



Daffodil Polytechnic Institute, Institute Code: 50238

Subject Teacher : Shariful Islam Shishir
Subject Name : Civil CAD-1
Subject Code : 26443
Technology : CivilTechnology
Semester : 4th
Reference Book : Civil CAD-1 (Publisher: Haque Publication)

<i>Marks</i>	<i>Grade Point</i>	<i>Letter Grade</i>	<i>Marks</i>	<i>Grade Point</i>	<i>Letter Grade</i>
80>	4.00	A+	55-59	2.75	B-
75-79	3.75	A	50-54	2.50	C+
70-74	3.50	A-	45-49	2.25	C
65-69	3.25	B+	40-44	2.00	D
60-64	3.00	B	0-39	0.00	F

Time Distribution (90min)			
	Particular	Time	
Greeting with students		5 Min	
Previous class review		10 Min	
Present class lecture		60 Min	
Feedback		10 Min	
Attendance		5 Min	

Mark Distribution for 100 Marks			
Theory Marks		Practical Marks	
Midterm	10	PC	25
Class Test	05	PF	25
Quiz Test	05		
Final	30		
Total	50	Total	50

THEORY LESSON PLAN

Chapter	Topics with contents	Learning Outcome	Supporting Equipments
1	FUNDAMENTAL OF CAD 1.1 Define Computer Aided Design (CAD). 1.2 State start and exit procedure of CAD. 1.3 List different tools used in CAD. 1.4 State WCS icon and UCS icon of CAD. 1.5 Describe the classifications of co-ordinate system. 1.6 Mention the necessity of drawing units and limits.	1.To define Computer Aided Design (CAD).	Desktop, Projector
QUIZ TEST 1 (Date:30/07/2023)		Evaluation of Chapter-1	Questions & answers script
CLASS TEST 1 (Date: 20/08/23)		Evaluation of Chapter-1	Questions & answers script
2	FUNCTIONS AND USES OF CAD COMMANDS 2.1 State the drawing process of line, poly line, rectangle, triangles, polygons, circles and arcs. 2.2 Mention the functions of copy, move, offset, trim, fillet, array, chamfer, extend, break, rotate, stretch, mirror, change, scale and edit command. 2.3 Mention the functions block, insert, explode, divide command. 2.4 Mention the functions of distance, area, Id, list command. 2.5 Mention the functions of layout, view port, model space, paper space command. 2.6 Mention the functions of dimension style, leader, linear, radius & diameter, aligned, continue and base	2.To state the drawing process of line, poly line, rectangle, triangles, polygons, circles and arcs.	Desktop, Projector

	dimension command. 2.7 Mention the functions of donut, solid, trace, p line, x line, ray, fill, hatch and text command. 2.8 Mention the functions of zoom, pan, undo, redo, save, command. 2.9 Define Layer, Layer on/off and formation of Layer. 2.10 Mention the advantages of Layers in drawing using CAD.		
QUIZ TEST 2 (Date:)		Evaluation of Chapter-4 & 5	Questions & answers script
3	FEATURES OF A BUILDING 3.1 Define single and multistoried building. 3.2 Define site and lay-out Plan. 3.2 Differentiate between site plan and lay-out plan. 3.3 Mention the types of building 3.4 Describe Setback rules and FAR 3.5 Describe the main features of residential building. 3.6 Describe the different component of a building. 3.7 Describe the procedure of drawing for a one unit residential building.	3. Define single and multistoried building.	Desktop, Projector
CLASS TEST 2 (Date:)		Evaluation of Chapter-6 & 7	Questions & answers script
4	PLAN, SECTION, ELEVATION OF A RESIDENTIAL BUILDING PREPARING PROCEDURE BY CAD 4.1 Describe the procedure of drawing site plan and layout plan of a Single storied building. 4.2 Describe the procedure of drawing floor plan, elevation and	4. Describe the procedure of drawing site plan and layout plan of a Single storied building.	Desktop, Projector

	sectional elevation of a residential building. 4.3 Describe the procedure of drawing plan of square and rectangular column with footing showing reinforcement. 4.4 Describe the procedure of making detailed drawing of RCC 4 7 lintel with sunshade showing reinforcement. 4.5 Describe the procedure of making detailed drawing of Furniture lay-out plan. 4.6 Describe the setting procedure of plumbing fixture for toilet. 4.7 Describe the setting procedure of component for kitchen. 4.8 Describe the setting procedure of electrical layout diagram. 4.9 List the drawings of a residential building necessary for approval of the relevant authorities.		
MID TERM EXAM-(Exam starts from September 07)		Syllabus: Chapter 01-08	Questions & answers script
5	A PLAN AND SECTIONAL ELEVATION OF A SEPTIC TANK, UNDERGROUND WATER RESERVOIR AND TRUSS 5.1 Describe the procedure of plan and sectional elevation of a septic tank. 5.2 Describe the procedure of plan and section of soak pit and inspection pit. 5.3 Describe the procedure of plan and sectional elevation of an underground water reservoir showing the	5. Describe the procedure of plan and sectional elevation of a septic tank.	Desktop, Projector

