



सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय
DEVELOPMENT COMMISSIONER
MINISTRY OF MICRO, SMALL & MEDIUM
ENTERPRISES

MSME TECHNOLOGY CENTRE



QUALIFICATION FILE

Technician - Hand Held Products

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

☐ Up skilling ☐ Dual/Flexi Qualification ☐ For ToT ☐ For ToA

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

NCrF/NSQF Level: 4.0

Submitted By:

MSME TECHNOLOGY CENTRE

O/o DC MSME, Ministry of Micro, Small and Medium Enterprises

Govt. of India

A-Wing, 7th Floor, Nirman Bhawan, Maulana Azad road,

New Delhi-110108

Contact No. +91-674-2654700,

Email-msmetcab@gmail.com

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Section 1: Basic Details

1.	Qualification Name	Technician - Hand Held Products	
2.	Sector/s	Electronics &HW	
3.	Type of Qualification: ☒ New ☐ Revised ☐ Has Electives/Options ☐ OEM	NQR Code & version of existing/previous qualification: (change to previous, once approved) QG-04-EH-02384-2024-V1-MSME	NQR Code & version of existing/previous qualification: (change to previous, once approved) MSME /HHP / 69
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-EH-02384-2024-V1-MSME	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	Learners who attains this Qualification will be able to: • Rectify the faults in the Hand-Held Products like Mobile, Tablet, Laptop. • Performs front end or hardware level repair as required, resolves software issues and ensures effective functioning before delivering back to customer. • To become an entrepreneur	
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	Nil		
		2	Completed / Pursuing 2nd year of 3-year diploma (after 10th)	Nil		
		3	Previous relevant Qualification of NSQF Level 3.	3 -year relevant experience		
		4	Previous relevant Qualification of NSQF Level 3.5	1.5-year relevant experience		
		b. Age: 17 Years				
10.	Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	17			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)	OJT Mandatory (Hours)	OJT Recommended (Hours)
		Classroom (offline)	72	120	210	-
		Online	108	-	-	-
		Total	180	120	210	510
		(Refer Blended Learning Annexure for details)				
14.	Aligned to NCO/ISCO Code/s (if no code is available mention the same)	7422.23 (Smartphones Repair Technician)				
15.	Progression path after attaining the qualification (Please show Professional and Academic progression)	Professional Progress: Sr. Technician (HHP)				
16.	Other Indian languages in which the Qualification & Model Curriculum are being submitted	Hindi				

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: As per Govt. Norms	
19.	How Participation of Women will be Encouraged	Seats are reserved as per government Norms.	
20.	Are Greening/ Environment Sustainability Aspects Covered (<i>Specify the NOS/Module which covers it</i>)	☒ Yes ☐ No The said aspect is covered in the module name Employability Skill.	
21.	Is Qualification Suitable to be Offered in Schools/Colleges	Schools ☐ Yes ☒ No Colleges ☒ Yes ☐ No Subject to availability of resources.	
22.	Name and Contact Details of Submitting / Awarding Body SPOC (<i>In case of CS or MS, provide details of both Lead AB & Supporting ABs</i>)	Name: Sh. Vijay Mahipatrao Bankar Contact No. +0755 3501078 Email-msmetcab@gmail.com	
23.	Final Approval Date by NSQC: 30.04.2024	24.Validity Duration: 3years	25.Next Review Date: 30.04.2027

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.	Pro j.	Viva	Total	Weight age (%) (if applicabl e)
1.	STUDY ON BASIC ELECTRICAL/ELECTRONICS, SAFETY & HAND TOOLS -HHP	MSME/HHP /01	Core	4	4	120	-	-	-	120	100	-	-	-	100	
2.	ADVANCE SKILL ENHANCEMENT ON TROUBLESHOOTING, ASSEMBLY ,DISASSEMBLY & SET UP ON RESPECTIVE PRODUCTS -HHP	MSME/HHP /02	Core	4	5	30	120	-	-	150	100	100	-	-	200	
3.	Employability skills	MSME/ES/01	Non- Core	4	1	30	-	-	-	30	100	-	-	-	100	
4.	ON JOB TRAINING	MSME/HHP /03	Core	4	7	-	-	210	-	210	-	-	-	100	100	
Duration (in Hours) / Total Marks					17	180	120	210	-	510	200	-	-	100	500	

Elective NOS/s:

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.	OJT - Man.	OJT - Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)

Optional NOS/s:

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.	OJT- Man.	OJT - Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)

Assessment - Minimum Qualifying Percentage:

Specify any one of the following:

