	-	-
	PC11. submit the documented variation to design team (if required) for approval or revised drawings	2	2	-	-
	PC12. arrange for tools and consumables required for mounting the solar panels	3	3	-	-
	PC13. Dispatch the equipment at site as per statutory and other requirements	2	4	-	-
	PC14. Ensure that all materials are QC passed	2	3	-	-
	PC15. Complete all documentation with respect to procurement and plan and receive the equipment at site	2	4	-	-
	Verify the components on-site	**8**	**13**	**-**	**-**
	PC16. Ensure that all the components are handled and stored properly as per standard operating procedures	2	3	-	-

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	PC17. Check materials received as per final BoM to ensure that the correct material for the job arrives on site and is damage free	2	4	-	-
	PC18. Describe the DO's and Don'ts of material handling and demonstrate the process of safe material handling.	2	2	-	-
	PC19. Report and document the status of material received at site and take appropriate action for replacements, if any	2	4	-	-
	Material conservation and use of environment friendly materials	**2**	**2**	**-**	**-**
	PC20. identify materials which can be replaced by environment friendly substitutes and identify processes where material utilization can be optimized and accordingly suggest those to higher authority.	2	2	-	-
NOS Total		**43**	**57**	**-**	**-**
NOS/ Module Name	**Assessment Criteria for Performance Criteria/Learning Outcomes**	**Theory Marks**	**Practical Marks**	**Project Marks**	**Viva Marks**
SGJ/N0103: *Install Civil and Mechanical parts of Solar PV System*	*Construction of equipment foundation*	**5**	**7**	-	-
	PC1. identify type of footing or dead load required	1	1	-	-
	PC2. locate structural footings	1	1	-	-
	PC3. arrange tools and consumables required for civil/mechanical installation	1	1	-	-
	PC4. construct concrete forms to design specifications with water and material conservation	1	2	-	-
	PC5. install mounting posts, roof attachments and anchors	1	2	-	-
	Install mounting system	**7**	**7**	-	-
	PC6. locate structural roof members and install structural attachments	1	1	-	-
	PC7. install module support/racking frame	1	1	-	-
	PC8. plumb and level array structure	1	1	-	-
	PC9. install supplementary structural supports	1	1	-	-
	PC10. apply corrosion protection to cut surfaces	1	1	-	-

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	PC11. apply weatherproofing and anchoring chemical to avoid any seepage and for properintegration with surface	1	1	-	-
	PC12. install tracking system or carport mountingsystem	1	1	-	-
	Install photovoltaic modules	**7**	**7**	**-**	**-**
	PC13. unpack PV modules	1	1	-	-
	PC14. inspect module for physical damage	1	1	-	-
	PC15. test PV modules electrical output	1	1	-	-
	PC16. install the modules as per layout diagrams	1	1	-	-
	PC17. secure module wiring	1	1	-	-
	PC18. fasten modules to structure	1	1	-	-
	PC19. torque module fasteners	1	1	-	-
	Install battery bank stand and inverter stand	**2**	**2**	**-**	**-**
	PC20. install battery bank stand and battery spill containment as per drawings / manuals	1	1	-	-
	PC21. install inverter stand as per drawings / manuals	1	1	-	-
	Material conservation practices	**2**	**2**	**-**	**-**
	PC22. identify ways to optimize usage of material including water in various tasks/activities/processes and suggest to higher authority	1	1	-	-
	PC23. check for spills/leakages in various tasks/activities/processes, plug spills/leakages and escalate to appropriate authority if unable to rectify	1	1	-	-
	Effective waste management/recycling practices	**1**	**1**	**-**	**-**
	PC24. segregate waste into different categories, dispose non- recyclable waste appropriately and deposit recyclable and reusable material at identified location	1	1	-	-
NOS Total		**24**	**26**	**-**	**-**
NOS/ Module Name	**Assessment Criteria for Performance Criteria/Learning Outcomes**	**Theory Marks**	**Practical Marks**	**Project Marks**	**Viva Marks**

