



QUALIFICATION FILE

Mobile Equipment Operator (Metal Sector)

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

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

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

NCrF/NSQF Level: 3

Submitted By:

Indian Iron and Steel Sector Skill Council (IISSSC)

Karigari Bhawan, 5th Floor,

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Action Area-III, New Town,

Rajarhat, Kolkata-700160

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Section 1: Basic Details

1.	Qualification Name	Mobile Equipment Operator (Metal Sector)																			
2.	Sector/s	Iron and Steel																			
3.	Type of Qualification: ☐ New ☒ Revised ☐ Has Electives/Options ☐ OEM	NQR Code & version of existing/previous qualification: 2022/IS/IISSSC/06827 / v4.0	Qualification Name of existing/previous version: Mobile Equipment Operator (Metal Sector) / v5.0																		
4.	a. OEM Name b. Qualification Name (Wherever applicable)	NA																			
5.	National Qualification Register (NQR) Code & Version (Will be issued after NSQC approval)	QG-03-IS-03887-2025-V2-IISSSC	6. NCrF/NSQF Level: 3																		
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	The individual in this role operate and maintain mobile equipment such as forklift, JCB, Skid Loader, Pay Loader etc. available in a steel plant.																			
9.	Eligibility Criteria for Entry for Student/Trainee/Learner/Employee	a. Entry Qualification & Relevant Experience: <table border="1"> <thead> <tr> <th>S. No.</th> <th>Academic/Skill Qualification (with Specialization - if applicable)</th> <th>Required Experience (with Specialization - if applicable)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>10th Class</td> <td></td> </tr> <tr> <td>2</td> <td>9th Class</td> <td>1.5 year experience in relevant field</td> </tr> <tr> <td>3</td> <td>8th class with 2year NTC/NAC in relevant field</td> <td></td> </tr> <tr> <td>4</td> <td>8th Class</td> <td>3 years of experience in relevant field</td> </tr> <tr> <td>5</td> <td>5th Class</td> <td>7.5 years of experience in relevant field</td> </tr> </tbody> </table> b. Age: 18 years		S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1	10 th Class		2	9 th Class	1.5 year experience in relevant field	3	8th class with 2year NTC/NAC in relevant field		4	8 th Class	3 years of experience in relevant field	5	5 th Class	7.5 years of experience in relevant field
S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)																			
1	10 th Class																				
2	9 th Class	1.5 year experience in relevant field																			
3	8th class with 2year NTC/NAC in relevant field																				
4	8 th Class	3 years of experience in relevant field																			
5	5 th Class	7.5 years of experience in relevant field																			
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 <i>(wherever applicable)</i>	NA																						
13.	Training Duration by Modes of Training Delivery <i>(Specify Total Duration as per selected training delivery modes and as per requirement of the qualification)</i>	☒ Offline ☐ Online ☐ Blended <table border="1"> <thead> <tr> <th>Training Delivery Modes</th> <th>Theory (Hours)</th> <th>Practical (Hours)</th> <th>OJT Mandatory (Hours)</th> <th>OJT Recommended (Hours)</th> <th>Total (Hours)</th> </tr> </thead> <tbody> <tr> <td>Classroom (offline)</td> <td>132:00</td> <td>228:00</td> <td>60:00</td> <td></td> <td>420</td> </tr> <tr> <td>Online</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <i>(Refer Blended Learning Annexure for details)</i>					Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)	Classroom (offline)	132:00	228:00	60:00		420	Online					
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Classroom (offline)	132:00	228:00	60:00		420																			
Online																								
14.	Aligned to NCO/ISCO Code/s <i>(if no code is available mention the same)</i>	NCO-2015/ 8342.2101																						
15.	Progression path after attaining the qualification <i>(Please show Professional and Academic progression)</i>	Junior. Supervisor – Operator Mobile Equipment (Level-4)																						
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:																						
19.	How Participation of Women will be Encouraged	No gender sensitization																						
20.	Are Greening/ Environment Sustainability Aspects Covered <i>(Specify the NOS/Module which covers it)</i>	☐ 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 <i>(In case of CS or MS, provide details of both Lead AB & Supporting ABs)</i>	Name: Mr. Sushim Banerjee Email: ceo@iissc.org/ sushim_banerjee@yahoo.com Contact No.: 033-23247559 Website: https://www.iissc.org																						
23.	Final Approval Date by NSQC: 01/04/2025	24. Validity Duration: 3 Years			25. Next Review Date: 31/03/2028																			

