

ARCHITECTURE DRAFTING

Assessment Package

National Vocational
Certificate Level 2

Version 1 - July 2015

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Document Version

July, 2015

Islamabad, Pakistan

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ASSESSMENT MATERIAL EVIDENCE GUIDE	<h1>APPLY DRAFTING FUNDAMENTALS</h1>																				
Qualification Architecture Drafting CS Code: Level: 2 Credit: 31 Version: 1																					
CONTENTS	1. Assessment Summary and Record 2. Candidate Assessment 3. Assessor Judgment Guide 4. List of required tools/equipment, material and context of assessment																				
ASSESSMENT AND ASSESSOR DETAILS	Competent <input type="checkbox"/> Not Yet Competent <input type="checkbox"/>																				
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1

ASSESSMENT SUMMARY & RECORD

ACTIVITY	METHOD				DESIRED OUTCOMES	RESULT	
	WRITTEN	ORAL	PORTFOLIO	OBSERVATION		COMPETENT	NOT YET COMPETENT
NATURE OF ACTIVITY					DESIRED OUTCOMES FOR SUCCESSFUL ASSESSMENT OF COMPETENCY STANDARD: APPLY DRAFTING FUNDAMENTALS		
Practical Skill Demonstration				✓	<ul style="list-style-type: none"> Prepare working drawing using lead pencil (HB) for the given plan (see Annexure 1 for the sample plan) 		
Knowledge Assessment	✓	✓			<ul style="list-style-type: none"> Answer all questions your Assessor may have during the practical assessment. 		
Other Requirements			✓		<ul style="list-style-type: none"> N/A 		

2

CANDIDATE ASSESSMENT

Candidate's Name..... Father's Name

ALL WORK ASSESSED IN THIS COMPETENCY STANDARD MUST BE YOUR OWN WORK.

GUIDANCE TO CANDIDATE

To meet this standard you are required to complete the following tasks within **4 hours** timeframe:

- Prepare working drawing using lead pencil (HB) for the given plan (see Annexure 1 for the sample plan)

ACTIVITIES	CANDIDATE RESPONSE
1. Complete practical task of applying drafting fundamentals as per given drawing under observation by an assessor	<p>During a practical assessment, under observation by an assessor, I will correctly :</p> <ul style="list-style-type: none"> • Prepare working drawing using lead pencil (HB) for the given plan (see Annexure 1 for the sample plan) <ul style="list-style-type: none"> ✓ Place the drawing sheet (A3 size) on the drawing board. ✓ Draw the outline border and title of the drawing on the drawing sheet with the help of a lead pencil. ✓ Select the scale (1' = 1/4" or 1' = 1/8") for drawing the given plan. ✓ Sketch the single line plan on the drawing sheet as per the selected scale with the help of lead pencil. ✓ Convert the single line plan into double line plan using lead pencils to represent the walls. ✓ Mark the openings on the drawn plan by using symbols of doors, windows and ventilators on the drawing sheet using lead pencil. ✓ Finalize the drawn plan by converting construction /unnecessary lines into object lines ✓ Remove construction/unnecessary/reference lines from the drawn plan using eraser. ✓ Draw the interior layout using furniture and fixture symbols on the drawn plan. ✓ Label names and sizes (annotations) of areas (bed, kitchen, living & bath) on the drawn plan. ✓ Draw and verify dimensions of walls, windows, doors, and ventilators as per the given plan. ✓ Draw schedule/table of doors, windows and ventilators of the drawn plan on the drawing sheet.
2. Other requirements	<ul style="list-style-type: none"> • N/A
3. Answer any questions your assessor may have during the practical assessment	<ul style="list-style-type: none"> • My answers to questions are correct and demonstrate my understanding of the topics and their application.

3

ASSESSOR JUDGEMENT GUIDE

Candidate's Name Father's Name.....

INSTRUCTIONS FOR ASSESSOR

This section contains minimum evidence requirements. Oral questioning may be used to clarify candidate understanding of the topic and its application.

ACTIVITIES	MINIMUM EVIDENCE REQUIRED	YES	NO	ASSESSOR COMMENTS
1. Complete practical task of Drafting a Studio Apartment working Plan as per given drawing under observation by an assessor	During a practical assessment, under observation by an assessor, the candidate correctly carried out the following tasks:			
Prepare working drawing using lead pencil (HB) for the given plan (see Annexure 1 for the sample plan)	Placed the drawing sheet (A3 size) on the drawing board.			
	Drew the outline border and title of the drawing on the drawing sheet with the help of a lead pencil.			
	Selected the scale ($1' = 1/4''$ or $1' = 1/8''$) for drawing the given plan.			
	Sketched the single line plan on the drawing sheet as per the selected scale with the help of lead pencil.			
	Converted the single line plan into double line plan using lead pencils to represent the walls.			
	Marked the openings on the drawn plan by using symbols of doors, windows and ventilators on the drawing sheet using lead pencil.			
	Finalized the drawn plan by converting construction /unnecessary lines into object lines.			
	Removed construction/unnecessary/reference lines from the drawn plan using eraser.			
	Drew the interior layout using furniture and fixture symbols on the drawn plan.			
	Labelled names and sizes (annotations) of areas (bed, kitchen, living & bath) on the drawn plan.			
	Drew and verify dimensions of walls, windows, doors, and ventilators as per the given plan.			
	Drew schedule/table of doors, windows and ventilators of the drawn plan on the drawing sheet.			
2. Other requirements	N/A			

<p>3. Answer any questions the assessor may have during the practical assessment</p>	<p>Candidate's answers to questions are correct and demonstrate understanding of the topics and their application.</p> <p>Assessor to document below all questions asked and candidate answers. Use extra sheets if required and attach.</p>			
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4