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SGJ/N0104: *Installation of electrical components of a Solar PV system*	*Prepare for solar Installation*	**9**	**9**	-	-
	PC1. implement the site safety plan, keep workarea clear and be aware of the situation at site	1	2	-	-
	PC2. ascertain the maximum working voltage	1	1	-	-
	PC3. identify tools and tackles and measure current and voltage through instruments beforeproceeding with work	2	2	-	-
	PC4. inspect and utilize electrical installationtoolkit	2	1	-	-
	PC5. select the location of DC combiner box	1	1	-	-
	PC6. install DC combiner box along withdisconnect protections	2	2	-	-
	Install electrical components	**14**	**20**	-	-
	PC7. install DC energy meters	1	1	-	-
	PC8. confirm battery bank location and installbatteries	2	2	-	-
	PC9. prepare battery terminals and installbattery interconnection cables	1	2	-	-
	PC10. terminate fine stranded cables	1	1	-	-
	PC11. test final assembled battery polarity andvoltage	1	1	-	-
	PC12. install charge controller (if required)	1	1	-	-
	PC13. install inverter	1	2	-	-
	PC14. install utility required disconnects	1	2	-	-
	PC15. install AC combiner box	1	1	-	-
	PC16. connect the solar system to the distribution box or transformer	1	2	-	-
	PC17. label components properly	1	1	-	-
	PC18. prepare conduit and cable routing plan	1	2	-	-
	PC19. select the correct cable type, color, and gauge	1	2	-	-
	Install conduits and cables ensuring minimum wastage of materials	**7**	**11**	**-**	**-**
	PC20. ensure that the conduits are properly supported and secured	2	2	-	-

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	PC21. install the cables for modules, inverter and other components	1	2	-	-
	PC22. terminate cables	2	2	-	-
	PC23. check cables for continuity	1	2	-	-
	PC24. label conduits and cables properly	1	2	-	-
	PC25. locate underground hazards, if any	-	1	-	-
	Install battery bank (as required)	**4**	**8**	**-**	**-**
	PC26. confirm and install battery bank enclosure/racks	1	2	-	-
	PC27. install battery spill containment (if required)				
		1	2	-	-
	PC28. install batteries and prepare battery terminals (e.g. clean)	1	2	-	-
	PC29. install battery interconnection cables and apply anti-oxidant material	1	2	-	-
	Perform electrical grounding and install earthing and lightening arrestor	**6**	**8**	**-**	**-**
	PC30. perform the grounding work for modules/mounting system and inverters	2	3	-	-
	PC31. perform bonding work for all electrical equipment and apply anti-oxidant material	2	3	-	-
	PC32. explain the de-mounting of a solar PV power plant (after commissioning).	2	2	-	-
	Post work activities	**2**	**2**	**-**	**-**
	PC33. clean the work area after completing the installation work	1	1	-	-
	PC34. remove all the tools, consumables used from the work area	1	1	-	-
NOS Total		**42**	**58**	**-**	**-**
NOS/ Module Name	**Assessment Criteria for Performance Criteria/Learning Outcomes**	**Theory Marks**	**Practical Marks**	**Project Marks**	**Viva Marks**

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SGJ/N0105: *Test and commission Solar PV system*	*Test the system*	**14**	**17**	-	-
	PC1. describe the importance of conducting testing of all solar PV components and performfault findings and analysis	2	-	-	-
	PC2. perform visual inspection	1	1	-	-
	PC3. inspect mechanical, civil and electricalinstallation components	2	2	-	-
	PC4. verify system grounding and measureinsulation resistance	1	2	-	-
	PC5. check continuity of the system and verifypolarity	1	2	-	-
	PC6. measure solar irradiance, DC voltages, current for each string and array for properoperation of the system	2	2	-	-
	PC7. verify inverter operation including anti- islanding performance and measurement of ACsystem values	2	2	-	-
	PC8. verify calibration of data acquisition system	1	1	-	-
	PC9. verify workmanship and demonstrateproficiency in using tools	1	3	-	-
	PC10. prepare inspection report and takeappropriate action	1	2	-	-
	Commission the system	**9**	**10**	-	-
	PC11. verify labeling of solar PV systemincluding components and cabling	1	2	-	-
	PC12. initiate startup procedures as per manufacturer's instructions and record energymeter reading at startup	2	1	-	-
	PC13. measure and record voltage of energystorage system	1	2	-	-
	PC14. record and repair any anomalous conditions	1	1	-	-
	PC15. document design changes, if any and verify de- mounting of a solar PV power plant after commissioning	1	1	-	-
	PC16. examine concerned regulations & guidelines for grid interconnection.	1	1	-	-
	PC17. describe and demonstrate the commissioning process for the solar PV system.	2	2	-	-
NOS Total		**23**	**27**	-	-

