

**ACADEMIC LESSON PLAN OF SUMMER 2022**

<b>Discipline</b> Electrical Engg.	Semester: - <b>6th</b> (1st shift)	<b>Name of the Teaching Faculty: -Sandeep Mohapatra</b>
<b>Subject:</b> <b>TH-1</b> <b>(ELECTRICAL</b> <b>INSTALLATION</b> <b>AND</b> <b>ESTIMATING)</b>	No. of days/per week class allotted : 4p/week Tutorial: 1p/w week	Semester From: 10 <sup>th</sup> March 2022 to 10 <sup>th</sup> June 2022
<b>Week</b>	<b>Class Day</b>	<b>Theory Topics</b>
1 <sup>st</sup>	14/03/2022	<b>1. INDIAN ELECTRICITY RULES</b> 1.1 Definitions, Ampere, Apparatus, Accessible, Bare, cablew, circuit, circuit breaker,conductor voltage (low, medium, high, EH), live, dead, cut-out, conduit, system,danger, Installation, earthing system, span, volt, switch gear, etc.
	14/03/2022	1.2 General safety precautions, rule 29, 30, 31, 32, 33, 34, 35, 36, 40, 41, 43, 44, 45, 46.
	15/03/2022	1.3 General conditions relating to supply and use of energy : rule 47, 48, 49, 50, 51, 54, 55,56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 70. .(cont..)
	15/03/2022	1.3 General conditions relating to supply and use of energy : rule 47, 48, 49, 50, 51, 54, 55,56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 70
	16/03/2022	Tutorial
2 <sup>nd</sup>	21/03/2022	1.4 OH lines : Rule 74, 75, 76, 77, 78, 79, 80, 86, 87, 88, 89, 90, 91.(cont..)
	21/03/2022	1.4 OH lines : Rule 74, 75, 76, 77, 78, 79, 80, 86, 87, 88, 89, 90, 91
	22/03/2022	<b>2. ELECTRICAL INSTALLATIONS</b> 2. 1 Electrical installations, domestics, industrial, Wiring System, Internal distribution of Electrical Energy. Methods of wiring, systems of wiring, wire and cable, conductor materials used in cables, insulating materials mechanical protection. Types of cables used in internal wiring, multi-stranded cables, voltage grinding of cables, general specifications of cables. .(cont..)
	22/03/2022	2. 1 Electrical installations, domestics, industrial, Wiring System, Internal distribution of Electrical Energy. Methods of wiring, systems of wiring, wire and cable, conductor materials used in cables, insulating materials mechanical protection. Types of cables used in internal wiring, multi-stranded cables, voltage grinding of cables, general specifications of cables. .(cont..)
	23/03/2022	Tutorial

3 <sup>rd</sup>	28/03/2022	2. 1 Electrical installations, domestics, industrial, Wiring System, Internal distribution of Electrical Energy. Methods of wiring, systems of wiring, wire and cable, conductor materials used in cables, insulating materials mechanical protection. Types of cables used in internal wiring, multi-stranded cables, voltage grinding of cables, general specifications of cables. (cont..)
	28/03/2022	2. 1 Electrical installations, domestics, industrial, Wiring System, Internal distribution of Electrical Energy. Methods of wiring, systems of wiring, wire and cable, conductor materials used in cables, insulating materials mechanical protection. Types of cables used in internal wiring, multi-stranded cables, voltage grinding of cables, general specifications of cables.
	29/03/2022	2. 2 ACCESSORIES: Main switch and distribution boards, conduits, conduit accessories and fittings, lighting accessories and fittings, fuses, important definitions, determination of size of fuse – wire, fuse units. Earthing conductor, earthing, IS specifications regarding earthing of electrical installations, points to be earthed. Determination of size of earth wire and earth plate for domestic and industrial installations. Material required for GI pipe earthing(cont..)
	29/03/2022	2. 2 ACCESSORIES: Main switch and distribution boards, conduits, conduit accessories and fittings, lighting accessories and fittings, fuses, important definitions, determination of size of fuse – wire, fuse units. Earthing conductor, earthing, IS specifications regarding earthing of electrical installations, points to be earthed. Determination of size of earth wire and earth plate for domestic and industrial installations. Material required for GI pipe earthing(cont..)
	30/03/2022	Tutorial
4 <sup>th</sup>	04/04/2022	2. 2 ACCESSORIES: Main switch and distribution boards, conduits, conduit accessories and fittings, lighting accessories and fittings, fuses, important definitions, determination of size of fuse – wire, fuse units. Earthing conductor, earthing, IS specifications regarding earthing of electrical installations, points to be earthed. Determination of size of earth wire and earth plate for domestic and industrial installations. Material required for GI pipe earthing(cont..)
	04/04/2022	2. 2 ACCESSORIES: Main switch and distribution boards, conduits, conduit accessories and fittings, lighting accessories and fittings, fuses, important definitions, determination of size of fuse – wire, fuse units. Earthing conductor, earthing, IS specifications regarding earthing of electrical installations, points to be earthed. Determination of size of earth wire and earth plate for domestic and industrial installations. Material required for GI pipe earthing.

