



QUALIFICATION FILE

<Grader Machine Operator>

- Short Term Training (STT) Long Term Training (LTT) Apprenticeship
 Upskilling Dual/Flexi Qualification For ToT For ToA
- General Multi-skill (MS) Cross Sectoral (CS) Future Skills OEM
- NCrF/NSQF Level: 3

Submitted By:

<Skill Council for Mining Sector>

<011-26814596, scms@skillcms.in>

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Section 1: Basic Details

1.	Qualification Name	Grader Machine Operator																							
2.	Sector/s	Mining																							
3.	Type of Qualification: <input type="checkbox"/> New <input checked="" type="checkbox"/> Revised <input type="checkbox"/> Has Electives/Options <input type="checkbox"/> OEM	NQR Code & version of existing/previous qualification: <i>(change to previous, once approved)</i> 2015/MIN/SCMS/00851	Qualification Name of existing/previous version: Grader Operator																						
4.	a. OEM Name b. Qualification Name <i>(Wherever applicable)</i>	Not Applicable																							
5.	National Qualification Register (NQR) Code &Version <i>(Will be issued after NSQC approval)</i>	QG-03-MG-02025-2024-V1-SCMS	6. NCrF/NSQF Level: 3																						
7.	Award (Certificate/Diploma/Advance Diploma/ Any Other) <i>(Wherever applicable specify multiple entry/exits also & provide details in annexure)</i>	Not Applicable																							
8.	Brief Description of the Qualification	A grader operator prepares the grader for operations, conducts routine maintenance, performs the grader operations, and transports the grader.																							
9.	Eligibility Criteria for Entry for Student/Trainee/Learner/Employee	a. Entry Qualification & Relevant Experience: <table border="1" style="width: 100%; margin-top: 10px;"> <thead> <tr> <th style="width: 10%;">S. No.</th> <th style="width: 60%;">Academic/Skill Qualification (with Specialization - if applicable)</th> <th style="width: 30%;">Required Experience (with Specialization - if applicable)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.</td> <td>10th grade pass</td> <td></td> </tr> <tr> <td style="text-align: center;">2.</td> <td>9th grade pass</td> <td>1-year relevant experience</td> </tr> <tr> <td style="text-align: center;">3.</td> <td>8th grade pass</td> <td>2 years relevant experience</td> </tr> <tr> <td style="text-align: center;">4.</td> <td>5th grade pass</td> <td>5 years relevant experience</td> </tr> <tr> <td style="text-align: center;">5.</td> <td>Previous relevant Qualification of NSQF Level 2.5-Jr. Grader Operator</td> <td>1.5 year of experience in relevant field</td> </tr> <tr> <td style="text-align: center;">6.</td> <td></td> <td></td> </tr> </tbody> </table> b. Age: 20			S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1.	10th grade pass		2.	9th grade pass	1-year relevant experience	3.	8th grade pass	2 years relevant experience	4.	5th grade pass	5 years relevant experience	5.	Previous relevant Qualification of NSQF Level 2.5-Jr. Grader Operator	1.5 year of experience in relevant field	6.		
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6.																									
10.	Credits Assigned to this Qualification, Subject to Assessment <i>(as per National Credit Framework (NCrF))</i>	14	11. Common Cost Norm Category (I/II/III) <i>(wherever applicable):</i> I																						
12.	Any Licensing requirements for Undertaking Training on This Qualification <i>(wherever applicable)</i>	NA																							

13.	Training Duration by Modes of Training Delivery <i>(Specify Total Duration as per selected training delivery modes and as per requirement of the qualification)</i>	<input checked="" type="checkbox"/> Offline <input type="checkbox"/> Online <input type="checkbox"/> 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>150:00</td> <td>120:00</td> <td>150:00</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>	Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)	Classroom (offline)	150:00	120:00	150:00	-	420:00	Online									
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Classroom (offline)	150:00	120:00	150:00	-	420:00																			
Online																								
<i>(Refer Blended Learning Annexure for details)</i>																								
14.	Aligned to NCO/ISCO Code/s <i>(if no code is available mention the same)</i>	NCO-2015/8342.0400																						
15.	Progression path after attaining the qualification <i>(Please show Professional and Academic progression)</i>	Vertical progression NSQF Level 4 – Dumper/Tipper Operator, Excavator Operator, Bulldozer Operator, Loader Operator (Mining), Loader Operator (Underground), Backhoe Loader Operator.																						
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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No URLs of similar Qualifications:																						
18.	Is the Job Role Amenable to Persons with Disability	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If “Yes”, specify applicable type of Disability:																						
19.	How Participation of Women will be Encouraged	By creating awareness among Women and encouraging them to take up this training.																						
20.	Are Greening/ Environment Sustainability Aspects Covered <i>(Specify the NOS/Module which covers it)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No DGT/VSQ/N0102, MIN/N1703, MIN/N1702, MIN/N1704																						
21.	Is Qualification Suitable to be Offered in Schools/Colleges	Schools <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Colleges <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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: Skill Council for Mining Sector (SCMS) Email: ceo@skillcms.in, scms@skillcms.in Contact No.: +91-11-26814593 Website: https://www.skillcms.in/																						
23.	Final Approval Date by NSQC: 31 January, 2024	24. Validity Duration: 3 years from the NSQC approval date		25. Next Review Date: 30 January, 2027																				

Section 2: Module Summary

NOS/s of Qualifications

(In exceptional cases these could be described as components)

Mandatory NOS/s:

Specify the training duration and assessment criteria at NOS/ Module level. For further details refer curriculum document.