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

Minimum Marks to pass Theory Exam: 40%

Minimum Marks to pass Practical Exam: 60%

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

Minimum Marks to pass Theory Exam: 40%

Minimum Marks to pass Practical Exam: 60%

Section 3: Training Related

1.	Trainer's Qualification and experience in the relevant sector (in years)(as per NCVET guidelines)	Diploma/ Degree in Mechanical Engineering/Electrical/Electronic or Equivalent with Practical skills and knowledge required in the relevant job role at least one level high-rise level 4.5 and above in related field and minimum 2 years of experience in Tool Room/ Technology Centre of MSME or any reputed industry will become a trainer, Or in accordance with the TOT guideline of NCVET
2.	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	Degree in Engineering (Mechanical Engineering/Electrical/Electronic or) or equivalent with 3 to 5 years of experience in Service centre of any reputed company like Samsung ,LG, Reliance OR Training Department from Tool Room/ Technology Centre of MSME or any reputed industry will become as a Master Trainer, Or in accordance with the TOT guideline of NCVET
3.	Tools and Equipment Required 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	Yes

Section 4: Assessment Related

1.	Assessor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Diploma / Degree in Engineering (Mechanical Engineering/Electrical/Electronic) or equivalent with 3 years of experience Service centre of any reputed company like Samsung ,LG, Reliance OR in Training from Tool
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		Room/ Technology Centre of MSME or any reputed industry. Only (TOA) certified assessors will be able to conduct the assessments.
2.	Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Degree in Engineering (Mechanical Engineering/Electrical/Electronic) or equivalent With 5 years of experience in Service centre of any reputed company like Samsung ,LG, Reliance OR Training Department from Tool Room/ Technology Centre of MSME or any reputed industry.
3.	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Post Graduate in the relevant discipline with minimum 5 years of experience in Service centre of any reputed company like Samsung ,LG, Reliance OR Training/Department from Tool Room/ Technology Centre of MSME or any reputed industry.
4.	Assessment Mode (Specify the assessment mode)	Blended Type (Online + Offline)
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): Yes, Skill Gap Analysis Report for Electronics and IT hardware Industry https://www.meity.gov.in/writereaddata/files/Electronics_IT_Hardware_NSDC_Report_1732011%20%281%29.pdf
2.	Latest Market Research Reports or any other source (not older than 2years) (Yes/No):Yes https://www.marketresearch.com/IBISWorld-v2487/Cell-Phone-Repair-Research-34321577/
3.	Government /Industry initiatives/ requirement (Yes/No):Yes

4.	Number of Industry validation provided: 30
5.	Estimated nos. of persons to be trained and employed: Approx. 500 per Year
6.	Evidence of Concurrence/Consultation with Line Ministry/State Departments: YES If "No", why:

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 (<i>Mandatory</i>)	<i>Annexure-I</i>
2.	Annexure: List of tools and equipment relevant for qualification (<i>Mandatory, except in case of online course</i>)	<i>Annexure-II</i>
3.	Annexure: Industry Validations Summary	<i>Annexure-III</i>
4.	Annexure: Training & Employment Details	<i>Annexure-IV</i>

5.	Annexure: Blended Learning (<i>Mandatory, in case selected Mode of delivery is "Blended Learning"</i>)	Annexure-V
6.	Annexure: Detailed Assessment Criteria (<i>Mandatory</i>)	Annexure-VI
7.	Annexure: Assessment Strategy (<i>Mandatory</i>)	Annexure-VII
8.	Annexure: Acronym and Glossary (<i>Optional</i>)	Annexure- VIII
9.	Annexure: Multiple Entry-Exit Details (<i>Mandatory, in case qualification has multiple Entry-Exit</i>)	NA
10.	Supporting Document: Model Curriculum (<i>Mandatory – Public view</i>)	Annexure- IX
11.	Supporting Document: Career Progression (<i>Mandatory - Public view</i>)	This aspect mentioned in point no. 15
12.	Supporting Document: Occupational Map (<i>Mandatory</i>)	Annexure-X
13.	Supporting Document: Assessment SOP (<i>Mandatory</i>)	Annexure- XI
14.	Any other document you wish to submit:	NA

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	Describe general service & maintenance practice ☐ ☐ Describe elements of servicing of various products. ☐ ☐ Describe assembling procedure for	As job holder (Service Engineer) is dealing with various products. he has to describe various process involving standard guidelines and procedures for doing the work. Job Holder (Service Engineer) shall use various methods for completing the task in stipulated time by using various catalogues and manuals supplied with the product . He should understand various	4

