

Department of Electrical And Electronics Engg

SEMESTER : VIII
BRANCH : EEE
SUBJECT : ELECTRICAL DESIGN, ESTIMATING AND COSTING
SUBJECT CODE: 10EE81

NAME OF THE FACULTY : Ms. T Aruna Kumari
DATE OF COMMENCEMENT : 21.01.2016
DATE OF CLOSING : 21.05.2016
CLASS STRENGTH : 62
NO OF HRS/WK : 6
TOTAL HOURS : 76

Sessi on No	Chapter no (No of hrs planed for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignmen ts/ Tests planned for the chapter	Topics covered As per plan
1	1/4	21/1/16	UNIT: 1(introduction) GENERAL PRINCIPLES OF ESTIMATION		Assignmen t-I	
2	2/4	21/1/16	Introduction to estimation & costing, Electrical Schedule, Catalogues, Market Survey and source selection, Recording of estimates, Determination of required quantity of material			
3	3/4	22/1/16	Labor conditions, Determination of cost material and labour, contingencies, Overhead charges, Profit, Purchase system			
4	4/4	22/1/16	Purchase enquiry and selection of appropriate purchase mode, Comparative statement, Purchase orders, Payment of bills, Tender form, General idea about IE rule, Indian Electricity Act and major applicable I.E rules.			
5	1/8	23/1/16	UNIT: 2 (introduction) RESIDENTIAL BUILDING ELECTRIFICATION:		Assignmen t-II	
6	2/8	23/1/16	General rules guidelines for wiring of residential installation and positioning of equipments, Principles of circuit design in lighting and			

			power circuits, Procedures for designing the circuits and deciding the number of circuits, Method of drawing single line diagram, Selection of type of wiring and rating of wires and cables, Load calculations and selection of size of conductor, Selection of rating of main switch, distribution board, protective switchgear ELCB and MCB and wiring accessories			
7	3/8	28/1/16	Earthing of residential Installation,			
8	4/8	28/1/16	Sequence to be followed for preparing estimate, Preparation of detailed estimates and costing of residential installation.			
9	5/8	29/1/16	Problem solving on unit-II			
10	6/8	29/1/16	Problem solving on unit-II			
11	7/8	30/1/16	Problem solving on unit-II			
12	8/8	30/1/16	Problem solving on unit-II			
13	1/7	4/2/16	UNIT: 4(introduction) SERVICE CONNECTION, INSPECTION AND TESTING OF INSTALLATION		Assignment-III	
14	2/7	4/2/16	Concept of service connection, Types of service connection and their features, Method of installation of service connection			
15	3/7	5/2/16	Problem solving on unit-IV			
16	4/7	5/2/16	Problem solving on unit-IV			
17	5/7	11/2/16	Estimates of underground and overhead service connections			
18	6/7	11/2/16	Inspection of internal wiring installations, Inspection of new installations, Testing of installations, Testing of wiring installations			
19	7/7	12/2/16	Reason for excess recording of energy consumption by energy meter.			
20	1/9	12/2/16	UNIT: 5(introduction) ELECTRICAL INSTALLATION FOR POWER CIRCUITS:		Assignment-IV	
21	2/9	13/2/16	Introduction, Important considerations regarding motor installation wiring			
22	3/9	13/2/16	Determination of input power, Determination of input current to motors, Determination of rating of			

			cables, determination of rating of fuse			
23	4/9	18/2/16	Determination of size of Condit, distribution Board main switch and starter.			
24	5/9	18/2/16	Problem solving on unit-V			
25	6/9	25/2/16	Problem solving on unit-V			
26	7/9	25/2/16	Problem solving on unit-V			
27	8/9	26/2/16	Problem solving on unit-V			
28	9/9	26/2/16	Problem solving on unit-V			
29	1/10	3/3/16	UNIT: 8(introduction) DESIGN AND ESTIMATION OF SUBSTATIONS:		Assignmen t-V	
30	2/10	3/3/16	Introduction, Classification of substation, Indoor substations,			
31	3/10	4/3/16	Outdoor substations			
32	4/10	4/3/16	Selection and location of site for substation, Main Electrical Connections, Graphical symbols for various types of apparatus and circuit elements on substation main connection diagram, Key diagram of typical substations			
33	5/10	5/3/16	Equipment for substation and switchgear installations			
34	6/10	5/3/16	Substation auxiliaries supply, Substation Earthing			
35	7/10	10/3/16	Problem solving on unit-VIII			
36	8/10	10/3/16	Problem solving on unit-VIII			
37	9/10	11/3/16	Problem solving on unit-VIII			
38	10/10	11/3/16	Problem solving on unit-VIII			
39	1/18	17/3/16	UNIT:6 and 7(introduction) DESIGN AND ESTIMATION OF OVERHEAD TRANSMISSION & DISTRIBUTION LINES		Assignmen t-VI	