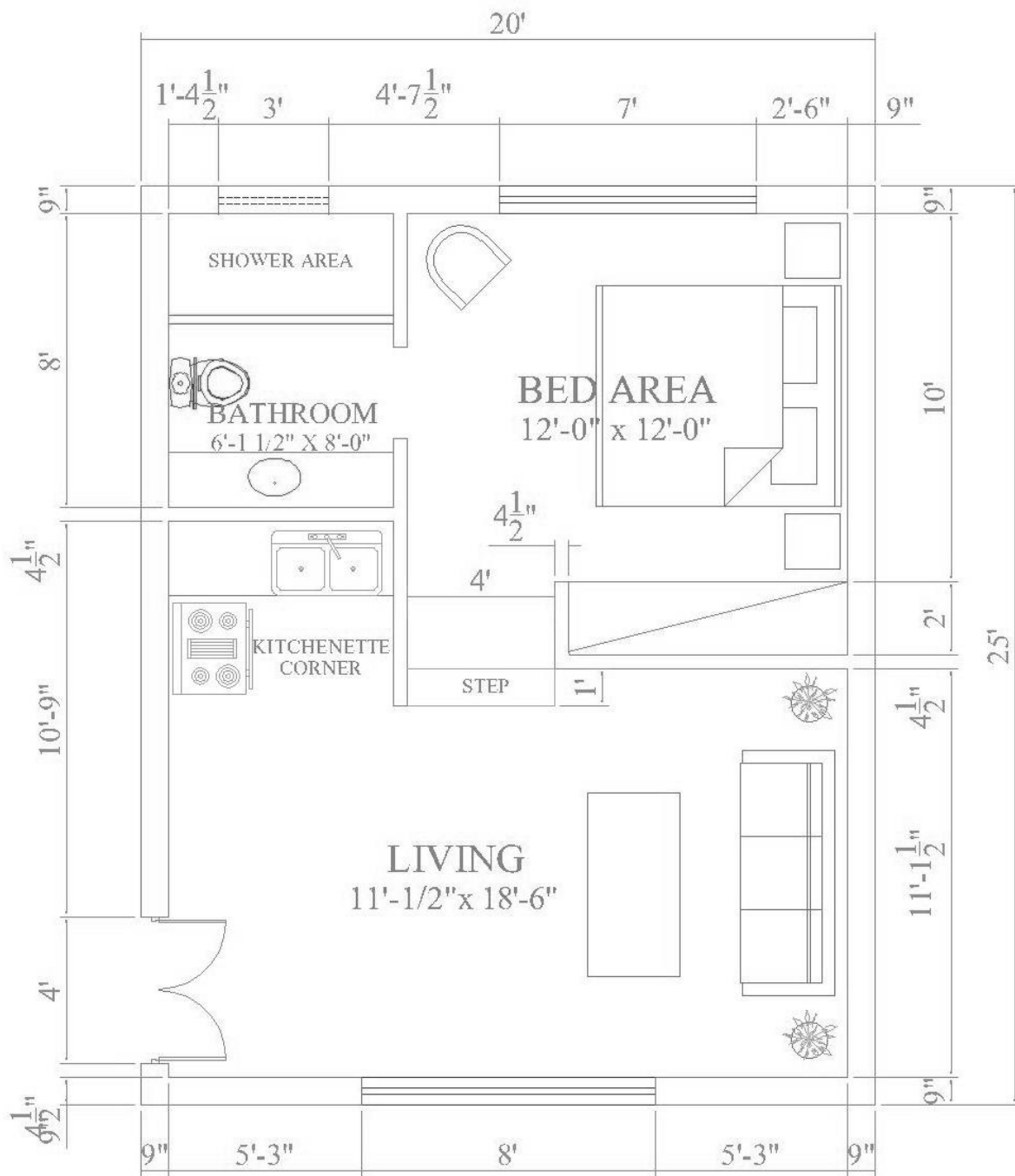
LIST OF TOOLS, EQUIPMENT, MATERIAL AND CONTEXT OF ASSESSMENT

INSTRUCTIONS	<p>This section contains information regarding;</p> <ul style="list-style-type: none"> Context of the assessment List of required tools and equipment. List of consumable items required during the service
1. Context of Assessment	This task will be performed in real time/simulated environment.

2. List of tools and equipment required (for five candidates)		
S. No	Items	Quantity
1	Architectural Scale	5
2	Architectural Board/template	5
3	Set Squares	5
4	T-Scale	5
5	Pencil Sharpener	5
6	Paper Cutter	5
7	Drawing/Geometry Box	5

3. List of consumable items required (for five candidates)		
S. No	Items	Quantity
1	Lead Pencils (HB)	5
2	Eraser	5
3	Sand paper	5
4	Scotch/Paper Tape	5
5	Drawing Sheets	5

Annexure 1:





ASSESSMENT MATERIAL EVIDENCE GUIDE	<h1>PERFORM TECHNICAL MATHEMATICS</h1>
Qualification آئی ڈی CS Code Level 2 Credit 7 Version 1	
CONTENTS	1. Assessment 2. Candidate 3. Assessor 4. List of
ASSESSMENT AND ASSESSOR DETAILS	Competent <input type="checkbox"/> Not Yet Competent <input type="checkbox"/>
	Assessor <input type="checkbox"/> Re-Assessor <input type="checkbox"/>
	Assessor's Name _____ Assessor's Code _____ Assessor's Signature _____ Date _____ <div style="display: flex; justify-content: flex-end; align-items: center;"> <div style="border: 1px solid black; width: 20px; height: 20px; margin-right: 5px;"></div> DD <div style="border: 1px solid black; width: 20px; height: 20px; margin-right: 5px; margin-left: 10px;"></div> MM <div style="border: 1px solid black; width: 20px; height: 20px; margin-left: 10px;"></div> Y </div>
CANDIDATE DETAILS	Candidate's Name _____ <small>First Name Last Name</small>
	Father's Name _____
	Identification _____
	CNIC/BFORM # <div style="border: 1px solid black; display: inline-block; width: 100px; height: 20px; vertical-align: middle;"></div>
	Region _____ Assessor By _____
	Gender Male <input type="checkbox"/> Female <input type="checkbox"/> Trans <input type="checkbox"/>
	Candidate's Signature _____ <small>Signature</small>
ASSESSMENT RESULTS SUMMARY FORM	Assessment Results Summary Form. Signatures _____ NAVTTC
NAVTTTC OFFICE ONLY	1. DATE FORM RECEIVED: <div style="border: 1px solid black; display: inline-block; width: 60px; height: 20px; vertical-align: middle;"></div> <small>DD MM</small>
	2. DATE ENTERED INTO DATABASE: <div style="border: 1px solid black; display: inline-block; width: 60px; height: 20px; vertical-align: middle;"></div> <small>DD MM</small>

ASSESSMENT SUMMARY RECORD

ACTIVITY	METHOD				DESIRED OUTCOMES	RESULT	
	WRITTEN	ORAL	PORTFOLIO	OBSERVATION		COMPETENT	NOT COMPETENT
NATURE OF ACTIVITY					DESIRED OUTCOMES FOR SUCCESSFUL ASSESSMENT OF COMPETENCY STANDARD: PERFORM TECHNICAL MATHEMATICS		
Prsk Dtn				✓	<ul style="list-style-type: none"> • Prsk Dtn 		
Kly Atn	✓	✓			<ul style="list-style-type: none"> • Atn Atn 		
Ob Rtn			✓		<ul style="list-style-type: none"> • N/A 		

2

CANDIDATE ASSESSMENT

Candidate Name Follower's Name

ALL WORK ASSESSED IN THIS COMPETENCY STANDARD MUST BE YOUR OWN WORK.