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/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)
1.	Use basic health and safety practices at the work place	ISC/N0008, v2.0	Non-Core	3	2	25	35	00		60	30	50	00	20	100	10
2.	Work effectively with others	ISC/N0009, v2.0	Non-Core	3	1	10	20	00		30	30	50	00	20	100	10
3.	Prepare the vehicle	ISC/N0401, v5.0	Core	3	3	30	60	00		90	30	50	00	20	100	20
4.	Perform mobile equipment operations	ISC/N0402, v5.0	Core	3	3	30	60	00		90	30	50	00	20	100	30
5.	Perform maintenance of mobile equipment	ISC/N0403, v5.0	Core	3	2	25	35	00		60	30	50	00	20	100	20
6.	Employability Skills (30 Hours)	DGT/VSQ/N0101	Non-core	2	1	12	18	00		30	20	30	00	00	50	10
7.	OJT		Core	3	2			60		60						
Duration (in Hours) / Total Marks					14	132	228	60		420	170	280	00	100	550	100

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)
1.																
2.																
Duration (in Hours) / Total Marks																

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)
1.																
2.																
Duration (in Hours) / Total Marks																

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: ____% (Every Trainee should score specified minimum passing percentage in each mandatory and selected elective NOS/Module to successfully clear the assessment.)

Section 3: Training Related

1.	Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	ITI (In stream related to Fitter, Diesel Mechanic) with 5 years experience in industry and 1 year of training experience in Mobile Equipment Operations and Maintenance Or Diploma (Mechanical engineering) with 3 years experience in industry and Maintenance and 1 year of training experience in Mobile Equipment Operations and Maintenance
2.	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	B.Tech (Mechanical) with 3 years experience in industry and 1 year of training experience in Mobile Equipment Operations and Maintenance
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	

Section 4: Assessment Related

1.	Assessor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	ITI (In stream related to Fitter, Diesel Mechanic) with 5 years experience in industry and 1 year of assessment experience in Mobile Equipment Operations and Maintenance
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		Or Diploma (Mechanical engineering) with 3 years experience in industry and 1 year of assessment experience in Mobile Equipment Operations and Maintenance
2.	Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	B.Tech (Mechanical) with 5 years experience in industry and 2 year of training experience in Mobile Equipment Operations and Maintenance
3.	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	B.Tech (Mechanical) with 5 years experience in industry and 2 year of training experience in Mobile Equipment Operations and Maintenance
4.	Assessment Mode (Specify the assessment mode)	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
2.	Latest Market Research Reports or any other source (not older than 2 years) (Yes/No): Yes
3.	Government /Industry initiatives/ requirement (Yes/No): Yes
4.	Number of Industry validation provided: 20
5.	Estimated nos. of persons to be trained and employed: 500
6.	Evidence of Concurrence/Consultation with Line Ministry/State Departments: In progress 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 (Mandatory)	Attached
2.	Annexure: List of tools and equipment relevant for qualification (Mandatory, except in case of online course)	Attached
3.	Annexure: Detailed Assessment Criteria (Mandatory)	Attached
4.	Annexure: Assessment Strategy (Mandatory)	Attached

5.	Annexure: Blended Learning (Mandatory, in case selected Mode of delivery is “Blended Learning”)	NA
6.	Annexure: Multiple Entry-Exit Details (Mandatory, in case qualification has multiple Entry-Exit)	Filled
7.	Annexure: Acronym and Glossary (Optional)	
8.	Supporting Document: Model Curriculum (Mandatory – Public view)	Attached
9.	Supporting Document: Career Progression (Mandatory - Public view)	Attached
10.	Supporting Document: Occupational Map (Mandatory)	Attached
11.	Supporting Document: Assessment SOP (Mandatory)	Attached
12.	Any other document you wish to submit:	