	05/04/2022	2. 3 LIGHTING SCHEME: Aspects of good lighting services. Types of lighting schemes, design of lighting schemes, factory lighting, public lighting installations, street lighting, general rules for wiring, determination of number of points (light, fan, socket, outlets), determination of total load, determination of Number of sub-circuits. (cont..)
	05/04/2022	2. 3 LIGHTING SCHEME: Aspects of good lighting services. Types of lighting schemes, design of lighting schemes, factory lighting, public lighting installations, street lighting, general rules for wiring, determination of number of points (light, fan, socket, outlets), determination of total load, determination of Number of sub-circuits. (cont..)
	06/04/2022	Tutorial
5 <sup>th</sup>	11/04/2022	2. 3 LIGHTING SCHEME: Aspects of good lighting services. Types of lighting schemes, design of lighting schemes, factory lighting, public lighting installations, street lighting, general rules for wiring, determination of number of points (light, fan, socket, outlets), determination of total load, determination of Number of sub-circuits. (cont..)
	11/04/2022	2. 3 LIGHTING SCHEME: Aspects of good lighting services. Types of lighting schemes, design of lighting schemes, factory lighting, public lighting installations, street lighting, general rules for wiring, determination of number of points (light, fan, socket, outlets), determination of total load, determination of Number of sub-circuits.
	12/04/2022	<b>3. INTERNAL WIRING</b> 3 . 1 Type of internal wiring, cleat wiring, CTS wiring, wooden casing capping, metal sheathed wiring, conduit wiring, their advantage and disadvantages comparison and applications.(cont..)
	12/04/2022	3 . 1 Type of internal wiring, cleat wiring, CTS wiring, wooden casing capping, metal sheathed wiring, conduit wiring, their advantage and disadvantages comparison and applications.(cont..)
	13/04/2022	Tutorial
6 <sup>th</sup>	18/04/2022	3 . 1 Type of internal wiring, cleat wiring, CTS wiring, wooden casing capping, metal sheathed wiring, conduit wiring, their advantage and disadvantages comparison and applications.
	18/04/2022	3 . 2 Prepare one estimate of materials required for CTS wiring for small domestic installation of one room and one verandah within 25 m2 with given light, fan & plug points.(cont..).
	19/04/2022	3 . 2 Prepare one estimate of materials required for CTS wiring for small domestic installation of one room and one verandah within 25 m2 with given light, fan & plug points.(cont..).
	19/04/2022	3 . 2 Prepare one estimate of materials required for CTS wiring

