Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	Mining Process Technology
Competency Standards	Perform physical, optical and chemical evaluation of minerals
Assessment Task	Investigate the mineralogy of ore by using following techniques 1. Perform physical evaluation of ores 2. Perform optical evaluation of ores 3. Perform Petrographic studies *Note: Assessor should provide ore sample as required for the assessment.*

I can……..

Performance Criteria	**Yes**	**No**
1. Observe lustre of ores	☐	☐
2. Observe Colour of ores	☐	☐
3. Measure Streak for ores	☐	☐
4. Measure Hardness of ores	☐	☐
5. Estimate specific gravity	☐	☐
6. Carry out Optical compound microscopic study	☐	☐
7. Perform Polarized Microscopy (Pleochroism)	☐	☐
8. Carry out Birefringence	☐	☐
9. Prepare the equipment for testing	☐	☐
10. Mount sample on glass slide/acrylic button	☐	☐
11. Perform grinding and polishing of the sample	☐	☐
12. Perform electro-microscopy studies	☐	☐

Candidate's Signature_____ Assessor's Signature_____

Date: _____

Instruction Sheet for the Candidate

Qualification	National Vocational Certificate level 1 to 5, Mining Process Technology
Competency Standard(s)	Perform physical, optical and chemical evaluation of minerals

Candidate Details	Name_____ Registration/Roll Number_____
Guidance for Candidate	**To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):** Investigate the mineralogy of ore by using following techniques 1. Perform physical evaluation of ores 2. Perform optical evaluation of ores 3. Perform Petrographic studies *Note: Assessor should provide ore sample as required for the assessment.*
Time:180 mins	During a practical assessment, under observation by an assessor, you are required to demonstrating the following criteria: 1. Observe luster of ores 2. Observe Color of ores 3. Measure Streak for ores 4. Measure Hardness of ores 5. Estimate specific gravity 6. Carry out Optical compound microscopic study 7. Perform Polarized Microscopy (Pleochroism) 8. Carry out Birefringence 9. Prepare the equipment for testing 10. Mount sample on glass slide/acrylic button 11. Perform grinding and polishing of the sample 12. Perform electro-microscopy studies
Minimum Evidence Required	

Assessors Judgment Guide

Qualification	National Vocational Certificate level 1 to 5, Mining Process Technology
Competency Standard(s)	Perform physical, optical and chemical evaluation of minerals
Candidate Details	Name: _____ Registration/Roll Number: _____Signature: _____
Assessment Outcome	**COMPETENT** ☐ **NOT YETCOMPETENT** ☐ **Name of the Assessor**_____**Assessor's code:** _____ **Signature:** _____

Assessment Summary (to be filled by the assessor)							
Activity	**Method**					**Result**	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment		✓					
Other Requirement							

Observation Checklist

Assessment Task	Investigate the mineralogy of ore by using following techniques 1. Perform physical evaluation of ores 2. Perform optical evaluation of ores 3. Perform Petrographic studies *Note: Assessor should provide ore sample as required for the assessment.*

	During the practical assessment, candidate demonstrated the following:	**Yes**	**No**	**Remarks**
1.	Observed lustre of ores			
2.	Observed Colour of ores			
3.	Measured Streak for ores			
4.	Measured Hardness of ores			
5.	Estimated specific gravity			
6.	Carried out Optical compound microscopic study			
7.	Performed Polarized Microscopy (Pleochroism)			
8.	Carried out Birefringence			
9.	Prepared the equipment for testing			
10.	Mounted sample on glass slide/acrylic button			
11.	Performed grinding and polishing of the sample			
12.	Performed electro-microscopy studies			

Competent ☐ **Not Yet Competent** ☐

Feedback to the Candidate
Candidate's Signature_____**Assessor's Signature**_____