GUIDANCE TO CANDIDATE

Total time: four hours

- Prepare a report to be presented to the assessor

ACTIVITIES	CANDIDATE RESPONSE
1. Complete practical task of performing technical mathematics under observation by an assessor	<p> Prepare a report <ul style="list-style-type: none"> • Prepare a report to be presented to the assessor <ul style="list-style-type: none"> ✓ Calculate the area of the ground floor's carpet ✓ Calculate the volume of the carpet ✓ Calculate the perimeter of the carpet ✓ Calculate the area of the carpet ✓ Calculate the volume of the carpet (V = L x W x H) (1 Cf = 6.22 G) ✓ Determine the area of the carpet </p>
2. Other requirements	<ul style="list-style-type: none"> • N/A
3. Answer any questions you assessor may have during the practical assessment	<p>My assessor</p>

3

ASSESSOR JUDGEMENT GUIDE

Case No: Filler's Name:

INSTRUCTIONS FOR ASSESSOR	Title: Organisation: Address: City: State: Zip: Country:
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ACTIVITIES	MINIMUM EVIDENCE REQUIRED	YES	NO	ASSESSOR COMMENTS
1. Complete practical task performing technical mathematics under observation by an assessor	Draw a floor plan of a house with a rectangular plot of 10m x 15m. The house has a rectangular living room of 4m x 6m, a rectangular kitchen of 3m x 4m, a rectangular dining room of 3m x 4m, a rectangular bedroom of 3m x 4m, a rectangular bathroom of 2m x 3m, and a rectangular garage of 4m x 6m. The house is situated on a rectangular plot of 10m x 15m. The house is situated on a rectangular plot of 10m x 15m.			
Prepare a site plan for a house with a rectangular plot of 10m x 15m. The house has a rectangular living room of 4m x 6m, a rectangular kitchen of 3m x 4m, a rectangular dining room of 3m x 4m, a rectangular bedroom of 3m x 4m, a rectangular bathroom of 2m x 3m, and a rectangular garage of 4m x 6m. The house is situated on a rectangular plot of 10m x 15m. The house is situated on a rectangular plot of 10m x 15m.	Calculate the area of the plot.			
	Calculate the area of the living room.			
	Calculate the area of the kitchen.			
	Calculate the area of the dining room.			
	Calculate the area of the bedroom.			
	Calculate the area of the bathroom.			
2 Other requirements	N/A			

<p>3 Answer any questions the assessor may ask during the practical assessment</p>	<p>Candidate's answers to questions are correct and demonstrate</p> <p>Good</p> <p>Acceptable</p> <p>Unsatisfactory</p> <p style="text-align: center;">a</p>			
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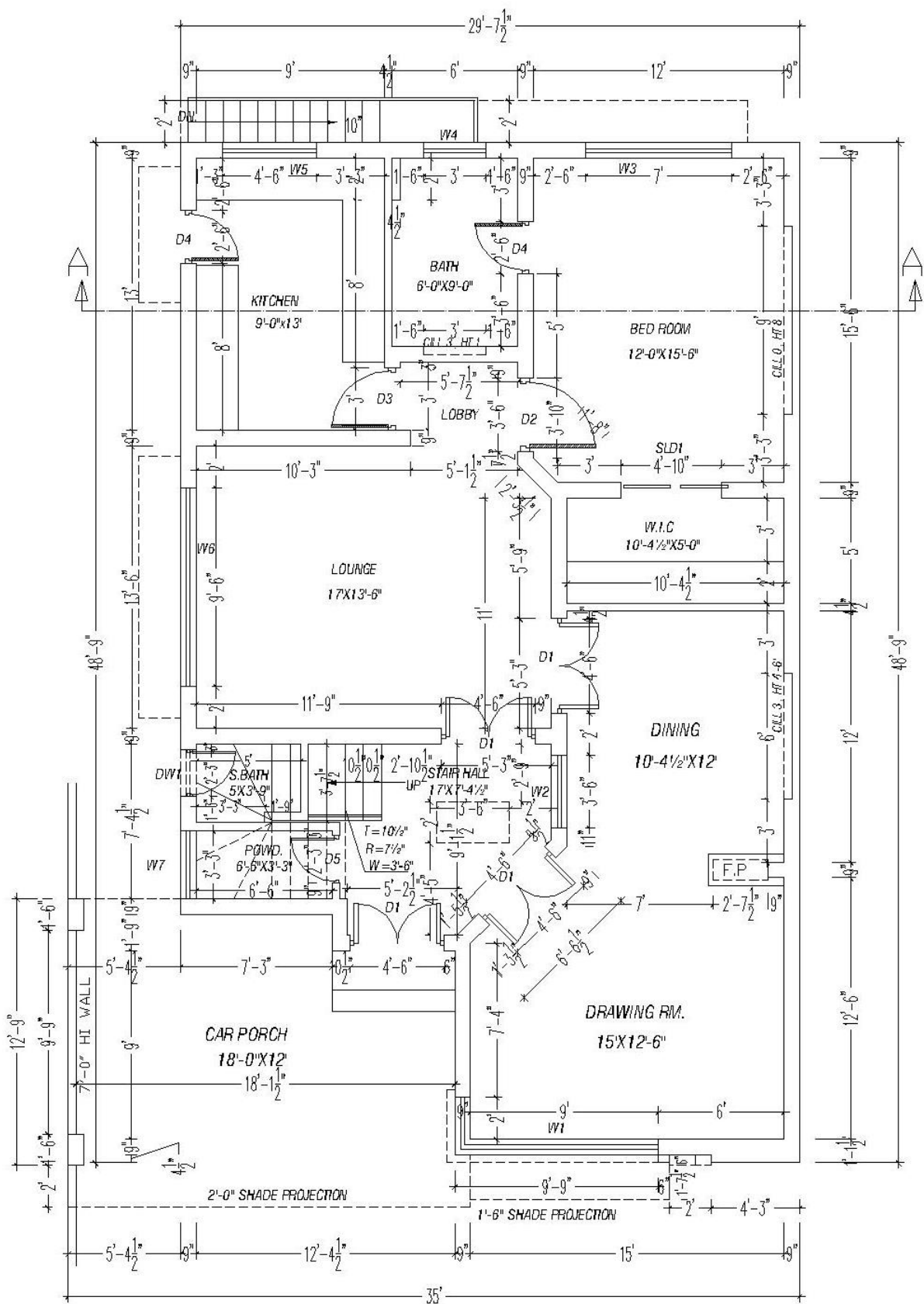
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LIST OF TOOLS, EQUIPMENT, MATERIAL AND CONTEXT OF ASSESSMENT