		for small domestic installation of one room and one verandah within 25 m2 with given light, fan & plug points.
	20/04/2022	Tutorial
7 <sup>th</sup>	25/04/2022	3 . 3 Prepare one estimate of materials required for conduit wiring for small domestic installation of one room and one verandha within 25 m2 with given light, fan & plug points.(cont..)
	25/04/2022	3 . 3 Prepare one estimate of materials required for conduit wiring for small domestic installation of one room and one verandha within 25 m2 with given light, fan & plug points.
	26/04/2022	3 . 4 Prepare one estimate of materials required for concealed wiring for domestic installation of two rooms and one latrine, bath, kitchen & verandah within 80m2 with given light, fan & plug points. .(cont..)
	26/04/2022	3 . 4 Prepare one estimate of materials required for concealed wiring for domestic installation of two rooms and one latrine, bath, kitchen & verandah within 80m2 with given light, fan & plug points.
	27/04/2022	Tutorial
8 <sup>th</sup>	02/05/2022	3 . 5 Prepare one estimate of materials required for erection of conduct wiring to a small workshop installation about 30m2 and load within 10 KW. .(cont..)
	02/05/2022	3 . 5 Prepare one estimate of materials required for erection of conduct wiring to a small workshop installation about 30m2 and load within 10 KW.
	03/05/2022	<b>HOLIDAY</b>
	03/05/2022	<b>HOLIDAY</b>
	04/05/2022	<b>4. OVER HEAD INSTALLATION</b> 4.1 Main components of overhead lines, line supports, factors Governing Height of pole, conductor materials, determination of size of conductor for overhead transmission line, cross arms, pole brackets and clamps, guys and stays, conductors configurations, spacing and clearances, span lengths, overhead line insulators, types of insulators, lighting arresters, danger plates, anti-climbing devices, bird guards, beads of jumpers, jumpers, tee-offs, guarding of overhead lines.(cont..)
9 <sup>th</sup>	09/05/2022	4.1 Main components of overhead lines, line supports, factors Governing Height of pole, conductor materials, determination of size of conductor for overhead transmission line, cross arms, pole brackets and clamps, guys and stays, conductors configurations, spacing and clearances, span lengths, overhead line insulators, types of insulators, lighting arresters, danger plates, anti-climbing devices, bird guards, beads of jumpers, jumpers, tee-offs, guarding of overhead lines.(cont..)
	09/05/2022	Tutorial
	10/05/2022	4.1 Main components of overhead lines, line supports, factors

		Governing Height of pole, conductor materials, determination of size of conductor for overhead transmission line, cross arms, pole brackets and clamps, guys and stays, conductors configurations, spacing and clearances, span lengths, overhead line insulators, types of insulators, lighting arresters, danger plates, anti-climbing devices, bird guards, beads of jumpers, jumpers, tee-offs, guarding of overhead lines.(cont..)
	10/05/2022	4.1 Main components of overhead lines, line supports, factors Governing Height of pole, conductor materials, determination of size of conductor for overhead transmission line, cross arms, pole brackets and clamps, guys and stays, conductors configurations, spacing and clearances, span lengths, overhead line insulators, types of insulators, lighting arresters, danger plates, anti-climbing devices, bird guards, beads of jumpers, jumpers, tee-offs, guarding of overhead lines.
	11/05/2022	4.2 Prepare an estimate of materials required for LT distribution line within load of 100 KW maximum and standard spans involving calculation of the size of conductor (from conductor chart), current carrying capacity and voltage regulation consideration using ACSR. .(cont..)
10 <sup>th</sup>	16/05/2022	<b>HOLIDAY</b>
	16/05/2022	<b>HOLIDAY</b>
	17/05/2022	4.2 Prepare an estimate of materials required for LT distribution line within load of 100 KW maximum and standard spans involving calculation of the size of conductor (from conductor chart), current carrying capacity and voltage regulation consideration using ACSR. .(cont..)
	17/05/2022	Tutorial
	18/05/2022	4.2. Prepare an estimate of materials required for LT distribution line within load of 100 KW maximum and standard spans involving calculation of the size of conductor (from conductor chart), current carrying capacity and voltage regulation consideration using ACSR.
11 <sup>th</sup>	23/05/2022	4.3. Prepare an estimate of materials required for LT distribution line within load of 100 KW maximum and standard spans involving calculation of the size of conductor (from conductor chart), current carrying capacity and voltage regulation consideration using ACSR.
	23/05/2022	4.3. Prepare an estimate of materials required for LT distribution line within load of 100 KW maximum and standard spans involving calculation of the size of conductor (from conductor chart), current carrying capacity and voltage regulation consideration using ACSR.