	critical product. ☐ ☐ Describe Service / Maintenance Processes and process plan	assemblies and fitments related to product and desired mechanism. Through Cognitive knowledge job holder (Service Engineer) shall judge the best conceptual procedure to work in complicated systems and logical system diagrams related to product	
Professional and Technical Skills/ Expertise/ Professional Knowledge	☐ ☐ Identify customer's requirement and create standard worksheet as per product. ☐ ☐ Develop plan for daily, weekly and monthly service / maintenance chart. ☐ ☐ Demonstrate and understand various service / maintenance techniques of mechanisms on various product. ☐ ☐ Develop creative solution to the predictable and unpredictable problems in product ☐ ☐ Develop mathematical/Analytical skills ☐ ☐ Develop quality consciousness concept ☐ ☐ Prepare costing of servicing and its related replace part. ☐ ☐ Troubleshoot the problems in product.	Job holder (Service Engineer) shall carry out the regular service / maintenance activity in service station / workshop. Assembling and dis- assembling methods for various product . Able identify and correct the cause of problems/error ,use of work clamping & product holding device for product , cognitive & practical skill required to accomplished tasks and solve problem & selecting basic method, principles, tools, material and information of standard practice of service product assembly. Understand judge the product and create a report of problems and errors. Identifying the basic problems/errors and resolving through related system solutions.	4
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	Cognitive and practical skills required to generate solutions to specific problems in a field of work or study		4
Broad Learning Outcomes/Core Skill	☐ ☐ Use basic & advance knowledge of the product and safety practices at the workplace ☐ ☐ Work on service of the product ☐ ☐ Develop entrepreneurship skills ☐ ☐ Communicate effectively	Job holder (Service Engineer) shall work on product service where he/she shall gather accurate information on maintenance or service scope and requirements, Confirm the problems, preparation of service plan, selection of assembly process based on criticality and fitment, communicate	4

		clearly about the failure to the group members through written /verbal/e mail etc. as per organizational standard, identify different solution options which will meet requirements and design specification, ,Analyze system concepts to meet design requirements, identify problems with work planning, procedures, output and behavior and their implications e.g. unpredictable behavior of machines, different automatic systems and standard parts de graded performance, prioritize and plan for problem solving, communicate problems appropriately to others. identify sources of information and support for problem solving, seek assistance and support from other sources to solve problems, Identify effective resolution techniques e.g. user manuals, maintenance manual, do and don'ts of systems etc., select and apply resolution techniques, seek evidence for problem resolution, inspect quality of own or other's work, analyze, information according to enterprise and work requirements, use diagnostic skills to identify and determine causes of faults, including interpretation of in-built fault indicators and error codes, take decisions within if within own jurisdiction or take approval for case outside own jurisdiction, Prepare cost estimate of the project, Prepare design & development project plan with timeline and responsibilities of self and team members, Carry out mathematical calculation required for various input specifications e.g. economy factor calculation, different forces calculation, tool element size design calculations, no. of cavities calculation etc., carry out mathematical calculation for selection of optimum solutions.	
Responsibility	☐ ☐ Work independently and work as a team members with full responsibility of output of group and development.	Job holder (Service Engineer) shall work independently during analyzing requirements of the service (product), concept generation of standard practice (based on guide line of particular product) and finalizing	4

		the requirements (according to service point of view) with the customer. After receiving confirm order from the customer, job holder shall prepare service work sheet and development plan with time line (visit date) and with job responsibilities of team members like preparation of standard parts (procure from store or purchase), preparation of material list as per service point of requirement.. Verification of final service plan, after service of the product final testing charts can be made for product performance, if its ok and rectification along with tool validation and will have full responsibility of output of service engineer. Job holder (Service Engineer) shall encourage team members for continues learning and development by time to time discussing with them various issues of service point of view like problems & its solution, frequent failures to specified product, new development in product (service point of view), selection of parts, new development in various automation systems according to service point of view. . Job holder (Service Engineer) shall follow work standard , Product Service Guide Line (Service Manual), specific norms and procedures (work instruction) laid down by the organization. Job holder (Service Engineer) shall develop moral, values and ethical practices in business operation.	
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Annexure: II Tools and Equipment (Lab Set-Up)

List of Tools and Equipment for Batch Size: 10

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
1.	SMD REWORK FR-801-08	Industry Standard	5
2.	NOZZLE A1130		5

3.	HAKKO SOLDERING STATION 88D		7
4.	Screw driver 0.5mm		21
5.	Screw driver 1mm		21
6.	BSSCRPS4V Power supply		2
7.	Digital Multimeter		7
8.	Magnifying Glass		7
9.	PBA Fixer		7
10.	Tweezers straight		10
11.	Tweezers bent		10
12.	IP Dispenser		10
13.	Flux Dispenser		10
14.	Brush straight		10
15.	ESD T-Br		10
16.	Disoldring Wick		20
17.	3M Wrist Strap-ECWS61M-Blue-80000953978		42
18.	Temp Resisitant Tape		5
19.	BSASFWSPUSLIPBBLU44ESD SLIPPERS		42
20.	ANTISTATIC APPRON		42
21.	ESD GLOVES BSGLSNF1301ESD GLOVES		42
22.	ESD FLOOR MET TESTER		1
23.	WSFT-01 STRAP FOOTWEAR TESTER		1
24.	SOLDER WIRES LEAD FREE		10
25.	NO CLEAN IP		5
26.	NO CLEAN FLUX		5
27.	DUST BLOWER		3

