



QUALIFICATION FILE

Assistant-Mine Surveyor

☒ 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:

Skill Council for Mining Sector (SCMS)

FIMI House, B-311,

Okhla Industrial, Phase-1

New Delhi-110020

Table of Contents

Section 1: Basic Details	3
Section 2: Module Summary	4
NOS/s of Qualifications.....	4
Mandatory NOS/s:	4
Elective NOS/s:	5
Optional NOS/s: Not Applicable	6
Assessment - Minimum Qualifying Percentage.....	6
Section 3: Training Related.....	6
Section 4: Assessment Related.....	7
Section 5: Evidence of the need for the Qualification.....	8
Section 6: Annexure & Supporting Documents Check List.....	8
Annexure: Evidence of Level	9
Annexure: Tools and Equipment (Lab Set-Up)	11
Annexure: Industry Validations Summary.....	14
Annexure: Training & Employment Details	17
Annexure: Blended Learning	18
Annexure: Detailed Assessment Criteria	19
Annexure: Assessment Strategy	27
Annexure: Acronym and Glossary	29

Section 1: Basic Details

1.	Qualification Name	Assistant-Mine Surveyor																						
2.	Sector/s	Mining																						
3.	Type of Qualification: ☐ New ☒ Revised ☒ Has Electives/Options ☐ OEM	NQR Code & version of existing/previous qualification: 2022/MIN/SCMS/06987 & Version 2.0			Qualification Name of existing/previous version: Assistant-Mine Surveyor																			
4.	a. OEM Name b. Qualification Name (Wherever applicable)	Not Applicable																						
5.	National Qualification Register (NQR) Code &Version (Will be issued after NSQC approval)	QG-04-MG-04053-2025-V2-SCMS & Version 3.0			6. NCrF/NSQF Level: 4																			
7.	Award (Certificate/Diploma/Advance Diploma/ Any Other (Wherever applicable specify multiple entry/exits also & provide details in annexure)	Not Applicable																						
8.	Brief Description of the Qualification	An Assistant-Mine Surveyor assists in measuring and setting out dimensional control, setting out secondary dimensional work control, and handling resources to assist surveyor.																						
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 (or equivalent)</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 (or equivalent)	-												
S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)																						
1.	12th grade Pass (or equivalent)	-																						
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)	Not Applicable																						
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>160:00</td> <td>260:00</td> <td>00:00</td> <td>-</td> <td>420:00</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)	160:00	260:00	00:00	-	420:00	Online	-	-	-	-	-
Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)																			
Classroom (offline)	160:00	260:00	00:00	-	420:00																			
Online	-	-	-	-	-																			
14.	Aligned to NCO/ISCO Code/s (if no code is available mention the same)	NCO-2015/2165.0500																						

15.	Progression path after attaining the qualification <i>(Please show Professional and Academic progression)</i>	NSQF Level 5 – Mine Surveyor (to be developed)
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: https://www.nqr.gov.in/qualifications/12790 This qualification is focused for the Mining Industry and the Entry Requirement is Class 12 th or its equivalent. And this qualification is at NSQF level 4, while the Qualification of the URL above is of NSQF level 2 for construction.
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	By creating awareness in women and training them
20.	Are Greening/ Environment Sustainability Aspects Covered <i>(Specify the NOS/Module which covers it)</i>	☒ Yes ☐ No MIN/N1702, MIN/N1703, MIN/N1704
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. Navneet Kumar Email : coo@skillcms.in, scms@skillcms.in Contact No.: +91-11-26814593 Website : https://www.skillcms.in/
23.	Final Approval Date by NSQC: 06.05.2025	24. Validity Duration: 3 Years 25. Next Review Date: 06.05.2028

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.	Assist in measuring and setting out dimensional control for the mining requirements	MIN/N1105 & V2.0	Core	4	5	55:00	95:00	00:00	-	150:00	30	50	0	20	100	25
2.	Set out secondary dimensional work control	MIN/N1106 & V2.0	Core	4	5	45:00	105:00	00:00	-	150:00	30	50	0	20	100	25
3.	Handle resources to assist the surveyor	MIN/N1107 & V2.0	Core	4	3	30:00	60:00	00:00	-	90:00	30	50	0	20	100	15
4.	Employability Skills (30 Hours)	DGT/VSQ/N0101 & V1.0	Non-Core	2	1	30:00	00:00	00:00	-	30:00	20	30	-	-	50	10
Duration (in Hours) / Total Marks					14	160:00	260:00	00:00	-	420:00	110	180	-	60	350	75

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.	Follow Health, Safety and Environmental guidelines for Underground Metalliferous Mines	MIN/N1702 & V2.0	Core	3.5	2	20:00	40:00	00:00	-	60:00	30	50	-	20	100	25
2.	Follow Health, Safety, and Environmental Guidelines for opencast mines	MIN/N1703 & V2.0	Core	3.5	2	20:00	40:00	00:00	-	60:00	30	50	-	20	100	25
3.	Follow Health, Safety, and Environmental guidelines for underground coal mines	MIN/N1704 & V2.0	Core	3.5	2	20:00	40:00	00:00	-	60:00	30	50	-	20	100	25
Duration (in Hours) / Total Marks					6	60:00	120:00	00:00		180:00	90	150	-	60	300	75

