

## Instruction Sheet for the Candidate

<b>Qualification</b>	<b>National Vocational Certificate in Metal Forming &amp; Processing Level 2</b>
<b>Competency Standards</b>	<ul style="list-style-type: none"> <li>• CS 01 Observe Basic Occupational Safety &amp; Health Practices</li> <li>• CS 02 Establish &amp; Maintain Occupational Safety &amp; Health System</li> <li>• CS 03 Draw the Lettering and Geometrical Shapes</li> <li>• CS 04 Construct different Engineering Curves</li> <li>• CS 05 Construct multi-view drawings</li> <li>• CS 06 Perform Bench Works</li> <li>• CS 07 Perform cutting on Power Hack Saw</li> <li>• CS 08 Interpret Welding/Fabrication Requirements</li> <li>• CS 09 Perform Pre-welding operations</li> <li>• CS 10 Identify Metal forming operations</li> <li>• CS 11 Perform Preparation for Metal Processing</li> <li>• CS 12 Carryout Housekeeping Jobs</li> <li>• CS 13 Perform General Maintenance</li> </ul>
<b>Purpose of Assessment</b>	<b>Summative Assessment</b>
<b>Candidate Details</b>	Name _____ Registration/Roll Number _____
<b>Guidance for Candidate</b>	<p><b>To meet this standard, you are required to complete the following within 04 Hrs. time frame (for practical demonstration &amp; assessment):</b></p> <ol style="list-style-type: none"> <li>1. Interpret the given drawing and produce a component safely using bench work as per the requirement.</li> </ol>
<b>Time: 04 Hrs.</b>	During a practical assessment, under observation by an assessor, you are required to <ul style="list-style-type: none"> <li>• Interpret the given drawing and produce a component safely using bench work as per the requirement.</li> </ul>
<b>Minimum Evidence Required</b>	<ol style="list-style-type: none"> <li>1. Arrange and wear personal protective equipment to ensure correct fit and protection in compliance with company procedures.</li> <li>2. Identify health and safety hazards associated with the work</li> <li>3. Interpret the technical drawing of given job</li> <li>4. Mark layout of job as per drawing using required marking tool.</li> <li>5. Perform clamping of the work piece according to the instructions</li> <li>6. Select blade according to the material and set in hacksaw frame</li> <li>7. Perform sawing according to the instructions</li> <li>8. Perform filing as per standard procedures</li> <li>9. Perform drilling as per standard procedures</li> </ol>

	<ul style="list-style-type: none"> <li>10. Perform post drilling operations</li> <li>11. Select reamer according to the job specification</li> <li>12. Perform reaming as per job specification</li> <li>13. Perform tapping as per job specification</li> <li>14. Perform counter sinking as per standard procedures</li> <li>15. Check quality of the component at suitable intervals.</li> <li>16. Verify the final job with the given drawing</li> </ul>
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## Self-Assessment Checklist

<b>Candidate Name</b>	
<b>Registration No.</b>	
<b>Qualification</b>	<b>National Vocational Certificate in Metal Forming &amp; Processing Level 2</b>
<b>Competency Standards</b>	<ul style="list-style-type: none"> <li>• CS 01 Observe Basic Occupational Safety &amp; Health Practices</li> <li>• CS 02 Establish &amp; Maintain Occupational Safety &amp; Health System</li> <li>• CS 03 Draw the Lettering and Geometrical Shapes</li> <li>• CS 04 Construct different Engineering Curves</li> <li>• CS 05 Construct multi-view drawings</li> <li>• CS 06 Perform Bench Works</li> <li>• CS 07 Perform cutting on Power Hack Saw</li> <li>• CS 08 Interpret Welding/Fabrication Requirements</li> <li>• CS 09 Perform Pre-welding operations</li> <li>• CS 10 Identify Metal forming operations</li> <li>• CS 11 Perform Preparation for Metal Processing</li> <li>• CS 12 Carryout Housekeeping Jobs</li> <li>• CS 13 Perform General Maintenance</li> </ul>
<b>Purpose of Assessment</b>	<b>Summative Assessment</b>
<b>Assessment Task</b>	<ul style="list-style-type: none"> <li>• Interpret the given drawing and produce a component safely using bench work as per the requirement.</li> </ul>

I can.....

<b>Performance Criteria</b>	<b>Yes</b>	<b>No</b>
1. Arrange and wear personal protective equipment to ensure correct fit and protection in compliance with company procedures.	<input type="checkbox"/>	<input type="checkbox"/>
2. Identify health and safety hazards associated with the work	<input type="checkbox"/>	<input type="checkbox"/>
3. Interpret the technical drawing of given job	<input type="checkbox"/>	<input type="checkbox"/>
4. Mark layout of job as per drawing using required marking tool.	<input type="checkbox"/>	<input type="checkbox"/>
5. Perform clamping of the work piece according to the instructions	<input type="checkbox"/>	<input type="checkbox"/>
6. Select blade according to the material and set in hacksaw frame	<input type="checkbox"/>	<input type="checkbox"/>
7. Perform sawing according to the instructions	<input type="checkbox"/>	<input type="checkbox"/>
8. Perform filing as per standard procedures	<input type="checkbox"/>	<input type="checkbox"/>
9. Perform drilling as per standard procedures	<input type="checkbox"/>	<input type="checkbox"/>
10. Perform post drilling operations	<input type="checkbox"/>	<input type="checkbox"/>