Th.-Theory Pr.-Practical OJT-On the Job Man.-Mandatory Training Rec.-Recommended Proj.-Project

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/NS QF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT - Rec.	Total	Th.	Pr.	Pr oj.	Vi va	Tota l	Weightag e (%) (if applicable)
1.	Prepare the grader for operations and conduct routine maintenance	MIN/N1416, v1.0	Core	3	2	30:00	10:00	20:00	-	60:00	30	50	-	20	100	15
2.	Perform the grader operations	MIN/N1417, v1.0	Core	3	4	20:00	40:00	60:00	-	120:00	30	50	-	20	100	25
3.	Transport the grader	MIN/N1418, v1.0	Core	3	4	30:00	50:00	40:00	-	120:00	30	50	-	20	100	25
4.	Employability Skills (60 Hours)	DGT/VSQ/N010 2, v1.0	Non-Core	4	2	60:00	00:00	00:00	-	60:00	20	30	-	-	50	10
Duration (in Hours) / Total Marks					12	140:00	100:00	120:00		360:00	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 opencast mines	MIN/N1703, v2.0	Core	3.5	2	10:00	20:00	30:00	-	60:00	30	50	-	20	100	25
2.	Follow Health, Safety and Environmental guidelines for Underground Metalliferous Mines	MIN/N1702, v2.0	Core	3.5	2	10:00	20:00	30:00	-	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	10:00	20:00	30:00	-	60:00	30	50	-	20	100	25
Duration (in Hours) / Total Marks					6	30:00	60:00	90:00	-	180:00	90	150	-	60	200	50

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: NA % (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 10th with 6 years relevant experience required in grader operation Or ITI with 6 years relevant experience required in grader operation Or Diploma (Mining / Mechanical / Electrical) with 5 years relevant experience required in grader operation Or B. Tech (Mining / Mechanical / Electrical) with 4 years relevant experience required in grader operation
2.	Master Trainer’s Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	Class 10th with 6 years relevant experience required in grader operation Or ITI with 6 years relevant experience required in grader operation Or Diploma (Mining / Mechanical / Electrical) with 5 years relevant experience required in grader operation Or B. Tech (Mining / Mechanical / Electrical) with 4 years relevant experience required in grader operation
3.	Tools and Equipment Required for Training	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If “Yes”, details to be provided in Annexure)
4.	In Case of Revised Qualification, Details of Any Upskilling Required for Trainer	The trainers need to qualify the TOT assessments as per the latest Qualification file requirements.

Section 4: Assessment Related

1.	Assessor’s Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Class 10th with 8 years relevant experience required in grader operation Or ITI with 8 years relevant experience required in grader operation Or Diploma (Mining / Mechanical / Electrical) with 7 years relevant experience required in grader operation Or B. Tech (Mining / Mechanical / Electrical) with 6 years relevant experience required in grader operation
2.	Proctor’s Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Must be aware about the Skill Ecosystem
3.	Lead Assessor’s/Proctor’s Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Must be aware about the Skill Ecosystem
4.	Assessment Mode (Specify the assessment mode)	Tablet based/ Online

5.	Tools and Equipment Required for Assessment	<input checked="" type="checkbox"/> Same as for training <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(details to be provided in Annexure-if it is different for Assessment)</i>
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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): Link for the document: https://www.skillcms.in/app_files/filemanager/2e2567a0-e413-477e-86a4-d5d165de55dc.pdf
2.	Latest Market Research Reports or any other source (not older than 2 years) (Yes/No): Link for the document: https://www.skillcms.in/app_files/filemanager/2e2567a0-e413-477e-86a4-d5d165de55dc.pdf
3.	Government /Industry initiatives/ requirement (Yes/No): Yes
4.	Number of Industry validation provided: 13
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>	<i>Attached</i>
2.	Annexure: List of tools and equipment relevant for qualification <i>(Mandatory, except in case of online course)</i>	<i>Attached</i>
3.	Annexure: Detailed Assessment Criteria <i>(Mandatory)</i>	<i>Attached</i>
4.	Annexure: Assessment Strategy <i>(Mandatory)</i>	<i>Attached</i>
5.	Annexure: Blended Learning <i>(Mandatory, in case selected Mode of delivery is "Blended Learning")</i>	<i>Filled</i>
6.	Annexure: Multiple Entry-Exit Details <i>(Mandatory, in case qualification has multiple Entry-Exit)</i>	<i>NA</i>
7.	Annexure: Acronym and Glossary <i>(Optional)</i>	
8.	Supporting Document: Model Curriculum <i>(Mandatory – Public view)</i>	<i>Attached</i>
9.	Supporting Document: Career Progression <i>(Mandatory - Public view)</i>	<i>Attached</i>
10.	Supporting Document: Occupational Map <i>(Mandatory)</i>	<i>Attached</i>
11.	Supporting Document: Assessment SOP <i>(Mandatory)</i>	<i>Assessment Strategy Filled</i>
12.	Any other document you wish to submit:	<i>None</i>