Optional NOS/s: Not Applicable

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/Non-Core	NCrF/NS QF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
1.																
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: Not Applicable% (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)	Class 12 th pass with 6 years of relevant experience required in surveying. OR ITI with 6 years of relevant experience required in surveying. OR Diploma (Civil/Mining) with 5 years of relevant experience required in surveying. OR B-Tech (Civil/Mining) with 4 years of relevant experience required in surveying. OR CITS-NCIC (Surveyor) with 1 year Relevant experience in surveying. AND Certified for Job role "Assistant-Mine Surveyor" and Job Role "Trainer (VET and Skills)" with minimum accepted score of 80% in each.
2.	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	Class 12 th pass with 6 years of relevant experience required in surveying. OR ITI with 6 years of relevant experience required in surveying. OR Diploma (Civil/Mining) with 5 years of relevant experience required in surveying. OR

		B-Tech (Civil/Mining) with 4 years of relevant experience required in surveying. OR CITS-NCIC (Surveyor) with 1 year Relevant experience in surveying. AND Certified for Job role “Assistant-Mine Surveyor” and Job Role “Master Trainer (VET and Skills)” with minimum accepted score of 90% in each.
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	The trainers should be aware of how to use Electronic Distance Measurement (EDM), Theodolite, and other modern surveying technologies and instruments.

Section 4: Assessment Related

1.	Assessor’s Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Class 12 th pass with 8 years of relevant experience required in surveying. OR ITI with 8 years of relevant experience required in surveying. OR Diploma (Civil/Mining) with 7 years of relevant experience required in surveying. OR B-Tech (Civil/Mining) with 6 years of relevant experience required in surveying. OR CITS-NCIC (Surveyor) with 1 year Relevant experience in surveying. AND Certified for Job role “Assistant-Mine Surveyor” and Job Role “Assessor (VET and Skills)” with minimum accepted score of 80% in each
2.	Proctor’s Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Class 12 th pass with 6 years of relevant experience required in surveying. OR ITI with 6 years of relevant experience required in surveying. OR Diploma (Civil/Mining) with 5 years of relevant experience required in surveying. OR B-Tech (Civil/Mining) with 4 years of relevant experience required in surveying. OR CITS-NCIC (Surveyor) with 1 year Relevant experience in surveying. AND Certified for Job role “Assistant-Mine Surveyor” and Job Role “Trainer (VET and Skills)” with minimum accepted score of 80% in each.

3.	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) <i>(as per NCVET guidelines)</i>	Class 12 th pass with 8 years of relevant experience required in surveying. OR ITI with 8 years of relevant experience required in surveying. OR Diploma (Civil/Mining) with 7 years of relevant experience required in surveying. OR B-Tech (Civil/Mining) with 6 years of relevant experience required in surveying. OR CITS-NCIC (Surveyor) with 1 year Relevant experience in surveying. AND Certified for Job role "Assistant-Mine Surveyor" and Job Role "Lead Assessor (VET and Skills)" with minimum accepted score of 90% in each
4.	Assessment Mode <i>(Specify the assessment mode)</i>	Tablet based/ Online
5.	Tools and Equipment Required for Assessment	☒ Same as for training ☐ Yes ☐ No <i>(details to be provided in Annexure-if it is different for Assessment)</i>

Section 5: Evidence of the need for the Qualification

Provide Annexure/Supporting documents name.

1.	Latest Skill Gap Study (not older than 2 years) (Yes/No): No
2.	Latest Market Research Reports or any other source (not older than 2 years) (Yes/No): No
3.	Government /Industry initiatives/ requirement (Yes/No): Yes
4.	Number of Industry validation provided: 21
5.	Estimated nos. of persons to be trained and employed: 600
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>	Attached
2.	Annexure: List of tools and equipment relevant for qualification <i>(Mandatory, except in case of online course)</i>	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")	Not Applicable
6.	Annexure: Multiple Entry-Exit Details (Mandatory, in case qualification has multiple Entry-Exit)	Filled
7.	Annexure: Acronym and Glossary (Optional)	Filled
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:	No

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	An Assistant Mine Surveyor requires foundational knowledge of mine surveying principles and processes to support accurate mapping and measurement activities. This includes understanding survey instruments, measurement techniques, and mine layouts. Proficiency in interpreting geological data and basic cartographic principles is essential. The role involves adherence to safety protocols and statutory regulations related to mining operations. Theoretical understanding of surveying tools like total stations, GPS, and leveling instruments ensures precise documentation of mine dimensions and coordinates. The qualification aims to produce skilled personnel who can assist in surveying tasks, prepare basic reports, and contribute to efficient mining operations, while upholding environmental and legal standards.	An Assistant Mine Surveyor, aligned with NSQF Level 4, demonstrates foundational theoretical knowledge of surveying principles, mine mapping techniques, and basic geospatial processes. This role involves understanding surveying equipment, data collection methods, and basic calculations for mining layouts. The individual applies standard procedures to measure and record mine dimensions, contributing to the creation of accurate maps and layouts under supervision. Theoretical knowledge enables the Assistant Mine Surveyor to relate practical tasks with defined processes, ensuring precision and compliance with mining safety standards. Their competence at Level 4 bridges semi-skilled tasks with limited decision-making, emphasizing adherence to protocols and structured workflows essential for supporting mining operations efficiently.	4