INSTRUCTIONS	<ul style="list-style-type: none"> • Cl • L • L
1. Context of Assessment	real time simulation

2. List of tools and equipment required for five candidates		
S. No	Items	Quantity
1	Cb	5
2	Sb	5
3	Ab	5
4	Pb	5

3. List of consumable items required for five candidates		
S. No	Items	Quantity
1	A4 Paper ()	10
2	L Paper	5
3	E	5
4	P	5
5	A4 Sheet	5





ASSESSMENT MATERIAL EVIDENCE GUIDE	<h1>APPLY COMPUTER AIDED DESIGN/DRAFTING</h1>																				
Qualification Architecture Drafting CS Code: Level: 2 Credit: 30 Version: 1																					
CONTENTS	1. Assessment Summary and Record 2. Candidate Assessment 3. Assessor Judgment Guide 4. List of required tools/equipment, material and context of assessment																				
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ASSESSMENT SUMMARY & RECORD

ACTIVITY	METHOD				DESIRED OUTCOMES	RESULT	
	WRITTEN	ORAL	PORTFOLIO	OBSERVATION		COMPETENT	NOT YET COMPETENT
NATURE OF ACTIVITY					DESIRED OUTCOMES FOR SUCCESSFUL ASSESSMENT OF COMPETENCY STANDARD: APPLY COMPUTER AIDED DESIGN/DRAFTING		
Practical Skill Demonstration				✓	<ul style="list-style-type: none"> Use Computer Aided Design (CAD) for architectural drawings 		
Knowledge Assessment	✓	✓			<ul style="list-style-type: none"> Answer all questions your Assessor may have during the practical assessment. 		
Other Requirements			✓		<ul style="list-style-type: none"> N/A 		

2

CANDIDATE ASSESSMENT

Candidate's Name..... Father's Name

ALL WORK ASSESSED IN THIS COMPETENCY STANDARD MUST BE YOUR OWN WORK.

GUIDANCE TO CANDIDATE

To meet this standard you are required to complete the following tasks within **four hours** timeframe:

- Create 2D plan, layout, section and elevation of the given drawing by using AutoCAD software (see Annexure 1 for the sample drawing).
- Create 3D model (exterior) of the given 2D plan by using AutoCAD software (see Annexure 2 for the sample drawing).

ACTIVITIES	CANDIDATE RESPONSE
<p>1. Complete practical task of applying Computer Aided Design/drafting under observation by an assessor</p>	<p>During a practical assessment, under observation by an assessor, I will correctly :</p> <ul style="list-style-type: none"> • Create 2D plan, layout, section and elevation of the given drawing by using AutoCAD software (see Annexure 1 for the sample drawing). <ul style="list-style-type: none"> ✓ Set the units of measurement to Architectural Units in the software. ✓ Set the Drawing Limits of the drawing area in the software. ✓ Set the Dimension and Text Styles of the drawing in the software. ✓ Set and adjust the Layers with respect to their names, colours, line styles and line weights using Layer Style Manager for the given drawing. ✓ Use Draw and Modify toolbars to draw the given plan. ✓ Draw/place the symbols of doors, windows and ventilators in the plan. ✓ Draw/place layout (furniture & fixture) of the spaces in the plan by using Component Library or blocks. ✓ Add labels and sizes (annotations) of the spaces in the plan as per the given drawing. ✓ Mark dimensions for walls, doors, windows, ventilators, passages, lawn, boundary wall and entrance gate in the plan. ✓ Draw the front elevation of the drawn plan along with details (Parapet, front railing, doors & windows shades and projections). ✓ Draw a section of the plan as per the Cutting-plane line (Section line) marked in the given drawing. ✓ Assign the components of the plan to the relevant layers such as walls, doors, windows, ventilators, columns, dimensions, text, furniture, fixture, hatchings, planters, steps and pavements. ✓ Draw outline borders and drawing title block (Seal) of the plan. ✓ Make and save Jpeg/PDF of the prepared 2D working plan on A3 size paper using the scale of 1' = 1/4" or 1' = 1/8" in the hard drive of the system. ✓ Print the prepared 2D plan on A3 size paper using the scale of 1' = 1/4" or 1' = 1/8". • Create 3D model (exterior) of the given 2D plan by using AutoCAD software (see Annexure 2 for the sample drawing). <ul style="list-style-type: none"> ✓ Adjust Viewports and/or Views of the drawing window in the software. ✓ Convert the given plan into a 3D model by selecting one of the methods for extrusion (Polyline, Region, Boundary or 3D objects/modelling). ✓ Make openings for doors, windows and ventilators by using the Subtract and/or Union command of 3D exterior model. ✓ Make/Insert doors, windows and ventilators in the openings of 3D exterior model. ✓ Complete the 3D model of the plan by making details (Parapet, railing, boundary walls, window shades, projections and entrance gate). ✓ Save the model view in Jpeg/PDF by using any one shading method (Conceptual, 2Dwireframe, Hidden, Realistic) in the hard drive of the system.