Annexure: 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	Knowledge related to physical properties of metals and lab equipment used for testing and basic metallurgy	The job involves a range of theoretical understanding and practical skills as can be seen from the job requirements given in the adjacent cell. The skills include setting, adjusting and operating the operator mobile equipment in the given parameters	3
Professional and Technical Skills/ Expertise/ Professional Knowledge	Knowledge related to motor maintenance and plant operations, basic measurements, basic raw material handling processes	As indicated by the knowledge and understanding requirements mentioned in the adjacent cell, the job holder needs to have a wide range of information for operator mobile equipment.	3
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	- Plan the operator mobile equipment and prepare the appropriate schedules - Perform the operational/function checks - Carry out relevant documentation manually and/ or electronically - Operate mobile equipment	As indicated by the performance criteria in the adjacent cell, the job holder needs to have wide-ranging practical skills for operator mobile equipment.	3
Broad Learning Outcomes/Core Skill	Logical and mathematical skills Follow the technical specification and appropriate procedures.	The job holder requires logical and relevant skills for conducting operator mobile equipment.	3

	- Perform work-related calculations - Use the standard templates and tools for documenting work	As indicated by the performance criteria in the adjacent cell, the job involves operator mobile equipment	
Responsibility	- Responsible for determining the work requirements. - Responsible for planning the operator mobile equipment - Responsible for process parameters. - Responsible for preparing and updating the relevant documents.	The incumbent on the job roles carrying out operator mobile equipment, sample collections, collecting the reports from the lab and documenting the same	3

Annexure: Tools and Equipment (Lab Set-Up)

List of Tools and Equipment

Batch Size: 30

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
1	Forklift (light/heavy)	As per requirement	1
2	Training track	As per requirement	1
3	wooden square block	As per requirement	10
4	Wooden rectangular block	As per requirement	15
5	Light signal	As per requirement	1
6	JCB	As per requirement	1
7	Mobile cranes	As per requirement	1
8	Automobile tool kit	As per requirement	2

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Whiteboard and Marker
2. Projector
3. Computer/Laptop
4. Chairs
5. Tables
6. Whiteboard marker

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)
1	Tata Steel Ltd.	Mr. Amit Khanna	Head IEM, Mills & Utilities (Electrical Maintenance)	P.O. - Bistupur, Jamshedpur, Pin – 831001, Jharkhand			
2	SAIL BSL	Mr. Malay Nandi	Deputy General Manager	Bokaro Steel Plant Bokaro – 827001, Jharkhand			
3	SAIL DGP	Mr. Soumitra Ghosh	Deputy General Manager - Electrical	Durgapur Steel Plant Durgapur – 713203 West Bengal			
4	JSW Bellary	Mr. Ajay Bihari	Head HR	Vijayanagar Works: P.O. Vidyanagar, Toranagallu Village, Sandur Taluk Bellary District - 583275 Karnataka			
5	JSPL	Mr. Sanjay Gupta	Head HR	Kharsia Road, Raigarh, Pin - 496001, Chhattisgarh			
6	Essar Steel	Mr. Sarosh Gandhi	Sr. Manager -HR	27th KM, SuratHazira Road District – Surat, Hazira, Pin - 394 270, Gujarat			
7	RohitFerrotech Ltd.	Mr. Jayanta Chatterjee	Director	Bhunia Raichak, Joynagar, P.S. DurgaChak, Dist. East Medinipur, Haldia, West Bengal			
8	Ankit Metal and Power Ltd	Mr. Avik Mukherjee	Chief HR	35, Chittranjan Avenue, Kolkata – 700012			
9	Godawari Power & Ispat (GPIL)	Mr. Shailendra Mishra	Dy CEO	428/2, Phase-I, Industrial Area, Siltara – 493111 Dist. Raipur, Chhattisgarh,			
10	ArcvacForgeCast Ltd	Mr. Binod Chhajje r	MD	2B, Shyamkunj, 2nd floor 12 C, Lord Sinha Road Post Box: 9210 Kolkata - 700071			
11	Tayo Rolls Limited	Mr. Abhijit Mitra	VP - Marketing	Annex – 2, General Office, Tata Steel Limited, P.O. & P.S. – Bistupur, Jamshedpur 831001, Dist: East Singhbhum, Jharkhand			
12	Kejriwal Castings	Mr. Subhasis Chatterjee	General Manager (Projects)	33A, Chowringhee Road Chatterjee International Centre 11th Floor, Suite No. 11 Kolkata 700071			
13	Vizag Steel Plant (RINL)	Mr. D N Rao	Director Operations	Engineering Shops And Foundry, Visakhapatnam Steel Plant, Visakhapatnam - 530032			