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
<p>Professional Theoretical Knowledge/Process</p>	<p>A grader operator, responsible for leveling and shaping surfaces on construction sites or roads, must possess professional theoretical knowledge and processes essential for the role. They should be well-versed in grading principles, understanding the use of grading equipment, and soil composition. Proficiency in reading and interpreting blueprints and design specifications is crucial. Knowledge of safety protocols, maintenance procedures, and troubleshooting equipment issues is vital. Grader operators should also understand the principles of surface drainage and possess the ability to make precise adjustments to achieve desired grades. Lastly, effective communication and teamwork skills are necessary to collaborate with other construction professionals to achieve the desired project outcome.</p>	<p>Grader operators, in alignment with the National Career Readiness Framework (NCRF) and the National Skills Qualifications Framework (NSQF) Level Descriptors, must possess a robust foundation in construction and heavy machinery operation theory. They should demonstrate proficiency in understanding grading principles, soil composition, and slope management. Knowledge of safety protocols, equipment maintenance, and quality control is essential. Additionally, they should be skilled in interpreting grading plans, blueprints, and project specifications. Problem-solving abilities, adaptability, and effective communication are critical for this role, as it involves collaborating with various stakeholders. Grader operators must continuously update their expertise to ensure alignment with industry standards and technological advancements.</p>	<p>3</p>
<p>Professional and Technical Skills/ Expertise/ Professional Knowledge</p>	<p>A Grader Operator is responsible for maintaining road surfaces and leveling construction sites. To excel in this role, one must possess strong technical and professional skills. Proficiency in operating heavy machinery, particularly graders, is essential. This includes knowledge of machine controls and maintenance. Understanding grading techniques, road construction, and safety protocols is vital. Effective communication, teamwork, and problem-solving skills are also crucial for coordinating with colleagues and addressing on-site challenges. Knowledge of construction blueprints and surveying</p>	<p>A Grader Operator, typically operating heavy machinery in construction and road maintenance, needs a range of professional and technical skills. They must possess expertise in equipment operation, including advanced knowledge of grader controls and maintenance. Proficiency in reading blueprints, understanding construction plans, and ensuring precise grading is essential. Safety protocols and hazard awareness are crucial professional knowledge, as is the ability to troubleshoot and perform basic repairs. Communication skills are vital for coordinating with team members. Grader operators must relate their job outcomes to the NCrF/NSQF level descriptor by demonstrating a comprehensive</p>	<p>3</p>

	<p>tools, as well as the ability to interpret them accurately, is necessary. Overall, a Grader Operator must combine technical expertise, safety consciousness, and effective teamwork to achieve quality grading outcomes.</p>	<p>understanding of their role in construction projects, adhering to industry standards, and ensuring efficient, accurate grading to meet specific project requirements.</p>	
<p>Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill</p>	<p>A Grader Operator requires a unique skill set and mindset for employment readiness and entrepreneurship. Key skills include precision in operating heavy machinery, grading proficiency, and safety consciousness. Strong problem-solving abilities, adaptability to diverse terrains, and effective communication with team members are essential. Entrepreneurial qualities such as financial acumen for equipment maintenance, project management, and client interaction skills are vital for those seeking entrepreneurial opportunities in grading services. A professional mindset emphasizing punctuality, attention to detail, and a commitment to quality work is a must. These qualities ensure success in the role and the potential to explore entrepreneurial ventures in the field.</p>	<p>Employment readiness and entrepreneurship skills for a Grader Operator at the NCrF/NSQF level require a solid foundation in technical proficiency, including equipment operation and maintenance. A strong safety mindset and adherence to industry regulations are paramount. Effective communication, teamwork, and problem-solving abilities are essential for collaboration within the construction and mining sectors. Adaptability, time management, and attention to detail ensure efficient work. Entrepreneurial attributes, such as resourcefulness and a customer-centric approach, can enable Grader Operators to explore opportunities for self-employment or business ventures within the industry, aligning with NCrF/NSQF level descriptors by fostering professional competence and potential for self-reliance.</p>	<p>3</p>
<p>Broad Learning Outcomes/Core Skill</p>	<p>The key requirements for a Grader Operator job role or outcome of the qualification typically encompass a range of core skills and broad learning outcomes. These include proficiency in heavy equipment operation, particularly grader machinery, comprehensive knowledge of construction and grading techniques, the ability to interpret blueprints and grading plans, strong spatial awareness, and a keen eye for precision. Safety awareness, effective communication, and teamwork skills are vital, along with problem-solving abilities. Environmental consciousness and adaptability to various worksite conditions are crucial. Additionally, proficiency in equipment maintenance, data recording,</p>	<p>The job role of a Grader Operator corresponds to the National Career Readiness Framework (NCRF) and National Skills Qualification Framework (NSQF) at the appropriate level descriptor. Key core skills and broad learning outcomes for this role include proficiency in operating grading machinery, adherence to safety protocols, understanding grading standards, and effectively communicating within the team. Grader Operators are expected to demonstrate technical competence, quality control, problem-solving abilities, and attention to detail. Their role contributes to product quality assurance and aligns with the NSQF's emphasis on vocational skills and knowledge, ensuring competency and professionalism in the field.</p>	<p>3</p>

