

PADMASHREE KRUTARTHA ACHARYA INSTITUTE OF
ENGINEERING & TECHNOLOGY, BARGARH



PROGRESS REGISTER
Session-2021-2022

Discipline: Electronics Engg. Semester: 6th

Name of the Teaching Faculty: Durga Prasad Biswal

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Sub - E I E

Subject: Electrical Installation and Estimating No. of Days/per week class allotted 4

Semester From Date : 10/3/22 To Date : 24/5/22 No. of Weeks : 3

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
10/3/22	IERWe (1951) Definition of electrical quantity	Determination of ampere, Apparatus, Bare, conduit	Determination of ampere, Apparatus, Bare, conduit	D. Biswas 10/3/22
11/3/22	Cut-out, Conduit system, danger, Earthing system	Determination of Cut-out, Conduit system, Span earthing system	Determination of Cut-out, Conduit system, Span	D. Biswas 11/3/22
12/3/22	General safety precaution rule	Rule 29, 30, 31, 32, 33, 34, 35, 36, 40, 41, 43, 44, 45, 46	Construction, Installation, protection Cut-out on Consumer Premises	D. Biswas 12/3/22
14/3/22	General condition relating supply and use of energy	Rule - 47, 48, 49, 50, 51, 54, 55, 56, 57, 58, 59 to 68 and 70	Consumer installation, Testing, leakage on consumer premises, supply of consumer	D. Biswas 14/3/22
16/3/22	Electrical installation, domestic, industrial wiring system, internal distribution of energy	Electrical installation of domestic and Industrial wiring	Maincable, Sub-maincable, Sub-cable, DB system, two system	D. Biswas 16/3/22
17/3/22	System of wiring, cable and wire, conductor materials used in cable	system of wiring, wire and cable	Tee system, Joint box system, CU, AL, PVC, CT, STRS cable	D. Biswas 17/3/22
21/3/22	Cables used in internal house wiring, Voltage grading of cable	Insulating material in cable, Types of cable	VIR, CT, PVC weather proof cable	D. Biswas 21/3/22
23/3/22	Specification of cable, Electrical accessories	Cable specification, Electrical Accessories	Aluminum-2A, XLPE-2X voltage grading, V.I. mm cable, MS, DB	D. Biswas 23/3/22
24/3/22	Fuses, Important terms, fuse wire size, fuse unit	Fuse, important term, fuse wire, fuse unit	Let-let fuse, HRC fuse, fuse element, current rating	D. Biswas 24/3/22
25/3/22	Earthing conductor Earthing, IS specification of earthing	Earthing, Earthing conductor, IS specification	Earthing, earthing resistance points to be earthed	D. Biswas 25/3/22
26/3/22	Determination of size of earth wire earth plate	Determination of size of earth wire, earth plate	Earthing resistance calculation, plate earthing	D. Biswas 26/3/22

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 Semester From Date : 28/3/22 To Date : 13/4/22 No. of Weeks : 3

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
28/3/22	Pipe earthing material required for pipe earthing	Pipe earthing material required for pipe earthing	Pipe earthing GI wire Charcoal, salt	Dhishu 28/3/22
30/3/22	Lighting scheme Aspects of good lighting scheme	Lighting scheme Aspects of good lighting scheme	Direct lighting, Indirect lighting Illumination level Uniform illumination	Dhishu 30/3/22
31/3/22	Factory lighting	Design of lighting scheme	Colour, shadow, mounting height Space height ratio	Dhishu 31/3/22
2/4/22	public lighting Street lighting	Factory lighting	General requirements, General lighting standard, reflector	Dhishu 2/4/22
4/4/22	General rules for wiring in building determination of no. of points	Public and Street lighting	Terminology in public lighting Street lighting	Dhishu 4/4/22
6/4/22	Types of internal wiring, Cleat wiring	General rules for wiring, determination of no. of points, load	Load calculation, Determination of sub-main cut, sub-cut, M.S. rating	Dhishu 6/4/22
7/4/22	CTS wiring advantage & disadvantage	Cleat wiring advantage & disadvantage	Cleat wiring, procedure, advantage, disadvantage	Dhishu 7/4/22
8/4/22	Standard practice for house wiring	CTS wiring	CTS wiring, advantage, disadvantage size of batten	Dhishu 8/4/22
9/4/22	Prepare one estimate of material required for CTS wiring in 25m ² place	Standard practice	Sub-main cut Sub-cut cut Load calculation Voltage drop Cable calculation	Dhishu 9/4/22
11/4/22	prepare one estimate of material for CTS wiring in 25m ² place	prepare one estimate of material for 25m ² place	Load data, M.S. rating, Cable calculation Earth wire calculation	Dhishu 11/4/22
13/4/22	metal sheathed wiring	Solution of above problem.	Material required TW gutties calculation, Rawl plug, brass nail, wooden	Dhishu 13/4/22