11. Select reamer according to the job specification	<input type="text"/>	<input type="text"/>
12. Perform reaming as per job specification	<input type="text"/>	<input type="text"/>
13. Perform tapping as per job specification	<input type="text"/>	<input type="text"/>
14. Perform counter sinking as per standard procedures	<input type="text"/>	<input type="text"/>
15. Check quality of the component at suitable intervals.	<input type="text"/>	<input type="text"/>
16. Verify the final job with the given drawing	<input type="text"/>	<input type="text"/>

Candidate's Signature\_\_\_\_\_ Assessor's Signature\_\_\_\_\_

Date: \_\_\_\_\_

## Assessors Judgment Guide

<b>Qualification</b>	<b>National Vocational Certificate in Metal Forming &amp; Processing Level 2</b>
<b>Competency Standards</b>	<ul style="list-style-type: none"> <li>CS 01 Observe Basic Occupational Safety &amp; Health Practices</li> <li>CS 02 Establish &amp; Maintain Occupational Safety &amp; Health System</li> <li>CS 03 Draw the Lettering and Geometrical Shapes</li> <li>CS 04 Construct different Engineering Curves</li> <li>CS 05 Construct multi-view drawings</li> <li>CS 06 Perform Bench Works</li> <li>CS 07 Perform cutting on Power Hack Saw</li> <li>CS 08 Interpret Welding/Fabrication Requirements</li> <li>CS 09 Perform Pre-welding operations</li> <li>CS 10 Identify Metal forming operations</li> <li>CS 11 Perform Preparation for Metal Processing</li> <li>CS 12 Carryout Housekeeping Jobs</li> <li>CS 13 Perform General Maintenance</li> </ul>
<b>Purpose of Assessment</b>	<b>Summative Assessment</b>
<b>Candidate Details</b>	Name: _____ Registration/Roll Number: _____ Signature: _____
<b>Assessment Outcome</b>	<p> <b>COMPETENT</b> <input type="checkbox"/> <span style="margin-left: 100px;"><b>NOT YET COMPETENT</b> <input type="checkbox"/></span> </p> <p>Name of the Assessor _____</p> <p>Assessor's code: _____</p> <p>Signature: _____</p>

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

<b>Assessment Task</b>	<ul style="list-style-type: none"> <li>Interpret the given drawing and produce a component safely using bench work as per the requirement</li> </ul>			
<b>During the practical assessment, candidate demonstrated the following:</b>		<b>Yes</b>	<b>No</b>	<b>Remarks</b>
1.	Arrange and wear personal protective equipment to ensure correct fit and protection in compliance with company procedures.			
2.	Identify health and safety hazards associated with the work			
3.	Interpret the technical drawing of given job			
4.	Mark layout of job as per drawing using required marking tool.			
5.	Perform clamping of the work piece according to the instructions			
6.	Select blade according to the material and set in hacksaw frame			
7.	Perform sawing according to the instructions			
8.	Perform filing as per standard procedures			
9.	Perform drilling as per standard procedures			
10.	Perform post drilling operations			
11.	Select reamer according to the job specification			
12.	Perform reaming as per job specification			
13.	Perform taping as per job specification			
14.	Perform counter sinking as per standard procedures			
15.	Check quality of the component at suitable intervals.			
16.	Verify the final job with the given drawing			
<b>Competent</b> <input type="checkbox"/>		<b>Not Yet Competent</b> <input type="checkbox"/>		

## Knowledge Assessment

<b>Qualification</b>	<b>National Vocational Certificate in Metal Forming &amp; Processing Level 2</b>
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<b>Purpose of Assessment</b>	<b>Summative Assessment</b>
<b>Candidate Details</b>	Name: _____ Registration/Roll Number: _____ Candidate Signature: _____
<b>Assessment Outcome</b>	<div style="display: flex; justify-content: space-around; align-items: center;"> <span><b>COMPETENT</b> <input type="checkbox"/></span> <span><b>NOT YET COMPETENT</b> <input type="checkbox"/></span> </div> Name of the Assessor: _____ Assessor's code: _____ Signature of the Assessor: _____

Candidate's response is not required to be identical, but similar concepts and/or keywords must be used. Oral questioning may be used to clarify candidate understanding of topic and its application.

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	Name the types of rolling operation		
2.	What is the difference between wire drawing and deep drawing operations		

3.	Enlist the post treatment techniques required for forging operations		
4.	Define casting and pattern		
5.	Name the types of shearing operations		
6.	Name the types of bending operations		
7.	What is the use of welding torch?		



8.	Define extrusion		
9.	Uses of Clamping devices		
10.	What is the difference between counter sinking and counter boring?		

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