	and adherence to regulatory standards is essential for successful grader operation.		
Responsibility	<p>A Grader Operator plays a crucial role in the construction and maintenance of roads and surfaces. Key responsibilities include operating motor graders to achieve precise grading and leveling of terrain, ensuring proper drainage, and creating smooth surfaces for roadways or construction projects. They must adhere to safety protocols and equipment maintenance to prevent accidents and downtime. Grader Operators should have a deep understanding of blueprints and project specifications, as well as the ability to make real-time adjustments to achieve accurate grading. Communication with team members and supervisors is essential for a seamless workflow. A focus on quality and precision is vital in ensuring the successful outcome of construction and grading projects.</p>	<p>The role of a Grader Operator is closely aligned with the National Career Readiness Framework (NCRF) and National Skills Qualification Framework (NSQF) Level Descriptors. Grader Operators are responsible for efficiently and accurately sorting and grading materials, such as agricultural produce, construction materials, or industrial products, in accordance with established quality standards. Their duties encompass assessing product quality, adjusting machinery, and ensuring compliance with safety regulations. They play a crucial role in maintaining the quality of goods and the overall efficiency of production processes, which directly corresponds to the NCRF/NSQF Level Descriptor for skilled vocational roles, contributing to workforce development and economic productivity.</p>	3

Annexure: Tools and Equipment (Lab Set-Up)

(This list can change as per the industrial relevance.)

List of Tools and Equipment

Batch Size: 30

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
1.	Helmet	Approved by DGMS	15
2.	Dust Mask	Approved by DGMS	15
3.	Safety Goggles	Approved by DGMS	15
4.	Ear Plug	Approved by DGMS	15
5.	Gloves	Approved by DGMS	15
6.	Reflective Jacket	Approved by DGMS	15
7.	Safety Belt	Approved by DGMS	5
8.	Gum Boots/ Safety shoes	Approved by DGMS	15
9.	Grader or its VR Module or Simulator		1
10.	Vehicle Driver Tool Box		2
11.	Fire extinguisher cylinders		3
12.	First Aid box		3
13.	Fire Fighting Charts		1
14.	First Aid Charts		1
15.	Spanner set		1
16.	Slide Wrench		2
17.	Vehicle Log Book		2
18.	Self Rescuer Kit		30
19.	Drip torch		1
20.	Alcohol-based sanitizers		1
21.	Gas Detector		1
22.	Safety Lamp		1
23.	Self-Contained Breathing Apparatus		1

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Projector
2. Computer/laptops
3. Internet connectivity
4. Whiteboard & Demonstration table
5. Trainer Chair & Table
6. Pin Up boards

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.	Integrated Coal and Mining Limited	Niladri Topdar	Assistant manager (HR & IR)	Integrated Coal and Mining Limited (ICML), 6 Church Lane, Kolkata-700001	9830987657	niladri.topdar@rpsg.in	
2.	Ikramuddin Khan Panwarmines and Masanri Stones	Ikramuddin Khan Panwar	Proprietor	Ikramuddin Khan Panwarmines and masanri stones, Village, Ramsar, Tehsil, Nasirabaddistrict Ajmer, Rajasthan, Pin-305402	9928552045	Amruddin0081@gmail.com	
3.	Karni Kripa Mines	Sachin Gora	Proprietor	Karni Kripa Mines, Village-Hathnoda, Tehsil-Chomu, Dist. Jaipur, Rajasthan. Pin:303807	9887456442	gora3364@gmail.com	
4.	East India Minerals Limited	Pushpak Mishra	Asstt. General Manager (Commercial)	East India Minerals Limited, 6, Waterloo Street, 4th Floor, Kolkata - 700 069	9830059283	pushpak_mishra@hotmail.com	

5.	Maheshwari Mining Pvt. Ltd.	Jayaram Kousik	Vice President	Shilpangan, C.F Building, 4th Floor, FR-07, Plot- LB-1, Sector III, Bidhannagar, Kolkata, West Bengal 700098	9810706023	Jayaram.kousik@maheshwaree.com	
6.	Sanjay Maheshwari and Amruddin Panwar Mines	Dr. Arpana Shukla	Operational Manager	Sanjay Maheshwari & Amarudddin Panwar mines Village, Ramsar, Tehsil, Nasirabad district Ajmer, Rajasthan, Pin-305402	9829094130	arpanashukla31@gmail.com	
7.	Aditya Real Stone	Khirod Kumar Dash	Proprietor	Kailash Enclave, Flat No. A/201, Kharakhia Baidyanath Sahi, Old Town, Bhubaneswar, Odisha - 751002.	9437211100	khirod@adityasrealstone.com	
8.	Alxa chemicals	Madan Singh Gurjar	Proprietor	Alxa Chemical. Village: Bagwara, Tehsil Amber, Dist. Jaipur, Rajasthan. Pin:303805	8290222232	Alxachemical@gmail.com	
9.	Caltex	Kartik Paul	Executive	Caltex Mining Pvt Ltd, BA, Rajmohan Street, 3rd Floor, Kolkata-700 073	8336835616	caltexminingit@rediffmail.com	
10.	Jai Hindustan stone crushers	Devender Singh Khatri	Partner	Jai Hindustan Stone Crushing Company, Hamri Rural	9414080827	devenderjnn@gmail.com	

