

QUALIFICATION FILE

Coupler and Shunting Porter (Steel Plant)

☒ 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:

Indian Iron and Steel Sector Skill Council (IIS SSC)

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	Coupler and Shunting Porter (Steel Plant)																			
2.	Sector/s	Iron and Steel																			
3.	Type of Qualification: ☒ New ☐ Revised ☐ Has Electives/Options ☐ OEM	NQR Code & version of existing/previous qualification: <i>(change to previous, once approved)</i>	Qualification Name of existing/previous version: Coupler and Shunting Porter (Steel Plant) / v1.0																		
4.	a. OEM Name b. Qualification Name <i>(Wherever applicable)</i>																				
5.	National Qualification Register (NQR) Code & Version <i>(Will be issued after NSQC approval)</i>	QG-04-IS-03629-2025-V1-ISSSC	6. NCrF/NSQF Level: 4																		
7.	Award (Certificate/Diploma/Advance Diploma/ Any Other) <i>(Wherever applicable specify multiple entry/exits also & provide details in annexure)</i>	Certificate																			
8.	Brief Description of the Qualification	The individual in this role performs loco crew joining / disengaging Loco / match car with Rolling Stock, wagons etc. and other jobs related to the safe movement on railway track.																			
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>12th grade Pass (In science)</td> <td>6 Months of experience in relevant field</td> </tr> <tr> <td>2</td> <td>11th Class (In science)</td> <td>1.5 years of experience in relevant field</td> </tr> <tr> <td>3</td> <td>10th Class</td> <td>3 Years of experience in relevant field</td> </tr> <tr> <td>4</td> <td>10th Class (2 years of NTC / NAC / CTS in Fitter, Machinist)</td> <td></td> </tr> <tr> <td>5</td> <td>Pursuing 2nd year of 3-year regular Diploma (in Metallurgy / Mechanical / Electrical/ Chemical) (after 10th)</td> <td></td> </tr> </tbody> </table> b. Age: 18 years		S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1	12th grade Pass (In science)	6 Months of experience in relevant field	2	11th Class (In science)	1.5 years of experience in relevant field	3	10th Class	3 Years of experience in relevant field	4	10th Class (2 years of NTC / NAC / CTS in Fitter, Machinist)		5	Pursuing 2nd year of 3-year regular Diploma (in Metallurgy / Mechanical / Electrical/ Chemical) (after 10th)	
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4	10th Class (2 years of NTC / NAC / CTS in Fitter, Machinist)																				
5	Pursuing 2nd year of 3-year regular Diploma (in Metallurgy / Mechanical / Electrical/ Chemical) (after 10th)																				

10.	Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	16	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 <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>154:00</td> <td>266:00</td> <td>60:00</td> <td></td> <td>480</td> </tr> <tr> <td>Online</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> (Refer Blended Learning Annexure for details)					Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)	Classroom (offline)	154:00	266:00	60:00		480	Online					
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Classroom (offline)	154:00	266:00	60:00		480																			
Online																								
14.	Aligned to NCO/ISCO Codes (if no code is available mention the same)	NCO-2015/8311.0601																						
15.	Progression path after attaining the qualification (Please show Professional and Academic progression)	Locomotive - Supervisor																						
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 (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. 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: 18.02.2025	24. Validity Duration: 3 Years		25. Next Review Date: 18.02.2028																				