	reinforcement. 5.4 Describe the procedure of detail drawing of a water closet including trap. 5.5 Draw an elevation of King post and Queen post wooden truss with showing different components. 5.6 Draw an elevation of steel truss with showing different components.		
	QUIZ TEST - 3 (Date:)	Evaluation of Chapter- 9	Questions & answers script
6	LAYOUT AND PLOT THE DRAWING 6.1 Define layout for plot/print using paper space and model space. 6.2 State the scale & assign pen (if necessary) for plot/print. 6.3 Describe the paper & plotter for plotting/printing. 6.4 Describe the process of Plot/Print the drawing. 6.5 Discuss about various drawing in different scale in a paper through layout. 6.6 Describe the process of drawing in PDF format.	6. Define layout for plot/print using paper space and model space.	Desktop, Projector
	CLASS TEST 3 (Date:)	Evaluation of Chapter- 14 & 15	Questions & answers script
	Total Class/ Quiz Test: 3	Total Class: 15	

PRACTICAL LESSON PLAN

Exp.	Experiment Names	Submission date
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No.		
1	PREPARE PAGE LAYOUT USING CAD. 1.1 Open CAD 1.2 Create CAD new file 1.3 Set up the units and dimension style 1.4 Set up the drawing limits. 1.5 Set zoom all 1.6 Exit from CAD	Within next 7 days
2	PERFORM DRAW AND SAVE DRAWING USING CAD. 2.1 Draw a line using CAD. 2.2 Draw different types of rectangles using CAD. 2.3 Draw circles, arcs using CAD. 2.4 Draw triangles using CAD. 2.5 Draw different types of polygons using CAD. 2.6 Save the drawing.	Within next 7 days
3	EDIT THE EXISTING DRAWING USING CAD. 3.1 Erase a line or object. 3.2 Perform pan, undo and redo commands. 3.3 Apply different types of Zoom commands. 3.4 Perform Cut, Trim and extend commands. 3.6 Apply move and copy commands. 3.7 Perform the uses of the following commands: offset, rotate, stretch, array, mirror, scale, P edit and explode, block, fillet, chamfer.	Within next 7 days
4	PERFORM DIMENSION OF DRAWING USING CAD. 4.1 Perform dimensioning. 4.2 Perform linear dimensions in the drawing. 4.3 Perform aligned dimensions in the drawing. 4.4 Use radius dimensions in the drawing. 4.5 Use angular dimensions in the drawing. 4.6 Use modify dimension style in the drawing.	Within next 7 days
5	LAYERS, TEXT AND HATCHES THE DRAWING	Within next 7 days

	USING CAD. 5.1 Create different layers for line, dimension, text, hatches, etc. 5.2 Select different colors for different layers. 5.3 Select the type and scale of the hatch for a drawing. 5.4 Select the type and size of the text for a drawing. 5.5 Insert text in the drawing.	
6	SET THE LAYOUT AND PLOT THE DRAWING. 6.1 Create layout for plot/print using paper space and model space. 6.2 Set up the scale & assign pen (if necessary) for plot/print. 6.3 Select the paper & plotter for plotting/printing. 6.4 Set various drawing in different scale in a paper through layout. 6.5 Plot/Print the drawing. 6.6 Save the drawing in PDF format.	Within next 7 days
7	PERFORM A PLAN, SECTION AND ELEVATION OF A RESIDENTIAL BUILDING BY CAD. 7.1 Create a plan of a residential building with setback rules or FAR 7.2 Draw an elevation of a residential building. 7.3 Draw a sectional elevation of a residential building. 7.4 Set a furniture layout plan for a residential building.	Within next 7 days
8	PERFORM A PLAN, SECTION AND ELEVATION OF A RESIDENTIAL BUILDING BY CAD. 3 3 8.1 Create a column footing working drawing showing reinforcement. 8.2 Create lintel with sun shed working drawing showing reinforcement.	Within next 7 days

	8.3 Create a Plumbing plan for a toilet and kitchen. 8.4 Create a Electrical layout Plan.	
9	PERFORM UNDERGROUND WATER RESERVOIR BY CAD. 9.1 Create a plan and sectional elevation of an underground water reservoir. 9.2 Create a Section of underground water reservoir showing the reinforcement. 9.3 Draw the pipe line diagram for UGW.	Within next 7 days
10	PERFORM SEPTIC TANK BY CAD. 10.1 Create a plan for Septic tank. 10.2 Create a sectional elevation of a septic tank. 10.3 Draw the plan and section of soak pit and inspection pit.	Within next 7 days
Last submission date: 02/10/23		Total Classes: 10

