



QUALIFICATION FILE

Mine Mechanic/Fitter

- 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 (SCMS)

FIMI House, B-311,

Okhla Industrial, Phase-1

New Delhi-110020

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Section 1: Basic Details

1.	Qualification Name	Mine Mechanic/Fitter																			
2.	Sector/s	Mining																			
3.	Type of Qualification: <input type="checkbox"/> New <input checked="" type="checkbox"/> Revised <input checked="" type="checkbox"/> Has Electives/Options <input type="checkbox"/> OEM	NQR Code & version of existing/previous qualification: 2022/MIN/SCMS/06985 & Version 2.0	Qualification Name of existing/previous version: Mine Mechanic/Fitter																		
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-03-MG-04061-2025-V2-SCMS & Version 3.0	6. NCrF/NSQF Level: 3																		
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	A Mine Mechanic or Fitter in a mine is responsible for repair and maintenance of plant and machinery, medium / light vehicles, drilling machines, pumps, compressors, pneumatic machines, overhaul of crushers and other mechanical equipment and assemblies. A mechanic/fitter most often works with / assists senior technicians.																			
9.	Eligibility Criteria for Entry for Student/Trainee/Learner/Employee	a. Entry Qualification & Relevant Experience: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">S. No.</th> <th style="width: 50%;">Academic/Skill Qualification (with Specialization - if applicable)</th> <th style="width: 40%;">Required Experience (with Specialization - if applicable)</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>10th grade pass (or equivalent)</td> <td></td> </tr> <tr> <td>2.</td> <td>9th grade pass</td> <td>1.5 years' relevant experience in Mining Industry</td> </tr> <tr> <td>3.</td> <td>8th grade pass</td> <td>3 years' relevant experience in Mining Industry</td> </tr> <tr> <td>4.</td> <td>5th grade pass</td> <td>7.5 years' relevant experience in Mining Industry</td> </tr> <tr> <td>5.</td> <td>Previous relevant Qualification of NSQF Level 2: Helper-Opencast Mines or Helper-Underground Mines</td> <td>3 years relevant experience in Mining Industry</td> </tr> </tbody> </table> b. Age: 20 Years		S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1.	10 th grade pass (or equivalent)		2.	9 th grade pass	1.5 years' relevant experience in Mining Industry	3.	8 th grade pass	3 years' relevant experience in Mining Industry	4.	5 th grade pass	7.5 years' relevant experience in Mining Industry	5.	Previous relevant Qualification of NSQF Level 2: Helper-Opencast Mines or Helper-Underground Mines	3 years relevant experience in Mining Industry
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5.	Previous relevant Qualification of NSQF Level 2: Helper-Opencast Mines or Helper-Underground Mines	3 years relevant experience in Mining Industry																			

10.	Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	13 (Compulsory Modules + 1 Elective) ; Additional 2 credits for each optional Module	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)	<input checked="" type="checkbox"/> Offline <input type="checkbox"/> Online <input type="checkbox"/> Blended <table border="1" data-bbox="952 384 2051 600"> <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>90:00</td> <td>240:00</td> <td>-</td> <td>-</td> <td>330:00</td> </tr> <tr> <td>Online</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </table> <p>(Refer Blended Learning Annexure for details)</p>				Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)	Classroom (offline)	90:00	240:00	-	-	330:00	Online	-	-	-	-	-
Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)																		
Classroom (offline)	90:00	240:00	-	-	330:00																		
Online	-	-	-	-	-																		
14.	Aligned to NCO/ISCO Code/s (if no code is available mention the same)	NCO-2015/7231.0401																					
15.	Progression path after attaining the qualification (Please show Professional and Academic progression)	NSQF Level 4.0 (Vertical)-Heavy Earth Moving Machinery (HEMM) Mechanic																					
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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No URLs of similar Qualifications: https://www.nqr.gov.in/qualifications/10271 The qualification referenced in the above link does not address non-mineral sands resources.																					
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 in women and training them																					
20.	Are Greening/ Environment Sustainability Aspects Covered (Specify the NOS/Module which covers it)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MIN/N1702, MIN/N1703, 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 (In case of CS or MS, provide details of both Lead AB & Supporting ABs)	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: 6 May 2025	24. Validity Duration: 3 years	25. Next Review Date: 06 May 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.	Perform installation and preventive maintenance of commonly used mine machineries/equipment	MIN/N3211 & V2.0	Core	3	4	30:00	90:00	-	-	120:00	30	50	-	20	100	40
2.	Perform troubleshooting and repair of commonly used mine machineries/equipment	MIN/N3212 & V2.0	Core	3	6	30:00	150:00	-	-	180:00	30	50	-	20	100	30
3.	Employability Skills (30 Hours)	DGT/VSQ/N 0101 & V1.0	Non-Core	2	1	30:00	00:00	00:00	-	30:00	20	30	-	-	50	10
Duration (in Hours) / Total Marks					11	90:00	240:00	-	-	330:00	80	130	-	40	250	80

