

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

Letter Grade

B

C+

C

D

F



Daffodil Polytechnic Institute, Institute Code: 50238

Lesson Plan – Academic Session June-November 2024

Subject Teacher : Gulshan Ara Akhi)

Subject Name : Electrical Engineering Drawing

Subject Code : 26722

Technology : Electrical

Semester :2nd

Reference Book : Electrical Engineering Drawing (Publisher: R.S Prokashoni)

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Mark Distribution (for 150 Marks)

Theory Marks		Practical Marks
Midterm	20	PC 50
Class test	05	PF 50
Quiz test	05	-
Final	25	-
Total	50	Total 100

After completion of these contents students will be able to acquire, achieve and develop: To acquaint with electrical engineering drawings. To develop skill in drawing isometric, oblique and orthographic views. To enable interpretation and skill to draw thread and fastening devices. To develop skill in drawing the symbols for electrical components and equipment. To develop skill in drawing the layout diagram of overhead distribution lines. To develop skill in drawing the layout diagram of a small substation. To enable interpreting the electrical layout diagram of a residential building. To enable and skill to draw Electrical circuits, plan with ECAD.

SHORT DESCRIPTION

After completion of these contents students will be able to acquire, achieve and develop: Drawing (elevation, plan and section) of electrical transmission and distribution line structure; Drawing of symbols used in electrical planning; Drawing of insulator used in overhead line; Drawing of pole mounted sub-station; Drawing of LT distribution line; Drawing electrical layout and single line wiring diagram of a small residential building; Using ECAD in electrical Drawing and circuit.

Lecture Chapter/Exam Learning Area Learning	Outcome Class/Lab Supporting	Equipment's Video Link	
Lecture-1	Chapter-1	<div><div>ELECTRICAL SYMBOLS</div><div>1.1 Define electrical symbols 1.2 Explain the necessities of Electrical symbols 1.3Mention the name of different symbols of fittings, fixtures and meters used in electrical Installation such as Lamp (incandescent, fluorescent), Choke coil, Lamp outlet(Holder), Starter (for tube light), Ceiling rose, Cartridge fuse, Socket outlet, Power outlet (2-pin & 3-pin), Calling bell, Push switch,</div></div>	<div>1. Pencil, Drawing Board, Marker, Ruler. Compass</div> <div>https://youtu.be/Kzm1XNI7oKc</div>
Lecture-2	Chapter-1	<div><div>ELECTRICAL SYMBOLS</div><div>1.4 Mention the name of different symbols various equipment and machines used in electrical Installation</div></div>	<div>2. Pencil, Drawing Board, Marker, Ruler. Compass</div> <div>https://youtu.be/Kzm1XNI7oKc</div>

		OCB/VCB/CB, Relay Transformer, Battery, Motor (DC/AC) (3- phase & 1-phase), Rectifier unit, Generator, Transformer, Isolator, Motor starter, Lightning arrestor.		
QT-1	Quiz Test on Chapter-1	Quiz test ELECTRICAL SYMBOLS To build up their confidence level on chapter-1	White Board, M arker and Exam Script	
Lab-1	DRAW THE SYMBOLS FOR THE FITTINGS AND FIXTURES USED IN ELECTRICAL INSTALLATION .	Identify the fittings used in electrical installation. 1.2 Identify the fixtures used in electrical installation. Know About the Installation of Electrical equipments	.Drawing sheet, Drawing board, Mini drafter T square, Compass, Divider, Set squares, Protractor, French curves Templates, Pencils, Eraser	https://youtu .b e/ezCZjpzN P zs
Lecture-3	TRANSMISSION AND DISTRIBUTION SYSTEM	Chapter-2 2.1 Define transmission system 2.2 List the main parts used in transmission line 2.3 List the main parts used in Distribution line	Book, Paper	Electric...
Lab-2	DRAW THE SYMBOLS OF EQUIPMENTS USED IN	Identify the Equipment used in Electrical Know About the Installation of Electrical	Drawing sheet, Drawing board, Mini drafter T square,	https://youtu .b e/Kzm1XNI 7o kc