				Road, Jhunjhunu Ro'ad, Tehsil, Jhunjhunu, Dist. Jhunjhunu, Rajasthan. Pin:333023			
11.	Shiv Shakti Mines and Minerals	Madan Singh Gurjar	Proprietor	Shiv Shakti Mines and Minerals, viii: Saylodra, Tehsil, Neem ka Thana, Bist Sikar, Rajasthan. Pin:332718	829022232	shivshakktimines@gmail.com	
12.	Associated Mining Company	Krishna Chandra Pradhan	Mine Manager	Associated Mining Co., Nanak House, H-2/133, Narmada Nagar, Bilaspur (C.G.) 495001	8224893545	kcpradhan09@gmail.com	
13.	G.S.Atwal & Co. (Engineers) Pvt. Ltd.	Vikram Dewan	Purchase Head	G.S.Atwal & Co. (Engineers) Pvt. Ltd., 4B Little Russle Street, Kolkata-700071	9830595059	gsaengineer@gmail.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
2023-24	100	100	25	25	Not Available	Not Available
2024-25	200	200	50	50	Not Available	Not Available
2025-26	300	300	75	75	Not Available	Not Available

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
		Not Available											
		Not Available											

Applicable for revised qualifications only, data to be provided year-wise for past 3 years. No Trainings Done

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

1. Non-PMKVY
- 2.

Content availability for previous versions of qualifications: Not available for previous versions. Will be created for the present version post approval.

Participant Handbook Facilitator Guide Digital Content Qualification Handbook Any Other:

Languages in which Content is available: Not available for previous versions. Will be created for the present version post approval.

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	<input checked="" type="checkbox"/> Theory/ Lectures - Imparting theoretical and conceptual knowledge	<ul style="list-style-type: none"> • Books/ e-books • Presentations • Reference Material • Audio / Video Modules 	Only Offline. Online only on exceptional cases.
2	<input checked="" type="checkbox"/> Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners	<ul style="list-style-type: none"> • Self-Learning Videos • Broadcasts • Mobile Learning • Curated Digital content 	Only Offline. Online only on exceptional cases.
3	<input checked="" type="checkbox"/> Showing Practical Demonstrations to the learners	<ul style="list-style-type: none"> • Video Content • E-Resource library • AR/ VR/ XR 	Only Offline
4	<input checked="" type="checkbox"/> Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	<ul style="list-style-type: none"> • Training tools (tools list attached) • Video Play • Presentations 	Only Offline
5	<input checked="" type="checkbox"/> Tutorials/ Assignments/ Drill/ Practice	<ul style="list-style-type: none"> • Online Question Bank • Mobile Quick test app • MCQ based tests 	Only Offline. Online only on exceptional cases.
6	<input checked="" type="checkbox"/> Proctored Monitoring/ Assessment/ Evaluation/ Examinations	<ul style="list-style-type: none"> • Assessment engine for Essays • Up-loadable file examinations • Mock test sessions 	Tablet based/Online
7	<input checked="" type="checkbox"/> On the Job Training (OJT)/ Project Work Internship/ Apprenticeship Training	<ul style="list-style-type: none"> • 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/N1416: Prepare the grader for operations and conduct routine maintenance	PC1. identify the different types and sizes of graders, e.g. rigid articulating etc., and relevant manufacturers specifications as required	1	2	-	1
	PC2. check the function of major components, such as circle, mould board, ripper, scarifier, drive train and their importance	2	3	-	2
	PC3. check the common types of ground engaging tools, such as mould board cutting edges (e.g.,carbide, standard etc.), ripper tooth	2	3	-	2
	PC4. Identify different types of attachments and accessories: and such as V-blades,one-way blades, push-blades, ripper, scarifier, grade control system [e.g., Global Positioning System(GPS),laser],shouldering boot etc	1	3	-	1
	PC5. ensure the purpose of attachments and accessories such as shouldering boot is used to prevent spillage etc.	2	3	-	2
	PC6. check the basic tools and supplies associated with grader, such as hammer, screwdrivers, pliers, self-locking pliers, adjustable wrench, assorted other wrenches, grease etc.	1	3	-	1
	PC7. check tyre conditions and inflation pressure	2	3	-	1
	PC8. identify the regulatory documents required for the vehicle	1	3	-	1
	PC9. inspect and service lubrication system such as low oil levels, dirty filler cap, adjust the oil level	2	3	-	1
	PC10. inspect and service electrical system thorough visual inspection and brief operation in idle condition	2	3	-	1
	PC11. inspect and service hydraulic systems & suspension systems thorough visual inspection and brief operation if required such as grease pivot points, check hydraulic oil levels, use spill kit	2	3	-	1
	PC12. inspect and service engine & transmission system to perform basic service such as add coolant, use spill kit	2	3	-	1
	PC13. inspect and service fuel system & air intake system through visual inspection and brief period of idle running, perform basic service, such as fill fuel, clean air filter	2	3	-	1
	PC14. maintain a checking/maintenance log book to record all activities to be performed before starting the Grader	2	3	-	1
	PC15. read indicators that signal need for replacement	2	3	-	1
	PC16. read maintenance records and documentation relating to service, such as log books and equipment manual	2	3	-	1
	PC17. perform scheduled maintenance	2	3	-	1
Total Marks		30	50	-	20