28.	Mobile/Tablet		40
29.	Computer System		01
30.	SVC JIG-MOBILE DRYER;1059738100		1
31.	SVC JIG-DISABLE SET HOLDER ; 1077365200,		2
32.	SVC JIG-DISASSEMBLY JIG;1059595100		4
33.	SVC JIG-TSP FORM TAPE ATTACHED JIG; 1059738		1
34.	SVC JIG-WINDOW PRESS JIG(BODY);10#973840		1
35.	SVC JIG-WINDOW PRESS PAD;SM-N910F,106846		1
36.	SVC JIG-WINDOW PRESS PAD;SM-Z130H,106846		1
37.	JIG SLEEP CURRENT CABLE		2
38.	A/S-TAPE_BACK_GLASS_SVC;SM-A510F,ANYONE		24
39.	A/S-OCTA COVER-TAPE(LJ63-15550A);SM-A510		48
40.	A/S-TAPE_BATTERY_SVC;SM-A510F,TESA 68408		48
41.	GRAPHITE THERMAL SHEET-TAPE_OCTA_CU;SM-A		48
42.	A/S-MAIN WINDOW_SVC;SM-J510F,YT-6930B,BL		48
43.	A/S-TAPE BATTERY;SM-G925F,YT-6705SRH,TRP		48
44.	A/S-TAPE BACKGLASSOUTTER(R/KIT)SM-G925F		48
45.	A/S Tape Window (R/KIT)-G925		48
46.	A/S-TAPE BRACKET CU TOP_V1;SM-N910F,AT03		48
47.	CONDUCTIVE GASKET-TAPE LCD		50
48.	A/S REWORK KIT-SM-N950,COMM;SM-N950		21
49.	TAPE SPONGE- BATT CELL; SM-N950F,PU,SRJ015		34
50.	A/S REWORK KIT-T;SM-G950,SVCCOMM; SM-G9		34
51.	SVC JIG-WINDOW ABSORBER;2714143700,SM		1
52.	SVC JIG-SLEEP CURRENT CABLE (NEW 7 PIN);10		1

53.	SVC JIG-SLEEP CURRENT CABLE (11 PIN);23224		1
54.	SVC JIG-SCRAPER;2711705700,SVC		1
55.	SVC JIG- BATTERY PRESS PAD (SET);118646960		2
56.	SVC JIG-NFC TAG;1094598300, COMMON		1
57.	SVC JIG- DISASSEMBLY JIG; A131272186		21
58.	SVC JIG- TABLET DISABLE SET HOLDER; 111264		1
59.	SVC JIG- WHEEL TORQUE WRENCH ASSY; 1166055		1
60.	SVC JIG-WINDOW PRESS PAD;G950;1129979700		1
61.	SVC JIG- WINDOW PRESS PAD;N950;1129979700		1
62.	SVC JIG-WINDOW PRESS JIG(BODY);10#973840		1
63.	SVC JIG-HAN TECH A.O.D JIG (COMM);SVC; HAN		1
64.	SVC JIG-TSP FORM TAPE ATTACHED JIG; 1059738		1
65.	A/S-TAPE OCTA CU SHEET_REWORK;		11
66.	A/S REWORK KIT-SM-N960F		12
67.	A/S-OCTA_SCFTAPE;SM-J510FN,AMS520KT01,O		10
68.	A/S-TAPE_BATTERY_SVC;SM-A510F,TESA 68408		12
69.	A/S-TAPE_BACK_GLASS_SVC;SM-A510F,ANYONE		12
70.	TAPE DOUBLE FACE-WINDOW TAPE REAR BTM		12
71.	TAPE DOUBLE FACE-WINDOW TAPE REAR TOP		12
72.	TAPE DOUBLE FACE-TOP		11
73.	A/S REWORK KIT-SM-N950,COMM;SM-N950		10
74.	A/S REWORK KIT-T;SM-G955;SM-G955,SV;SM-G		7
75.	A/S-TAPE BACK GLASS CS;SM-A750		7
76.	A/S REWORK KIT-SM-G965F		10
77.	A/S-TAPE FRONT WINDOW CS;SM-A750		8

78.	A/S-TAPE OCTA WINDOW CS;SM-J600F	8
79.	A/S-TAPE PET-HR CS;SM-J600F,TTI2100GDR#	8
80.	A/S- COVER PANEL;SM-A600FN	8
81.	SVC JIG- BATTERY PRESS PAD (SET);118646960	1
82.	SVC JIG-WINDOW PRESS PAD;A750	1
83.	SVC JIG-PRESSURE RUBBER + CARD RING SET	5
84.	Tweezer Plastic-ESD	5
85.	SVC JIG-WINDOW PRESS PAD;J600	1
86.	SVC JIG-WINDOW PRESS PAD;A750	1
87.	SVC JIG-WINDOW PRESS PAD;G965	1
88.	SVC JIG-SCRAPER;2711705700,SVC	1
89.	A/S-TAPE OCTA WINDOW CS;SM-J600F	12
90.	A/S-TAPE PET-HR CS;SM-J600F,TTI2100GDR#	12
91.	A/S-TAPE BACK GLASS CS;SM-A750	12
92.	A/S-TAPE FRONT WINDOW CS;SM-A750	12
93.	TAPE PET-HR;SM-A750FN,PET,2100GDR#50	12
94.	A/S REWORK KIT-SM-G965F	12
95.	A/S REWORK KIT-SVC;SM-T825,COMMON	12
96.	A/S REWORK KIT-SM-N950,COMM;SM-N950	12
97.	SVC JIG-HAN TECH A.O.D JIG (COMM);SVC; HAN	1
98.	SVC JIG-Y DRIVER , 1.6 MM BIT	1
99.	SVC JIG DISASSEMBLER UPPER	1