Professional and Technical Skills/ Expertise/ Professional Knowledge	An Assistant Mine Surveyor is expected to have a solid understanding of mine surveying techniques, tools, and equipment, including the use of total stations, GPS, and auto levels. They must be skilled in creating and interpreting mine maps, layouts, and plans, as well as maintaining accurate survey records. Proficiency in using CAD software and knowledge of mining safety standards and regulations are essential. The role demands familiarity with basic geological concepts, surface and underground surveying, and an understanding of mining operations. Effective communication, teamwork, and problem-solving abilities are key, ensuring the accurate execution of surveys and compliance with operational requirements for safe and efficient mining activities.	The role of an Assistant Mine Surveyor at NSQF Level 4 aligns with the National Credit Framework (NCrF) and NSQF level descriptors by emphasizing the development of foundational technical expertise and professional knowledge. This position requires practical skills in conducting surveys, using survey instruments, and recording measurements with precision. It demands a clear understanding of mining safety standards, environmental regulations, and basic geological principles. The role also involves interpreting survey data, assisting in mapping, and collaborating with senior surveyors. These responsibilities reflect NSQF Level 4 descriptors, which focus on work that involves application of knowledge in predictable and structured contexts, requiring a mix of technical skills, procedural understanding, and the ability to execute routine tasks under supervision.	4
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	An Assistant Mine Surveyor at NSQF Level 4 is expected to possess strong employment readiness and professional skills to ensure efficient operations in the mining sector. Key requirements of the role include proficiency in basic surveying techniques, handling survey instruments, interpreting mine plans, and accurately recording data. The individual must demonstrate problem-solving abilities, attention to detail, and adherence to safety and environmental regulations. Entrepreneurial skills such as decision-making, resource management, and effective communication are essential for career growth. Outcome of the qualification includes the ability to perform independent tasks under guidance, ensuring accurate and safe surveying practices that support mining operations, while fostering a professional and adaptable mindset.	The job role of an Assistant Mine Surveyor requires the ability to execute precise surveying tasks in mining operations. At NSQF Level 4, individuals are expected to demonstrate factual knowledge of survey techniques, equipment, and safety protocols. They possess professional skills to operate instruments, prepare detailed drawings, and maintain records, ensuring compliance with legal and operational standards. The role aligns with descriptors emphasizing problem-solving, task execution under guidance, and limited autonomy. Employment readiness includes adaptability, teamwork, and a quality-focused mindset, while entrepreneurial skills foster resource management, effective communication, and awareness of business impacts. These competencies support career growth and align with industry expectations.	4
Broad Learning Outcomes/Core Skill	An Assistant Mine Surveyor is expected to possess core skills aligned with precision, safety, and compliance in mine surveying operations. The role demands basic mathematical proficiency for accurate measurements and calculations, technical understanding of survey equipment and familiarity with geographic information systems (GIS). Effective	An Assistant Mine Surveyor, aligned with NSQF Level 4, demonstrates the ability to execute basic technical tasks, apply critical thinking, and use practical skills effectively under limited supervision. Core skills include interpreting technical drawings, conducting field surveys, maintaining instruments, and ensuring	4

	communication skills are critical for collaboration with supervisors and team members, ensuring adherence to safety standards and operational procedures. Additionally, the individual must demonstrate problem-solving abilities, situational awareness, and adaptability in dynamic mining environments. Knowledge of mining laws and environmental guidelines is essential to perform tasks ethically and responsibly. The qualification emphasizes practical application of these skills, fostering professionalism and contributing to efficient mine operations.	safety compliance. This role requires proficiency in communication for reporting and teamwork. The role aligns with Level 4 descriptors, emphasizing the ability to perform tasks independently, solve routine problems, and execute responsibilities requiring a mix of cognitive and technical skills. Assistant Mine Surveyors also contribute to mining operations by aiding in data collection, planning, and mapping processes, ensuring accuracy and operational efficiency while adhering to quality standards.	
Responsibility	An Assistant Mine Surveyor holds responsibility for assisting in conducting precise surveys in mining areas, ensuring the accuracy of measurements and mapping. They support senior surveyors in gathering data on underground and surface layouts, assisting with plotting and updating mining plans using surveying instruments and software. They ensure compliance with safety and legal standards while working in potentially hazardous environments. The role involves documenting survey findings and maintaining records for future reference. Their work contributes to efficient mine operations, resource management, and safety planning. Strong technical knowledge, attention to detail, and teamwork are essential to meet job outcomes and support the overall objectives of mining projects.	The role of an Assistant Mine Surveyor, leveled at NSQF Level 4, involves responsibility for conducting detailed surveys of mining areas, assisting in mapping, and collecting data necessary for safe and efficient mining operations. At this level, the individual is expected to apply foundational technical skills, interpret survey data, and assist in maintaining mine planning documents. The outcomes of this role align with the NSQF Level 4 descriptor, which requires individuals to perform tasks under limited supervision and with responsibility for quality and safety. They are expected to demonstrate decision-making skills related to standard operating procedures and exhibit basic problem-solving abilities in mine surveying activities.	4

Annexure: Tools and Equipment (Lab Set-Up)

(subject to change as per Industry requirement)

List of Tools and Equipment

Batch Size: 30

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
1.	Posters for describing different types of mines.	Standard	1 for each type