40	2/18	17/3/16	Introduction, Typical AC electrical power system, Main components of overhead lines			
41	3/18	18/3/16	Line supports, Factors governing height of pole, Conductor materials			
42	4/18	18/3/16	Determination of size of conductor for overhead transmission line, Cross arms			
43	5/18	19/3/16	Pole brackets and clamps, Guys and Stays, Conductors configuration spacing and clearances			
44	6/18	19/3/16	Span lengths, Overhead line insulators, Insulator materials, Types of insulators			
45	7/18	24/3/16	Lightning Arrestors, Phase plates, Danger plates, Anti climbing devices, Bird guards			
46	8/18	24/3/16	Beads of jumpers, Muffs, Points to be considered at the time of erection of overhead lines			
47	9/18	31/3/16	Erection of supports, Setting of stays, Fixing of cross arms, Fixing of insulators, Conductor erection, Repairing and jointing of conductor			
48	10/18	31/3/16	Dead end clamps, Positioning of conductors and attachment to insulators, Jumpers, Tee-offs,			
49	11/18	1/4/16	Earthing of transmission lines, Guarding of overhead lines, Clearances of conductor from ground, Spacing between conductors			
50	12/18	1/4/16	Testing and commissioning of overhead distribution lines, Some important specifications.			
51	13/18	2/4/16	Problem solving on units-VI & VII			
52	14/18	2/4/16	Problem solving on units-VI & VII			
53	15/18	7/4/16	Problem solving on units-VI & VII			
54	16/18	7/4/16	Problem solving on units-VI & VII			
55	17/18	15/4/16	Problem solving on units-VI & VII			
56	18/18	15/4/16	Problem solving on units-VI & VII			
57	1/13	16/4/16	UNIT:3(introduction) ELECTRIFICATION OF COMMERCIAL INSTALLATION:		Assignment-VII	

58	2/13	16/4/16	Concept of commercial installation, Differentiate between electrification of residential and commercial installation			
59	3/13	21/4/16	Fundamental considerations for planning of an electrical installation system for commercial building, Design considerations of electrical installation system for commercial building			
60	4/13	21/4/16	Load calculation and selection of size of service connection and nature of supply, Deciding the size of the cables, busbar and bus bar chambers			
61	5/13	22/4/16	Mounting arrangements and positioning of switchboards, distribution boards main switch etc			
62	6/13	22/4/16	Earthing of the electrical installation, Selection of type wire, wiring system and layout, Sequence to be followed to prepare estimate			
63	7/13	23/4/16	Preparation of detailed estimate and costing of commercial installation.			
64	8/13	23/4/16	Problem solving on unit-III			
65	9/13	28/4/16	Problem solving on unit-III			
66	10/13	28/4/16	Problem solving on unit-III			
67	11/13	29/4/16	Problem solving on unit-III			
68	12/13	29/4/16	Problem solving on unit-III			
69	13/13	30/4/16	Problem solving on unit-III			
70		30/4/16	Previous question paper discussion			
71		5/5/16	Previous question paper discussion			
72		5/5/16	Previous question paper discussion			
73		6/5/16	Previous question paper discussion			
74		6/5/16	Previous question paper discussion			
75		7/5/16	Previous question paper discussion			
76		7/5/16	Previous question paper discussion			

Department of Electrical And Electronics Engg

SEMESTER : VIII
BRANCH : EEE
SUBJECT : PSOC
SUBJECT CODE : 10EE82

NAME OF THE FACULTY : Ms. Sanitha Michail C
DATE OF COMMENCEMENT : 21.01.2016
DATE OF CLOSING : 21.05.2016
CLASS STRENGTH :
NO OF HRS/WK : 6
TOTAL HOURS : 60