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. White Board with marker pen
2. Practice Exercise

Annexure III: 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)
1	R K Imaging Service	KrunalManilal Patel (Karta)		702, Sungrace Arcade, Chandkheda, Visat Gandhi Ngr Road, Motera	9825020026		
2	Shree Ram Krishna Enterprises	RajenderChoudhary		Sh No 15,16,17, 1st Floor, Manas Complex, Jodhpur Cross Road, Satellite Road	079-40321036		
3	Shrinath Electronics	HemantkumarSatishbhai Patel		1, Panchjyot Society	079-27495225		
4	Panacea Services	Manish Chandak		1st Floor - 126, Pushkar Business Park, LbShahtri Marg Bapunagar, Near Chirag Diamond	9558551919		
5	H H Enterprise	AartiNamanReshamwala		U/L/6, Opp. Rambali School, Paldi, Anisha Complex, Mahalaxmi Cross Road	9874507339		
6	Rajvi Enterprise	Bhavika K Shah		8/46, Sonal Park, Nr. Ankur Cross Road, Naranpura	9925221137		
7	Aditi AirconditioningPvt Ltd	Ashish D Shah		7, Ground Floor, Ekta Tower, VasnaBarage Road, Vasna	9925227800		
8	Krishna Sales	Dharmendra Nandubhai Patel		27, Kalgi Park, Opp. Swaminarayan Mandir, Nava Naroda	9558821465		
9	Electronics World Service	Sumit R Patel & Ramesh J Pataliya		No. 2, AshopalavAppt, Maitrinagar Society, Near Adc Bank, Pragatinagar	9904022243		
10	Rucha Refrigeration	NileshPrafulbhaiMaru		12, Sujan Tower, Naranpura	7878888188		
11	Giriraj Engineers	Kanan S Shah		Shop 24 to 27, Bima Shopping Center, Rambaug, Maninagar	9265964401		
12	Qarmatek Services Pvt Ltd	KrunalSaumirbhai Shah		4th Floor, ShashwatBuisness Park, Opp. Soma Textile Brts, Rakhiyal	8799050997		
13	Vision HVAC Pvt Ltd	Darshan Dave		A3, Madhuvrund,Rajpath Row House Road, Opp. Ahmedabad International School, Bodakdev	9825018222		
14	Dev Services	Vishal Patel		Ff -102&103, Urja Complex, Near Vishvakarma Temple - Mart Mall, Sabarmati	079-40328185		
15	Azzure Enterprise	Ravi Asnani		Shop No. 205, 2nd Floor, Stellar Sindhu Bhawan Road, Bodakdev	6353270099		
16	Qarmatek Services Pvt Ltd	KrunalSaumirbhai Shah		2nd Floor, Shashwat Business Park, Opp. Soma Textile Brts, Rakhiyal	9879060300		
17	Riddhi Siddhi Mobile	ShivkumarDharwal		4/40/1, Vallabh Nagar Flats, Near Bapunagar Char Rasta, Bapunagar	9227233777		
18	VtechNxtgen Retails LLP	Malav Shah		Showroom No. 4, Ground Floor, The Link, Vijay Cross Road, Navarangpura	7874732836		
19	Anand Cooling Equipment PVT Ltd	ManojAshokbhaiHarwani& Sunil LakhmichandHarwani		1, Ground Floor, Vinues Chambers, Near KalapiRestaurant, Bhadra	9998305678		
20	Sysnet Global Technologies Pvt Ltd	Narinder Sharma		4Th Floor,ChandaNivas, Opposite Karnavati Hospital, Near Ellis Bridge	7948944566		