2.	Total station-electronic theodolite	Standard	15
3.	Staff	Standard	5
4.	Pegs	Standard	15
5.	Surface positioning equipment	Standard	15
6.	Geo physical equipment	Standard	15
7.	GPS (global positioning system)	Standard	15
8.	DGPS (differential global positioning system)	Standard	15
9.	Motion sensors	Standard	15
10.	Emitter reflector(prism)	Standard	15
11.	Posters	Standard	15
12.	Graph	Standard	15
13.	Drone	Standard	1
14.	Safety Helmet	Standard	15
15.	Gloves	Standard	15
16.	Visibility harness	Standard	15
17.	Earplugs/ Ear muffs	Standard	15
18.	Safety Goggles	Standard	15
19.	Nose mask	Standard	15
20.	Safety shoes	Standard	5
21.	Fire extinguisher Cylinders	Standard	5
22.	Gum boots	Standard	5
23.	Reflective jackets	Standard	5
24.	Safety belt	Standard	15
25.	Types of log book	Standard	15
26.	First Aid box	Standard	15
27.	Firefighting chart	Standard	1
28.	First Aid Chart	Standard	1
29.	EDM	Standard	1
30.	Chain for surveying	Standard	1
31.	Total station-electronic theodolite	Standard	1
32.	Staff	Standard	1
33.	Projector System	Standard	1
34.	Mine Plans and Sections	Standard	1
35.	Geological maps	Standard	1
36.	3D-Laser Scanner	Standard	1

37.	Fire extinguisher	Standard	1
38.	MCDR	Standard	5
39.	MCR	Standard	1
40.	Company's SOP; Diagrams showing quarries	Standard	1
41.	Samples Of Different Types Of Rocks To Be Encountered; Mines Act; "5-S" Charts; Daily, Weekly	Standard	1
42.	Monthly Maintenance/Defect sheets; Systematic Support Plan (SSP); Systematic Support Rules (SSR); self-rescue apparatus; Line Diagram of Ventilation Circuit; Alcohol based sanitisers; self-rescue apparatus; Gas Detector	Standard	1
43.	Safety Lamp	Standard	1
44.	Self-Contained Breathing Apparatus	Standard	1
45.	Gum boots;	Standard	5 pairs
46.	Diagrams of Armoured face conveyor; Charts of coal mines occupational diseases; CMR; MRR	Standard	1
47.	Company's Safety Management Plan (SMP) and Emergency Management Plan (EMP);	Standard	1

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. LCD Projector
2. White Board
3. Flip Chart
4. Markers
5. Trainer Chair & Table
6. Demonstration Table

7. Pin Up Boards
8. Computer with internet
9. Surveyor operating software (Auto cad, Data mine, Surpac)
10. Scanner
11. Switch board
12. Power supply monitor panel board
13. Measuring tape

Annexure: Industry Validations Summary

S. No	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID	LinkedIn Profile (if available)
1.	Alxa Chemical	Madan Singh Gujar	Proprietor	PLOT-26, JAYNARAYANPURI, NIWARU ROAD, JHOTWARA, JAIPUR, RAJASTHAN-302012	9829094130	alxachemical@gmail.com	
2.	Caltex Mining Pvt Ltd	Kartik Paul	Executive	8A, Rajmohan Street, 3rd Floor, Kolkata - 700 073	09874388894	caltexminingit@rediffmail.com	
3.	East India Minerals Limited	Pushpak Mishra	GM (Commercial)	6, Waterloo St, Esplanade, Chowringhee North, Bow Barracks, Kolkata, West Bengal 700069	9830059283	pushpak_mishra@hotmail.com	

4.	GS Atwal and Co	Vikram Dewan	Purchase Head	4B, Little Russel St, Kankaria Estates, Park Street area, Kolkata, West Bengal 700071	033 2282 4115	gsengineers@gmail.com	
5.	Integrated Coal and Mining Limited (ICML)	Niladri Topodar	Assistant Manager (HR/IR)	Hindustan Colas, 6, Church Ln, B.B.D. Bagh, Kolkata, West Bengal 700001	033 2210 9360	nilidri.topodar@rpgs.com	
6.	Maheshwari Mining Pvt. Ltd	Jayram Koushik	VP	21, C.L.M. Lane, P.O.-Raniganj-713347, Dist- Paschim Bardhaman, W.B., India	9810706023	jayaram.koushik@maheshwaree.com	
7.	Amnex	Abhijit Anand	Group Head	Mondeal Heights, Wing-B, 1201/1202/1301, Sarkhej - Gandhinagar Hwy, Ahmedabad, Gujarat 380015	97277 47451	info@amnex.com	
8.	Jindal Steel & Power	Vivek Gupta	Corporate Head	Jindal Centre 12, Bhikaiji Cama Place, New Delhi - 110 066, INDIA	91 11 26188340-50	info@jindalsteel.com	
9.	Naaraayani	Khurshid Alam	Managing Partner	Khatore Bagan, Basti Road, Barbil, Dist - Kendujhar, Odisha - 758035	6767351080	info@naaraayani.com	
10.	Mine Magma	M Manjunath Reddy	Proprietor	430, 3rd Floor, 5th A Cross Rd, HRBR Layout 2nd Block, HRBR Layout, Kalyan Nagar, Bengaluru, Karnataka 560043	99867 07359	contact@minemagma.com	
11.	JSW Cement	Shweta Gaighani	Assistant Manager HR	Near MMRDA Grounds, Kolivery Village, MMRDA Area, Bandra Kurla Complex,	1800 266 266 1	info@jswcement.in	