2. Other requirements	<ul style="list-style-type: none">• N/A
3. Answer any questions your assessor may have during the practical assessment	My answers to questions are correct and demonstrate my understanding of the topics and their application.

3

ASSESSOR JUDGEMENT GUIDE

Candidate's Name Father's Name.....

INSTRUCTIONS FOR ASSESSOR

This section contains minimum evidence requirements. Oral questioning may be used to clarify candidate understanding of the topic and its application.

ACTIVITIES	MINIMUM EVIDENCE REQUIRED	YES	NO	ASSESSOR COMMENTS
1. Complete practical task of Apply Computer Aided Design/Drafting under observation by an assessor	During a practical assessment, under observation by an assessor, the candidate correctly carried out the following tasks:			
Create 2D plan layout, section and elevation of the given drawing by using AutoCAD software (see Annexure 1 for the sample drawing).	Set the units of measurement to Architectural Units in the software.			
	Set the Drawing Limits of the drawing area in the software.			
	Set the Dimension and Text Styles of the drawing in the software.			
	Set and adjust the Layers with respect to their names, colours, line styles and line weights using Layer Style Manager for the given drawing.			
	Used Draw and Modify toolbars to draw the given plan.			
	Drew/placed the symbols of doors, windows and ventilators in the plan.			
	Drew/placed layout (furniture & fixture) of the spaces in the plan by using Component Library or blocks.			
	Added labels and sizes (annotations) of the spaces in the plan as per the given drawing.			
	Marked dimensions for walls, doors, windows, ventilators, passages, lawn, boundary wall and entrance gate in the plan.			
	Drew the front elevation of the drawn plan along with details (Parapet, front railing, doors & windows shades and projections).			
	Drew a section of the plan as per the Cutting-plane line (Section line) marked in the given drawing.			
	Assigned the components of the plan to the relevant layers such as walls, doors, windows, ventilators, columns, dimensions, text, furniture, fixture, hatchings, planters, steps and pavements.			
	Drew outline borders and drawing title block (Seal) of the plan.			
	Made and saved Jpeg/PDF of the prepared 2D working plan on A3 size paper using the scale of 1' = 1/4" or 1' = 1/8" in the hard drive of the system.			
Printed the prepared 2D plan on A3 size paper using the scale of 1' = 1/4" or 1' = 1/8".				
Create 3D model (exterior) of the given 2D plan by using AutoCAD software (see Annexure 2 for the sample drawing).	Adjusted Viewports and/or Views of the drawing window in the software.			
	Converted the given plan into a 3D model by selecting one of the methods for extrusion (Polyline, Region, Boundary or 3D objects/modelling).			
	Made openings for doors, windows and ventilators by using the Subtract and/or Union command of 3D exterior model.			

	Made/Inserted doors, windows and ventilators in the openings of 3D exterior model.			
	Completed the 3D model of the plan by making details (Parapet, railing, boundary walls, window shades, projections and entrance gate).			
	Saved the model view in Jpeg/PDF by using any one shading method (Conceptual, 2Dwireframe, Hidden, Realistic) in the hard drive of the system.			
2. Other requirements	N/A			

<p>3. Answer any questions the assessor may have during the practical assessment</p>	<p>Candidate's answers to questions are correct and demonstrate understanding of the topics and their application.</p> <p>Assessor to document below all questions asked and candidate answers. Use extra sheets if required and attach.</p>			
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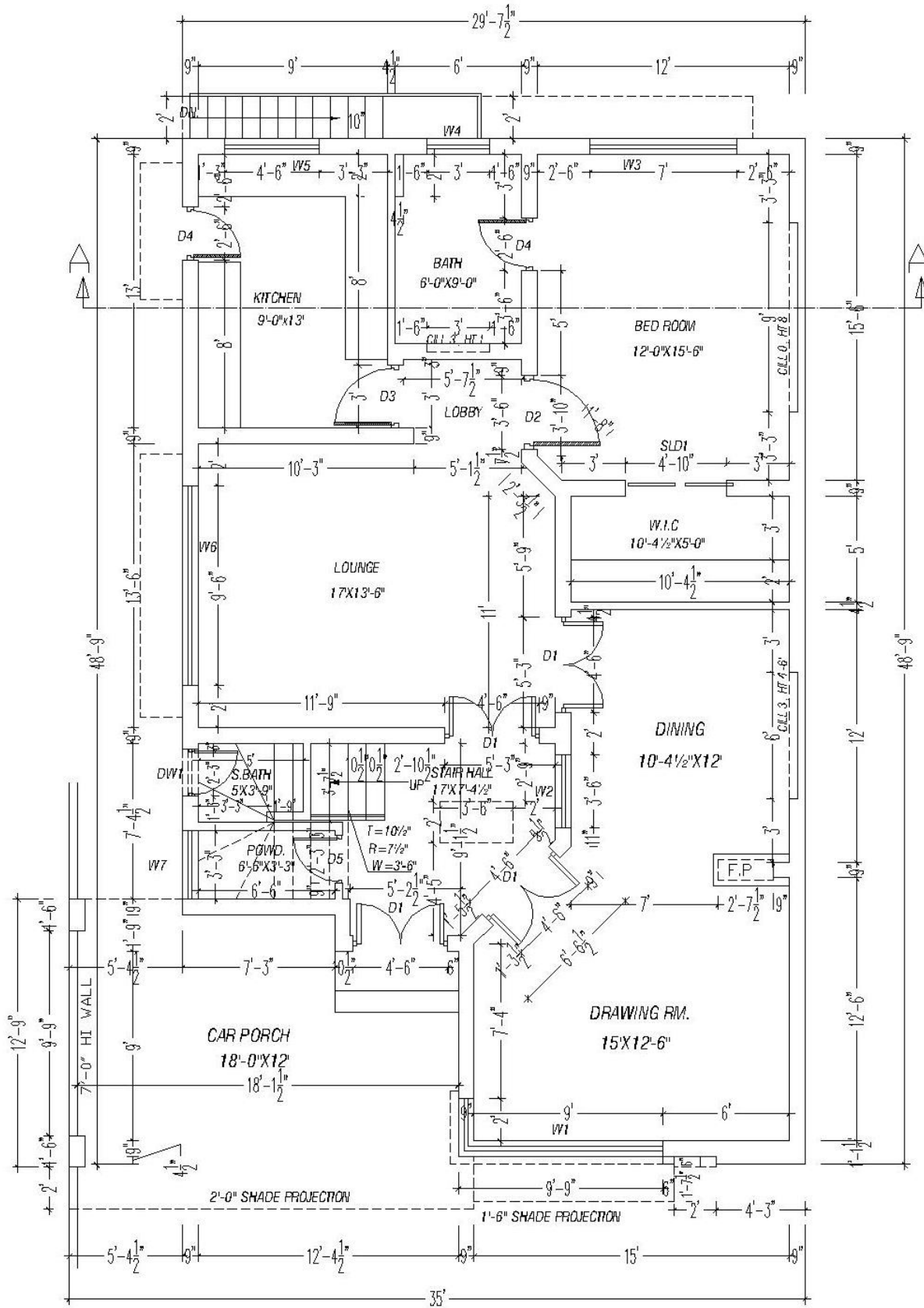
4