		equipments		
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	ELECTRICAL INSTALLATION	installation and Identify the meter used in Electrical system.	Compass, Divider, Set squares, Protractor, French curves Templates, Pencils, Eraser	
CT-1	Class Test on Chapter-2	Test on TRANSMISSION AND DISTRIBUTION SYSTEM To build up their confidence level on chapter-1	White Board, Marker and Exam Script	
Lab-3	SKETCH DIFFERENT TYPES OF ELECTRIC POLE	Draw the elevation, plan and section of a tubular steel pole used in LT distribution line. 3.2 Draw the elevation, plan and section of a concrete pole (RCC/PCC) of Circular Know About the Installation of Electrical Poles and The Area of the Poles	Drawing sheet, Drawing board, Mini drafter T square, Compass, Divider, Set squares, Protractor, French curves Templates, Pencils, Eraser	https://youtu.be/s6raD5osR4s
Lecture-4	FUNCTIONS AND USES OF DIFFERENT CAD COMMANDS	Chapter-3 3.1 Define Computer Aided Design (CAD). 3.2 State how to start and exit CAD. 3.3 Name different tools used in CAD.	Book, Paper, Pen	https://youtu.be/17vBdqQaqDA

QT-2	Quiz Test on Chapter-3	Class test FUNCTIONS AND USES OF DIFFERENT CAD COMMANDS To build up their confidence level on chapter-3	White Board, Marker and Exam Script	
Lecture-5	FUNCTIONS AND USES OF DIFFERENT CAD COMMANDS	Chapter-3 3.4 State the meaning of WCS icon and UCS icon. 3.5 State the	Book, Paper, Pen	https://youtu.be/17vBdqQaqDA

		necessity of drawing units and limits. 3.6 Mention the functions of the following editing commands: copy,		
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Lab-4	SKETCH LINE SUPPORTS USED IN DISTRBUTI ON LINE	<p>Draw the elevation, plan and section of a pole with cross arm.</p> <p>To Know the Distribution and Different types of polls</p> <p>Draw the elevation, plan and section of Pin, Shackle and Disc (Strain and suspension) type insulator.</p>	<p>Drawing sheet, Drawing board, Mini drafter</p> <p>T square, Compass, Divider, Set squares, Protractor, French curves</p> <p>Templates, Pencils, Eraser</p>	https://youtu.be/vWZV9_LF2nc
Lab-5	MAKE THE PLAN OF A POLE MOUNTED SUB-STATIO N	<p>Draw the plan of an H-type pole structure.</p> <p>To Know the Distribution and Different types of Tranformer</p> <p>Draw a transformer on the middle limb of the structure.</p>	<p>Drawing sheet, Drawing board, Mini drafter</p> <p>T square, Compass, Divider, Set squares, Protractor, French curves</p> <p>Templates, Pencils, Eraser</p>	https://youtu.be/wlgcF4ynTB8
Lecture-6	FUNCTION OF ENQUIRY, PLOT AND DIMENSION COMMANDS	<p>Chapter-4 4.1 Mention the functions of the following plotting commands: layout, view port, model space and paper space.</p> <p>4.2 Plot Setup and preview.</p>	<p>Book, Paper, Pen</p>	https://youtu.be/MqGEfiHPv_o0
Lecture-7	FUNCTION OF ENQUIRY, PLOT AND	<p>Chapter-4 4.3 Mention the functions of the following</p>	<p>Book, Paper, Pen</p>	https://youtu.be/MqGEfiHPv_o0

	DIMENSION COMMANDS	dimension commands: dimension style, leader, linear dimension, radius & diameter dimension, aligned dimension, continue dimension, base dimension etc.		
CT-2	Class Test on Chapter-4	Test on FUNCTION OF ENQUIRY, PLOT AND DIMENSION COMMANDS To build up their confidence level on chapter-4	White Board, Marker and Exam Script	
Lecture-8	FUNCTION OF GEOMETRIC , ADC AND LAYER COMMANDS	Chapater-5 5.1 Mention the functions of the following geometric commands: donut, solid, trace, p-line, x-line, ray, fill etc. 5.2 Mention the functions of the following commands: zoom, pan, undo, redo, save, etc.	Book, Paper, Pen	
Lab-6	DEVELOP THE DRAWING OF A LT DISTRIBUTION LINE (11KV & 0.4KV)	Draw the layout To know about the plan of a LT Distribution Line in Details Draw the section of a pole showing the conductors.	Drawing sheet, Drawing board, Mini drafter T square, Compass, Divider, Set squares, Protractor, French curves Templates, Pencils, Eraser	https://youtu.be/DejcWVp_VmA

Model Test	Final Model Test
Review class-1	From Chapter:1-2