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 workplace	ISC/N0008, v2.0	Non-Core	4	2	25	35	00		60	45	105	00	00	150	10
2.	Conduct pre-departure checks and inspections	ISC/N0114, v1.0	Core	4	2	25	35	00		60	30	50	00	20	100	15
3.	Perform coupling and decoupling of the train	ISC/N0115, v1.0	Core	4	3	30	60	00		90	30	50	00	20	100	25
4.	Perform shunting of rolling stock	ISC/N0116, v1.0	Core	4	3	30	60	00		90	30	50	00	20	100	25
5.	Perform rail track maintenance	ISC/N0117, v1.0	Core	4	2	20	40	00		60	30	50	00	20	100	15
6.	Employability Skills (60 Hours)	DGT/VSQ/N0102	Non-core	4	2	24	36	00		60	20	30	00	00	50	10
7.	OJT	NA	Core	4	2			60		60						
Duration (in Hours) / Total Marks						16	154	266	60	480	185	335	00	80	600	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 welding) with 5 years of industry and 1 year of training experience in Loco Operations Or Diploma (Mechanical engineering) with 3 years of industry and 1 year of training experience in Loco Operations
2.	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	B.Tech (Mechanical) with 6 years of industry and 2 year of training experience in Loco Operations
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 welding) with 5 years of industry and 1 year of assessment experience in Loco Operations Or
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		Diploma (Mechanical engineering) with 3 years of industry and 1 year of assessment experience in Loco Operations
2.	Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	B.Tech (Mechanical) with 5 years of industry and 2 year of assessment experience in Loco Operations
3.	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	B.Tech (Mechanical) with 6 years of industry and 2 year of assessment experience in Loco Operations
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: 18
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	Carryout the inspection of locomotive, controls continuous operation and maintains the locomotive available in a steel plant.	Person may carry out a job which may require limited range of activities routine and predictable. This level 4	4
Professional and Technical Skills/ Expertise/ Professional Knowledge	- Coupling and decoupling of train - Pre-departure checks of loco - Process of shunting rolling stock - Maintenance of rail track	Basic facts, process and principle applied in trade of employment and hence is level 4.	4
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	Attaching utmost importance to safety and housekeeping, maintenance and operations of screening and crushing unit	demonstrate practical skill, routine and repetitive in narrow range of application and Hence this is level 4	4
Broad Learning Outcomes/Core Skill	Reading and writing; addition, subtraction; hygiene and environment.	Communication written and oral, with minimum required clarity, skill of basic arithmetic and algebraic principles. Hence this is level 4	4
Responsibility	Responsible for completing the repetitive assigned task, working under guidance of supervisor/senior technician	Under close supervision. Some responsibility for own work within defined limit and hence level 4	4

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	Locomotive with wagon	As per requirement	1
2	Transition coupler, emergency coupler, coupling adaptor	As per requirement	1 Set
3	Rolling stock	As per requirement	As per requirement
4	Spanner set	As per requirement	5
5	Allen key	As per requirement	5
6	Vibrometer	As per requirement	5
7	Bearing tester	As per requirement	5
8	Feeler gauge	As per requirement	5
9	Chain block	As per requirement	3
10	Gloves	As per requirement	30
11	Sunglasses and safety glasses	As per requirement	30
12	Safety footwear	As per requirement	30
13	Portable radios	As per requirement	5
14	Hand lamps	As per requirement	5
15	Flags	As per requirement	5
16	High visibility clothing	As per requirement	30
17	Emergency warning devices	As per requirement	2
18	Portable signs and markers	As per requirement	5
19	Emergency procedures manuals	As per requirement	5
20	Train register book	As per requirement	5
21	Maintenance tools - Cant board, wire claw, powarah, hammer, rail bender, jacks, railgauge, sleeper tongs, auger, shovels, rail tongs, claw bar, sledge hammer, chisel, beater cum pickaxe, spanner, spirit level along with straight edge	As per requirement	5 set

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Whiteboard
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	Bokaro Steel Plant	B.K Singh	GM		8986871504	Basant.singh@sail.in	
2	Kejriwal Castings	Mr. Subhasis Chatterjee	General Manager (Projects)	33A, Chowringhee Road Chatterjee International Centre 11th Floor, Suite No. 11 Kolkata 700071			
3	Bhalotia Auto Products Pvt. Ltd.	Kanchan Patra	AGM	H.O Muneshwari Bhawan, Jamshedpur - 831001	9830019700		
4	Rourkela Steel Plant	H. Pati	GM	Rourkela - 769011	8895500593		
5	ESL Steel Limited	G L Karna	Head – L&D	Siyalijori, P.O – Jogidih, O.P – Bangaria, P.S – Chandankyari, Bokaro Pin – 828303	9004974233	Govindlal.karna@vadanta.co.in	
6	Super Pannel Pvt. Ltd.	Amit Kumar	Director	3/32 & 3/33, Ajanta compound site-II, Mohan Nagar, Ghaziabad	8533921917	Director.superpanel@hotmail.com	
7	Thinkway Industries Private Limited	Swati Kumar	Director	Flat no. 33, Block B, Pocket C, Loknayak Puram, Bakarwala, DDA flat Nagloi	9999751120	Operations.zita@gmail.com	
8	ManpowerGroup Services India Pvt. Ltd.	Durgesh Bagariya	Head Branch Operations	Unit No. 4-A/1 & Unit No. 4-A/2, 4th Floor, plot no. 6, Uppalplaza, M-6, Jasola, New Delhi, Delhi 110025	+91 9824054165	durgesh.b@manpower.co.in	
9	N. V. Enterprises	Amresh Kumar Tyagi	Owner	Corporation Office: Door No. A-16, 3 rd Cross, Thiruppathi Valley, Near Kothgondaapally, Hosur (TN), 635109	9944799610	Nthyagi2010@gmail.com	
10	Sun Bright Manpower Solution (P) Ltd.	Arun Kumar	Supervisor	Shop No. 3144, Mainroad Narasapura (v), Kolar Taluk & Dist. Pin – 563133	7338463588	bangalore@sunbrightgroup.com	