Session No	Chapter no (No of hrs planed for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignments/ Tests planned for the chapter	Topics covered As per plan
1	1/8	21/1/2016	Control center operation of power systems	Board, chalk, duster	Prerequisite Assignment	
2	1/8	21/1/2016	SCADA system	„		
3	1/8	22/2016	Digital computer configuration	„		
4	1/8	22/1/2016	Automatic generation control	„		
5	1/8	23/1/2016	Tie-line control Area control error	„	Assignment- I	
6	1/8	23/1/2016	Operation without central computers	„		
7	1/8	28/1/2016	Parallel operation of generators	„		
8	1/8	28/1/2016	Parallel operation of generators	Board, chalk, duster		
9	1/8	29/1/2016	Area lumped dynamic model	„		

10	1/12	29/1/2016	Automatic load frequency control	„		
11	1/12	30/1/2016	Automatic load frequency control	„		
12	1/12	30/1/2016	AVR control loops of generators	„	Assignmen t -II	
13	1/12	4/2/2016	Performance of AVR	„		
14	1/12	4/2/2016	ALFC of single area systems	„		
15	1/12	5/2/2016	Concept of control area			
16	1/12	5/2/2016	Multi-area systems			
17	1/12	11/2/2016	Pool operation of two area systems			
18	1/12	11/2/2016	Tie-line bias control	„		
19	1/12	12/2/2016	Example	„	Assignmen t -III	
20	1/12	12/2/2016	Example	„		
21	1/12	13/2/2016	Solving Question Paper	„		
22	1/12	13/2/2016	Solving Question Paper	„		
23	1/12	18/2/2016	Solving Question Paper			
24	1/6	18/2/2016	Introduction to voltage control Reactive power control	Board, chalk, duster		
25	1/6	25/2/2016	Generation and absorption of reactive power, Voltage, power & reactive power at a node	„		
26	1/6	25/2/2016	Generation and absorption of reactive power, Voltage, power & reactive power at a node	„	Assignmnt -IV	
27	1/6	26/2/2016	SMIB systems	„		
28	1/6	26/2/2016	Methods of voltage control	„		
29	1/6	3/3/2016	Sub-synchronous resonance	„		
30	1/6	3/3/2016	Voltage stability, Voltage collapse	„		
31	1/6	4/3/2016	Optimal operation of thermal plants	„		

32	1/6	4/3/2016	Constraints in economic operation	„		
33	1/6	5/3/2016	Incremental production cost	Board, chalk, duster		
34	1/6	5/3/2016	Need and importance of unit commitment	„		
35	1/6	10/3/2016	Unit Commitment solution methods- Priority lists method	„	Assignment -V	
36	1/6	10/3/2016	Forward Dynamic Programming method, Spinning reserve.	„		
37	1/6	11/3/2016	Introduction to power system security	„		
38	1/6	11/3/2016	Security functions, Factors affecting system security	„		
39	1/6	17/3/2016	Contingency analysis: detection of network problems	„		
40	1/6	17/3/2016	Security analysis	„		
41	1/6	18/3/2016	Calculation of network sensitivity factors	„		
42	1/6	18/3/2016	Contingency analysis using sensitivity factors	„		
43	1/6	19/3/2016	Contingency ranking	„		
44	1/6	19/3/2016	Techniques for contingency evaluation-D.C. load flow	„		
45	1/6	24/3/2016	Techniques for contingency evaluation- fast decoupled load flow.	„	Assignment -VI	
46	1/6	24/3/2016	Energy management system	„		
47	1/6	31/3/2016	The basis of power system state estimation(PSSE)	„		
48	1/6	31/3/2016	Mathematical description of PSSE process	„	Assignment -VII	
49	1/6	1/4/2016	Minimization technique for PSSE	Board, chalk, duster		
50	1/6	1/4/2016	Least Square estimation	„		