MIN/N1417: Perform the grader operations	PC1. recognize symbols and markings used on job site	1	2	-	-
	PC2. interpret survey markers, construction grades, and stakes to differentiate between types of survey markers, construction grades, and stakes identify what is indicated by different types of survey markers, construction grades, and stakes	1	2	-	1
	PC3. mark stakes/surface with appropriate symbols or markings, such as coloured paint, ribbons	1	2	-	1
	PC4. ensure the use of grade-checking devices such as laser levels, line levels, sight levels and check grades using information on stakes and plans	1	2	-	-
	PC5. set up equipment correctly to adjust to factors affecting safe operation of equipment, maintain stability of equipment, position equipment correctly communicate with traffic control person/signaller	2	3	-	1
	PC6. install attachments to the equipment following correct procedures and mechanisms specified by the equipment manufacturer	1	1	-	1
	PC7. use tools for installing attachments, positions equipment and attachments for installation and installs attachments safely	1	1	-	1
	PC8. start the grader safely, following correct procedures as specified by the equipment manufacturer	3	2	-	1
	PC9. use different operating control conditions	1	2	-	-
	PC10. monitor performance of equipment from gauges and symbols, and using own senses and judgment to monitor/ adjust performance and identify equipment problems	1	2	-	1
	PC11. identify and troubleshoot equipment problems and possible solutions, communicate problems accurately to others, such as maintenance personnel if required.	1	2	-	-
	PC12. observe and respond to movement of others (people, vehicles, and other equipment in work area while performing tasks	1	2	-	1
	PC13. communicate with others, such as site personnel, signaller, traffic control person use and respond to hand and audible signals	1	2	-	-
	PC14. optimize equipment capabilities by positioning equipment correctly by adjusting operation to accommodate weather conditions, materials being handled, limitations of equipment, ground conditions, seasonal conditions, and stability characteristics, etc. adjust work procedures as necessary	1	2	-	1
	PC15. maintain and adjust grades, scarify and rip surface materials, such as reclaiming road surface materials to maintain road within the capabilities and limitations of equipment and site obstructions and hazards, such as underground/opencast utilities	1	2	-	1
	PC16. check strip/windrow surface materials according to job specifications while avoiding site obstructions and hazards	1	2	-	1
	PC17. ensure work surface materials, such as combine, separate, windrow and spread materials as per the job specifications	1	2	-	1
	PC18. control blade of grader to cut, shape and distribute material effectively and create rough/finish graded itches in accordance with job specifications	1	2	-	1

	PC19. create slopes (also known as inclines) by cutting or filling and blending materials in accordance with job specifications	1	2	-	1
	PC20. establish grade profiles by reading site plans and positioning attachments of the equipment correctly to generate rough/finish grades to job specifications, such as correct elevation	1	2	-	1
	PC21. create proper drainage to prevent haul road erosion and water accumulation on haul roads	2	2	-	-
	PC22. ensure clean wheels and attachments according to manufacturers' specifications and company policies and procedures	1	1	-	1
	PC23. identify appropriate parking location and park equipment according to company policies and procedures, lower attachments before shutting down	1	2	-	1
	PC24. shut down and secure equipment as per company policy and procedures and manufacturer's specification to protect against movement, theft and vandalism	1	2	-	1
	PC25. perform housekeeping of the equipment as per the manufacturer's specification and clean site ms such as wind shields, rails, steps, instrument panel	1	2	-	1
	PC26. perform visual inspection, identify existing or potential problems communicate concerns to appropriate personnel, such as supervisor, mechanic	1	2	-	1
	Total Marks	30	50	-	20
MIN/N1418: Transport the grader	PC1. check load grader and attachments for transport such as clean blades and wheels	3	5	-	2
	PC2. load or assist with loading Grader and attachments while avoiding hazards such as uneven ground, utility lines etc.	3	5	-	2
	PC3. respond to code of signals (Hand/audible sounds etc.)	3	5	-	2
	PC4. protect equipment from damage, such as cover exhaust pipe etc.	3	5	-	2
	PC5. assist with securing Grader and attachment to transport vehicle driver as required, such as attach warning flags and reflectors.	3	5	-	2
	PC6. unload or assist with unloading grader and attachments and assist transport driver as required	3	5	-	2
	PC7. assess and adjust to hazards, such as overhead obstructions, narrow landing areas	3	5	-	2
	PC8. check the working of visual attachments, rear view camera etc.	3	5	-	2
	PC9. prepare grader for road travel: secure attachments in proper positions for road travel, complete inspection, such as check brakes, steering, lights, tires, and Back-up warnings, clean equipment	3	5	-	2
	PC10. drive grader on a public road: comply with applicable legislation, such as possessing appropriate and valid driver's license, follow the route to the destination, adjust to road and weather conditions, such as adjust speed, recognize and avoid potential hazards	3	5	-	2
	Total Marks	30	50	-	20