11	Surya Consultancy & Solutions	V. Ravi Kumar	Owner	1, Pragathi Printers rod, Govindappa Building, Narasapura, Kolar Tq & District – 563133	7338463588	suryaconsultancy.solution@gmail.com	
12	TD Placements & Services Pvt. Ltd.	Joy Mitra	Manager		8010154000	operation@tdsjob.com	
13	Texmo Industries	C. Manimaran	Asst. Manager		+91422-6610300	TRM@texmo.net	
14	SAIL DGP	Mr. Soumitra Ghosh	Deputy General Manager - Electrical	Durgapur Steel Plant Durgapur – 713203 West Bengal			
15	JSPL	Damodar Mittal	SVP, DRI Plant	Kharsia Road, Raigarh, Pin 496001, Chhattisgarh			
16	Essar Steel	Sarosh Gandhi	Sr. Manager - HR	27th KM, Surat Hazira Road District – Surat, Hazira, Pin - 394 270, Gujarat			
17	Rohit Ferro tech Ltd.	Mr. Jayanta Chatterjee	Director	Bhunia Raichak, Joynagar, P.S. DurgaChak,			
18	Sarda Metals & Alloys Ltd.	Mr. Prabhat Mohan	Head HR	Floor II & III, D.No.50-96-4/1, Sri Gowri Nilayam, 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
2023-24	500	350	200	140	50	35
2024-25	1000	700	400	280	100	70
2025-26	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	40:60
2	☒ Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners	• Self-Learning Videos • Broadcasts • Mobile Learning • Curated Digital content	40:60
3	☒ Showing Practical Demonstrations to the learners	• Video Content • E-Resource library • AR/ VR/ XR	40:60
4	☒ Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	• Training tools (tools list attached) • Video Play • Presentations	40:60
5	☒ Tutorials/ Assignments/ Drill/ Practice	• Online Question Bank • Mobile Quick test app • MCQ based tests	40:60
6	☒ Proctored Monitoring/ Assessment/ Evaluation/ Examinations	• Assessment engine for Essays • Up-loadable file examinations • Mock test sessions	40:60
7	☒ On the Job Training (OJT)/ Project Work Internship/ Apprenticeship Training	• Online tests • Offline assessments	40:60