14	Tata Metaliks Ltd.	Ms. Ratna Sinha	Chief HRM	Tata Centre, 10th Floor 43 Jawaharlal Nehru Road Kolkata - 700071 West Bengal			
15	Sesa Goa Ltd	Mr. Vijay Khanzode	GM & Head PIDII	Queeny Elite, 1st Floor, Swatantrapath, Vasco, Panaji - 403802			
16	Tata Steel Processing & Distribution Ltd.	Mr. Ashok Kumar Balyan	Chief of Operations	Tata Centre 43, Jawaharlal Nehru Road Kolkata 700071			
17	Monnet Ispat Ltd.	Mr. Amitabh S. Mudgal	President (Marketing and Corp affair)	MandirHausad, Chandkhuri Marg, Chandkhuri Marg, Raipur, Chhattisgarh 492101			
18	Tata Sponge Iron Ltd	Mr. Partha Chattopadhy ay	Chief Operating Officer (SB)	PO: Joda, Dist: Keonjhar Orissa - 758034			
19	Facor Alloys Ltd.	Mr. M S S Sharma	Chief Executive	46 A and B, MIDC Industrial Estate, Nagpur - 440028			
20	Sarda Metals & Alloys Ltd	Mr. Prabhat Mohan	Head HR	Floor II & III, D.No.50-96-4/1, Sri GowriNilayam, Seethammadhara NE Visakhapatnam - 530013			

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
2022-23	500	350	200	140	50	35
2023-24	1000	700	400	280	100	70
2024-25	1500	1050	600	420	150	105

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

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.
- 2.

Content availability for previous versions of qualifications:

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

Languages in which Content is available:

Annexure: 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/sites/default/files/Guidelines%20for%20Blended%20Learning%20for%20Vocational%20Education,%20Training%20&%20Skilling.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	
2	☒ Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners	• Self-Learning Videos • Broadcasts • Mobile Learning • Curated Digital content	
3	☒ Showing Practical Demonstrations to the learners	• Video Content • E-Resource library • AR/ VR/ XR	
4	☒ Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	• Training tools (tools list attached) • Video Play • Presentations	
5	☒ Tutorials/ Assignments/ Drill/ Practice	• Online Question Bank • Mobile Quick test app • MCQ based tests	
6	☒ Proctored Monitoring/ Assessment/ Evaluation/ Examinations	• Assessment engine for Essays • Up-loadable file examinations • Mock test sessions	
7	☒ On the Job Training (OJT)/ Project Work Internship/ Apprenticeship Training	• Online tests • Offline assessments	

Annexure: 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
ISC/N0009: Work effectively with others	<i>Communicate effectively with colleagues and others</i>	13	20	-	9
	PC1. coordinate with colleagues to share work, as per the workload in order to achieve team goals	3	5	-	2
	PC2. maintain clear communication with colleagues and others, wherever needed, through all means i.e. face-to-face, telephonic or written	5	7	-	3
	PC3. adjust communication styles to reflect gender and persons with disability (PwD) sensitivity	3	4	-	2
	PC4. respect all colleagues and co-workers	1	2	-	1
	PC5. resolve conflicts by communicating with colleagues and other departments	1	2	-	1
	<i>Interact with supervisor</i>	8	14	-	6
	PC6. identify work requirements by receiving instructions from reporting supervisor	2	3	-	1
	PC7. escalate problems to supervisors that cannot be handled	2	3	-	2
	PC8. report the completed work	2	3	-	1
	PC9. interact with the reporting supervisor about any possible hazards and safety concerns	2	5	-	2
	<i>Follow appropriate behaviour at work place</i>	9	16	-	5
	PC10. extend help to people with Disability (PwD) at workplace, if required	2	4	-	2
	PC11. empathizes with people with disability	2	4	-	1
	PC12. adopt a gender neutral behavior	2	4	-	1
	PC13. avoid contact with ill people and self-isolate in a similar situation	3	4	-	1
	Total Marks	30	50	-	20
ISC/N0008: Use basic health and safety practices at the work place	<i>Maintain safe and secure working environment</i>	10	14	-	6
	PC1. identify hazardous activities and the possible causes of risks or accidents in the workplace	2	2	-	1
	PC2. follow safe working practices while dealing with hazards to ensure safety of self and others.	2	3	-	1
	PC3. Use appropriate protective clothing / equipment for specific tasks and work	1	2	-	1

