

Assessment Evidence Guide

for

“CAD Operator”

Level-3
(Summative Assessment)



**National Vocational & Technical
Training Commission**

Instruction Sheet for the Candidate

Title of Qualification: National Vocational Certificate Level-3 Computer Aided Design & Manufacturing (CAD Operator)	CS Code: 	Level: 3 	Version:01
Competency Standard Title: Develop 3D Surfaces in AutoCAD Develop 3D Model in AutoCAD Develop 3D Model in Sketch Up Manipulate Images in Adobe Photoshop Maintain Safety at Workplace Work in a Team Environment	Assessment Date (DD/MM/YY): Assessment Time: 4 ½ hrs.		

Candidate Details	Name: Registration/Roll Number:
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):</p> <p>Assessment Task 1: Candidate is required to develop and render 3D building model and create construction document as per instruction given by assessor.</p> <p>And complete:</p> <ol style="list-style-type: none"> Knowledge assessment test (Written or Oral) Portfolios at the time of assessment (if any)
Minimum Evidence Required	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 1:</p> <p>Performance Criteria 1: Create 3D objects with given measurements.</p> <p>Performance Criteria 2: Make customized 3D models according to the requirement of given job.</p> <p>Performance Criteria 3: Edit the existing surfaces through:</p> <ul style="list-style-type: none"> Fillet Trim Un trim Extend Sculpt <p>Performance Criteria 4: Apply material to required 3D Model as per given specification</p> <p>Performance Criteria 5: Apply lights to get the requisite scene of required 3D model</p> <p>Performance Criteria 6: Assign cameras to execute different views of</p>

	<p>required 3D Model.</p> <p>Performance Criteria 7: Apply texture to 3D model as per given specification.</p> <p>Performance Criteria 8: Render and print the 3D model according to required size & orientation.</p> <p>Performance Criteria 9: Check leads and cable for any visual damage before use</p> <p>Performance Criteria 10: Express your own opinions</p>
	<p>Portfolios required at the time of assessment (if any) for</p> <ul style="list-style-type: none"> ✓ File/folder includes evidence about Sketch Up ✓ File/folder includes evidence about Adobe Photoshop <p>Performance Criteria 1: Import/create 2D Drawing/image as per assigned specification.</p> <p>Performance Criteria 2: Create 3D object from 2D drawing/image in line with given measurements.</p> <p>Performance Criteria 3: Select the required tool and apply on image</p> <p>Performance Criteria 4: Create layers and open image or draw object or image on layer.</p> <p>Performance Criteria 5: Select all objects on a specific layer and also move object from one layer to another layer and also copy past the object on different layer</p>

Continued on following page

Assessors Judgment Guide

(to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

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 1		Description of Assessment Task 1 develop and render 3D building model and create construction document as per instruction given by assessor.		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Create 3D objects with given measurements.			
2.	Make customized 3D models according to the requirement of given job.			
3.	Performance Criteria 3: Edit the existing surfaces through: <ul style="list-style-type: none"> • Fillet • Trim • Un trim • Extend • Sculpt 			
4.	Apply material to required 3D Model as per given specification			
5.	Apply lights to get the requisite scene of required 3D model			
6.	Assign cameras to execute different views of required 3D Model.			
7.	Apply texture to 3D model as per given specification.			
8.	Render and print the 3D model according to required size & orientation.			
9.	Check leads and cable for any visual damage before use			
10.	Express your own opinions			

Competent <input type="checkbox"/>	Not Yet Competent <input type="checkbox"/>
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Portfolio		Description of Portfolio		
		✓ File/folder includes evidence about Sketch Up ✓ File/folder includes evidence about Adobe Photoshop		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Import/create 2D Drawing/image as per assigned specification.			
2.	Create 3D object from 2D drawing/image in line with given measurements.			
3.	Select the required tool and apply on image			
4.	Create layers and open image or draw object or image on layer.			
5.	Select all objects on a specific layer and also move object from one layer to another layer and also copy past the object on different layer			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Knowledge Assessment

Title of Qualification: National Vocational Certificate Level-3 Computer Aided Design & Manufacturing (CAD Operator)	CS Code:	Level: 03	Version: 01
Competency Standard Title: Develop 3D Surfaces in AutoCAD Develop 3D Model in AutoCAD Develop 3D Model in Sketch Up Manipulate Images in Adobe Photoshop Maintain Safety at Workplace Work in a Team Environment	Assessment Date (DD/MM/YY): Assessment Time: 30 min		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
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Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

Question	Candidate's answer
Answer these questions.	
1. Enlist three different views?	
2. Where is 3D command in AutoCAD?	
3. What are the benefits of Sketchup?	
4. What is Ctrl+J in Photoshop?	
5. Extrude means in 3D CAD?	