

## Instruction Sheet for the Candidate

<b>Qualification</b>	<b>National Vocational Certificate in Metal Forming &amp; Processing Level 3</b>
<b>Competency Standard</b>	Develop 3D design
<b>Purpose of Assessment</b>	<b>Formative 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> <ul style="list-style-type: none"> <li>• CU1. Develop 3D Objects</li> <li>• CU2. Manipulate 3D objects using 3D Editing Tools</li> <li>• CU3. Render 3D Model</li> </ul>
<b>Time: 04 Hrs.</b>	During a practical assessment, under observation by an assessor, you are required to
<b>Minimum Evidence Required</b>	<p><b>CU1. Develop 3D Objects</b>  <b>P1.</b> Setup &amp; save 3D drawing interface for required specifications.  <b>P2.</b> Setup 3D user interface settings for required specifications.  <b>P3.</b> Create 3D objects with given measurements.</p> <p><b>CU2. Manipulate 3D objects using 3D Editing Tools</b>  <b>P1.</b> Modify 3D objects in line with the requirements.  <b>P2.</b> Make customized 3D models according to the requirement of given job.  <b>P3.</b> Convert 3D Face objects into a single mesh objects.</p> <p><b>CU3. Render 3D Model</b>  <b>P1.</b> Apply material to required 3D Model as per given specification  <b>P2.</b> Apply lights to get the requisite scene of required 3D model  <b>P3.</b> Assign cameras to execute different views of required 3D Model.  <b>P4.</b> Render and print the 3D model according to required size &amp; orientation.  <b>P5.</b> Apply texture to 3D model as per given specification.</p>

## Self-Assessment Checklist

<b>Candidate Name</b>	
<b>Registration No.</b>	
<b>Qualification</b>	<b>National Vocational Certificate in Metal Forming &amp; Processing Level 3</b>
<b>Competency Standard</b>	Develop 3D design
<b>Purpose of Assessment</b>	<b>Formative Assessment</b>
<b>Assessment Task</b>	<ul style="list-style-type: none"> <li>• CU1. Develop 3D Objects</li> <li>• CU2. Manipulate 3D objects using 3D Editing Tools</li> <li>• CU3. Render 3D Model</li> </ul>

I can.....

<b>Performance Criteria</b>	<b>Yes</b>	<b>No</b>
<b>P1.</b> Setup & save 3D drawing interface for required specifications.	<input type="checkbox"/>	<input type="checkbox"/>
<b>P2.</b> Setup 3D user interface settings for required specifications.	<input type="checkbox"/>	<input type="checkbox"/>
<b>P3.</b> Create 3D objects with given measurements.	<input type="checkbox"/>	<input type="checkbox"/>
<b>P4.</b> Modify 3D objects in line with the requirements.	<input type="checkbox"/>	<input type="checkbox"/>
<b>P5.</b> Make customized 3D models according to the requirement of given job.	<input type="checkbox"/>	<input type="checkbox"/>
<b>P6.</b> Convert 3D Face objects into a single mesh objects.	<input type="checkbox"/>	<input type="checkbox"/>
<b>P7.</b> Apply material to required 3D Model as per given specification	<input type="checkbox"/>	<input type="checkbox"/>
<b>P8.</b> Apply lights to get the requisite scene of required 3D model	<input type="checkbox"/>	<input type="checkbox"/>
<b>P9.</b> Assign cameras to execute different views of required 3D Model.	<input type="checkbox"/>	<input type="checkbox"/>
<b>P10.</b> Render and print the 3D model according to required size & orientation.	<input type="checkbox"/>	<input type="checkbox"/>
<b>P11.</b> Apply texture to 3D model as per given specification.	<input type="checkbox"/>	<input type="checkbox"/>

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

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

## Assessors Judgment Guide

<b>Qualification</b>	<b>National Vocational Certificate in Metal Forming &amp; Processing Level 3</b>
<b>Competency Standard</b>	Develop 3D design
<b>Purpose of Assessment</b>	<b>Formative Assessment</b>
<b>Candidate Details</b>	Name: _____ Registration/Roll Number: _____ Signature: _____
<b>Assessment Outcome</b>	<div style="display: flex; justify-content: space-between; 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: _____

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>CU1. Develop 3D Objects</li> <li>CU2. Manipulate 3D objects using 3D Editing Tools</li> <li>CU3. Render 3D Model</li> </ul>			
<b>During the practical assessment, candidate demonstrated the following:</b>		<b>Yes</b>	<b>No</b>	<b>Remarks</b>
1.	Setup & save 3D drawing interface for required specifications.			
2.	Setup 3D user interface settings for required specifications.			
3.	Create 3D objects with given measurements.			
4.	Modify 3D objects in line with the requirements.			
5.	Make customized 3D models according to the requirement of given job.			
6.	Convert 3D Face objects into a single mesh objects.			
7.	Apply material to required 3D Model as per given specification			
8.	Apply lights to get the requisite scene of required 3D model			
9.	Assign cameras to execute different views of required 3D Model.			
10.	Render and print the 3D model according to required size & orientation.			
11.	Apply texture to 3D model as per given specification.			
<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 3</b>
<b>Competency Standard</b>	Develop 3D design
<b>Purpose of Assessment</b>	<b>Formative 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.	What are 3D objects?		
2.	State 3D shape examples?		

3.	Differentiate between Surface Modelling and Solid Modelling.		

<b>Feedback to the Candidate</b>	
Candidate's Signature _____	Assessor's Signature _____