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Semester From Date : 16/4/22 To Date : 30/4/22 No. of Weeks : 2

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
16/4/22	Conduit wiring, conduit accessories conduit wiring	Another problem of CTJ wiring is discussed	Problem discussion class (Tutorial class)	D. Bis2 16/4/22
18/4/22	prepare one estimate of material required for conduit wiring)	metal sheathed wiring	metal sheathed wiring, advantage disadvantage	D. Bis2 18/4/22
20/4/22	problems of conduit wiring	Conduit wiring Conduit accessories	Size of conduit, Bends, Elbow Round block Bushing	D. Bis2 20/4/22
21/4/22	prepare one estimate of material for concealed conduit wiring	prepare one estimate of material for conduit wiring	Load Calculation, MS, DB rating wiring diagram material Analysis	D. Bis2 21/4/22
22/4/22	prepare one estimate of material for concealed conduit wiring	Solution of Above problem continues	Calculation, material table	D. Bis2 22/4/22
23/4/22	Wooden casing capping system.	prepare one estimate of material required for conduit wiring	Load Calculation. sub-main cut, sub-cut, MS, DB ratings material Analysis	D. Bis2 23/4/22
25/4/22	problems of casing-capping	Solution of Above problem continues	Calculation, material table	D. Bis2 25/4/22
27/4/22	Power circuit wiring	Wooden casing capping wiring system	Wooden casing-capping wiring, size, advantage disadvantage	D. Bis2 27/4/22
28/4/22	Standard practice for power cut	problem of casing-capping	Discussion of problem of casing-capping	D. Bis2 28/4/22
29/4/22	prepare one estimate of material required for small domestic installation	Power circuit wiring	Load belonging to power cut, no. of points and wattage in power cut	D. Bis2 29/4/22
30/4/22	OH Line rule	Standard practice for power cut	sub-main cut, sub-cut cable calculation voltage drop	D. Bis2 30/4/22

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Semester From Date : 2/5/22 To Date : 18/5/22 No. of Weeks : 2

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
2/5/22	Main components of overhead lines, lines support, factors affecting height of pole	Prepare one estimate of material for small workshop	Main switch rating, Cable size calculation, Conductor calculation	D. Bisht 2/5/22
4/5/22	Size of conductors for OH line, Cross-arm, pole	Another problem of workshop is discussed	problems discussion	D. Bisht 4/5/22
5/5/22	Insulator of Overhead line	Main components of OH line, line supports	Poles, Cross-arm, Clamps, insulator, Conductor	D. Bisht 5/5/22
6/5/22	Lighting arresters	Size of conductor for OH line pole	AI, ACSR, AAC, Factor affecting the height of pole	D. Bisht 6/5/22
7/5/22	Danger plate, Anti climbing device, bird guard	Insulator of OH line	Pin, Disc, Shackle, Suspension	D. Bisht 7/5/22
9/5/22	Standard practice	Lighting Arresters	Lighting arresters, Joining of conductors	D. Bisht 9/5/22
11/5/22	Prepare one estimate of material for LT connection of 10kV line	Danger plate, Anti climbing devices, tee-off	Danger plate, Anti climbing devices, t-off	D. Bisht 11/5/22
12/5/22	Problems of LT distribution line	Standard practice	Current calculation, Cable calculation, Voltage drop, Voltage regulation	D. Bisht 12/5/22
13/5/22	Prepare one estimate of material for HT connection	Prepare one estimate of material for LT connection	Poles calculation, Cable calculation, Insulator, Jumper wire	D. Bisht 13/5/22
14/5/22	Problem regarding HT connection.	Prepare one estimate of material for HT connection	Poles calculation, Insulator, Earthing cable	D. Bisht 14/5/22
18/5/22	Components of service line	Problem regarding HT connection	problem discussion class	D. Bisht 18/5/22

