

## Self-Assessment Checklist

|                             |  |
|-----------------------------|--|
| <b>Candidate Name</b>       |  |
| <b>Registration No.</b>     |  |
| <b>Qualification</b>        |  |
| <b>Competency Standards</b> | <ol style="list-style-type: none"> <li>1. Follow basic safety rules at workplace</li> <li>2. Demonstrate Basic Numeracy skills</li> <li>3. Perform Basic Manual Drawing</li> <li>4. Construct multi-view drawing</li> <li>5. Perform basic workshop techniques</li> <li>6. Interpret topographic sheet</li> <li>7. Interpret geological maps</li> <li>8. Understand mineral maps</li> <li>9. Verify Ohm's Law &amp; Kirchhoff's Law by Implementing Series/Parallel Circuits.</li> <li>10. Handle transportation and explosive material</li> </ol> |
| <b>Assessment Task</b>      | <b>Make a comprehensive work plan to draw a basic technical drawing for mine Initiation</b>  |

I can.....

| Performance Criteria   | Yes                      | No                       |
|--|--------------------------|--------------------------|
| 1. Applies mine site safety reporting procedures   | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Use appropriate personal protective equipment   | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Identify and conform appropriate procedures for working in confined space   | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Calculate quantities of materials (stone aggregate stacks/pile and sand) by incorporating time saving practices   | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Prepare Drawing sheet as per requirements   | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Set up drilling machine according to job requirement.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Adjust speeds and feeds of drill in accordance with the size, type, and hardness of work-piece material, so that the drill performs optimum cutting without damage to work-piece. | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Ensure proper alignment of the reamer during operations.  | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Identify geographical location of topographic sheet   |                          |                          |
| 10. Identify the natural and man-made features on topographic sheet  |                          |                          |
| 11. Measure distance between two specific points on topographic sheet  | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. Calculate mining area of required location   |                          |                          |
| 13. Measure dip and strike of the rock bed   |                          |                          |

|  |                      |                      |
|--|----------------------|----------------------|
| 14. Identify type of lithology (limestone, sandstone, shale etc.)                          | <input type="text"/> | <input type="text"/> |
| 15. Identify Fold, faults and joints   | <input type="text"/> | <input type="text"/> |
| 16. Identify legends and symbols on map  | <input type="text"/> | <input type="text"/> |
| 17. Identify Sedimentary, Igneous area and Metamorphic area                                | <input type="text"/> | <input type="text"/> |
| 18. Identify different mineral zone on map   | <input type="text"/> | <input type="text"/> |
| 19. Estimate the hardness of gemstone  | <input type="text"/> | <input type="text"/> |
| 20. Perform Basic Electric Circuits as required  | <input type="text"/> | <input type="text"/> |
| 21. Apply Basic Electrical Measurements  | <input type="text"/> | <input type="text"/> |
| 22. Keep detonator and explosive material separately while transferring as per SOP         | <input type="text"/> | <input type="text"/> |
| 23. Store all blasting material away from populated area under surveillance                | <input type="text"/> | <input type="text"/> |
| 24. Keep the electric wires and metallic materials away from Magazine (Storage) as per SOP | <input type="text"/> | <input type="text"/> |

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) | <ol style="list-style-type: none"><li>1. Follow basic safety rules at workplace</li><li>2. Demonstrate Basic Numeracy skills</li><li>3. Perform Basic Manual Drawing</li><li>4. Construct multi-view drawing</li><li>5. Perform basic workshop techniques</li><li>6. Interpret topographic sheet</li><li>7. Interpret geological maps</li><li>8. Understand mineral maps</li><li>9. Verify Ohm's Law &amp; Kirchhoff's Law by Implementing Series/Parallel Circuits.</li><li>10. Handle transportation and explosive material</li></ol> |