PC4.	Follow appropriate safety practices while working in and around trenches, elevated places and confined areas	2	1	-	-
PC5.	lift heavy objects safely using correct procedures	1	2	-	1
PC6.	carry out routine check of the machine for identifying potential hazards	1	2	-	1
PC7.	Report any identified breaches in health, safety and security policies and procedures to the designated person.	1	2	-	1
	<i>Emergencies, rescue and first aid procedures</i>	6	9	-	5
PC8.	use appropriate type of fire extinguisher	1	1	-	-
PC9.	apply appropriate rescue techniques during fire hazard	1	2	-	1
PC10.	Provide appropriate first aid procedure to victims wherever required eg. In case of bleeding, burns, choking, electric shock etc.	2	2	-	1
PC11.	follow emergency procedures such as raising alarm, safe evacuation etc.	1	2	-	1
PC12.	attend safety training and fire drills to respond promptly during an emergency	1	2	-	1
	<i>Health and hygiene</i>	2	6	-	2
PC13.	Follow regular cleaning and disinfection practices at work place using appropriate techniques and materials.	1	2	-	1
PC14.	follow hand hygiene practices at work place using appropriate techniques and materials	1	2	-	1
PC15.	report regarding the contagious illness of self or people in close contact	-	1	-	-
PC16.	avoid contact with ill people and self-isolate in a similar situation		1	-	
	<i>Housekeeping and waste management</i>	7	12	-	5
PC17.	follow the fundamentals of 5S for housekeeping	2	3	-	2
PC18.	ensure good housekeeping in order to prevent hazards and accidents	1	2	-	-
PC19.	store the material, tools and equipment in the correct location and in good condition	1	2	-	-
PC20.	segregate waste into different categories	1	2	-	1
PC21.	identify recyclable, non-recyclable and hazardous waste	1	1	-	1
PC22.	dispose non-recyclable, recyclable and reusable waste appropriately at identified location	1	2	-	1
	<i>Material and energy conservation</i>	5	9	-	2

	PC23. identify ways to optimize usage of material in various tasks/activities/processes	1	2	-	-
	PC24. check for spills/leakages in various tasks/ activities/processes	1	2	-	1
	PC25. plug spills/leakages and escalate to appropriate authority if unable to rectify	1	2	-	1
	PC26. check if the equipment/machine is functioning normally before commencing work and rectify wherever required	1	2	-	-
	PC27. ensure electrical equipment and appliances are properly connected and turned off when not in use	1	1	-	-
	Total Marks	30	50	-	20
ISC/N0401: Prepare the vehicle	<i>Identify work requirements</i>	2	4	-	1
	PC1. identify the work requirements from the instructions received from supervisor	1	2	-	1
	PC2. prepare a work plan to carry out the job	1	2	-	-
	<i>Inspect and prepare the vehicle for operation</i>	28	46	-	19
	PC3. check oil levels of engine, transmission, radiator coolant and brake	2	3	-	2
	PC4. check differential and hydraulic oil levels	2	3	-	2
	PC5. check the hydraulic hose and ram for leakages	2	3	-	1
	PC6. check various controls, gauges, parking brake, main horn, reverse horn, head light, warning lamp, other safety devices etc. for proper functioning and any defect	5	9	-	3
	PC7. check and adjust fan belt tension, driving position, rear and side mirrors, seat belts etc.	3	6	-	3
	PC8. clean dust from the air filter and drain water and sediment from the fuel tank	2	3	-	1
	PC9. fill coolant and oil in engine, transmission, etc. if necessary	3	4	-	1
	PC10. check electrolyte level, terminals, seating arrangements of the battery	3	4	-	1
	PC11. apply grease to all greasing pins and pivot points of the vehicle	2	4	-	2
	PC12. ensure the locking bar of vehicle is in position to prevent the front and rear chassis (articulated machines only)	1	2	-	1