LIST OF TOOLS, EQUIPMENT, MATERIAL AND CONTEXT OF ASSESSMENT

INSTRUCTIONS	<p>This section contains information regarding;</p> <ul style="list-style-type: none"> Context of the assessment List of required tools and equipment. List of consumable items required during the service
1. Context of Assessment	This task will be performed in real time/simulated environment.

2. List of tools and equipment required (for five candidates)		
S. No	Items	Quantity
1	Computer system with Mouse having AutoCAD (2009 or above) software	5
2	A3 Size Printer	1
3	Power backup (ups or generator) min 1000 KVA	1

3. List of consumable items required (for five candidates)		
S. No	Items	Quantity
1	A3 Size printer paper	5
2		0
3		0





ASSESSMENT MATERIAL EVIDENCE GUIDE	<h1>ARCHITECTURE DRAFTING</h1>																				
Qualification Architecture Drafting CS Code: Level: 2 Credit: 80 Version: 1																					
CONTENTS	1. Assessment Summary and Record 2. Candidate Assessment 3. Assessor Judgment Guide 4. List of required tools/equipment, material and context of assessment																				
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	Father's Name																				
	Institute Name and District																				
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	Registration Number issued by Assessment Body																				
	Gender Male <input type="checkbox"/> Female <input type="checkbox"/> Transgender <input type="checkbox"/>																				
Candidate's Consent I agree to the time and date of the assessment and am aware of the requirements of the assessment. I fully understand my rights of appeal. Candidate's Signature																					
ASSESSMENT RESULTS SUMMARY FORM	You can use this coversheet as an <i>Assessment Results Summary Form</i> . Simply post a photocopy of this completed coversheet to NAVTTCC																				
NAVTTCC OFFICE ONLY	1. DATE FORM RECEIVED: <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table> <div style="display: flex; justify-content: space-around; width: 100px;">DDMMYYYY</div>																				
	2. DATE ENTERED INTO DATABASE: <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table> <div style="display: flex; justify-content: space-around; width: 100px;">DDMMYYYY</div>																				

1

ASSESSMENT SUMMARY & RECORD

ACTIVITY	METHOD				DESIRED OUTCOMES	RESULT	
	WRITTEN	ORAL	PORTFOLIO	OBSERVATION		COMPETENT	NOT YET COMPETENT
NATURE OF ACTIVITY					DESIRED OUTCOMES FOR SUCCESSFUL ASSESSMENT OF COMPETENCY STANDARD: ARCHITECTURE DRAFTING		
Practical Skill Demonstration				✓	<ul style="list-style-type: none"> Prepare the schedule of areas in Imperial units of the provided residential plan(see Annexure 1 for reference) Prepare working drawing using lead pencil (HB) for the given plan (see Annexure 1 for the sample plan) Create 2D plan and an elevation of the given drawing by using AutoCAD software (see Annexure 1 for the sample drawing). Create 3D model (exterior) of the given 2D plan by using AutoCAD software (see Annexure 1 for the sample drawing). 		
Knowledge Assessment	✓	✓			<ul style="list-style-type: none"> Answer all questions your Assessor may have during the practical assessment. 		
Other Requirements			✓		<ul style="list-style-type: none"> N/A 		

2

CANDIDATE ASSESSMENT

Candidate's Name..... Father's Name

ALL WORK ASSESSED IN THIS COMPETENCY STANDARD MUST BE YOUR OWN WORK.

GUIDANCE TO CANDIDATE

To meet this standard you are required to complete the following tasks within **five hours** timeframe:

- Prepare the schedule of areas in Imperial units of the provided residential plan(see Annexure 1 for reference)
- Prepare working drawing using lead pencil (HB) for the given plan (see Annexure 1 for the sample plan)
- Create 2D plan and an elevation of the given drawing by using AutoCAD software (see Annexure 1 for the sample drawing).
- Create 3D model (exterior) of the given 2D plan by using AutoCAD software (see Annexure 1 for the sample drawing).

ACTIVITIES	CANDIDATE RESPONSE
<p>1. Complete practical task of Architecture Drafting under observation by an assessor</p>	<p>During a practical assessment, under observation by an assessor, I will correctly :</p> <ul style="list-style-type: none"> • Prepare the schedule of areas in Imperial units of the provided residential plan (see Annexure 1 for reference). <ul style="list-style-type: none"> ✓ Calculate and write down the total area of the plot on the given drawing. ✓ Calculate and write down ground floor's covered area of the plot on the given drawing. ✓ Calculate and write down the floors/rooms area of the plan on the given drawing. ✓ Calculate and write down the open areas of the plan (passages, lawns and patios) on the given drawing. ✓ Draw the legend of areas and write down the calculations on A4 size scholar sheet with the help of lead pencil. • Prepare working drawing using lead pencil (HB) for the given plan (see Annexure 1 for the sample plan) <ul style="list-style-type: none"> ✓ Place the drawing sheet (A3 size) on the drawing board. ✓ Draw the outline border and title of the drawing on the drawing sheet with the help of a lead pencil. ✓ Select the scale (1' = 1/4" or 1' = 1/8") for drawing the given plan. ✓ Sketch the single line plan on the drawing sheet as per the selected scale with the help of lead pencil. ✓ Convert the single line plan into double line plan using lead pencils to represent the walls. ✓ Mark the openings on the drawn plan by using symbols of doors, windows and ventilators on the drawing sheet using lead pencil. ✓ Finalize the drawn plan by converting construction /unnecessary lines into object lines ✓ Remove construction/unnecessary/reference lines from the drawn plan using eraser. ✓ Label names and sizes (annotations) of areas (bed, kitchen, living & bath) on the drawn plan. . ✓ Draw and verify dimensions of walls, windows, doors, and ventilators as per the given plan. ✓ Draw schedule/table of doors, windows and ventilators of the drawn plan on the drawing sheet. • Create 2D plan and elevation of the given drawing by using AutoCAD software (see Annexure 1 for the sample drawing). <ul style="list-style-type: none"> ✓ Set the units of measurement to Architectural Units in the software. ✓ Set the Drawing Limits of the drawing area in the software. ✓ Set the Dimension and Text Styles of the drawing in the software. ✓ Set and adjust the Layers with respect to their names, colours, line styles and line weights using Layer Style Manager for the given drawing. ✓ Use Draw and Modify toolbars to draw the given plan. ✓ Draw/place the symbols of doors, windows and ventilators in the plan. ✓ Add labels and sizes (annotations) of the spaces in the plan as per the given drawing. ✓ Mark dimensions for walls, doors, windows, ventilators, passages, lawn, boundary wall and entrance gate in the plan. ✓ Draw the front elevation of the drawn plan along with details (Parapet, front railing, doors & windows shades and projections).