	24/05/2022	4.4 Prepare an estimate of materials required for HT distribution line (11 KV)within 2 km and load of 2000 KVA maximum and standard spans involvingcalculation of the size of conductor (from conductor chart), current carryingcapacity and voltage regulation of the size of conductor (from conductor chart),current carrying capacity and voltage regulation consideration using ACSR. .(cont..)
	24/05/2022	Tutorial
	25/05/2022	4.4 Prepare an estimate of materials required for HT distribution line (11 KV)within 2 km and load of 2000 KVA maximum and standard spans involvingcalculation of the size of conductor (from conductor chart), current carryingcapacity and voltage regulation of the size of conductor (from conductor chart),current carrying capacity and voltage regulation consideration using ACSR. .(cont..)
12 <sup>th</sup>	30/05/2022	<b>HOLIDAY</b>
	30/05/2022	<b>HOLIDAY</b>
	31/05/2022	4.4 Prepare an estimate of materials required for HT distribution line (11 KV)within 2 km and load of 2000 KVA maximum and standard spans involvingcalculation of the size of conductor (from conductor chart), current carryingcapacity and voltage regulation of the size of conductor (from conductor chart),current carrying capacity and voltage regulation consideration using ACSR.
	31/05/2022	<b>5. OVER HEAD SERVICE LINES</b> 5.1 Components of service lines, service line (cables and conductors), bearer wire,lacing rod. Ariel fuse, service support.(cont..)
	01/06/2022	5.1 Components of service lines, service line (cables and conductors), bearer wire,lacing rod. Ariel fuse, service support.(cont..)
13 <sup>th</sup>	06/06/2022	Tutorial
	06/06/2022	5.1 Components of service lines, service line (cables and conductors), bearer wire,lacing rod. Ariel fuse, service support.
	07/06/2022	5.2 Prepare and estimate for providing single phase supply of load of 5 KW (light,fan, socket) to a single stored residential building.(cont..)
	07/06/2022	5.2 Prepare and estimate for providing single phase supply of load of 5 KW (light,fan, socket) to a single stored residential building.(cont..)
	08/06/2022	5.2 Prepare and estimate for providing single phase supply of load of 5 KW (light,fan, socket) to a single stored residential building.
14 <sup>th</sup>	Extra Class	Tutorial

	Extra Class	5.3 Prepare and estimate for providing single phase supply load of 3KW to each floor of a double stored building having separate energy meter.(cont..)
	Extra Class	5.3 Prepare and estimate for providing single phase supply load of 3KW to each floor of a double stored building having separate energy meter
	Extra Class	5.4 Prepare one estimate of materials required for service connection to a factory building with load within 15 KW using insulated wire.(cont..)
	Extra Class	5.4 Prepare one estimate of materials required for service connection to a factory building with load within 15 KW using insulated wire
15 <sup>th</sup>	Extra Class	Tutorial
	Extra Class	5.5 Prepare one estimate of materials required for service connection to a factory building with load within 15 KW using bare conductor and insulated wire combined.(cont..)
	Extra Class	5.5 Prepare one estimate of materials required for service connection to a factory building with load within 15 KW using bare conductor and insulated wire combined
	Extra Class	<b>6. ESTIMATING FOR DISTRIBUTION SUBSTATIONS</b> 6.1 Prepare one materials estimate for following types of transformer substations.(cont..)
	Extra Class	6.1 Prepare one materials estimate for following types of transformer substations
16 <sup>th</sup>	Extra Class	Tutorial
	Extra Class	6.1.1 Pole mounted substation.(cont..)
	Extra Class	6.1.1 Pole mounted substation
	Extra Class	6.1.2 Plinth Mounted substation.(cont..)
	Extra Class	6.1.2 Plinth Mounted substation
17 <sup>th</sup>	Extra Class	Tutorial