51	1/6	2/4/2016	Error and detection in PSSE	„		
52	1/6	2/4/2016	System security and emergency control.	„		
53	1/8	7/4/2016	Modes of failures of a system	PPT		
54	1/8	7/4/2016	Generating system and its performance	„		
55	1/8	15/4/2016	Derivation of reliability index	Board/Chalk	Assignment -VIII	
56	1/8	15/4/2016	Reliability measure for N- unit system	„		
57	1/8	16/4/2016	Cumulative probability outages- Recursive Relation	PPT/Board/Chalk,,		
58	1/8	16/4/2016	Loss of load probability	„		
59	1/8	21/4/2016	Frequency and duration of a state.	„		
60	1/8	21/4/2016	Revision	„		

Department of Electrical And Electronics Engg

SEMESTER : VIII
BRANCH : EEE
SUBJECT : RPM
SUBJECT CODE : 10EE831

NAME OF THE FACULTY : Ms.SHARENANJIT
DATE OF COMMENCEMENT : 21.01.2016
DATE OF CLOSING : 07.05.2016
CLASS STRENGTH :
NO OF HRS/WK : 06
TOTAL HOURS : 76

Sessi on No	Chapter no (No of hrs planed for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignmen ts/ Tests planned for the chapter	Topics covered As per plan
1	1/1	21/1/16	Introduction: Basic concept of Reactive Power	Board, chalk, duster	Prerequisit e Assignmen t	
2	2/1	21/1/16	Necessary to control voltage & reactive power	„		
3	3/1	22/1/16	Problem of reactive power	„		
4	4/1	22/1/16	Importance of reactive power control in EPS	„		
5	5/1	23/1/16	Importance of reactive power control in EPS	„	Assignmen t- I	
6	6/1	23/1/16	Reactive power devices	„		
7	7/1	28/1/16	Reactive power devices	„		
8	1/2	28/1/16	Theory of Load Compensation: Introduction	Board, chalk, duster		
9	2/2	29/1/16	Requirement for compensation	„		
10	3/2	29/1/16	Objectives in load compensation: Power factor correction, voltage regulation , load balancing	„		
11	4/2	30/1/16	Ideal compensator	„	Assignmen t -II	
12	5/2	30/1/16	Specifications of a load compensator	„		
13	6/2	4/2/16	Power factor correction and voltage	„		

			regulations in single phase system			
14	7/2	4/2/16	Phase balancing and p.f. correction of unsymmetrical loads	„		
15	8/2	5/2/16	Compensation in term of symmetrical components			
16	1/3	5/2/16	Reactive Power Control: Introduction			
17	2/3	11/2/16	Fundamental requirement in AC Power transmission			
18	3/3	11/2/16	Fundamental transmission line equation	„		
19	4/3	12/2/16	Surge impedance and natural loading	„	Assignment –III	
20	5/3	12/2/16	Voltage and current profiles of uncompensated radial and symmetrical line on open circuit	„		
21	6/3	13/2/16	Uncompensated line under load	„		
22	7/3	13/2/16	Effect of line length	„		
23	8/3	18/2/16	load power and power factor on voltage and reactive power.			
24	1/4	18/2/16	Passive and active compensators: Uniformly distributed fixed compensation	Board, chalk, duster		
25	2/4	25/2/16	Effect of distributed compensation on voltage control	„		
26	3/4	25/2/16	Effect of distributed compensation on line charging	„		
27	4/4	26/2/16	Effect of distributed compensation on maximum power	„	Assignmmt –IV	
28	5/4	26/2/16	Passive shunt compensation, required reactance values of shunt reactance	„		
29	6/4	3/3/16	Control of open circuit voltage by shunt reactance	„		
30	7/4	3/3/16	Reactance of shunt reactors	„		
31	8/4	4/3/16	Multiple shunt reactors along the line	„		
32	1/5	4/3/16	Series compensation: Objectives and practical limitations	„		
33	2/5	5/3/16	Symmetrical line with mid-point series capacitor and shunt reactor	Board, chalk, duster		