|                           |  |
|---------------------------|--|
| Candidate Details         | <p>Name_____</p> <p>Registration/Roll Number_____</p>  |
| Guidance for Candidate    | <p><b>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration &amp; assessment):</b></p> <p><b>Make a comprehensive work plan to draw a basic technical drawing for mine Initiation</b></p>   |
| Time:180 mins             | <p>During a practical assessment, under observation by an assessor, you are required to <b>conduct iron conduit surface wiring for a three-phase industrial motor on a dish antenna and generate a task completion report.</b> demonstrating the following criteria:</p>   |
| Minimum Evidence Required | <ol style="list-style-type: none"> <li>1. Applies mine site safety reporting procedures</li> <li>2. Use appropriate personal protective equipment</li> <li>3. Identify and conform appropriate procedures for working in confined space</li> <li>4. Calculate quantities of materials (stone aggregate stacks/pile and sand) by incorporating time saving practices</li> <li>5. Prepare Drawing sheet as per requirements</li> <li>6. Set up drilling machine according to job requirement.</li> <li>7. Adjust speeds and feeds of drill in accordance with the size, type, and hardness of work-piece material, so that the drill performs optimum cutting without damage to work-piece.</li> <li>8. Ensure proper alignment of the reamer during operations.</li> <li>9. Identify geographical location of topographic sheet</li> <li>10. Identify the natural and man-made features on topographic sheet</li> <li>11. Measure distance between two specific points on topographic sheet</li> <li>12. Calculate mining area of required location</li> <li>13. Measure dip and strike of the rock bed</li> <li>14. Identify type of lithology (limestone, sandstone, shale etc.)</li> <li>15. Identify Fold, faults and joints</li> <li>16. Identify legends and symbols on map</li> <li>17. Identify Sedimentary, Igneous area and Metamorphic area</li> <li>18. Identify different mineral zone on map</li> <li>19. Estimate the hardness of gemstone</li> <li>20. Perform Basic Electric Circuits as required</li> <li>21. Apply Basic Electrical Measurements</li> <li>22. Keep detonator and explosive material separately while transferring as per SOP</li> <li>23. Store all blasting material away from populated area under surveillance</li> <li>24. Keep the electric wires and metallic materials away from Magazine (Storage) as per SOP</li> </ol> |

## Assessors Judgment Guide

|                               |  |
|-------------------------------|--|
| <b>Qualification</b>          | National Vocational Certificate level 1 to 5, Mining Process Technology  |
| <b>Competency Standard(s)</b> | 1. Follow basic safety rules at workplace<br>2. Demonstrate Basic Numeracy skills<br>3. Perform Basic Manual Drawing<br>4. Construct multi-view drawing<br>5. Perform basic workshop techniques<br>6. Interpret topographic sheet<br>7. Interpret geological maps<br>8. Understand mineral maps<br>9. Verify Ohm's Law & Kirchhoff's Law by Implementing Series/Parallel Circuits.<br>10. Handle transportation and explosive material |
| <b>Candidate Details</b>      | Name: _____<br>Registration/Roll Number: _____ Signature: _____  |
| <b>Assessment Outcome</b>     | COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/><br>Name of the Assessor _____ Assessor's code: _____<br>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  |   | Make a comprehensive work plan to draw a basic technical drawing for mine Initiation |    |         |
|--|---|--|----|---------|
| During the practical assessment, candidate demonstrated the following: |   | Yes  | No | Remarks |
| 1.   | Applies mine site safety reporting procedures   |  |    |         |
| 2.   | Use appropriate personal protective equipment   |  |    |         |
| 3.   | Identify and conform appropriate procedures for working in confined space   |  |    |         |
| 4.   | Calculate quantities of materials (stone aggregate stacks/pile and sand) by incorporating time saving practices   |  |    |         |
| 5.   | Prepare Drawing sheet as per requirements   |  |    |         |
| 6.   | Set up drilling machine according to job requirement.   |  |    |         |
| 7.   | Adjust speeds and feeds of drill in accordance with the size, type, and hardness of work-piece material, so that the drill performs optimum cutting without damage to work-piece. |  |    |         |
| 8.   | Ensure proper alignment of the reamer during operations.  |  |    |         |
| 9.   | Identify geographical location of topographic sheet   |  |    |         |
| 10.  | Identify the natural and man-made features on topographic sheet   |  |    |         |
| 11.  | Measure distance between two specific points on topographic sheet   |  |    |         |
| 12.  | Calculate mining area of required location  |  |    |         |
| 13.  | Measure dip and strike of the rock bed  |  |    |         |
| 14.  | Identify type of lithology (limestone, sandstone, shale etc.)   |  |    |         |
| 15.  | Identify Fold, faults and joints  |  |    |         |
| 16.  | Identify legends and symbols on map   |  |    |         |
| 17.  | Identify Sedimentary, Igneous area and Metamorphic area   |  |    |         |
| 18.  | Identify different mineral zone on map  |  |    |         |
| 19.  | Estimate the hardness of gemstone   |  |    |         |
| 20.  | Perform Basic Electric Circuits as required   |  |    |         |
| 21.  | Apply Basic Electrical Measurements   |  |    |         |
| 22.  | Keep detonator and explosive material separately while transferring as per SOP  |  |    |         |
| 23.  | Store all blasting material away from populated area under surveillance   |  |    |         |
| 24.  | Keep the electric wires and metallic materials away from Magazine (Storage) as per SOP  |  |    |         |
| Competent <input type="checkbox"/>                                     |   | Not Yet Competent <input type="checkbox"/>   |    |         |

| Feedback to the Candidate  |                           |
|----------------------------|---------------------------|
|                            |                           |
|                            |                           |
|                            |                           |
|                            |                           |
|                            |                           |
|                            |                           |
| Candidate's Signature_____ | Assessor's Signature_____ |