21	Yash Communications	Sushilkumar C Jain		Shop No. 65, Ground Floor, Sobo Center, South Bopal, Near Gala Swing	9898444524		
22	Happy Engineering	SamirbhaiYusufbhaiGhanchi		2nd floor, Office No. 0203, 0204, 0205, Gala Hub, Bopal	9825249087		
23	F1 Info Solutions & Services P Ltd	BalrajVirdi		Shop No 3&4, Metro Commerical Centre, City Survey No. 1973, Sub Plot No 3, Asharm Road	7080240240		
24	N K Enterprise	Modi NiravKanaiyalal		Ground, Shop No. 1 & 2, New Ashram Road, Ozone Aangan, Ramapir No Tekro, Vadaj	9909982548		
25	Khyansh Enterprise	Krutarth		09-Flat, Near GovtPolitechnic, Near AnandVatika, Ambawadi	9998868893		
26	Advance Care	Santoshbha		12/47, Gujarat Housing Board, Near Raipur Mill Rakhiyal	8128104755		
27	Ved Services	Anil Sharma		43 - A, Giriraj Tenement Mangaleshwar, Mahadev Road Ghodasar	9879002535		
28	PranamHvac Engineering Pvt Ltd	NiravJetly		405 - 406 / 1st Floor, Nilkanth Palace, Opp. Karma Shrstha Tower, 100 Ft Road Jod	9824009818		
29	Shreeji Mobile Care	DarshanNavnitlalBarot		Shop No 6, Ground Floor, Madhur Complex, Opp Stadium Fountain, Navrangpura	9879003545		
30	Reliance Retail Limited	Vaibhav Trivedi		Reliance Market Advance Mill Compund, Opp. Swaminarayan Temple, Shahibaug	9510977643		

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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
2024-25	1500	1500	800	800	-	-
2025-26	3000	3000	1350	1350	-	-
2026-27	5000	5000	2400	2400	-	-

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	Train ed	Asses sed	Certi fied	Placed	Trai ned	Assess ed	Certifi ed	Placed
0.0	20-21	300	300	300	254	0	0	0	0	-	-	-	-
0.0	21-22	350	350	350	282	0	0	0	0	-	-	-	-
0.0	22-23	547	547	547	511	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:

- Fee based Training Program under the Ministry of MSME.

Content availability for previous versions of qualifications:

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

Languages in which Content are available:

English

Annexure V: Blended Learning

Blended Learning Estimated Ratio & Recommended Tools:

Refer NCVET "Guidelines for Blended Learning for Vocational Education, Training & Skilling" available on: <https://ncvet.gov.in/wp-content/uploads/2023/01/Guidelines-for-Blended-Learning-for-Vocational-Education-Training-Skilling.pdf>

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	Books/ e-books, Presentations, Reference Material , Audio / Video Modules with 2D and 3D animation Self-Learning Videos /Broadcasts /Mobile Learning /Curated Digital content	40:60
2	☐ Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners	Self-Learning Videos , Broadcasts, Mobile Learning , Curated Digital content	100:0
3	☐ Showing Practical Demonstrations to the learners	ALL TYPE OF SMARTS PHONE JIG FOR STUDENTS DEMONSTRATION, Video Content , E-Resource library	100:0
4	☐ Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	ALL TYPE OF SMARTS PHONE JIG FOR STUDENTS DEMONSTRATION	100:0
5	☐ Tutorials/ Assignments/ Practice	Online Question Bank, Mobile Quick test app, MCQ based tests, Practical Test on Machines	40:60
6	☐ Proctored Monitoring/ Assessment/ Evaluation/ Examinations	Assessment engine for Essays, Up-loadable file examinations, Mock test sessions	50:50

7	☐ On the Job Training (OJT)	Different service centre of Reputed company like Samsung, LG, and Reliance Geo ETC.	100:0
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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	Theory Marks	Practical Marks	Project Marks	Viva Marks
NOS / Module: MSME/HHP/01 STUDY ON BASIC ELECTRICAL/ELECTRONICS, SAFETY & HAND TOOLS -HHP	PC.1 Safety- Basic knowledge about safety General safety precautions. Accidents Fire and Fire Accidents First Aid. Personal Protective Equipment (PPE) Selecting and using PPE. Maintenance of PPE. Monitor and review. Types of PPE. Emergency equipment. Basic hand tools Types of Screwdrivers Pliers, Tweezers, Steel Rule, and Scriber. PC.2 Electronics Fundamentals- What is Matter, molecules, atom. Brief knowledge about Voltage and current. Various types of Voltage and current device. Checking Process of Resistor, capacitor Basic units Basic of computer and its use. PC.3 Basic electronics- Process of Inductors. Describe Conductor, insulator, wire. Describe the types of Power supplies. 20 Process of Soldering, disordering equipment's. PC.4 Semiconductor- Semiconductor physics. Semiconductor diodes. Filters. Special purpose diodes Power supply. PC.5 Transistor and its application- Types of transistor. BJT. FET. Identify transistor terminals. Applications of transistor. PC.6 Basic technology- What is ohm's law, what is voltage, current, resistance? Series circuit and parallel circuit. Resistor, Variable Resistor(Rheostat), Trimmer Capacitor Polarized Capacitor, LED (Light Emitting Diode), Photodiode, Transistor NPN, Transistor PNP.	100			
NOS / Module: MSME/HHP/02 ADVANCE SKILL ENHANCEMENT ON TROUBLESHOOTING, ASSEMBLY ,DISASSEMBLY & SET UP ON RESPECTIVE PRODUCTS -HHP	PC.1 Basic technology- Introduction of basic electronics. About Electricity, Electronics. What is ohm's law, what is voltage, current, resistance? Series circuit and parallel circuit. Identifying electronics components and circuit symbols Resistor, Variable Resistor(Rheostat), Variable Register (Potentiometer), Trimmer Capacitor Polarized Capacitor, LED (Light Emitting Diode), Photodiode, Transistor NPN, Transistor PNP, Phototransistor, Microphone, Earphone, Loudspeaker, Pezos Transducer, Amplifier, Aerial (Antenna), Voltmeter, Ammeter, Galvanometer, Ohmmeter, Oscilloscope, LDR, Thermistor. PC.2 Overview of technologies- Learn about Network Technologies. Description of FDMA (frequency division multiple access), TDMA (time division multiple access), CDMA (code division multiple access), GSM (global system for mobile communication). Learn about Technology evolution. G (first generation), 2G (second generation), 3G (third generation), 4G (fourth generation). Description of GSM Overview. Service provided by				