34	3/5	5/3/16	Symmetrical line with mid-point series capacitor and shunt reactor	„		
35	4/5	10/3/16	Reactive power requirements at the terminals	„		
36	5/5	10/3/16	Example of a series compensated line, compensation by sectioning – fundamental concepts	„	Assignment -V	
37	6/5	11/3/16	Dynamic working of midpoint compensator, example of line compensated by sectioning	„		
38	7/5	11/3/16	Power transfer characteristics and maximum transmissible power for a general case	„		
39	8/5	17/3/16	Power transfer characteristics and maximum transmissible power for a general case	„		
40	9/5	17/3/16	Need for adjustable reactive compensation	„		
41	1/6	18/3/16	Principles of Static Compensation	„		
42	2/6	18/3/16	Principle of operation of thyristor controlled reactor	„		
43	3/6	19/3/16	Thyristors switched capacitor	„	Assignment -VI	
44	4/6	19/3/16	Series Capacitors- introduction	„		
45	5/6	24/3/16	Protective gear	„		
46	6/6	24/3/16	Reinsertion schemes	„		
47	7/6	31/3/16	Varistor protective gear, Resonance effects with series capacitors	„		
48	1/7	31/3/16	Synchronous Condenser: Introduction	„		
49	2/7	1/4/16	Power system Voltage control	Board, chalk, duster		
50	3/7	1/4/16	Emergency reactive power supply	„		
51	4/7	2/4/16	Starting methods : Starting motor	„	Assignment -VII	
52	5/7	2/4/16	reduced voltage starting	„		
53	6/7	7/4/16	Static starting	PPT		
54	1/8	7/4/16	Harmonics effects: Resonance	„		

55	2/8	15/4/16	Shunt capacitors and filters	Board/Chalk		
56	3/8	15/4/16	Reactive Power Coordination	„		
57	4/8	16/4/16	Reactive power management	PPT/Board/Chalk,,	Assignment -VIII	
58	5/8	16/4/16	Transmission benefits	„		
59	6/8	21/4/16	Reactive power dispatch & equipment impact	„		
60	7/8	21/4/16	Telephone interferences	„		
61	8/8	22/4/16	Reactive power dispatch	„		
62	9/8	22/4/16	equipment impact	„		
63		23/4/16	Revision of unit-1	„		
64		23/4/16	question paper discussion	„		
65		28/4/16	Revision of unit-2	„		
66		28/4/16	question paper discussion	„		
67		29/4/16	Revision of unit-3	„		
68		29/4/16	question paper discussion	„		
69		30/4/16	Revision of unit-4	„		
70		30/4/16	question paper discussion	„		
71		5/5/16	Revision of unit-5	„		
72		5/5/16	question paper discussion	„		
73		6/5/16	Revision of unit-6	„		
74		6/5/16	question paper discussion	„		
75		7/5/16	Revision of unit-7&8	„		
76		7/5/16	question paper discussion	“		

Department of Electrical And Electronics Engg

SEMESTER : VIII A
BRANCH : EEE
SUBJECT : RES
SUBJECT CODE: 10EE836

NAME OF THE FACULTY : Ms. Anju Das
DATE OF COMMENCEMENT : 21.01.2016
DATE OF CLOSING : 07.05.2016
CLASS STRENGTH : 41
NO OF HRS/WK : 6
TOTAL HOURS : 62

Session No	Chapter no (No of hrs planned for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignments/ Tests planned for the chapter	Topics covered As per plan
1	1/7	21/1/16	ENERGY SOURCES: Introduction	blackboard		
2	2/7	21/1/16	ENERGY SOURCES: Introduction	PPT		
3	3/7	22/1/16	Importance of Energy Consumption as Measure of Prosperity, Per Capita Energy Consumption,	PPT		
4	4/7	22/1/16	Classification of Energy Resources;	PPT	Assignment no.1	
5	5/7	23/1/16	Conventional Energy Resources - Availability and their limitations;	PPT		
6	6/7	23/1/16	Non-Conventional Energy Resources – Classification, Advantages, Limitations;	PPT		
7	7/7	28/1/16	Comparison of Conventional and Non-Conventional Energy Resources; World Energy Scenario; Indian Energy Scenario	PPT		
8	1/9	28/1/16	(2) SOLAR ENERGY BASICS: Introduction	blackboard		
9	2/9	29/1/16	, Solar Constant, Basic Sun-Earth Angles – definitions and their representation	blackboard		
10	3/9	29/1/16	Solar Constant, Basic Sun-Earth Angles – definitions and their representation	blackboard		
11	4/9	30/1/16	, Solar Radiation Geometry (numerical problems),	blackboard		