Signature of Teaching Faculty

**ACADEMIC LESSON PLAN OF SUMMER 2022**

<b>Discipline</b> Electrical Engg.	Semester: - <b>6th</b> (2nd shift)	<b>Name of the Teaching Faculty: -Sandeep Mohapatra</b>
<b>Subject:</b> <b>ELECTRICAL INSTALLATION AND ESTIMATING</b>	No. of days/per week class allotted : 4p/week Tutorial: 1p/w week	Semester From: 10 <sup>th</sup> March 2022 to 10 <sup>th</sup> June 2022 No. of weeks: 15 weeks
<b>Week</b>	<b>Class Day</b>	<b>Theory Topics</b>
1 <sup>st</sup>	10/03/2022	<b>1. INDIAN ELECTRICITY RULES</b> 1.1 Definitions, Ampere, Apparatus, Accessible, Bare, cable, circuit, circuit breaker, conductor voltage (low, medium, high, EH), live, dead, cut-out, conduit, system, danger, Installation, earthing system, span, volt, switch gear, etc.
	11/03/2022	1.2 General safety precautions, rule 29, 30, 31, 32, 33, 34, 35, 36, 40, 41, 43, 44, 45, 46.
	11/03/2022	1.3 General conditions relating to supply and use of energy : rule 47, 48, 49, 50, 51, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 70. (cont..)
	15/03/2022	1.3 General conditions relating to supply and use of energy : rule 47, 48, 49, 50, 51, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 70
	16/03/2022	Tutorial
2 <sup>nd</sup>	17/03/2022	1.4 OH lines : Rule 74, 75, 76, 77, 78, 79, 80, 86, 87, 88, 89, 90, 91. (cont..)
	22/03/2022	1.4 OH lines : Rule 74, 75, 76, 77, 78, 79, 80, 86, 87, 88, 89, 90, 91
	23/03/2022	<b>2. ELECTRICAL INSTALLATIONS</b> 2.1 Electrical installations, domestics, industrial, Wiring System, Internal distribution of Electrical Energy. Methods of wiring, systems of wiring, wire and cable, conductor materials used in cables, insulating materials mechanical protection. Types of cables used in internal wiring, multi-stranded cables, voltage grading of cables, general specifications of cables. (cont..)
	24/03/2022	2.1 Electrical installations, domestics, industrial, Wiring System, Internal distribution of Electrical Energy. Methods of wiring, systems of wiring, wire and cable, conductor materials used in cables, insulating materials mechanical protection. Types of cables used in internal wiring, multi-stranded cables, voltage grading of cables, general specifications of cables. (cont..)
	25/03/2022	Tutorial