DGT/VSQ/N0102: Employability Skills (60 Hours)	Introduction to Employability Skills	1	1	-	-
	PC 1. identify employability skills required for jobs in various industries	-	-	-	-
	PC 2. identify and explore learning and employability portals	-	-	-	-
	Constitutional values – Citizenship	1	1	-	-
	PC 3. 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.	-	-	-	-
	PC 4. follow environmentally sustainable practices	-	-	-	-
	Becoming a Professional in the 21st Century	2	4	-	-
	PC 5. recognize the significance of 21st Century Skills for employment	-	-	-	-
	PC 6. practice the 21st Century Skills such as Self- Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
	Basic English Skills	2	3	-	-
	PC 7. use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
	PC 8. read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
	PC 9. write short messages, notes, letters, e-mails etc. in English	-	-	-	-
	Career Development & Goal Setting	1	2	-	-
	PC 10. understand the difference between job and career	-	-	-	-
	PC 11. prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
Communication Skills	2	2	-	-	
PC 12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-	
PC 13. work collaboratively with others in a team	-	-	-	-	
Diversity & Inclusion	1	2	-	-	
PC 14. communicate and behave appropriately with all genders and PwD	-	-	-	-	
PC 15. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-	
Financial and Legal Literacy	2	3	-	-	
PC 16. select financial institutions, products and services as per requirement	-	-	-	-	

	PC 17. carry out offline and online financial transactions, safely and securely	-	-	-	-
	PC 18. identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
	PC 19. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
	Essential Digital Skills	3	4	-	-
	PC 20. operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
	PC 21. use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
	PC 22. use basic features of word processor, spreadsheets, and presentations	-	-	-	-
	Entrepreneurship	2	3	-	-
	PC 23. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
	PC 24. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
	PC 25. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
	Customer Service	1	2	-	-
	PC 26. identify different types of customers	-	-	-	-
	PC 27. identify and respond to customer requests and needs in a professional manner	-	-	-	-
	PC 28. follow appropriate hygiene and grooming standards	-	-	-	-
	Getting ready for apprenticeship & Jobs	2	3	-	-
	PC 29. create a professional Curriculum vitae (Résumé)	-	-	-	-
	PC 30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
	PC 31. apply to identified job openings using offline /online methods as per requirement	-	-	-	-
	PC 32. answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
	PC 33. identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
	Total	20	30	-	-
MIN/N1703: Follow Health, Safety, and Environmental Guidelines for	PC 1. comply with safety, health, and security related regulations/guidelines at the opencast mine	2	2	-	1
	PC 2. follow the safety instructions given by the workman's inspector	1	3	-	1

opencast mines	PC 3. follow adequate safety while working at haul roads, heights, overburden dumps, sump area, stockyard, near moving parts, etc.	3	3	-	1	
	PC 4. take safety precautions while working on sites (sub-station, workshop etc.), with equipment, and conducting welding and cutting operations	1	3	-	1	
	PC 5. follow appropriate Safe Operating Procedure (SOP) while dealing with explosives	2	3	-	2	
	PC 6. respond promptly and appropriately to an accident/ incident or an emergency situation, within limits of the role and responsibility	2	3	-	1	
	PC 7. provide first aid to an injured person	2	3	-	1	
	PC 8. operate various types of fire extinguishers to control different types of fire at a worksite when required	1	3	-	1	
	PC 9. use appropriate PPE as per the requirement	2	4	-	2	
	PC 10. maintain hand hygiene by washing hands with alcohol based sanitisers/soap	1	2	-	1	
	PC 11. disinfect the machine/tools before and after work/task	1	2	-	1	
	PC 12. maintain hygiene at the work site	1	1	-	1	
	PC 13. report any symptoms of illness to the shift in charge	1	2	-	1	
	PC 14. identify the environmental impact of related opencast mining operations	2	2	-	1	
	PC 15. 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	
	PC 16. ensure not to mix topsoil with waste in day to day tasks	2	2	-	1	
	PC 17. ensure that HEMM is washed at the designated location	2	2	-	1	
	PC 18. ensure the productivity of the machine for material/fuel conservation	1	3	-	-	
	PC 19. follow the mineral conservation practices specified by the organization in accordance with MCDR-2017 (Mineral Conservation and Development Rules)	1	3	-	1	
	PC 20. assist supervisor for reducing environmental impact caused due to related mining operations	1	2	-	-	
	Total Marks		30	50	-	20
	MIN/N1702: Follow Health, Safety and Environmental Guidelines for Underground Metalliferous Mines	PC 1. undertake "The Take-5 (Personal Risk Assessment)" before commencement of any work	-	2	-	2
PC 2. 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	-	-	
PC 3. operate various types of fire extinguishers to control different types of fire at a worksite when required		1	4	-	1	
PC 4. 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	-	-	
PC 5. take precaution against occupational health hazards (like dust, water, mine gases etc.) due to U/G working environment		1	2	-	1	