	PC13. keep footplates and steps clean and free from mud, dirt and oil	2	3	-	1
	PC14. report defects precisely to the supervisor if beyond scope of his role	1	2	-	1
	Total Marks	30	50	-	20
ISC/N0402: Perform mobile equipment operations	<i>Operate the crane to transfer material</i>	30	50	-	20
	PC1. start the engine using the push-button switch and key switch together	1	2	-	1
	PC2. use the priming pump and pre-heater to start the engine in cold weather conditions	1	2	-	1
	PC3. load the material to be transferred safely & correctly, ensuring that it is not damaged or spilt or does not slip/fall-off during loading or journey	3	5	-	2
	PC4. move the vehicle along with the material and transfer them to the designated or specified area	6	10	-	3
	PC5. follow safety practices such as wear safety belt & helmet, do not use phones etc. while driving	1	2	-	1
	PC6. look out for pedestrians, people working, stationary objects and hazards such as trenches, potholes, overhead pipes, power lines, confined space etc. during driving	3	5	-	2
	PC7. operate the shifting quadrant device for selecting the correct gear setting	2	3	-	2
	PC8. ensure vehicle load and operating speed are within limits as specified by the manufacturer	1	2	-	1
	PC9. follow the road signs and locally developed signals during driving	1	2	-	1
	PC10. select & use the right type of brake in different situations during journey	2	3	-	1
	PC11. discharge the load safely at the position and in the manner as specified in WI/SOP	4	7	-	3
	PC12. park the vehicle on firm, level ground; with handbrake applied and drive & controls disengaged after completion of work	3	4	-	1
	PC13. put the front accessory (boom, fork, basket/bucket) in lowered condition touching the ground; switch the engine off, apply handbrake and alight from the seat	2	3	-	1
	Total Marks	30	50	-	20

ISC/N0403: Perform maintenance of the mobile equipment	<i>Prepare for maintenance work</i>	4	7	-	4
	PC1. identify the vehicle, its manufacturer's specifications and functioning from the user manual and vehicle drawings	1	2	-	1
	PC2. read maintenance schedule and checklist and plan the time and schedule for conducting the maintenance	1	2	-	1
	PC3. track machine operating hours to assess the right service schedule	-	1	-	-
	PC4. identify and arrange the tools, consumables and spare parts required during the task	2	2	-	2
	<i>Repair and maintain the mobile equipment</i>	22	36	-	13
	PC5. follow safety practices during maintenance activities as per organisational SOP	1	1	-	-
	PC6. perform basic health check-up of vehicle as specified in the maintenance checklist	3	5	-	2
	PC7. dismantle the vehicle components and replace/change the spare parts and consumables of the vehicle as per the schedule	1	2	-	1
	PC8. replenish coolants, lubricants and fluids	1	2	-	-
	PC9. clean air filter dust bowls, footplates, pedals and steps and ensure that they are free from mud, or dirt	2	3	-	1
	PC10. check the internal conditions of vehicle parts i.e. bearings, shafts, battery systems, motors, wiring harness and connectors and other similar parts etc. to test its working status and expected conditions	4	6	-	3
	PC11. check the systems of the vehicle to find out root cause of the problems like any leakage, short circuit in parts, breakage of wires and clamps, unusual contact of electrical wires with other parts etc. and discuss the same with senior if required	4	6	-	3
	PC12. use recommended consumables, tools and equipment for service and repair of the vehicle as per Standard Operating Procedures (SOP)	1	2	-	1
	PC13. apply grease on all greasing pins and pivot points of the vehicle	1	2	-	1
	PC14. check and maintain the tyre rims, air pressure, wheel nuts and treads	2	3	-	1
	PC15. assess when the problem is beyond his competence and report the problem to suitably qualified/designated and competent personnel	1	2	-	-

	PC16. dispose off waste materials such as failed parts/aggregates, as per organisation's policies	1	2	-	-
	<i>Conducting trials and documentation</i>	4	7	-	3
	PC17. assemble back all the components of the vehicle as per the drawing and prepare it for conducting the trials	1	2	-	-
	PC18. conduct trials of the vehicle and verify that specified parameters are attained with no abnormalities	1	2	-	1
	PC19. change the maintenance due/status sticker on the vehicle	1	1	-	1
	PC20. record all repairs carried out, time taken and unplanned tasks encountered during the maintenance activities	1	2	-	1
	Total Marks	30	50	-	20
DGT/VSQ/N0101 - Employability Skills (30 hours)	<i>Introduction to Employability Skills</i>	1	1	-	-
	PC1. understand the significance of employability skills in meeting the current job market requirement and future of work	-	-	-	-
	<i>Constitutional values – Citizenship</i>	1	1	-	-
	PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
	<i>Becoming a Professional in the 21st Century</i>	1	3	-	-
	PC3. explain 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	-	-	-	-
	<i>Basic English Skills</i>	2	3	-	-
	PC4. speak with others using some basic English phrases or sentences	-	-	-	-
	<i>Communication Skills</i>	1	1	-	-
	PC5. follow good manners while communicating with others	-	-	-	-
	PC6. work collaboratively with others in a team	-	-	-	-
	<i>Diversity & Inclusion</i>	1	1	-	-
	PC7. communicate and behave appropriately with all genders and PwD	-	-	-	-
	PC8. report any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
	<i>Financial and Legal Literacy</i>	3	4	-	-
	PC9. use various financial products and services safely and securely	-	-	-	-
	PC10. calculate income, expenses, savings etc.	-	-	-	-
	PC11. approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
	<i>Essential Digital Skills</i>	4	6	-	-