GSM. Description of GSM Architecture. Mobile Station (MS), Base Station Subsystem (BSS), Network Switching Subsystem (NSS), Functions of Mobile Station (ME), Base Station Subsystem (BSS), Base Transceiver station (BTS), Base Station Controller (BSC), Network Subsystem (NS), Mobile Switching Centre (MSC), Mobile Switching Centre (MSC), Visitor Location Register (VLR), Authentication Centre (AUC), Equipment Identity Register (EIR), Description of GSM working. Location Update, Call Originating, Call Terminating, Handoff, Intra -BSC Handoff, Inter-BSC Handoff, Inter-MSC Handoff. Description of GSM call flow. Step by step call flow process in GSM (Global System for Mobile Communication). Description of voice transmission process. Internal Process for Voice Conversion and Transmission. Type of Wireless communication. About Near field communication (NFC), Difference between Near field

PC.3 safety and precautions- Electrostatic Discharge. Definitions of Electro Static Discharge (ESD), Electro Static Discharge Sensitive (ESDS), Electrostatic protected Area (EPA)What is Electrostatic Discharge (ESD), Charge is generated all the time, How to observe ESD, Damage Criteria, ESD comparison with germs, Electrostatic Protected Area (EPA) Setup, Methods of ESD Protection, Methods of Handling Printed Board Assembly (PBA), ESD Labels

PC.4 Basic Tools Identification & Function- Learn about Soldering Iron, Soldering Station, PBA (Printed Board Assembly) Holder, Solder Wire, Thinner or PBA(Printed Board Assembly) Cleaner, Liquid Flux, Precision Screwdriver, Tweezers, Brush, Hot Air Blower, Magnifying Lamp, Mobile Opener, DC Power Supply, Disorder Wick, Cleaning Sponge, Multimeter ESD Tools & Equipment. Wrist Strap, Antistatic Hand Gloves, Antistatic Apron, Anti-Static Bin, Antistatic Slipper, Antistatic Bag, Antistatic Mat. Basics of Multimeter. About Multimeter, Rotary selector switch, Sliding switch, Probes, Display, COM Plug, VΩ Plug, A Plug, DC Volt Range, DC Current Range, AC Volt Range, AC Current Range, Ohm Range, Frequency Range, Logic Range, Diode Range, Continuity. How to use Multimeter. Measuring AC Volt, DC Volt, DC Current, AC Current, Checking Continuity, Frequency & Logic. Wristband Testing. Electrostatic Discharge (ESD) Measurement of safe Wristband value using multimeter. Electrical Ground Testing. Measurement of safe Electrical Grounding value using multimeter.

PC.5 Product Overview- Introduction to Nomenclature What is Nomenclature, Samsung HHP Nomenclature, Product Serial Number Nomenclature, and Software Version Nomenclature?

PC.6 Types of Mobile Phone & its Features- About Mobile Phone & Features. Introduction to the Mobile Phone, Block Diagram of mobile phone. Introduction to the Basic Mobile Phone. Introduction To Dual SIM Mobile Phone. Introduction To Feature