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/N0008: Use basic health and safety practices at the workplace	<i>Health and safety</i>	5	5	-	-
	PC1. Use protective clothing/equipment for specific tasks and work conditions Protective clothing includes: Leather or asbestos gloves Flame proof aprons Flame proof overalls buttoned to neck Cuff less (without folds) trousers Reinforced footwear Helmets/hard hats Cap and shoulder covers Ear defenders/plugs Safety boots Knee pads Particle masks Glasses/gloves/visors Equipment includes: Hand shields Machine guards Residual current devices Shields Dust sheets Respirator	5	5	-	-
	<i>Health and safety procedures</i>	15	40	-	-
	PC2. State the name and location of people responsible for health and safety in the workplace Various areas are listed below: On chemical containers Equipment Packages Inside building Open areas and public spaces, etc.	-	4	-	-
	PC3. State the names and location of documents that refer to health and safety in the workplace	-	1	-	-
	PC4. Identify job-site hazardous work and state possible causes of risk or accident in the workplace Hazards include: Working with electrical and thermal tools and equipment Sharp edged and heavy tools Heated metals Oxyfuel and gas cylinders Welding radiation Surfaces: sharp, slippery, uneven, chipped, broken, etc. Substances: chemicals, gas, oxy-fuel, fumes, dust, etc. Physical: working at heights, large and heavy objects and machines, sharp and piercing objects, tolls and machines, intense light, load noise, obstructions in corridors, by doors, blind turns, noise, over stacked shelves and packages, etc. Electrical: power supply and points, loose and naked cables and wires, electrical machines and appliances, etc.	5	5	-	-
	PC5. Carry out safe working practices while dealing with hazards to ensure the safety of self and others state methods of accident prevention in the work environment of the job role Safe working practices include: Using protective clothing and equipment Putting up and reading safety signs Handle tools in the correct manner and store and maintain them properly Keep work area clear of clutter, spillage and unsafe object lying casually While working with electricity take all electrical precautions like insulated clothing, adequate equipment insulation, use of control equipment, dry work area, switch off the power supply when not required, etc. Safe lifting and carrying practices Use equipment that is working properly and is well maintained Take due measures for safety while working in confined places, trenches or at heights,	5	5	-	-

	etc. Including safety harness, fall arrestors, etc. Methods are: Training in health and safety procedures Using health and safety procedures Use of equipment and working practices (such as safe carrying procedures) Safety notices, advice Instruction from colleagues and supervisors				
PC6.	State location of general health and safety equipment in the workplace	-	5	-	-
PC7.	Inspect for faults, set up and safely use steps and ladders in general use Faults: Corrosion of metal components Deterioration Splits and cracks timber components Imbalance Loose rungs Nuts or bolts, etc. Set up: Firm/level base Clip/lash down Leaning at the correct angle, etc.	-	5	-	-
PC8.	Work safely in and around trenches, elevated places and confined areas	-	4	-	-
PC9.	Lift heavy objects safely using correct procedures	-	4	-	-
PC10.	Apply good housekeeping practices at all times. Good housekeeping practices: Clean/tidy work areas Removal/disposal of waste products Protect surfaces	-	1	-	-
PC11.	Identify common hazard signs displayed in various areas	5	1	-	-
PC12.	Retrieve and/or point out documents that refer to health and safety in the workplace	-	5		
	<i>Fire safety procedures</i>	10	15	-	-
PC13.	Use the various appropriate fire extinguishers on different types of fires correctly. Fire extinguishers: Sand Water Foam Co2 Dry powder Fires: Class A: Ordinary solid combustibles, e.g. wood, paper, cloth, plastic, charcoal etc. Class B: Flammable liquids and gases, e.g. gasoline, propane, diesel fuel, tar, cooking oil and similar substances Class C: Electrical equipment e.g. appliances, wiring, breaker panels etc.(these categories of fires become Class A, B, and D fires when the electrical equipment that initiated the fire is no longer receiving electricity) Class D: Combustible metals such as magnesium, titanium, and sodium(these fires burn at extremely high temperatures and require special suppression agents)Causes of fires: Heating of metal Spontaneous ignition Sparking, Electrical heating Loose fires (e.g. Smoking, welding, etc.) Chemical fires, etc.	5	5	-	-
PC14.	Demonstrate rescue techniques applied during fire hazard	5	5	-	-
PC15.	Demonstrate good housekeeping in order to prevent fire hazards	-	1	-	-
PC16.	Demonstrate the correct use of a fire extinguisher	-	4	-	-
	<i>Emergencies, rescue and first-aid procedures</i>	15	45	-	-
PC17.	Demonstrate how to free a person from electrocution	-	5	-	-
PC18.	Administer appropriate first aid to victims as required e.g. in case of bleeding, burns, choking, electric shock, poisoning etc.	5	5	-	-
PC19.	Demonstrate basic techniques of bandaging	-	5	-	-