	PC12. operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
	PC13. use internet and social media platforms securely and safely	-	-	-	-
	<i>Entrepreneurship</i>	3	5	-	-
	PC14. identify and assess opportunities for potential business	-	-	-	-
	PC15. identify sources for arranging money and associated financial and legal challenges	-	-	-	-
	<i>Customer Service</i>	2	2	-	-
	PC16. identify different types of customers	-	-	-	-
	PC17. identify customer needs and address them appropriately	-	-	-	-
	PC18. follow appropriate hygiene and grooming standards	-	-	-	-
	<i>Getting ready for apprenticeship & Jobs</i>	1	3	-	-
	PC19. create a basic biodata	-	-	-	-
	PC20. search for suitable jobs and apply	-	-	-	-
	PC21. identify and register apprenticeship opportunities as per requirement	-	-	-	-
	Total Marks	20	30	-	-
	Grand Total	170	280		100

Annexure: 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 assigned to the assessment agencies for conducting the assessment on SDMS/SIP or email
- Assessment agencies send the assessment confirmation to VTP/TC looping SSC
- Assessment agency deploys the ToA certified Assessor for executing the assessment
- SSC monitors the assessment process & records

2. Testing Environment:

- Confirm that the centre is available at the same address as mentioned on SDMS or SIP
- Check the duration of the training.
- Check the Assessment Start and End time to be as 10 a.m. and 5 p.m.

- EAF the batch size is more than 30, then there should be 2 Assessors.
 - Check that the allotted time to the candidates to complete Theory & Practical Assessment is correct.
 - Check the mode of assessment—Online (TAB/Computer) or Offline (OMR/PP).
 - Confirm the number of TABs on the ground are correct to execute the Assessment smoothly.
 - Check the availability of the Lab Equipment for the particular Job Role.
3. Assessment Quality Assurance levels / Framework:
- Question papers created by the Subject Matter Experts (SME)
 - Question papers created by the SME verified by the other subject Matter Experts
 - Questions are mapped with NOS and PC
 - Question papers are prepared considering that level 1 to 3 is for the unskilled & semi-skilled individuals, and level 4 and above are for the skilled, supervisor & higher management
 - Assessor must be ToA certified & trainer must be ToT Certified
 - Assessment agency must follow the assessment guidelines to conduct the assessment
4. Types of evidence or evidence-gathering protocol:
- Time-stamped & geotagged reporting of the assessor from assessment location
 - Centre photographs with signboards and scheme specific branding
 - Biometric or manual attendance sheet (stamped by TP) of the trainees during the training period
 - Time-stamped & geotagged assessment (Theory + Viva + Practical) photographs & videos
5. Method of verification or validation:
- Surprise visit to the assessment location
 - Random audit of the batch
 - Random audit of any candidate
6. Method for assessment documentation, archiving, and access
- Hard copies of the documents are stored
 - Soft copies of the documents & photographs of the assessment are uploaded / accessed from Cloud Storage
 - Soft copies of the documents & photographs of the assessment are stored in the Hard Drives

Annexure: Acronym and Glossary

Acronym

Acronym	Description
AA	Assessment Agency
AB	Awarding Body
ISCO	International Standard Classification of Occupations
NCO	National Classification of Occupations
NCrF	National Credit Framework

NOS	National Occupational Standard(s)
NQR	National Qualification Register
NSQF	National Skills Qualifications Framework
OJT	On the Job Training

Glossary

Term	Description
National Occupational Standards (NOS)	NOS 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.
Long Term Training	Long-term skilling means any vocational training program undertaken for a year and above. https://ncvet.gov.in/sites/default/files/NCVET.pdf