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 & V3.0	Core	1	2	20:00	40:00	-	-	60:00	30	50	-	20	100	20

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)
2.	Follow Health, Safety, and Environmental Guidelines for opencast mines	MIN/N1703 & V3.0	Core	1	2	20:00	40:00	-	-	60:00	30	50	-	20	100	20
3.	Follow Health, Safety, and Environmental guidelines for underground coal mines	MIN/N1704 & V3.0	Core	1	2	20:00	40:00	-	-	60:00	30	50	-	20	100	20
Duration (in Hours) / Total Marks					6	60:00	120:00	-	-	180:00	90	150	-	60	300	60

Optional NOS/s:

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/Non-Core	NCrF/NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT - Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
1.	Troubleshooting and repair/maintenance of UG mine equipment/machineries	MIN/N3209 & V2.0	Core	3	2	20:00	40:00	-	-	60:00	30	50	-	20	100	20
2.	Perform repair and maintenance of crusher and it's equipment	MIN/N3210 & V2.0	Core	3	2	20:00	40:00	-	-	60:00	30	50	-	20	100	20
Duration (in Hours) / Total Marks					4	40:00	80:00	-	-	120:00	60	100	-	40	200	40

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 10 th pass with 6 years of relevant experience required as Mechanic/Fitter. OR ITI (Mechanical Engineering) with 6 years of relevant experience required as Mechanic/Fitter. OR Diploma (Mechanical Engineering) with 5 years of relevant experience required as Mechanic/Fitter. OR B-Tech (Mechanical Engineering) with 4 years of relevant experience required as Mechanic/Fitter. OR CITS-NCIC (Fitter) with 1 year of relevant experience required as Mechanic/Fitter. AND Certified for Job role "Mine Mechanic/Fitter" 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 10 th pass with 6 years of relevant experience required as Mechanic/Fitter. OR ITI (Mechanical Engineering) with 6 years of relevant experience required as Mechanic/Fitter. OR Diploma (Mechanical Engineering) with 5 years of relevant experience required as Mechanic/Fitter. OR B-Tech (Mechanical Engineering) with 4 years of relevant experience required as Mechanic/Fitter. OR CITS-NCIC (Fitter) with 1 year of relevant experience required as Mechanic/Fitter. AND Certified for Job role "Mine Mechanic/Fitter" and Job Role "Master Trainer (VET and Skills)" with minimum accepted score of 90% in each.
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	Not Applicable

Section 4: Assessment Related

1.	Assessor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Class 10 th pass with 8 years of relevant experience required as Mechanic/Fitter. OR ITI (Mechanical Engineering) with 8 years of relevant experience required as Mechanic/Fitter. OR Diploma (Mechanical Engineering) with 7 years of relevant experience required as Mechanic/Fitter. OR B-Tech (Mechanical Engineering) with 6 years of relevant experience required as Mechanic/Fitter.
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		<p>OR CITS-NCIC (Fitter) with 1 year of relevant experience required as Mechanic/Fitter. AND Certified for Job role “Mine Mechanic/Fitter” and Job Role “Assessor (VET and Skills)” with minimum accepted score of 80% in each.</p>
2.	Proctor’s Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	<p>Class 10th pass with 6 years of relevant experience required as Mechanic/Fitter. OR ITI (Mechanical Engineering) with 6 years of relevant experience required as Mechanic/Fitter. OR Diploma (Mechanical Engineering) with 5 years of relevant experience required as Mechanic/Fitter. OR B-Tech (Mechanical Engineering) with 4 years of relevant experience required as Mechanic/Fitter. OR CITS-NCIC (Fitter) with 1 year of relevant experience required as Mechanic/Fitter. AND Certified for Job role “Mine Mechanic/Fitter” and Job Role “Trainer (VET and Skills)” with minimum accepted score of 80% in each.</p>
3.	Lead Assessor’s/Proctor’s Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	<p>Class 10th pass with 8 years of relevant experience required as Mechanic/Fitter. OR ITI (Mechanical Engineering) with 8 years of relevant experience required as Mechanic/Fitter. OR Diploma (Mechanical Engineering) with 7 years of relevant experience required as Mechanic/Fitter. OR B-Tech (Mechanical Engineering) with 6 years of relevant experience required as Mechanic/Fitter. OR CITS-NCIC (Fitter) with 1 year of relevant experience required as Mechanic/Fitter. AND Certified for Job role “Mine Mechanic/Fitter” and Job Role “Lead Assessor (VET and Skills)” with minimum accepted score of 90% in each.</p>
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 (details to be provided in Annexure-if it is different for Assessment)