				Bandra East, Mumbai, Maharashtra 400051			
12.	BGR Mining and Infra Ltd	Vivek Gupta	Corporate Head	BGR Mining & Infra Ltd. #8-2-596/R, Road No.10, Banjara Hills, Hyderabad, Telangana, India - 500034	91 40 23351932	ho.hyd@bgrmining.com	
13.	Saurashtra Cement Limited	M Trivadi	GM	Saurashtra Cement Limited Off Veraval Kodinar Highway Sidheegram - 362 276 Taluka Sutrapada Distr. Junagadh (Gujarat)	02876 - 268200	pralhad@mehtagroup.com	
14.	Dalmia Bharat Cement	Avnvs Murthy	Unit Head- Ariyalur unit	Dalmia Cement (Bharat) Limited Tamaraikulam, Ariyalur District - 621 705, Tamil Nadu	+91 11 23465100	corpcomm@dalmiabharat.com	
15.	ACC LIMITED	G. Srivastava	HR Head	Adani Corporate House Shantigram, S. G. Highway, Khodiyar, Ahmedabad - 382 421, Gujarat, India	+91 79-2555 5555	acchelp@adani.com	
16.	VPR	K Vijay Kumarj	DGM-HR	D.No.8-2-293/82/A/1259, 3rd Floor, Plot No.1259, Lakshmi Towers, Road No.36, Jubilee Hills, Hyderabad - 500 033 Telangana	040 - 23551862/63	info@vprmininginfra.com	
17.	Rungta Mines Limited	G Vidhyanathan	Group Head Mining division	RUNGTA MINES LIMITED is 8A EXPRESS TOWER, 42A SHAKESPEARE SARANI ,	033 2281 3751	INFO@THERUNGTAGROUP.COM	

				KOLKATA, West Bengal, India - 700017.			
18.	Elixir Engineering	H P Rajesh Rao	HR General Manager	6, 1st Floor, SFHS Shopping Area, Nandini Layout, Bangalore - 560 096.	91-8023196645	info@elixirengineering.com/elixireng@gmail.com	
19.	Shyam Metalic	Birendra Kumar	Assistant General Manager	Tower 7th Floor, Trinity, 83, E Topsia Rd, Kolkata, West Bengal 700046	1800 202 2233	contact@shyamgroup.com	
20.	Sainik Mining and Allied Services Ltd.	Lokendra Sethi	Plant Head	7th Floor, Corporate Tower, Ambience Mall NH-8, Gurgaon - 122001, Haryana	+91 124-2719000	info@sainikmining.com	
21.	Thriveni Sainik	Swathi Sinha	Corporate Communication & HR Head	Barwadih Coal Mining Project, Langatu, Barkagaon, Hazaribag - 825311, Jharkhand, India	91 6546-223115	info@thrivenisainik.com	

Annexure: Training & Employment Details

Training and Employment Projections:

Year	Total Candidates		Women		People with Disability	
	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities
2025-26	100	100	25	25	Not Applicable	Not Applicable
2026-27	200	200	50	50	Not Applicable	Not Applicable
2027-28	300	300	75	75	Not Applicable	Not Applicable

Data to be provided year-wise for next 3 years

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

Year	Total Candidates	Women	People with Disability
------	------------------	-------	------------------------

Qualification Version		Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed
2.0	2022-23	-	-	-	Not available	Not available	Not available	Not available	Not available	Not Applicable	Not Applicable	Not Applicable	Not Applicable
2.0	2023-24	98	47	41	Not available	Not available	Not available	Not available	Not available	Not Applicable	Not Applicable	Not Applicable	Not Applicable
2.0	2024-25	458	434	418	Not available	Not available	Not available	Not available	Not available	Not Applicable	Not Applicable	Not Applicable	Not Applicable

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. PMKVY 4.0 – STT
2. SKILL HUB INITIATIVE

Content availability for previous versions of qualifications:

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

Languages in which Content is available: English and Hindi

Annexure: Blended Learning

Blended Learning Estimated Ratio & Recommended Tools:

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

S. No.	Select the Components of the Qualification	List Recommended Tools – for all Selected Components	Offline : Online Ratio
1	☒ Theory/ Lectures - Imparting theoretical and conceptual knowledge	● Books/ e-books ● Presentations ● Reference Material ● Audio / Video Modules	Only Offline. Online only on exceptional cases.

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

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
MIN/N1105: Assist in measuring and setting out dimensional control as per the mining requirements	<i>Measuring and setting out dimensional control</i>	30	50	-	20
	PC1. interpret information and instructions are accurately for dimensional position and measurement control of the work program	1	2	-	1
	PC2. identify the area to be measured and set out accurately in accordance with the work's specification	1	2	-	1
	PC3. select the measuring tools and equipment to carry out the measuring and setting-out requirements	1	2	-	1