3 <sup>rd</sup>	25/03/2022	2. 1 Electrical installations, domestics, industrial, Wiring System, Internal distribution of Electrical Energy. Methods of wiring, systems of wiring, wire and cable, conductor materials used in cables, insulating materials mechanical protection. Types of cables used in internal wiring, multi-stranded cables, voltage grinding of cables, general specifications of cables. (cont..)
	29/03/2022	2. 1 Electrical installations, domestics, industrial, Wiring System, Internal distribution of Electrical Energy. Methods of wiring, systems of wiring, wire and cable, conductor materials used in cables, insulating materials mechanical protection. Types of cables used in internal wiring, multi-stranded cables, voltage grinding of cables, general specifications of cables.
	30/03/2022	2. 2 ACCESSORIES: Main switch and distribution boards, conduits, conduit accessories and fittings, lighting accessories and fittings, fuses, important definitions, determination of size of fuse – wire, fuse units. Earthing conductor, earthing, IS specifications regarding earthing of electrical installations, points to be earthed. Determination of size of earth wire and earth plate for domestic and industrial installations. Material required for GI pipe earthing(cont..)
	31/03/2022	2. 2 ACCESSORIES: Main switch and distribution boards, conduits, conduit accessories and fittings, lighting accessories and fittings, fuses, important definitions, determination of size of fuse – wire, fuse units. Earthing conductor, earthing, IS specifications regarding earthing of electrical installations, points to be earthed. Determination of size of earth wire and earth plate for domestic and industrial installations. Material required for GI pipe earthing(cont..)
	05/04/2022	Tutorial
4 <sup>th</sup>	06/04/2022	2. 2 ACCESSORIES: Main switch and distribution boards, conduits, conduit accessories and fittings, lighting accessories and fittings, fuses, important definitions, determination of size of fuse – wire, fuse units. Earthing conductor, earthing, IS specifications regarding earthing of electrical installations, points to be earthed. Determination of size of earth wire and earth plate for domestic and industrial installations. Material required for GI pipe earthing(cont..)
	07/04/2022	2. 2 ACCESSORIES: Main switch and distribution boards, conduits, conduit accessories and fittings, lighting accessories and fittings, fuses, important definitions, determination of size of fuse – wire, fuse units. Earthing conductor, earthing, IS specifications regarding earthing of electrical installations, points to be earthed. Determination of size of earth wire and earth plate for domestic and industrial installations. Material required for GI pipe earthing.

	08/04/2022	2. 3 LIGHTING SCHEME: Aspects of good lighting services. Types of lighting schemes, design of lighting schemes, factory lighting, public lighting installations, street lighting, general rules for wiring, determination of number of points (light, fan, socket, outlets), determination of total load, determination of Number of sub-circuits. (cont..)
	08/04/2022	2. 3 LIGHTING SCHEME: Aspects of good lighting services. Types of lighting schemes, design of lighting schemes, factory lighting, public lighting installations, street lighting, general rules for wiring, determination of number of points (light, fan, socket, outlets), determination of total load, determination of Number of sub-circuits. (cont..)
	12/04/2022	Tutorial
5 <sup>th</sup>	13/04/2022	2. 3 LIGHTING SCHEME: Aspects of good lighting services. Types of lighting schemes, design of lighting schemes, factory lighting, public lighting installations, street lighting, general rules for wiring, determination of number of points (light, fan, socket, outlets), determination of total load, determination of Number of sub-circuits. (cont..)
	19/04/2022	2. 3 LIGHTING SCHEME: Aspects of good lighting services. Types of lighting schemes, design of lighting schemes, factory lighting, public lighting installations, street lighting, general rules for wiring, determination of number of points (light, fan, socket, outlets), determination of total load, determination of Number of sub-circuits.
	20/04/2022	<b>3. INTERNAL WIRING</b> 3 . 1 Type of internal wiring, cleat wiring, CTS wiring, wooden casing capping, metal sheathed wiring, conduit wiring, their advantage and disadvantages comparison and applications.(cont..)
	21/04/2022	3 . 1 Type of internal wiring, cleat wiring, CTS wiring, wooden casing capping, metal sheathed wiring, conduit wiring, their advantage and disadvantages comparison and applications.(cont..)
	22/04/2022	Tutorial
6 <sup>th</sup>	22/04/2022	3 . 1 Type of internal wiring, cleat wiring, CTS wiring, wooden casing capping, metal sheathed wiring, conduit wiring, their advantage and disadvantages comparison and applications.
	26/04/2022	3 . 2 Prepare one estimate of materials required for CTS wiring for small domestic installation of one room and one verandah within 25 m2 with given light, fan & plug points.(cont..).
	27/04/2022	3 . 2 Prepare one estimate of materials required for CTS wiring for small domestic installation of one room and one verandah within 25 m2 with given light, fan & plug points.(cont..).
	28/04/2022	3 . 2 Prepare one estimate of materials required for CTS wiring