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Semester From Date: 19/5/2022 To Date: 8/6/22 No. of Weeks: 2

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
19/5/22	Components of service line, service line bearer wire	Tutorial Class	Problem solving class of LT connection	TD Bisht 19/5/22
20/5/22	Standard practice	Tutorial Class	Problem solving class of LT connection	TD Bisht 20/5/22
21/5/22	Prepare one estimate of material required for 1φ supply	Components of service lines, bearer wire, lacing rods	Service line, bearer wire, service support	TD Bisht 21/5/22
23/5/22	Problem of 1φ connection	Standard practice	Standard practice	TD Bisht 23/5/22
25/5/22	Prepare one estimate of material in a double store building	Prepare one estimate for 1φ supply	Current calculation, Voltage drop, Cable calculation	TD Bisht 25/5/22
1/6/22	Problem of double store building	Problem of 1φ connection	Problem of 1φ connection	TD Bisht 1/6/22
2/6/22	Prepare one estimate of material required to a factory building	Tutorial Class	Tutorial Class	TD Bisht 2/6/22
3/6/22	Problems of 3φ connection	Tutorial Class	Tutorial Class	TD Bisht 3/6/22
4/6/22	Prepare one estimate of material required for factory building	Problem of 3φ connection	Service connection of 3φ connection	TD Bisht 4/6/22
6/6/22	Problem of service connection of farmer	Tutorial Class	Tutorial Class	TD Bisht 6/6/22
8/6/22	Substation, Classification of Sub-Station	Tutorial Class	Tutorial Class	TD Bisht 8/6/22

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Semester From Date : 9/6/22 To Date : 25/6/22 No. of Weeks : 3

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
9/6/22	Equipments of Sub-Station	prepare one estimate of material for double street lighting	problem discussion	D. B. Singh 9/6/22
11/6/22	prepare one estimate of material for pole mounted substation	Tutorial Class	Tutorial Class	D. B. Singh 11/6/22
13/6/22	prepare one estimate of material for pylon mounted sub-station	prepare one estimate of material for factory building	problem discussion	D. B. Singh 13/6/22
13/6/22	Different problem on Sub-station	Problem of 3 ϕ Connection	problem discussion	D. B. Singh 13/6/22
17/6/22		Problems of service connection of farmer	Problems discussion	D. B. Singh 17/6/22
18/6/22		Sub-station, Classification of Substation	Indoor Sub-Station Out-door Substation	D. B. Singh 18/6/22
20/6/22		Equipments of Sub-Station	Channels for pole and pylon mounted Sub-station	D. B. Singh 20/6/22
22/6/22		Estimate of material for pole mounted sub-station	Current calculation, Cable calculation, Channel for Sub-station	D. B. Singh 22/6/22
23/6/22		Estimate of material for pylon mounted sub-station	Pole, Current calculation, voltage drop	D. B. Singh 23/6/22
24/6/22		Different problem on Sub-station	problem discussion	D. B. Singh 24/6/22
25/6/22		Tutorial class	Tutorial class	D. B. Singh 25/6/22

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Semester From Date : 27/6/22 To Date : 30/6/22 No. of Weeks : 1

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
27/6/22		Tutorial class	Tutorial class	<u>D. B. 22</u> 27/6/22
29/6/22		Tutorial class	Tutorial class	<u>D. B. 22</u> 29/6/22
30/6/22		Tutorial class	Tutorial class.	<u>D. B. 22</u> 30/6/22