	PC4. check that transference of dimensional control requirements are taken from given reference points in accordance with information and instructions	1	2	-	1
	PC5. identify components for setting out dimensional control are obtained in accordance with regulatory and operational requirements	1	3	-	1
	PC6. check the markings and dimensional control components are positioned and secured accurately in accordance with the specifications and work requirement	1	3	-	1
	PC7. compare the variations between the information and instructions and the actual dimensions of work are reported promptly to the authorized person	2	3	-	1
	PC8. take corrective actions for variations to the information and instructions as agreed, recorded, and confirmed with the appropriate person(s)	2	3	-	1
	PC9. inspect that the work is carried out as per approved procedures and practices and in compliance with statutory requirements	2	3	-	1
	PC10. prepare and maintain the plan and sections and related instruments	2	3	-	1
	PC11. identify the errors in surveying under the guidance of the surveyor	2	3	-	1
	PC12. perform linear measurement, ranging, chain surveying, Electronic Distance Measurement (EDM), etc.	2	3	-	1
	PC13. perform angular measurement	2	3	-	1
	PC14. operate a theodolite and use all its features and functions	2	3	-	1
	PC15. operate a total station and use all its features and functions	2	3	-	1
	PC16. perform controlled surveys like triangulation, trilateration, apply Global Positioning System (GPS) and Total Station	2	3	-	2
	PC17. perform leveling and use various methods of contouring	2	3	-	1
	PC18. perform correlation, apply field astronomy, national grid, geodesy, photogrammetry, development sampling	2	3	-	2
	NOS Total	30	50	-	20
MIN/N1106: Set-out secondary dimensional work control	<i>Interpret information required</i>	15	21	-	10
	PC1. interpret drawings of the survey area and draw relevant conclusions with respect to contours, markings and drawing symbols	3	5	-	2
	PC2. identify action points from method statements	3	4	-	2
	PC3. interpret specifications related to surveying equipment and specific usage intended for the purpose	3	3	-	2
	PC4. check the operating instructions specified with manufacturer's information	2	3	-	2

	PC5. follow the process of establishing reference points with respect to the work to be carried out	2	3	-	1
	PC6. read various types of mine plans and sections, geological maps, etc.	2	3	-	1
	<i>Select and prepare setting out equipment and ancillary resources for secondary dimensional control of the work</i>	15	29	-	10
	PC7. select appropriate measuring tools and instruments, marking equipment, level and alignment tools, as per requirement	3	5	-	2
	PC8. use given equipment to transfer, transpose, level, measure, mark, position, fix and secure required reference points	2	4	-	2
	PC9. measure and set-out secondary dimensional control for the work	2	4	-	2
	PC10. measure, align and level to dimensional control requirements	2	4	-	1
	PC11. transfer and set out line, angles and levels to dimensional control requirements	2	4	-	1
	PC12. use hand tools and measuring and marking equipment	2	4	-	1
	PC13. work at height if required to set up equipment	2	4	-	1
	NOS Total	30	50	-	20
MIN/N1107: Handle resources to assist the surveyor	<i>Move and handle resources to assist surveyor</i>	30	50	-	20
	PC1. comply with the given information to move and store resources to maintain safe work practice	6	10	-	4
	PC2. select the resources to be stored/moved and ensure they conform to the given information	6	10	-	4
	PC3. comply with the given information to prevent damage to the materials and surrounding environment	6	10	-	4
	PC4. comply with the manufacturer's instructions to carry out the work efficiently using the resources, as per the required guidance	6	10	-	4
	PC5. care, store, and preserve plans	6	10	-	4
	NOS Total	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 job requirements	-	-	-	-
	<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, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.	-	-	-	-
<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 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	-	-	-	-
<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 use its features and applications 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	-	-	-	-
NOS Total	20	30	-	-

MIN/N1702: Follow Health, Safety and Environmental guidelines for Underground Metalliferous Mines	<i>Follow work-site health and safety measures</i>	24	42	-	17
	PC1. undertake "The Take-5 (Personal Risk Assessment)" before commencement of any work	-	2	-	2
	PC2. comply with safety, health and security- related regulations/guidelines at the mine e.g. follow Standard Operating Procedure (SOP) for material handling in underground (U/G) mine	1	3	-	-
	PC3. operate various types of fire extinguishers to control different types of fire at a worksite when required	1	4	-	1
	PC4. check that roof supporting is as per Systematic Support Plan (SSP) and approved Systematic Support Rules (SSR) while undertaking work in an area	1	1	-	-
	PC5. take precaution against occupational health hazards (like dust, water, mine gases etc.) due to U/G working environment	1	2	-	1
	PC6. use self-rescue apparatus, appropriately when required	-	4	-	1
	PC7. follow appropriate emergency response procedure during emergency such as fire, water inrush, fall of ground etc.	1	2	-	1
	PC8. follow precautions against U/G electrical appliances	2	2	-	2
	PC9. follow appropriate Standard Operating Procedure while working near any isolated and sealed off area of the mine	2	2	-	1
	PC10. follow appropriate safety practices while traveling on U/G haul roads, incase of post blast fumes and misfire	2	4	-	-
	PC11. follow the manufacturer's instructions for care and safe operation of mine machinery and equipment	1	2	-	1
	PC12. identify the working ventilation district from line diagram of ventilation circuit to direct air to the working face	1	1	-	-
	PC13. follow Safety Management Plan (SMP) and Emergency Management Plan (EMP)	1	-	-	-
	PC14. follow gas detecting alarm signal on leakage of inflammable gases and laid out procedure to ensure safety	1	2	-	1
	PC15. follow process for reporting any unsafe act/condition in work area to the concerned person	-	2	-	1
	PC16. use underground mine communication system	-	1	-	-
	PC17. ensure positive isolation near the work place if applicable	1	1	-	1
	PC18. use appropriate PPE as per the requirement	2	4	-	2
	PC19. maintain hand hygiene by washing hands with alcohol based sanitisers/soap	1	1	-	1