	Mobile Phone. Introduction To Smart Mobile Phone. Introduction To Mobile Phone Sensors. What is Sensor, About Grip Sensor, Barometer Sensor, Accelerometer Sensor, Gyro Sensor, Magnetic Sensor, Proximity Sensor and Ambient Light Sensor (ALS). PC.7 Assembly & Disassembly Process- Disassembly Process. Basic Process of Disassembly, Required tools, How to open or disassemble a mobile cell phone. Assembly Process. How to assemble a mobile cell phone. PC.8 Soldering and disordering process- Soldering Technique. Tools required for soldering. Important Soldering Tips. Cleanliness, Tinning, Temperature, Duration, Adequate solder coverage, Handling. Soldering Precautions. Soldering Process. How to Solder Through-Hole Components. How to Solder Surface-Mount Components. Disordering Process. How to remove component efficiently, Tips for removing components, IFC Soldering Process. PC.9 About Software & IMEI Writing- Software & IMEI. Issues due to Software and IMEI Writing PC.10 Troubleshooting A- Basic Inspection /Hardware/Software Handling Procedures. Physical Inspection. Warranty Void. Test using codes. Basic Inspection /Hardware/Software Handling Procedures. How To Solve faults related to Ringer, Vibrator, Microphone, and Does Not Switch ON, Keypad, Touch and Display. Guides on Sleep Current test for Low battery, No Power or Auto Off, Rooting, Safe Mode, RAM status, Internet Memory, Power Saving Mode, Flow Chart for Troubleshooting.				
NOS / Module: MSME/HHP/03 OJT	On job training (OJT)- Product Repair related to Hand Held Products for example, mobile, tablet etc. Demonstration servicing Repairing Troubleshooting				
NOS / Module: MSME/ES/01 Employability skills	PC.1 Explain the major applications of MS Office PC.2 Explain the different types of e-commerce PC.3 List the benefits of e-commerce for retailers and customers PC.4 Discuss how the Digital India campaign will help boost e-commerce in India PC.5 Write applications pertaining to various matters. PC.6 Explain power of positive attitude and Importance of commitment PC.7 Explain motivation and the Ways to motivate oneself and Personal goal setting PC.8 Explain the Effective & Level of Communication PC.9 Explain communication and Significance of technical communication?	100	-	-	-

	PC.10	Explain the methods of listening Skills.				
	PC.11	Explain the differences between bio-data, CV and Resume.				
	PC.12	Explain verbal and non-verbal Communication				
	PC.13	Explain how to face an interview.				
	PC.14	Explain team work, group work, team formation process				
	PC.15	How to Minimize the team conflicts				
	PC.16	Explain Ethics & values				
	PC.17	Explain the concept of entrepreneurship, and entrepreneurship v/s Management				
	PC.18	Explain the process of project report preparation for setting up a new business				
	PC.19	Explain the role of various schemes and institute for self- employment i.e MSME, DIC, NSIC, SIDBI etc,				
	PC.20	Role of financial institution to support startup				
	PC.21	Discuss the importance of saving money				
	PC.22	Discuss the main types of bank accounts				
	PC.23	Differentiate between fixed and variable costs				
	PC.24	Describe the different types of insurance products				
	PC.25	Discuss the main types of electronic funds transfers				
	Total Marks		200	100	-	100

Annexure VII: 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.

Mention the detailed assessment strategy in the provided template.

1. Assessment System Overview:

- Batches are assigned to the MSME NSQF Assessment Agency via email for the assessment.
- MSME NSQF Assessment Agency sends the assessment confirmation to respective TC.
- MSME NSQF Assessment Agency deploys the certified Assessor for executing the assessment at respective TC via online / offline mode.
- MSME NSQF Assessment Agency & respective TC Internal Assessment cell monitors the assessment process & records.

2. Testing Environment:

- MSME NSQF Assessment Agency confirms the Assessment location, date and time
- For number of candidates more than 30 separate assessors are assigned for the assessment.
- MSME NSQF Assessment Agency & respective assessor confirms that the allotted time to the candidates to complete Theory & Practical Assessment is correct.

3. Assessment Quality Assurance levels/Framework:

- Each TC Submits the Question Bank for the individual subject Theory & Practice separately, submits to MSME NSQF Assessment Agency and it is verified by the MSME NSQF Assessment Agency Committee members.
- Questions are mapped to the specified assessment criteria
- All the assessors & Trainers are well qualified & trained to carry out the specified task.

4. Types of evidence or evidence-gathering protocol:

- Online Link is send by MSME NSQF Assessment Agency to respective TC & Assessor. Reporting of the assessor from assessment location is verified by the MSME NSQF Assessment Agency through the online Meeting Link. Students are also required to join for the online link for verification by the MSME NSQF Assessment Agency.
- Assessment Photographs are shared with the MSME NSQF Assessment Agency & are also with the respective TC.

5. Method of verification or validation:

- Online Link is send by MSME NSQF Assessment Agency to respective TC & Assessor. Reporting of the assessor from assessment location is verified by the MSME NSQF Assessment Agency through the online Meeting Link. Students are also required to join for the online link for verification by the MSME NSQF Assessment Agency.

6. Method for assessment documentation, archiving, and access:

- The Assessment records are shared with MSME NSQF Assessment Agency & also stored at respective TC.
- Assessor fills the assessment report and shares with the MSME NSQF Assessment Agency.

On the Job Training:

- Each module will be assessed separately.
- The candidate must score 60% marks to successfully complete the OJT.
- Learner will be assessed on the basis of OJT report followed by Viva
- Assessment will ensure that the Learner is able to:

✓ Effective engagement with the customers / Subordinates and team

Annexure VIII: 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
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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.
Short Term Training (STT)	STT/ Short -term skilling means any vocational training program undertaken for less than a year (Theory + Practical + OJT). https://ncvet.gov.in/sites/default/files/NCVET.pdf

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