Section 5: Evidence of the need for the Qualification

Provide Annexure/Supporting documents name.

1.	Latest Skill Gap Study (not older than 2 years) (Yes/No): Yes
2.	Latest Market Research Reports or any other source (not older than 2 years) (Yes/No): 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: 1000
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 (Mandatory)	Attached
2.	Annexure: List of tools and equipment relevant for qualification (Mandatory, except in case of online course)	Attached
3.	Annexure: Detailed Assessment Criteria (Mandatory)	Attached
4.	Annexure: Assessment Strategy (Mandatory)	Attached
5.	Annexure: Blended Learning (Mandatory, in case selected Mode of delivery is "Blended Learning")	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	The responsibilities of a Mine Mechanic/Fitter includes installation, preventive maintenance and troubleshooting/repair of mechanical systems of plant and machinery, medium / light vehicles, drilling machines, pumps, compressors, pneumatic machines, overhaul of crushers and other mechanical equipment and assemblies. He should also adhering to health, safety and environmental guidelines in Underground Metalliferous Mines (UMM), Open Cast Mines, Underground Coal Mines (UCM) and Rare Earth (RE) Chemical plant during the execution of various tasks and operations and maintenance.	A Mine Mechanic/Fitter will Installing machines, mechanical components and equipment, Performing preventive maintenance of machine components in plant machinery, pumps, compressors, pneumatic and other machines/vehicles tracking. He will also test the repaired equipment to ensure everything is working correctly and safely. The Mine Mechanic/Fitter will also adhere to the work-site health and safety measures and follow environmental guidelines	3
Professional and Technical Skills/ Expertise/ Professional Knowledge	Code of practice in specific areas of mine. Cost of equipment and loss for the company those results from damage of equipment. Provision as per Mines Act-1952. Different types of tyres and wheels used in medium and light vehicles, tracks, final drive etc., in case of crawling equipment. Repair of overhauling electrical and mechanical engines, manual and power shift transmissions, hydraulic and pneumatic systems etc. Importance of sensitization towards different genders and PWD (Persons with Disabilities)	A Mine Mechanic/Fitter will adhere to the code of practice in specific areas of mine and estimate the loss to the company due to damaged equipment. He will be aware of different types of tyres and wheels used in medium and light vehicles, tracks, final drive etc. He will also be able to repair the overhauling electrical and mechanical engines, manual and power shift transmissions, hydraulic and pneumatic systems etc.	3
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	Install machines, mechanical components and equipment and carry out various assembly of machines, etc. Follow maintenance schedule recommended by the equipment manufacturer and maintain a checking/maintenance logbook to record all activities performed. Perform troubleshooting and repair/maintenance while following Safety Management Plan (SMP) and Emergency Management Plan (EMP)	Provide full attention for production work in given time and make decisions pertaining to the concerned area of work. Detect problems in day by day tasks and able to resolve them. Also able to make decision in emergency condition.	3
Broad Learning Outcomes/Core Skill	Take responsibility for completing one's own work assignment, methods to avoid accidents/errors while working with mechanical systems. Note down the production data for the respective shifts in the log sheets/ online ERP as per applicability in the organization. Read the manuals, safety instructions and symbols for the better understanding of the working of the mechanical equipment.	Records and note down the routine work and observation and comply task list related with safety aspect such as fire-fighting process, handling Explosive safely, control dust on hual road etc. and notify the same to senior. Hence, Communication written and oral, with minimum required clarity, skill of basic arithmetic and algebraic principles are required.	3