	PC20. disinfect the machine/tools before and after work/task	1	1	-	-
	PC21. maintain hygiene at the work site	1	1	-	1
	PC22. report any symptoms of illness to the shift- incharge	1	-	-	-
	PC23. identify six directional hazards at workplace and take decisions accordingly	2	-	-	-
	<i>Follow environmental guidelines</i>	6	8	-	3
	PC24. identify the environmental impact of mining related operations and follow steps to reduce those impact	1	2	-	-
	PC25. follow the mineral conservation practices in U/G mining operations to achieve optimum ore or mineral recovery	-	1	-	-
	PC26. ensure that the stowing practices produce minimum disturbance to the surface	1	1	-	-
	PC27. ensure that the subgrade ore is carried out to surface and stacked separately at the earmarked place	1	-	-	1
	PC28. ensure the productivity of the machine for material/fuel conservation	1	1	-	-
	PC29. follow the process for collecting, storing and disposing of the hazardous material and waste (like used oil, lubricant, battery, etc.) in compliance with worksite guidelines	1	1	-	1
	PC30. follow the "5-S" practice at work site like cleaning oil from ground (to avoid soil from getting damaged), etc.	1	2	-	1
	NOS Total	30	50	-	20
MIN/N1703: Follow Health, Safety, and Environmental Guidelines for opencast mines	<i>Follow work-site health and safety measures</i>	20	34	-	15
	PC1. comply with safety, health, and securityrelated regulations/guidelines at the opencast mine	2	2	-	1
	PC2. follow the safety instructions given by the workman's inspector	1	3	-	1
	PC3. follow adequate safety while working at haul roads, heights, overburden dumps, sump area, stockyard, near moving parts, etc.	3	3	-	1
	PC4. take safety precautions while working on sites (sub-station, workshop etc.), with equipment, and conducting welding and cutting operations	1	3	-	1
	PC5. follow appropriate Safe Operating Procedure (SOP) while dealing with explosives	2	3	-	2
	PC6. respond promptly and appropriately to an accident/ incident or an emergency situation, within limits of the role and responsibility	2	3	-	1
	PC7. provide first aid to an injured person	2	3	-	1
	PC8. operate various types of fire extinguishers to control different types of fire at a worksite when required	1	3	-	1

	PC9. use appropriate PPE as per the requirement	2	4	-	2
	PC10. maintain hand hygiene by washing hands with alcohol based sanitisers/soap	1	2	-	1
	PC11. disinfect the machine/tools before and after work/task	1	2	-	1
	PC12. maintain hygiene at the work site	1	1	-	1
	PC13. report any symptoms of illness to the shift-incharge	1	2	-	1
	<i>Follow Environmental guidelines</i>	10	16	-	5
	PC14. identify the environmental impact of related opencast mining operations	2	2	-	1
	PC15. follow the process for collecting, storing and disposing of the hazardous material and waste (like used oil, lubricant, battery, etc.) in compliance with worksite guidelines	1	2	-	1
	PC16. ensure not to mix topsoil with waste in day to day tasks	2	2	-	1
	PC17. ensure that HEMM is washed at the designated location	2	2	-	1
	PC18. ensure the productivity of the machine for material/fuel conservation	1	3	-	-
	PC19. follow the mineral conservation practices specified by the organization in accordance with MCDR-2017 (Mineral Conservation and Development Rules)	1	3	-	1
	PC20. assist supervisor for reducing environmental impact caused due to related mining operations	1	2	-	-
	NOS Total	30	50	-	20
MIN/N1704: Follow Health, Safety, and Environmental guidelines for underground coal mines	<i>Follow work-site health and safety measures</i>	24	43	-	14
	PC1. follow preventive measures against firedamp, whitedamp, blackdamp etc.	1	1	-	-
	PC2. use the flame safety lamp for detecting the methane gas as per Standard Operating Procedure (SOP)	-	1	-	-
	PC3. undertake "The Take-5 (Personal Risk Assessment)" before commencement of any work	1	1	-	1
	PC4. comply with safety, health and security-related regulations/guidelines at the mine e.g. SOP for material handling in underground (U/G) mine	1	1	-	1
	PC5. ensure that oil, grease, canvas or other inflammable material are stored in fire-proof receptacle	-	1	-	-
	PC6. ensure that every instrument, apparatus and equipment are DGMS approved before these are used	1	1	-	-
	PC7. ensure that Armoured face conveyor (AFC) and chocks must be kept in a straight line for every cycle of operations and tightened up to the setting pressure while keeping it in full contact with the roof, applicable for longwall mining	3	3	-	-
	PC8. provide first aid to an injured person	1	2	-	1