		for small domestic installation of one room and one verandah within 25 m2 with given light, fan & plug points.
	29/04/2022	Tutorial
7 <sup>th</sup>	29/04/2022	3 . 3 Prepare one estimate of materials required for conduit wiring for small domestic installation of one room and one verandha within 25 m2 with given light, fan & plug points.(cont..)
	04/05/2022	3 . 3 Prepare one estimate of materials required for conduit wiring for small domestic installation of one room and one verandha within 25 m2 with given light, fan & plug points.
	05/05/2022	3 . 4 Prepare one estimate of materials required for concealed wiring for domestic installation of two rooms and one latrine, bath, kitchen & verandah within 80m2 with given light, fan & plug points. .(cont..)
	06/05/2022	3 . 4 Prepare one estimate of materials required for concealed wiring for domestic installation of two rooms and one latrine, bath, kitchen & verandah within 80m2 with given light, fan & plug points.
	06/05/2022	Tutorial
8 <sup>th</sup>	10/05/2022	3 . 5 Prepare one estimate of materials required for erection of conduct wiring to a small workshop installation about 30m2 and load within 10 KW. .(cont..)
	11/05/2022	3 . 5 Prepare one estimate of materials required for erection of conduct wiring to a small workshop installation about 30m2 and load within 10 KW.
	12/05/2022	<b>4. OVER HEAD INSTALLATION</b> 4.1 Main components of overhead lines, line supports, factors Governing Height of pole, conductor materials, determination of size of conductor for overhead transmission line, cross arms, pole brackets and clamps, guys and stays, conductors configurations, spacing and clearances, span lengths, overhead line insulators, types of insulators, lighting arresters, danger plates, anti-climbing devices, bird guards, beads of jumpers, jumpers, tee-offs, guarding of overhead lines.(cont..)
	13/05/2022	4.1 Main components of overhead lines, line supports, factors Governing Height of pole, conductor materials, determination of size of conductor for overhead transmission line, cross arms, pole brackets and clamps, guys and stays, conductors configurations, spacing and clearances, span lengths, overhead line insulators, types of insulators, lighting arresters, danger plates, anti-climbing devices, bird guards, beads of jumpers, jumpers, tee-offs, guarding of overhead lines.(cont..)
	13/05/2022	Tutorial
9 <sup>th</sup>	10/05/2022	4.1 Main components of overhead lines, line supports, factors Governing Height of pole, conductor materials, determination of size of conductor for overhead transmission line, cross

		arms, pole brackets and clamps, guys and stays, conductors configurations, spacing and clearances, span lengths, overhead line insulators, types of insulators, lighting arresters, danger plates, anti-climbing devices, bird guards, beads of jumpers, jumpers, tee-offs, guarding of overhead lines.(cont..)
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	18/05/2022	4.2 Prepare an estimate of materials required for LT distribution line within load of 100 KW maximum and standard spans involving calculation of the size of conductor (from conductor chart), current carrying capacity and voltage regulation consideration using ACSR. .(cont..)
	19/05/2022	4.2 Prepare an estimate of materials required for LT distribution line within load of 100 KW maximum and standard spans involving calculation of the size of conductor (from conductor chart), current carrying capacity and voltage regulation consideration using ACSR. .(cont..)
	20/05/2022	Tutorial
10 <sup>th</sup>	20/05/2022	4.2. Prepare an estimate of materials required for LT distribution line within load of 100 KW maximum and standard spans involving calculation of the size of conductor (from conductor chart), current carrying capacity and voltage regulation consideration using ACSR.
	24/05/2022	4.3. Prepare an estimate of materials required for LT distribution line within load of 100 KW maximum and standard spans involving calculation of the size of conductor (from conductor chart), current carrying capacity and voltage regulation consideration using ACSR.
	25/05/2022	4.3. Prepare an estimate of materials required for LT distribution line within load of 100 KW maximum and standard spans involving calculation of the size of conductor (from conductor chart), current carrying capacity and voltage regulation consideration using ACSR.