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NOS/ Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
SGJ/N0622: *Maintain Solar Photovoltaic Power System*	*Preventive maintenance of system*	**10**	**14**	-	-
	PC1. clean solar panels with water in low sunlightto remove dust, bird droppings, pollen, leaves, branches and snow for maximum energy output from the system	2	3	-	-
	PC2. wipe hard stains by wiping with sponge/cotton	2	2	-	-
	PC3. use cleaning agents such as detergents toclean the stains/dust on the aluminum framing	1	2	-	-
	PC4. clean without damaging modules by stepping on it or through mechanized method	1	1	-	-
	PC5. clean module periodically as per specification and document the date of cleaning	1	2	-	-
	PC6. explain and show how to prepare and execute preventive maintenance schedule andreactive maintenance activities.	3	4	-	-
	Inspection of the PV system	**8**	**15**	-	-
	PC7. inspect regularly solar power system andmark check points	1	2	-	-
	PC8. ensure modules are clean and not affectingpower output	1	1	-	-
	PC9. ensure that modules are free from any treeshades, construct or other disruption from receiving sunlight	1	2	-	-
	PC10. check all cables for loose connections andany mechanical damage	1	2	-	-
	PC11. check output voltage of the system andcompare with the expected output voltage generation	1	2	-	-
	PC12. check for any damage for the system byexternal elements	1	2	-	-
	PC13. ensure that electrical connections are as per specifications	1	2	-	-
	PC14. check for mechanical components and the condition and stability of mounting to hold solar panels	1	2	-	-

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	Troubleshoot function	**12**	**21**	**-**	**-**
	PC15. identify the faults in the system when there is an interruption in power generation	1	3	-	-
	PC16. check current output for each string and identify the string which gives low/undesired power output	1	3	-	-
	PC17. identify the faulty module if any by shading and check current output	1	2	-	-
	PC18. perform standard troubleshoot measures as per diagnosed fault	2	3	-	-
	PC19. check working conditions of fuses and circuit breakers	2	2	-	-
	PC20. check the service panel connections and any damages in the cables	1	2	-	-
	PC21. check wire connection to inverter and identify damage if any	2	2	-	-
	PC22. inform the inverter service technician if there is a circuit board level fault for further repair	1	2	-	-
	PC23. escalate the issue to superiors if faults can not be identified	1	2	-	-
	Completion of work	**7**	**8**	**-**	**-**
	PC24. remove all the tools, consumables used from the installation area	1	2	-	-
	PC25. fill in the job completion form and get the signature of the customer	2	2	-	-
	PC26. inform customers about maintenance of solar panels	2	2	-	-
	PC27. document maintenance activities if performed	2	2	-	-
	Follow greening principles at workplace	**3**	**2**	**-**	**-**
	PC28. clean the work area after completing the maintenance activity	2	1	-	-
	PC29. dispose off any waste materials in accordance with safe working practices and procedure	1	1	-	-
NOS Total		**40**	**60**	**-**	**-**

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NOS/ Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
SGJ/N0106: *Maintain Personal Health & Safety at Project Site*	*Adopt safe practices at workplace*	**13**	**19**	-	-
	PC1. explain the requirements for safe work area	2	-	-	-
	PC2. identify and report any hazards, risks orbreaches in site safety to the appropriate authority	2	3	-	-
	PC3. follow recommended safe practices in handling physical, chemical, electrical and firehazards and risk	1	2	-	-
	PC4. use appropriate Personal Protective Equipment (PPE) for head, eye, hand, ear, face, body and fall protection specific to work condition	2	4	-	-
	PC5. follow safe practices when working at heightand in confined space	1	1	-	-
	PC6. handle all required tools, tackles, materialsand equipment safely	1	2	-	-
	PC7. identify expiry dates, wear and tear issuesof specified equipment and accordingly inform supervisor and undertake corrective measures	1	2	-	-
	PC8. apply ergonomic principles whereverrequired	1	2	-	-
	PC9. use safety signs, labels, charts and noticesat workplace	1	1	-	-
	PC10. identify work safety procedures and instructions for handling heavy components	1	2	-	-
	Follow emergencies, rescue and first aid procedures	**4**	**4**	-	-
	PC11. follow emergency and evacuation procedures in case of accidents, fires and naturalcalamities	1	1	-	-
	PC12. use appropriate fire extinguishers fordifferent types of fire	1	1	-	-
	PC13. administer first aid to victim in case of various medical emergencies including bleeding, burns, choking, electric shock, cardiac arrest, etc.	1	1	-	-
	PC14. use correct method to move injured person during an emergency	1	1	-	-