Responsibility	This job requires the individual to concentrate on the job at hand and complete it efficiently and effectively without any accidents. The individual should be skilled in performing installation and maintenance of plant and machinery, medium / light vehicles, drilling machines, pumps, compressors, pneumatic machines, overhaul of crushers and other mechanical equipment and assemblies. The individual must be able to follow instructions provided by supervisor.	Works independently as per the instruction of supervisor/ Shift In- charge/Mines Manager	3
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Annexure: Tools and Equipment (Lab Set-Up)

(It may change as per Industry Needs)

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 and associated operations.	Standard	1
2.	LHD	Standard	1
3.	shuttle car	Standard	1
4.	Audio Visual Alarm	Standard	1
5.	Cutter head	Standard	1
6.	Crawler track	Standard	1
7.	Tyres	Standard	1
8.	Brakes	Standard	1
9.	Dead Man Switch	Standard	1
10.	Front and rear lights	Standard	1
11.	Canopy	Standard	1
12.	Seat	Standard	1
13.	Seat belt	Standard	1

14.	Winding cable	Standard	1
15.	Dummy winding drum	Standard	1
16.	Screw driver set	Standard	1
17.	Wrench	Standard	1
18.	Gate End Box	Standard	1
19.	Safety Helmet	Standard	15
20.	Cap lamp	Standard	1
21.	Battery	Standard	1
22.	Belt	Standard	1
23.	Gloves	Standard	15
24.	Harness	Standard	15
25.	Earplugs	Standard	15
26.	Goggles	Standard	15
27.	Dust mask	Standard	15
28.	Safety shoes/Gum Boots	Standard	15
29.	Fire extinguisher	Standard	1
30.	Visibility harness	Standard	1
31.	Reflector Jacket	Standard	1
32.	Fire Protective suits	Standard	1
33.	Self-Rescue Kit	Standard	1
34.	First Aid box	Standard	1
35.	Fire Fighting Chart	Standard	1

36.	First Aid chart	Standard	1
37.	LOTO-Lock Out Tag Out	Standard	1
38.	Types of log book	Standard	1
39.	MCDR	Standard	1
40.	MCR	Standard	1
41.	Company's SOP	Standard	1
42.	Diagrams showing quarries	Standard	1
43.	Overhangs	Standard	1
44.	Fencing	Standard	1
45.	Samples of different types of rocks to be encountered	Standard	1
46.	Mines Act	Standard	1
47.	"5-S" Charts	Standard	1
48.	Systematic Support Plan (SSP)	Standard	1
49.	Systematic Support Rules(SSR)	Standard	1
50.	Self-rescue apparatus	Standard	1
51.	Line Diagram of Ventilation Circuit	Standard	1
52.	Alcohol based sanitisers	Standard	1
53.	Self- rescue apparatus	Standard	1
54.	Gas Detector	Standard	1
55.	Safety Lamp	Standard	1
56.	Self-Contained Breathing Apparatus	Standard	1

57.	CMR	Standard	1
58.	MMR	Standard	1
59.	MRR	Standard	1
60.	Company's Safety Management Plan (SMP)	Standard	1
61.	Emergency Management Plan(EMP)	Standard	1

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Whiteboard, Pin Up boards, Demonstration Table
2. LCD Projector
3. Computer/Laptop with Internet
4. Trainer Chair and Table
5. Tables
6. Whiteboard markers

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.	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	9830595259	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	9830987657	nilidri.topodar@rpgs.com	
6.	Maheshwari Mining Pvt. Ltd	Jayram Koushik	VP	Shilpangan, Block - LB, Plot-1, Sector-III, Module - 1, 4th Floor, CF Building, Salt Lake, Kolkata - 700098	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	A1/3 Umesh Enclave, Main Road, Adityapur, Dist- Saraikela-Kharswan, Jharkhand-831013	6767351080	info@naaraayani.com	
10.	Mine Magma	M Manjunath Reddy	Proprietor	131, 2nd Floor, 1st Main, 2nd Stage, Kengeri Satellite Town, (Beside Corporation Bank), Bangalore - 560 060	99867 07359	contact@minemagma.com	
11.	JSW Cement	Tinu Sule	Group Head - HR	JSW Centre Bandra Kurla Complex, Near MMRDA Grounds, Bandra East, Mumbai 400 051	1800 266 266 1	info@jswcement.in	
12.	BGR Mining and Infra Ltd	Veepasha Kulkarni	Head BU HR	BGR Mining & Infra Ltd. #8-2-596/R, Road No.10, Banjara Hills, Hyderabad, Telangana, India - 500034	+91 40 23351932	careers@bgrmining.com	
13.	Saurashtra Cement Limited	G.M Trivadi	Gen. Manager (P & HRD)	Saurashtra Cement Limited Off Veraval Kodinar Highway Sidheegram - 362 276 Taluka Sutrapada Distr. Junagadh (Gujarat)	02876 - 268200 / 02876 - 308200 / 286530 - 34	pralhad@mehtagroup.com	
14.	Dalmia Bharat Cement	Avnvs Murthy	Unit Head- Ariyalur unit	Dalmia Bharat Group, 11th & 12th Floor, Hansalaya Building,	+91 11 23465100	corpcomm@dalmiabharat.com	