	<ul style="list-style-type: none"> ✓ Assign the components of the plan to the relevant layers such as walls, doors, windows, ventilators, columns, dimensions, text, furniture, fixture, hatchings, planters, steps and pavements. ✓ Draw outline borders and drawing title block (Seal) of the plan. ✓ Make and save Jpeg/PDF of the prepared 2D working plan on A3 size paper using the scale of 1' = 1/4" or 1' = 1/8" in the hard drive of the system. ✓ Print the prepared 2D plan on A3 size paper using the scale of 1' = 1/4" or 1' = 1/8". • Create 3D model (exterior) of the given 2D plan by using AutoCAD software (see Annexure 2 for the sample drawing). <ul style="list-style-type: none"> ✓ Adjust Viewports and/or Views of the drawing window in the software. ✓ Convert the given plan into a 3D model by selecting one of the methods for extrusion (Polyline, Region, Boundary or 3D objects/modelling). ✓ Make openings for doors, windows and ventilators by using the Subtract and/or Union command of 3D exterior model. ✓ Make/Insert doors, windows and ventilators in the openings of 3D exterior model. ✓ Complete the 3D model of the plan by making details (Parapet, railing, boundary walls, window shades, projections and entrance gate). ✓ Save the model view in Jpeg/PDF by using any one shading method (Conceptual, 2Dwireframe, Hidden, Realistic) in the hard drive of the system.
2. Other requirements	<ul style="list-style-type: none"> • N/A
3. Answer any questions your assessor may have during the practical assessment	My answers to questions are correct and demonstrate my understanding of the topics and their application.

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ASSESSOR JUDGEMENT GUIDE

Candidate's Name Father's Name.....

INSTRUCTIONS FOR ASSESSOR

This section contains minimum evidence requirements. Oral questioning may be used to clarify candidate understanding of the topic and its application.

ACTIVITIES	MINIMUM EVIDENCE REQUIRED	YES	NO	ASSESSOR COMMENTS
1. Complete practical task Architecture Drafting under observation by an assessor	During a practical assessment, under observation by an assessor, the candidate correctly carried out the following tasks:			
Prepare the schedule of areas in Imperial units of the provided residential plan (see Annexure 1 for reference).	Calculated and wrote down the total area of the plot on the given drawing.			
	Calculated and wrote down ground floor's covered area of the plot on the given drawing.			
	Calculated and wrote down the floors/rooms area of the plan on the given drawing.			
	Calculated and wrote down the open areas of the plan (passages, lawns and patios) on the given drawing.			
	Drew the legend of areas and write down the calculations on A4 size scholar sheet with the help of lead pencil.			
Prepare working drawing using lead pencil (HB) for the given plan (see Annexure 1 for the sample plan)	Placed the drawing sheet (A3 size) on the drawing board.			
	Drew the outline border and title of the drawing on the drawing sheet with the help of a lead pencil.			
	Selected the scale ($1' = 1/4''$ or $1' = 1/8''$) for drawing the given plan.			
	Sketched the single line plan on the drawing sheet as per the selected scale with the help of lead pencil.			
	Converted the single line plan into double line plan using lead pencils to represent the walls.			
	Marked the openings on the drawn plan by using symbols of doors, windows and ventilators on the drawing sheet using lead pencil.			
	Finalized the drawn plan by converting construction /unnecessary lines into object line			
	Removed construction/unnecessary/reference lines from the drawn plan using eraser.			
	Labelled names and sizes (annotations) of areas (bed, kitchen, living & bath) on the drawn plan. .			
	Drew and verified dimensions of walls, windows, doors, and ventilators as per the given plan.			

	Drew schedule/table of doors, windows and ventilators of the drawn plan on the drawing sheet			
Create 2D plan and elevation of the given drawing by using AutoCAD software (see Annexure 1 for the sample drawing).	Set the units of measurement to Architectural Units in the software.			
	Set the Drawing Limits of the drawing area in the software.			
	Set the Dimension and Text Styles of the drawing in the software.			
	Set and adjust the Layers with respect to their names, colours, line styles and line weights using Layer Style Manager for the given drawing.			
	Used Draw and Modify toolbars to draw the given plan.			
	Drew/placed the symbols of doors, windows and ventilators in the plan.			
	Added labels and sizes (annotations) of the spaces in the plan as per the given drawing.			
	Marked dimensions for walls, doors, windows, ventilators, passages, lawn, boundary wall and entrance gate in the plan.			
	Drew the front elevation of the drawn plan along with details (Parapet, front railing, doors & windows shades and projections).			
	Assigned the components of the plan to the relevant layers such as walls, doors, windows, ventilators, columns, dimensions, text, furniture, fixture, hatchings, planters, steps and pavements.			
	Drew outline borders and drawing title block (Seal) of the plan.			
	Made and save Jpeg/PDF of the prepared 2D working plan on A3 size paper using the scale of 1' = 1/4" or 1' = 1/8" in the hard drive of the system.			
	Printed the prepared 2D plan on A3 size paper using the scale of 1' = 1/4" or 1' = 1/8"			
Create 3D model (exterior) of the given 2D plan by using AutoCAD software (see Annexure 2 for the sample drawing).	Adjusted Viewports and/or Views of the drawing window in the software.			
	Converted the given plan into a 3D model by selecting one of the methods for extrusion (Polyline, Region, Boundary or 3D objects/modelling)			
	Made openings for doors, windows and ventilators by using the Subtract and/or Union command of 3D exterior model.			
	Made/Inserted doors, windows and ventilators in the openings of 3D exterior model.			
	Completed the 3D model of the plan by making details (Parapet, railing, boundary walls, window shades, projections and entrance gate).			
	Saved the model view in Jpeg/PDF by using any one shading method (Conceptual, 2Dwireframe, Hidden, Realistic) in the hard drive of the system.			
2. Other requirements	N/A			