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	Follow good housekeeping practices and infection control guidelines	**4**	**6**	**-**	**-**
	PC15. follow recommended personal hygiene, workplace hygiene and sanitation practices	1	1	-	-
	PC16. clean and disinfect all material, tools and supplies before and after use	1	1	-	-
	PC17. report immediately to concerned authorities regarding sign and symptoms of illness of self and other colleagues	1	2	-	-
	PC18. follow processes specified for disposal of hazardous waste	1	2	-	-
NOS Total		**21**	**29**	**-**	**-**
NOS/ Module Name	**Assessment Criteria for Performance Criteria/Learning Outcomes**	**Theory Marks**	**Practical Marks**	**Project Marks**	**Viva Marks**
SGJ/N0107: *Customer orientation for Solar PV system*	*Handover system completion documentation*	**15**	**17**	**-**	**-**
	PC1. explain and show how to prepare completeand final documentation	3	4	-	-
	PC2. record component serial numbers, file datasheet and complete equipment warranty registration	3	3	-	-
	PC3. record and document inspection andcommissioning certificates/forms	3	2	-	-
	PC4. deliver as-built documents along withproject photographs and permits	2	2	-	-
	PC5. deliver O&M documentation and customeroperation manual	2	3	-	-
	PC6. inform the customer about the type of battery used, its life of operation and to disposebattery after its useful life to a recycling facility	2	3	-	-
	Demonstrate working procedure of solar PV system	**9**	**9**	**-**	**-**
	PC7. demonstrate start-up, shutdown and safetyprocedures to the customer	3	3	-	-
	PC8. demonstrate normal operation procedure along with maintenance procedures of Solar PVsystem and provide basic training to maintain the system	3	3	-	-

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	PC9. demonstrate work safety procedures andhow to follow instructions for handling heavy components at project site	3	3	-	-
NOS Total		**24**	**26**	**-**	**-**

PWD/N0501 - Employability Skills for Persons with Disabilities (70 hours)				
Introduction to Employability Skills	**2**	**1**	**-**	**-**
PC1. identify employability skills required for jobs in various industries	-	-	-	-
PC2. identify and explore learning and employability portals	-	-	-	-
Constitutional values – Citizenship	**1**	**1**	**-**	**-**
PC3. recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
PC4. follow environmentally sustainable practices	-	-	-	-
Becoming a Professional in the 21st Century	**2**	**3**	**-**	**-**
PC5. recognize the significance of 21st Century Skills for employment	-	-	-	-
PC6. practice the 21st Century Skills such as Self- Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
Basic English Skills	**6**	**9**	**-**	**-**
PC7. use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
PC8. read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
PC9. write short messages, notes, letters, e-mails etc. in English	-	-	-	-
Communication Skills	**4**	**6**	**-**	**-**

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PC10. follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
PC11. recognize how to eliminate barriers to effective communication	-	-	-	-
PC12. work collaboratively with others in a team	-	-	-	-
Essential Digital Skills	**4**	**6**	**-**	**-**
PC13. operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
PC14. use e- mail and social media platforms, search engines and virtual collaboration tools to work effectively	-	-	-	-
PC15. use basic features of word processor, spreadsheets, and presentations	-	-	-	-
PC16. identify popular sites for learning & career growth	-	-	-	-
Diversity & Inclusion	**1**	**2**	**-**	**-**
PC17. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC18. explain business benefits of inclusive workplace	-	-	-	-
PC19. identify common barriers to Diversity & Inclusion	-	-	-	-
PC20. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
Financial and Legal Literacy	**2**	**4**	**-**	**-**
PC21. select financial institutions, products, and services as per requirement	-	-	-	-
PC22. carry out offline and online financial transactions, safely and securely	-	-	-	-
PC23. identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-