PC 6.	use self-rescue apparatus, appropriately when required	-	4	-	1
PC 7.	follow appropriate emergency response procedure during emergency such as fire, water inrush, fall of ground etc.	1	2	-	1
PC 8.	follow precautions against U/G electrical appliances	2	2	-	2
PC 9.	follow appropriate Standard Operating Procedure while working near any isolated and sealed off area of the mine	2	2	-	1
PC 10.	follow appropriate safety practices while traveling on U/G haul roads, incase of post blast fumes and misfire	2	4	-	1
PC 11.	follow the manufacturer's instructions for care and safe operation of mine machinery and equipment	1	2	-	1
PC 12.	identify the working ventilation district from line diagram of ventilation circuit to direct air to the working face	1	1	-	-
PC 13.	follow Safety Management Plan (SMP) and Emergency Management Plan (EMP)	1	-	-	-
PC 14.	follow gas detecting alarm signal on leakage of inflammable gases and laid out procedure to ensure safety	1	2	-	1
PC 15.	follow process for reporting any unsafe act/condition in work area to the concerned person	-	2	-	1
PC 16.	use underground mine communication system	-	1	-	-
PC 17.	ensure positive isolation near the work place if applicable	1	1	-	1
PC 18.	use appropriate PPE as per the requirement	2	4	-	2
PC 19.	maintain hand hygiene by washing hands with alcohol based sanitisers/soap	1	1	-	1
PC 20.	disinfect the machine/tools before and after work/task	1	1	-	-
PC 21.	maintain hygiene at the work site	1	1	-	1
PC 22.	report any symptoms of illness to the shift in charge	1	-	-	-
PC 23.	identify six directional hazards at workplace and take decisions accordingly	2	-	-	-
PC 24.	identify the environmental impact of mining related operations and follow steps to reduce those impact	1	2	-	-
PC 25.	follow the mineral conservation practices in U/G mining operations to achieve optimum ore or mineral recovery	-	1	-	-
PC 26.	ensure that the stowing practices produce minimum disturbance to the surface	1	1	-	-
PC 27.	ensure that the subgrade ore is carried out to surface and stacked separately at the earmarked place	1	-	-	1
PC 28.	ensure the productivity of the machine for material/fuel conservation	1	1	-	-
PC 29.	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
PC 30.	follow the "5-S" practice at work site like cleaning oil from ground (to avoid soil from getting damaged), etc.	1	2	-	1

	Total Marks	30	50	-	20
MIN/N1704: Follow Health, Safety, and Environmental guidelines for underground coal mines	PC 1. follow preventive measures against firedamp, whitedamp, blackdamp etc.	1	1	-	-
	PC 2. use the flame safety lamp for detecting the methane gas as per Standard Operating Procedure (SOP)	-	1	-	-
	PC 3. undertake "The Take-5 (Personal Risk Assessment)" before commencement of any work	1	1	-	1
	PC 4. 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
	PC 5. ensure that oil, grease, canvas or other inflammable material are stored in fire-proof receptacle	-	1	-	-
	PC 6. ensure that every instrument, apparatus and equipment are DGMS approved before these are used	1	1	-	-
	PC 7. 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	-	-
	PC 8. provide first aid to an injured person	1	2	-	1
	PC 9. follow safety precautions against spontaneous heating of the coal	1	1	-	-
	PC 10. operate various types of fire extinguishers to control different types of fire at worksite, if required	-	2	-	-
	PC 11. ensure that no person is traveling/working/staying under unsupported roof	1	-	-	-
	PC 12. 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
	PC 13. take precaution against occupational health hazards (like dust, water, mine gases etc.) due to U/G working environment	-	1	-	1
	PC 14. use self-rescue apparatus appropriately when required	-	2	-	-
	PC 15. follow Safety Management Plan (SMP) and Emergency Management Plan (EMP)	1	2	-	1
	PC 16. follow precautions against U/G electrical appliances	2	2	-	1
	PC 17. take proper care against damage and accidents while loading, transporting, dismantling and erecting of roof supports	1	2	-	-
	PC 18. follow appropriate SOP while working near any isolated and sealed off area of the mine	1	1	-	1
	PC 19. 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	-	-
	PC 20. take relevant safety precautions during depillaring operation in UCM	-	2	-	1
	PC 21. follow appropriate safety practices while traveling on U/G haul roads, incase of post blast fumes and misfire	1	1	-	-
	PC 22. follow the manufacturer's instructions for care and safe operation of mine machinery and equipment	-	1	-	1

PC 23. identify the working ventilation district from line diagram of ventilation circuit to direct air to the working face	-	1	-	1
PC 24. follow laid out SOP in case of alarm signal for leakage of inflammable gases	1	1	-	-
PC 25. follow the process of reporting any unsafe act/condition in the working area to the concerned person	-	1	-	1
PC 26. use underground mine communication system	-	1	-	-
PC 27. ensure positive isolation near the work place if applicable	1	1	-	-
PC 28. use appropriate Personal Protective Equipment (PPE) as per the requirement	2	2	-	1
PC 29. maintain hand hygiene by washing hands with alcohol based sanitisers/soap	-	1	-	-
PC 30. disinfect the machine/tools before and after work/task	1	1	-	-
PC 31. maintain hygiene at the work site	1	1	-	-
PC 32. report any symptoms of illness to the shift in charge	1	1	-	-
PC 33. identify six directional hazards at workplace and take decisions accordingly	-	1	-	1
PC 34. identify the environmental impact of mining related operations and follow steps to reduce those impact	1	1	-	1
PC 35. follow the mineral conservation practices in U/G mining operations to achieve optimum ore or mineral recovery	1	1	-	1
PC 36. ensure that the stowing practices produce minimum disturbance to the surface	1	1	-	-
PC 37. ensure that the subgrade coal is carried out to surface and stacked separately at the earmarked place	1	1	-	1
PC 38. ensure the productivity of the machine for material/fuel conservation	1	1	-	1
PC 39. 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
PC 40. follow the "5-S" practice at work site like cleaning oil from ground (to avoid soil from getting damaged), etc.	1	1	-	1
Total Marks	30	50	-	20
Grand Total	140	230	-	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.*

Assessment system Overview: -

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 number 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. https://ncvet.gov.in/sites/default/files/NCVET.pdf