<p>3. Answer any questions the assessor may have during the practical assessment</p>	<p>Candidate's answers to questions are correct and demonstrate understanding of the topics and their application.</p> <p>Assessor to document below all questions asked and candidate answers. Use extra sheets if required and attach.</p>			
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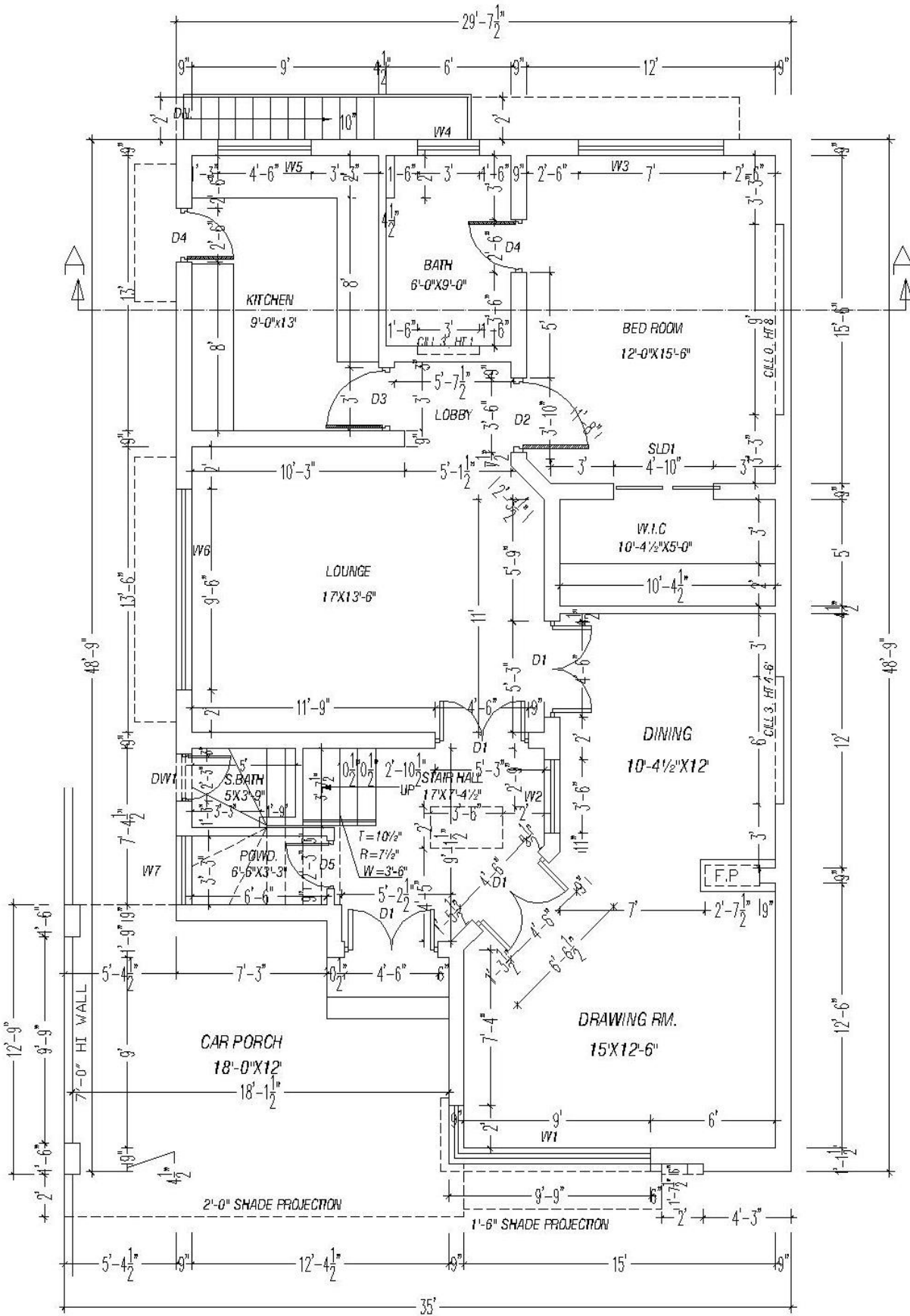
4

LIST OF TOOLS, EQUIPMENT, MATERIAL AND CONTEXT OF ASSESSMENT

INSTRUCTIONS	<p>This section contains information regarding;</p> <ul style="list-style-type: none"> Context of the assessment List of required tools and equipment. List of consumable items required during the service
1. Context of Assessment	This task will be performed in real time/simulated environment.


2. List of tools and equipment required (for five candidates)		
S. No	Items	Quantity
1	Architectural Scale	5
2	Architectural Board/template	5
3	Set Squares	5
4	T-Scale	5
5	Pencil Sharpener	5
6	Paper Cutter	5
7	Drawing/Geometry Box	5
8	Computer system with Mouse having AutoCAD (2009 or above) software	5
9	A3 Size Printer	1
10	Power backup (ups or generator) min 1000 KVA	1
11	Calculator	5
12	Scale	5
13	Architectural Scale	5


3. List of consumable items required (for five candidates)		
S. No	Items	Quantity
1	A3 Size printer paper	5
2	Lead Pencils (HB)	5
3	Eraser	5
4	Sand paper	5
5	Scotch/Paper Tape	5
6	Drawing Sheets	5
7	A4 size Paper sheets (for rough calculations.)	10
5	A4 Size Scholar Sheet	5





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