	PC20. Respond promptly and appropriately to an accident situation or medical emergency in real or simulated environments. few General health and safety equipment are mentioned below: Fire extinguishers First aid equipment Safety instruments and clothing Safety installations, e.g. Fire exits, exhaust fans etc.	5	5	-	
	PC21. Perform and organize loss minimization or rescue activity during an accident in real or simulated environments	-	5	-	
	PC22. Administer first aid to victims in case of a heart attack or cardiac arrest due to electric shock, before the arrival of emergency services in real or simulated cases	-	5	-	
	PC23. Demonstrate the artificial respiration and the CPR Process	-	5	-	-
	PC24. Participate in emergency procedures. Emergency procedures are: Raising alarm Safe/efficient evacuation Correct means of escape Correct assembly point Roll call Correct return to work	-	4	-	-
	PC25. Complete a written accident/incident report or dictate a report to another person, and send report to person responsible Incident Report should capture: Name Date/time of incident Date/time of report, Location Environment conditions Persons involved Sequence of events Injuries sustained Damage sustained Actions taken Witnesses Supervisor/manager notified Documents: Fire notices Accident reports Safety instructions for equipment and procedures Company notices and documents Legal documents (e.g. Government notices)Job titles: ISC/N0008: Use basic health and safety practices at the workplace Health and safety officer First aid officer Fire officer	5	5	-	-
	PC26. Demonstrate correct method to move injured people and others during an emergency	-	1	-	-
Total Marks		45	105	-	-
ISC/N0114: Conduct pre-departure checks and inspections	<i>Identify pre-departure checks</i>	11	18	-	7
	PC1. interpret the brake test documentation, rolling stock data	1	2	-	1
	PC2. conducts physical inspections to check coolant level, oil level etc. as per checklist	2	3	-	1
	PC3. conduct regular checks of the engine and wagons	2	3	-	1
	PC4. check the coupler position (if the position is not on the line, make them on a line)	2	3	-	1
	PC5. check the signalling system	2	3	-	1
	PC6. check for special instructions for inspection according to the material to be transported	1	2	-	1
	PC7. isolate the train or secured in accordance with workplace procedures to make the work area safe for inspection	1	2	-	1
	<i>Conduct pre-departure checks</i>	12	21	-	8
	PC8. identify the potential hazards and implement hazard control measures	1	2	-	1

	PC9. setup the motive power unit control systems as per SOP	1	2	-	1
	PC10. check to ensure rolling stock is coupled and sequenced correctly	1	2	-	1
	PC11. conduct the brake leak test	2	3	-	1
	PC12. conduct modified brake test as per standard requirements	1	2	-	-
	PC13. conduct air continuity test to ensure train braking system meets functional specifications	2	3	-	1
	PC14. check the train braking system for operational correctness	2	3	-	1
	PC15. inspect Hoses and pipes for leakage and defects	1	2	-	1
	PC16. identify the defective rolling stock not fit to run and detachment arrangements are made in compliance with workplace procedures	1	2	-	1
	<i>Confirm train can proceed</i>	7	11	-	5
	PC17. take action to rectify identified faults to ensure minimum delay to planned running schedule	2	3	-	1
	PC18. repair or replace the faulty parts	2	3	-	1
	PC19. verify the minor repairs carried out and replacements done	1	2	-	1
	PC20. records are filed in accordance with workplace policies and procedures	1	2	-	1
	PC21. record Brake tests completed in accordance with workplace policies and procedures	1	1	-	1
	Total Marks	30	50	-	20
ISC/N0115: Perform coupling and de-coupling of train	<i>Coupling of train</i>	16	26	-	12
	PC1. identify the type of connections required prior to coupling	1	2	-	2
	PC2. position the trains to be coupled in accordance with operating procedures and workplace requirements	2	3	-	2
	PC3. ensure that trains to be coupled are fully secured	2	3	-	1
	PC4. align couplers in the appropriate position for type of connection required	2	3	-	2
	PC5. ensure that all safety requirements are followed prior to coupling trains	1	2	-	-
	PC6. couple the rolling stock (in case of auto coupler, coupling will be automatic and in case of screw-coupling coupling to be made manually)	3	5	-	2
	PC7. couple the trains in accordance with operational/workplace requirements	2	3	-	1
	PC8. check if there is any skit under the wheel of the train, remove the skit if any	1	2	-	1
	PC9. conduct post-coupling inspection/tests in accordance with operating procedures and workplace requirements	2	3	-	1
	<i>De-coupling of train</i>	14	24	-	8
	PC10. identify the trains to be uncoupled	1	2	-	-
	PC11. conduct pre-uncoupling checks and, where required, procedures are conducted in accordance with operating procedures and workplace requirements	3	5	-	2
	PC12. ensure that all safety requirements are followed prior to uncoupling trains	1	2	-	-
	PC13. provide skit properly under the front wheel of the rolling stock	1	2	-	1
	PC14. de-couple the rolling stock by raising the auto-coupling handle or by detaching d-shackle from c-hook in case of screw coupling	3	5	-	2