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PC24. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
Career Development & Goal Setting	**4**	**6**	-	-
PC25. understand the difference between job and career	-	-	-	-
PC26. prepare a career development plan with short- and long-term goals, based on aptitude, interest & explain steps involved in conducting a market scan	-	-	-	-
Customer Service	**4**	**6**	-	-
PC27. identify different types of customers	-	-	-	-
PC28. identify and respond to customer requests and needs in a professional manner.	-	-	-	-
PC29. Elaborate types and importance of closing techniques during customer interface	-	-	-	-
Getting ready for apprenticeship & Jobs	**4**	**6**	-	-
PC30. follow appropriate hygiene and grooming standards	-	-	-	-
PC31. identify four stages of action to prepare for employment	-	-	-	-
PC32. identify common workplace solutions for better output	-	-	-	-
PC33. create a professional Curriculum vitae (Résumé)	-	-	-	-
PC34. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
PC35. apply to identified job openings using offline /online methods as per requirement	-	-	-	-
PC36. answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-

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PC37. evaluate failures and rejections for future opportunities	-	-	-	-
PC38. identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
Disability Specific Skills	**4**	**6**	**-**	**-**
PC39. identify the requirements and challenges of employment in terms of one's limitations and strengths	-	-	-	-
PC40. apply four stages of action for employment	-	-	-	-
PC41. apply solutions for challenges associated with one's disability at workplace	-	-	-	-
PC42. discuss significance of workplace challenges for the Persons with Disability	-	-	-	-
PC43. describe importance and impact of independent functioning for a person with disability at home, work place or community at large	-	-	-	-
PC44. illustrate skills like independent mobility, note taking and communication.	-	-	-	-
PC45. discuss ways to break barriers with colleagues owing to one's disability	-	-	-	-
PC46. use positive language to communicate about one's disability and possible intervention	-	-	-	-
Entrepreneurship	**2**	**4**	**-**	**-**
PC47. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
PC48. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
PC49. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
NOS Total	**40**	**60**	**-**	**-**

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Annexure 4: Assessment Strategy

Assessment Strategy of SCPwD

Pre-Assessment Phase-

1. Batch allocated to the Assessment Agency by SCPwD through Portal/ Email.
2. Assessment Agency to connect with Training Provider and communicate/confirm the date of assessment through email.
3. Assessment Agency to share requisite lab infrastructure & checklist with TP and discuss about the availability through email.
4. Assessment Agency aligns the Assessor for the assessment (Assessor should be Dual Certified by the Domain SSC as well as SCPwD, and the certification should be valid).
5. Prepare the Assessment link, formats and share with the Assessor over an email.
6. Share the Assessment demo link with the Training Partner over an email.

Assessment Phase-

1. The Assessor verifies the identity and disability through Aadhar Card and Disability Certificate and reports to SCPwD in- case of any discrepancy [In case of J&K and NE Voter ID & Pan Card also allowed for Candidates Identification].
2. The candidates are briefed on the assessment process (Prior to starting of the assessment).
3. The Assessor verifies the lab equipment and reports to SCPwD in-case of any variance.
4. Post validation of photo Id proof for each candidate, attendance of candidate is captured according to the scheme's requirement. i.e., under PMKVY, attendance of the candidates is captured through Aadhar Enabled Assessor Application, however, under other schemes candidates sign the attendance sheet.
5. The candidates attempt the assessment on TAB/Computer System.
6. The Assessor takes the photos and videos of respective activities and completes the documentation formalities.

Post Assessment Phase-

1. The Assessment Agency prepares the result based on responses captured in the server.
2. The Assessment Agency shares the result with SCPwD in the prescribe

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Annexure: Acronym and Glossary

Acronym

Term	Description
QP	Qualification Pack
NSQF	National Skills Qualification Framework
NSQC	National Skills Qualification Committee
NOS	National Occupational Standards

Glossary

Term	Description
Declarative Knowledge	Declarative knowledge refers to facts, concepts and principles that need to be known and/or understood in order to accomplish a task or to solve a problem.
Key Learning Outcome	Key learning outcome is the statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. A set of key learning outcomes will make up the training outcomes. Training outcome is specified in terms of knowledge, understanding (theory) and skills (practical application).
OJT (M)	On-the-job training (Mandatory); trainees are mandated to complete specified hours of training on site
OJT (R)	On-the-job training (Recommended); trainees are recommended the specified hours of training on site
Procedural Knowledge	Procedural knowledge addresses how to do something, or how to perform a task. It is the ability to work, or produce a tangible work output by applying cognitive, affective or psychomotor skills.
Training Outcome	Training outcome is a statement of what a learner will know, understand and be able to do **upon the completion of the training**.
Terminal Outcome	Terminal outcome is a statement of what a learner will know, understand and be able to do **upon the completion of a module.** A set of terminal outcomes help to achieve the training outcome.

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