				15 Barakhamba Road, New Delhi 110001			
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 , KOLKATA, West Bengal, India - 700017.	+91 (06553) 226846	INFO@THERUNGTAGROUP.COM	
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 Metallic	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	200	200	50	50	Not applicable	Not applicable

2026-27	300	300	70	70	Not applicable	Not applicable
2027-28	500	500	125	125	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:

Qualification Version	Year	Total Candidates				Women				People with Disability			
		Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed
2.0	2022-23	236	244	263	Not available	Not available	Not available	Not available	Not available	Not applicable	Not applicable	Not applicable	Not applicable
2.0	2023-24	377	343	316	Not available	Not available	Not available	Not available	Not available	Not applicable	Not applicable	Not applicable	Not applicable
2.0	2024-25	383	348	354	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. Industry funded (NON-PMKVY), DDU-KK
2. PMKVY4.0 & SANKALP

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:

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"> • 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/N3211: Perform installation and preventive maintenance of commonly used mine machineries/equipments	<i>Installing machines, mechanical components and Equipments</i>	11	20	-	6
	PC1. use ropes, slings, towing and lifting devices while assembling/disassembling machine/equipments and safely operate various types of hand and powertools	2	4	-	1

	PC2. follow drawings and blue-prints given in the instruction sheet and installation manual	2	4	-	1
	PC3. carry out various assembly of machines and conveyors etc.	2	4	-	1
	PC4. follow the manufacturer's instructions which apply to the care and safe handling of the machine/automobile	2	4	-	1
	PC5. test assembled machine for proper performance before handing over for operations	3	4	-	2
	<i>Performing preventive maintenance of machine components in plant machinery, pumps, compressors, pneumatic and other machines/vehicles tracking</i>	9	15	-	6
	PC6. follow maintenance schedule recommended by the equipment manufacturer	2	4	-	2
	PC7. carry out greasing and lubrication of pivot points in a machine	3	4	-	1
	PC8. open and re-assemble various types of bearings in machines	2	3	-	2
	PC9. adjust valves, linkages, bearings, hydraulic, pneumatic and systems for smooth operation	2	4	-	1
	<i>Tracking and logging preventive maintenance, repairs, operational faults and other activities</i>	10	15	-	8
	PC10. track hours-in-operation and adhere to preventive maintenance schedules of various machines assigned to them	2	4	-	2
	PC11. maintain a checking/maintenance logbook to record all activities performed	2	3	-	2
	PC12. inform the supervisor of problems that are beyond scope	3	4	-	2
	PC13. ensure availability of fuel, lubricants, consumables and other supplies	3	4	-	2
	Total Marks	30	50	-	20
	<i>Performing troubleshooting and repair/maintenance</i>	24	38	-	16
MIN/N3212: Perform troubleshooting and repair of commonly used mine machineries/equipment	PC1. explain various elements of a good maintenance system and difference between preventive and repair maintenance	3	4	-	2
	PC2. use various measuring instruments and testing tools	2	4	-	2
	PC3. compare measured readings with optimal readings to pin-point faults	3	4	-	2
	PC4. service, diagnose and repair faults in mechanical systems such as gears, steering systems, hydraulic pumps, transmission, crawlers, conveyor belts etc.	3	4	-	2
	PC5. ensure the machine is on firm and level ground before attempting to carry out any maintenance activity	3	4	-	1
	PC6. ensure the locking bar is in position to prevent the front and rear chassis moving and creating a crushing zone (articulated machines only)	2	4	-	2