PC9. follow safety precautions against spontaneous heating of the coal	1	1	-	-
PC10. operate various types of fire extinguishers to control different types of fire at worksite, if required	-	2	-	-
PC11. ensure that no person is traveling/working/staying under unsupported roof	1	-	-	-
PC12. check that roof supporting is as per Systematic Support Plan (SSP) and approved Systematic Support Rules (SSR) while undertaking work in an area	-	2	-	1
PC13. take precaution against occupational health hazards (like dust, water, mine gases etc.) due to U/G working environment	-	1	-	1
PC14. use self-rescue apparatus appropriately when required	-	2	-	-
PC15. follow Safety Management Plan (SMP) and Emergency Management Plan (EMP)	1	2	-	1
PC16. follow precautions against U/G electrical appliances	2	2	-	1
PC17. take proper care against damage and accidents while loading, transporting, dismantling and erecting of roof supports	1	2	-	-
PC18. follow appropriate SOP while working near any isolated and sealed off area of the mine	1	1	-	1
PC19. ensure that the roof and the sidewalls of the mine face (or newly exposed area of the mines) have been scaled/dressed properly	1	1	-	-
PC20. take relevant safety precautions during depillaring operation in UCM	-	2	-	1
PC21. follow appropriate safety practices while traveling on U/G haul roads, incase of post blast fumes and misfire	1	1	-	-
PC22. follow the manufacturer's instructions for care and safe operation of mine machinery and equipment	-	1	-	1
PC23. identify the working ventilation district from line diagram of ventilation circuit to direct air to the working face	-	1	-	1
PC24. follow laid out SOP in case of alarm signal for leakage of inflammable gases	1	1	-	-
PC25. follow the process of reporting any unsafe act/condition in the working area to the concerned person	-	1	-	1
PC26. use underground mine communication system	-	1	-	-
PC27. ensure positive isolation near the work place if applicable	1	1	-	-
PC28. use appropriate Personal Protective Equipment (PPE) as per the requirement	2	2	-	1
PC29. maintain hand hygiene by washing hands with alcohol based sanitisers/soap	-	1	-	-
PC30. disinfect the machine/tools before and after work/task	1	1	-	-

	PC31. maintain hygiene at the work site	1	1	-	-
	PC32. report any symptoms of illness to the shift- incharge	1	1	-	-
	PC33. identify six directional hazards at workplace and take decisions accordingly	-	1	-	1
	<i>Follow environmental guidelines</i>	6	7	-	6
	PC34. identify the environmental impact of mining related operations and follow steps to reduce those impact	1	1	-	1
	PC35. follow the mineral conservation practices in U/G mining operations to achieve optimum ore or mineral recovery	1	1	-	1
	PC36. ensure that the stowing practices produce minimum disturbance to the surface	1	1	-	-
	PC37. ensure that the subgrade coal is carried out to surface and stacked separately at the earmarked place	1	1	-	1
	PC38. ensure the productivity of the machine for material/fuel conservation	1	1	-	1
	PC39. follow the process for collecting, storing and disposing of the hazardous material and waste (like used oil, lubricant, battery, etc.) in compliance with worksite guidelines	-	1	-	1
	PC40. follow the "5-S" practice at work site like cleaning oil from ground (to avoid soil from getting damaged), etc.	1	1	-	1
	NOS Total	30	50	-	20
	Grand Total	200	330	-	120

Annexure: Assessment Strategy

Assessment will be carried out by SCMS affiliated assessment partners. Based on the results of assessment, SCMS certifies the learners. Candidates have to pass online theoretical assessment which is approved by SCMS.

The assessment will have both theory and practical components in 30:70 ratio.

While theory assessment is summative and an online written exam; practical will involve demonstrations of applications and presentations of procedures and other components. Practical assessment will also be summative in nature.

Testing Environment: -

Training partner has to share the batch start date and end date, number of trainees and the job role.

Assessment is fixed for a day after the end date of training. It could be next day or later. Assessment will be conducted at the training venue.

Question bank of theory and practical will be prepared by assessment agency and approved by SCMS. From this set of questions, assessment agency will prepare the question paper. Theory testing will include multiple choice questions, pictorial question, etc. which will test the trainee on theoretical knowledge of the subject.

The theory and practical assessments will be carried out on same day. If numbers of candidates are many, more assessors and venue will be organized on same day of the assessment.

Assessment			
Assessment Type	Formative or Summative	Strategies	Examples
Theory	Summative	Written Examination	Knowledge of facts related to the job role and functions. Understanding of principles and concepts related to the job role and functions
Practical	Summative	Structured tasks	Presentation
Viva	Summative	Questioning and Probing	Mock interview on topics

Assessment Quality Assurance framework

Only certified assessor can be assigned for conducting assessment. Provision of 100 % video recording with clear audio to be maintained and the same is to be submitted to SCMS.

The training partner will intimate the time of arrival of the assessor and time of leaving the venue.

Methods of Validation: -

Unless the trainee is registered, the person cannot undergo assessment. To further ensure that the person registered is the person appearing for assessment, id verification will be carried out. Aadhar card number is required of registering the candidate for training. This will form the basis of further verification during the assessment. Assessor conducts the assessment in accordance with the assessment guidelines and question bank as per the job role. The assessor carries tablet with the loaded questions. This tablet is geo tagged and so it is monitored to check their arrival and completion of assessment. Video of the practical session is prepared and submitted to SCMS. Random spot checks/audit is conducted by SCMS assigned persons to check the quality of assessment. Assessment agency will be responsible to put details in SIP.

SCMS will also validate the data and result received from the assessment agency.

Method of assessment documentation and access

The assessment agency will upload the result of assessment in the portal. The data will not be accessible for change by the assessment agency after the upload. The assessment data will be validated by SCMS assessment team. After upload, only SCMS can access this data. SCMS approves the results within a week and uploads on SIP.

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.