	PC15. ensure that trains are uncoupled in accordance with operating procedures and workplace requirements	2	3	-	1
	PC16. ensure that train is fully secured after uncoupling	1	2	-	1
	PC17. conduct post-uncoupling inspection/tests in accordance with operating procedures and workplace requirements	2	3	-	1
	Total Marks	30	50	-	20
ISC/N0116: Perform shunting of rolling stock	<i>Plan and prepare for shunting operation</i>	5	8	-	4
	PC1. interpret the shunting requirements and vehicles and equipment are obtained and prepared in accordance with shunting strategy	2	3	-	1
	PC2. check Rolling stock movements, availability and locations are established to determine appropriate siding and/or track locations for vehicle placement	2	3	-	2
	PC3. follow Work health and safety (WHS)/occupational health and safety (OHS) legislation, codes of practice, policies and procedures	1	2	-	1
	<i>Carry out shunting control procedures</i>	12	18	-	7
	PC4. use Points, levers, switches, signals and line of sight communications are used to assist the control of rolling stock movement	3	5	-	2
	PC5. use uniform hand signals, light and radio shunting commands that conform with operational rules and statutory requirements	3	5	-	2
	PC6. ensure wagon cards are checked and wagons are obtained and sorted to comply with shunting requirements	2	3	-	1
	PC7. apply shunting control techniques to prevent damage of rolling stock and loads/contents	3	5	-	2
	<i>Shunt rolling stock</i>	13	24	-	9
	PC8. apply workplace procedures for shunting	2	3	-	2
	PC9. position the rolling stock to meet shunting requirements	2	3	-	1
	PC10. identify and apply coupling systems to attach and detach rolling stock	2	3	-	1
	PC11. connect brake hoses, electrical couplings and hand brakes are connected/disconnected and applied/released	2	5	-	2
	PC12. ensure that rolling stock is shunted with the minimum of necessary moves	1	2	-	1
	PC13. identify the defective rolling stock not fit to run and detachment arrangements are made in compliance with workplace procedures	2	4	-	1
	PC14. identify the irregularities and defects with rolling stock equipment are reported in accordance with operational requirements	2	4	-	1
	Total Marks	30	50	-	20
ISC/N0117: Perform rail track maintenance	<i>Prepare for maintenance of rail tracks</i>	7	10	-	3
	PC1. follow safety practices during maintenance activities as per organisational SOP	1	1	-	-
	PC2. read maintenance schedule and checklist and plan the time and schedule for conducting the maintenance	1	2	-	1
	PC3. use checklist and coordinate with the superior for confirming maintenance tasks	-	1	-	-