	26/05/2022	4.4 Prepare an estimate of materials required for HT distribution line (11 KV) within 2 km and load of 2000 KVA maximum and standard spans involving calculation of the size of conductor (from conductor chart), current carrying capacity and voltage regulation of the size of conductor (from conductor chart), current carrying capacity and voltage regulation consideration using ACSR. .(cont..)
	27/05/2022	Tutorial
11 <sup>th</sup>	27/05/2022	4.4 Prepare an estimate of materials required for HT distribution line (11 KV) within 2 km and load of 2000 KVA maximum and standard spans involving calculation of the size of conductor (from conductor chart), current carrying capacity and voltage regulation of the size of conductor (from conductor chart), current carrying capacity and voltage regulation consideration using ACSR. .(cont..)
	31/05/2022	4.4 Prepare an estimate of materials required for HT distribution line (11 KV) within 2 km and load of 2000 KVA maximum and standard spans involving calculation of the size of conductor (from conductor chart), current carrying capacity and voltage regulation of the size of conductor (from conductor chart), current carrying capacity and voltage regulation consideration using ACSR.
	01/06/2022	<b>5. OVER HEAD SERVICE LINES</b> 5.1 Components of service lines, service line (cables and conductors), bearer wire, lacing rod. Ariel fuse, service support.(cont..)
	02/06/2022	5.1 Components of service lines, service line (cables and conductors), bearer wire, lacing rod. Ariel fuse, service support.(cont..)
	03/06/2022	Tutorial
12 <sup>th</sup>	03/06/2022	5.1 Components of service lines, service line (cables and conductors), bearer wire, lacing rod. Ariel fuse, service support.
	07/06/2022	5.2 Prepare and estimate for providing single phase supply of load of 5 KW (light, fan, socket) to a single stored residential building.(cont..)
	08/06/2022	5.2 Prepare and estimate for providing single phase supply of load of 5 KW (light, fan, socket) to a single stored residential building.(cont..)
	09/06/2022	5.2 Prepare and estimate for providing single phase supply of load of 5 KW (light, fan, socket) to a single stored residential building.
	10/06/2022	Tutorial
13 <sup>th</sup>	10/06/2022	5.3 Prepare and estimate for providing single phase supply load of 3KW to each floor of a double stored building having separate energy meter.(cont..)

	Extra Class	5.3 Prepare and estimate for providing single phase supply load of 3KW to each floor of a double stored building having separate energy meter
	Extra Class	5.4 Prepare one estimate of materials required for service connection to a factory building with load within 15 KW using insulated wire.(cont..)
	Extra Class	5.4 Prepare one estimate of materials required for service connection to a factory building with load within 15 KW using insulated wire
	Extra Class	Tutorial
14 <sup>th</sup>	Extra Class	5.5 Prepare one estimate of materials required for service connection to a factory building with load within 15 KW using bare conductor and insulated wire combined.(cont..)
	Extra Class	5.5 Prepare one estimate of materials required for service connection to a factory building with load within 15 KW using bare conductor and insulated wire combined
	Extra Class	<b>6. ESTIMATING FOR DISTRIBUTION SUBSTATIONS</b> 6.1 Prepare one materials estimate for following types of transformer substations.(cont..)
	Extra Class	6.1 Prepare one materials estimate for following types of transformer substations
	Extra Class	Tutorial
15 <sup>th</sup>	Extra Class	6.1.1 Pole mounted substation.(cont..)
	Extra Class	6.1.1 Pole mounted substation
	Extra Class	6.1.2 Plinth Mounted substation.(cont..)
	Extra Class	6.1.2 Plinth Mounted substation
	Extra Class	Tutorial

Signature of Teaching

Faculty