	PC7. ensure that no maintenance task on the machine/engine is performed when running or still hot	3	5	-	2
	PC8. adjust valves, belt tensions for optimal Operation	2	4	-	1
	PC9. test repaired equipment to ensure everything is working correctly and safely (this may include Pre-load testing, parking brake testing, hydraulic pressure, greasing points, air pressure, etc.)	3	5	-	2
	<i>Recording and Logging</i>	6	12	-	4
	PC10. complete daily/weekly maintenance/defect sheets as provided by the company	2	4	-	1
	PC11. inform the supervisor of those problems which are not under one's purview	2	4	-	2
	PC12. maintain inventory of fuel, lubricants and order other spares and consumables as required	2	4	-	1
	Total Marks	30	50	-	20
DGT/VSQ/N0101: Employability Skills (30 Hours)	<i>Introduction to Employability Skills</i>	1	1	-	-
	PC1. understand the significance of employability skills in meeting the 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	-	-	-	-
	Total Marks	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
	Total Marks	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 security – related 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	-	-
	Total Marks	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
	Total Marks	30	50	-	20
MIN/N3209: Troubleshooting and repair/ maintenance of UG mine equipment/machineries	<i>Perform troubleshooting and repair/ maintenance of UG mine equipment/machineries</i>	30	50	-	20
	PC1. conduct maintenance of the compressor of UG mine equipment, so that it operates properly and generates required output	3	5	-	2
	PC2. check and perform basic maintenance and troubleshooting of winding engine drum and its various equipments such as rope joint, slings, cage, skip etc.	3	5	-	2
	PC3. check and perform maintenance of ventilation fan, booster fan and its various sub-parts	3	5	-	2
	PC4. identify and repair/reduce the air pressure loss in the ventilation system	3	5	-	2
	PC5. check and repair any fault in the hoisting or winding system such as head-frame or head-gear, rope equipments and their various safety devices	3	5	-	2
	PC6. perform maintenance/repair of the track and mine car if required	3	5	-	2

	PC7. conduct the repairs/install of the various support system used in the mines such as hydraulic power support, rope support, steel props, shield support, rock bolting and its supporting equipments	3	5	-	2
	PC8. perform various repairs of the haulage system such as various rope haulage, rail and track mounted rope haulage and other fittings etc.	3	5	-	2
	PC9. ensure proper working of all safety systems used in the mines	3	5	-	2
	PC10. repair the various pumps and their supporting equipment/structure	3	5	-	2
	Total Marks	30	50	-	20
MIN/N3210: Perform repair and maintenance of crusher and it's Equipments	<i>Perform repair and maintenance of various types of crushers and it's equipments</i>	30	50	-	20
	PC1. discuss various types of crusher and their crushing principle	2	3	-	1
	PC2. identify the important components of a jaw crusher, cone crusher, etc	2	3	-	1
	PC3. check different types of crushing principal components such as gates, chutes and gaps, feeder, conveyor, dust collectors, water sprays etc.	2	3	-	1
	PC4. conduct maintenance of the crushing plant	2	2	-	1
	PC5. perform daily checking of plant as per check-list followed by organization	2	3	-	1
	PC6. change stoke and re- assembly properly	2	3	-	1
	PC7. check and replace thrust plate of the Crusher	1	3	-	1
	PC8. perform replacement of various worn out parts of the crusher	2	3	-	1
	PC9. replace main shaft protection sleeve of the Crusher	1	3	-	1
	PC10. install upper frame assembly of various Crusher	2	3	-	1
	PC11. replace various worn out parts of vibrating screen, feeder, conveyor etc.	1	3	-	1
	PC12. test samples, materials or products to ensure compliance with Indian standard (IS) specifications	2	2	-	1
	PC13. conduct operational checks on areas of potential issues like unusual noises/smells, blockages and obstruction, leaks etc. and take corrective actions if required	1	3	-	1
	PC14. check indicators that signal need for replacement	2	2	-	1
	PC15. replenish coolants, lubricants, fluids and screeners as and when required	1	3	-	1
	PC16. follow the safe code of practice for erection, installation, operation, repairs, maintenance, dismantling of plant and ancillary equipments	1	2	-	1
	PC17. identify missing or defective components or controls and replace them with genuine OEM recommended components	2	2	-	1
	PC18. check oil, fuel tanks for leaks and take necessary actions as per the operational manual	1	2	-	1
	PC19. lubricate all the moving parts at regular intervals	1	2	-	2
	Total Marks	30	50	-	20

Grand Total	230	380	-	140
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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 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.