12	5/9	30/1/16	Solar Radiation Geometry (numerical problems),	blackboard	Assignment no.2	
13	6/9	4/2/16	Estimation of Solar Radiation of Horizontal and Tilted Surfaces (numerical problems)	blackboard		
14	7/9	4/2/16	Estimation of Solar Radiation of Horizontal and Tilted Surfaces (numerical problems)	blackboard		
15	8/9	5/2/16); Measurement of Solar Radiation Data – Pyranometer and Pyrheliometer	PPT		
16	9/9	5/2/16	(3) SOLAR THERMAL SYSTEMS: Principle of Conversion of Solar Radiation into Heat	PPT		
17	1/7	11/2/16	, Solar Water Heaters (Flat Plate Collectors	PPT		
18	2/7	11/2/16	, Solar Water Heaters (Flat Plate Collectors	PPT		
19	3/7	12/2/16), Solar Cookers – Box type, concentrating dish type	PPT		
20	4/7	12/2/16	, Solar driers,	PPT	Assignment no.3	
21	5/7	13/2/16	Solar Still, Solar Furnaces,	PPT		
22	6/7	13/2/16	Solar Green Houses	PPT		
23	7/7	18/2/16	4)(a) SOLAR ELECTRIC SYSTEMS: Solar Thermal Electric Power Generation – Solar Pond and Concentrating Solar Collector (parabolic trough, parabolic dish, Central Tower Collector	PPT		
24	1/8	18/2/16	Solar Thermal Electric Power Generation – Solar Pond and Concentrating Solar Collector (parabolic trough, parabolic dish, Central Tower Collector)	PPT		
25	2/8	25/2/16	Advantages and Disadvantages; Solar Photovoltaic –Solar Cell fundamentals, characteristics, classification, construction of module, panel and array.	PPT		
26	3/8	25/2/16	SolarCell fundamentals, characteristics, classification, construction of module, panel and array.	PPT		
27	4/8	26/2/16	Solar PV Systems – stand-alone and grid connected; Applications – Street lighting, Domestic lighting and Solar Water pumping systems.	PPT	Assignment no.4	

28	5/8	26/2/16	(Solar PV Systems – stand-alone and grid connected; Applications – Street lighting, Domestic lighting and Solar Water pumping systems).			
29	6/8	3/3/16	(4)(b) ENERGY STORAGE: Introduction, Necessity of Energy Storage, and Methods of Energy Storage (classification and brief description using block diagram representation only).	PPT		
30	7/8	3/3/16	(4)(b) ENERGY STORAGE: Introduction, Necessity of Energy Storage, and Methods of Energy Storage (classification and brief description using block diagram representation only).	PPT		
31	8/8	4/3/16	(5) WIND ENERGY: Introduction, Wind and its Properties, History of Wind Energy,	PPT		
32	1/8	4/3/16	Wind Energy Scenario – World and India.	PPT		
33	2/8	5/3/16	Basic principles of Wind Energy Conversion Systems (WECS),.	PPT		
34	3/8	5/3/16	Classification of WECS, Parts of WECS,	PPT		
35	4/8	10/3/16	Derivation for Power in the wind, Electrical Power Output and Capacity Factor of WECS,	PPT	Assignment no.5	
36	5/8	10/3/16	Wind site selection consideration, Advantages and Disadvantages of WECS	PPT		
37	6/8	11/3/16	(6) BIOMASS ENERGY: Introduction.	PPT		
38	7/8	11/3/16	, Photosynthesis process, Biomass fuels,	PPT		
39	8/8	17/3/16	Biomass conversion technologies, Urban waste to Energy Conversion,	blackboard		
40	1/8	17/3/16	Biomass Gasification, Biomass to Ethanol Production	blackboard	Assignment no.6	
41	2/8	18/3/16	, Biogas production from waste biomass, factors affecting biogas generation	PPT		
42	3/8	18/3/16	, types of biogas plants – KVIC and Janata model;	PPT		
43	4/8	19/3/16	Biomass program in India	PPT		