PC4.	select and arrange the right tools, equipment, consumables and spare parts as per the SOP and job requirements	3	2	-	1
PC5.	check the tools, equipment, consumables and spare parts for any defects and that they are as per the required quality standards	1	2	-	1
PC6.	prepare tools, tackles, spares, lifting equipment etc. as per SOP/WI	1	2	-	-
<i>Perform maintenance of rail tracks</i>		23	40	-	17
PC7.	inspect the railway line for potential hazards and faults/failures	1	2	-	1
PC8.	conduct routine checks on the tracks to identify any signs of wear, damage, or defects that could affect train operations	1	2	-	1
PC9.	utilize specialized tools and machinery (e.g., ultrasonic testing devices, track inspection vehicles) to inspect the tracks, looking for issues like cracks, misalignment, or erosion	2	3	-	1
PC10.	measures the alignment, elevation, and gauge (distance between rails) by using special measuring equipment	1	2	-	1
PC11.	take appropriate action to ensure track system integrity	1	1	-	-
PC12.	repair or replace damaged rail components, including rails, ties (sleepers), and fasteners, to maintain proper track alignment	2	3	-	1
PC13.	perform welding of rail joints and grinding of track to ensure smooth and safe passage for trains	2	3	-	1
PC14.	use grinding machines to correct corrugations, fatigue, and metal flow in the rail	1	2	-	1
PC15.	use vibrating tamping lines to correct the level of the track by lifting the sleepers	1	2	-	1
PC16.	maintain and adjust ballast (gravel or crushed stone placed under and around the track) to ensure proper track stability and drainage	1	2	-	1
PC17.	address issues such as track curvature or misalignment caused by wear, extreme weather, or external factors, ensuring proper gauge and alignment for safe train passage	2	3	-	1
PC18.	realign the track when it becomes warped or misaligned due to wear, temperature changes, or shifts in the ground beneath the track	1	2	-	1
PC19.	replace or tighten the bolts, clips, and other fasteners that hold the rails to the ties, ensuring the track remains secure	1	2	-	1
PC20.	inspect and maintain the rail switches, which are critical for directing trains to different tracks. This includes lubricating and checking mechanical components	1	2	-	1
PC21.	remove debris or obstructions from the track that could impede train movement	1	2	-	1
PC22.	ensure proper drainage systems are in place to prevent water accumulation, which can erode tracks and cause other maintenance issues	1	2	-	1
PC23.	keep accurate records of inspections, repairs, and maintenance activities for future reference and compliance purposes.	1	2	-	1

	PC24. assess when the faults/failures are beyond the competence and report the problem to suitably qualified/designated and competent personnel	1	1	-	-
	PC25. track the lifespan and condition of rails and other components to schedule replacements or upgrades in a timely manner	1	2	-	1
	Total Marks	30	50	-	20
DGT/VSQ/N0102 - Employability Skills (60 hours)	<i>Introduction to Employability Skills</i>	1	1	-	-
	PC1. identify employability skills required for jobs in various industries	-	-	-	-
	PC2. identify and explore learning and employability portals				
	<i>Constitutional values – Citizenship</i>	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				
	<i>Becoming a Professional in the 21st Century</i>	2	4	-	-
	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				
	<i>Basic English Skills</i>	2	3	-	-
	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				
	<i>Career Development & Goal Setting</i>	1	2		
	PC10. understand the difference between job and career				
	PC11. prepare a career development plan with short- and long-term goals, based on aptitude.				
	<i>Communication Skills</i>	2	2	-	-
	PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
	PC13. work collaboratively with others in a team	-	-	-	-
	<i>Diversity & Inclusion</i>	1	2	-	-
	PC14. communicate and behave appropriately with all genders and PwD	-	-	-	-
	PC15. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
	<i>Financial and Legal Literacy</i>	2	3	-	-
	PC16. select financial institutions, products and services as per requirement.	-	-	-	-
	PC17. carry out offline and online financial transactions, safely and securely	-	-	-	-

PC18. identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
PC19. identify relevant rights and laws and use legal aids to fight against legal exploitation				
<i>Essential Digital Skills</i>	3	4	-	-
PC20. operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
PC22. use basic features of word processor, spreadsheets, and presentations				
<i>Entrepreneurship</i>	2	3	-	-
PC23. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
PC24. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
PC25. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity				
<i>Customer Service</i>	1	2	-	-
PC26. identify different types of customers	-	-	-	-
PC27. identify and respond to customer requests and needs in a professional manner.	-	-	-	-
PC28. follow appropriate hygiene and grooming standards				
<i>Getting ready for apprenticeship & Jobs</i>	2	3	-	-
PC29. create a professional Curriculum vitae (Résumé)	-	-	-	-
PC30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
PC31. apply to identified job openings using offline / online methods as per requirement	-	-	-	-
PC32. answer questions politely, with clarity and confidence, during recruitment and selection				
PC33. identify apprenticeship opportunities and register for it as per guidelines and requirement				
Total Marks	20	30	-	-
Grand Total	185	335		80

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