44	5/8	19/3/16	(7) ENERGY FROM OCEAN: Tidal Energy – Principle of Tidal Power,	PPT		
45	6/8	24/3/16	Components of Tidal Power Plant (TPP),	PPT		
46	7/8	24/3/16	Classification of Tidal Power Plants, Estimation of Energy – Single basin and Double basin type TPP (no derivations. Simple numerical problems),	PPT	Assignment no.7	
47	8/8	31/3/16	Advantages and Limitations of TPP. Ocean Thermal Energy Conversion (OTEC)	PPT		
48	1/7	31/3/16	Principle of OTEC system	PPT		
49	2/7	1/4/16	, Methods of OTEC power generation – Open Cycle(Claude cycle),	PPT		
50	3/7	1/4/16	Closed Cycle (Anderson cycle) and Hybrid cycle (block diagram description of OTEC);	PPT		
51	4/7	2/4/16	Site-selection criteria, Biofouling, Advantages & Limitations of OTEC	blackboard		
52	5/7	2/4/16	8) EMERGING TECHNOLOGIES: Fuel Cell,	PPT		
53	6/7	7/4/16	Fuel Cell	PPT		
54	7/7	7/4/16	Small Hydro Resources,	PPT	Assignment no.8	
55	1/8	15/4/16	Small Hydro Resources,	PPT		
56	2/8	15/4/16	Hydrogen Energy,	PPT		
57	3/8	16/4/16	Hydrogen Energy,	PPT		
58	4/8	16/4/16	Wave Energy. (Principle of Energy generation using block diagrams, advantages and limitations	PPT		
59	5/8	21/4/16	Wave Energy. (Principle of Energy generation using block diagrams, advantages and limitations	PPT		
60	6/8	21/4/16	Wave Energy. (Principle of Energy generation using block diagrams, advantages and limitations	PPT		
61	7/8	22/4/16	PROBLEMS	blackboard		

62	8/8	22/4/16	PROBLEMS	blackboard		
63		23/4/16	UNIT 1 REVISION			
64		23/4/16	UNIT 2 REVISION			
65		28/4/16	UNIT 3 REVISION			
66		28/4/16	UNIT 4 REVISION			
67		29/4/16	UNIT 5 REVISION			
68		29/4/16	UNIT 6 REVISION			
69		30/4/16	UNIT 7 REVISION			
70		30/4/16	UNIT 8 REVISION			
71		5/5/16				
72		5/5/16				
73		6/5/16				
74		6/5/16				
75		7/5/16				
76		7/5/16				

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Session wise – Course Plan

Department of Electrical And Electronics Engg

SEMESTER : VIII
BRANCH : EEE
SUBJECT : EA
SUBJECT CODE : 10EE842

NAME OF THE FACULTY : Ms.SHARENANJIT
DATE OF COMMENCEMENT : 21.01.2016
DATE OF CLOSING : 07.05.2016
CLASS STRENGTH :
NO OF HRS/WK : 06
TOTAL HOURS : 76

Sessi on No	Chapter no (No of hrs planed for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignmen ts/ Tests planned for the chapter	Topics covered As per plan
1	1/1	21/1/16	Introduction:-Energy situation	Board, chalk, duster	Prerequisit e Assignmen t	
2	2/1	21/1/16	Energy Sources , Classification of energy	„		
3	3/1	22/1/16	energy Scenario -world & India	„		
4	4/1	22/1/16	Energy Consumption	„		
5	5/1	23/1/16	Energy conservation	„	Assignmen t- I	
6	6/1	23/1/16	Codes, standards, Legislation	„		
7	7/1	28/1/16	Various electricity acts	„		
8	1/2	28/1/16	Energy Economic Analysis:- introduction	Board, chalk, duster		
9	2/2	29/1/16	Fixed cost, variable cost, simple interest & compound interest	„		
10	3/2	29/1/16	The time value of money concept	„		
11	4/2	30/1/16	Developing cash flow models	„	Assignmen t -II	
12	5/2	30/1/16	Payback analysis	„		
13	6/2	4/2/16	Depreciation	„		
14	7/2	4/2/16	Taxes and tax credit	„		
15	8/2	5/2/16	Numerical problems			
16	1/3	5/2/16	Auditing Energy:-Introduction			
17	2/3	11/2/16	Definition & objectives of Energy Management			
18	3/3	11/2/16	Elements of energy audits	„		
19	4/3	12/2/16	Need for energy audit & types of energy audit	„	Assignmen t –III	
20	5/3	12/2/16	ten step methodology for detailed energy audit	„		
21	6/3	13/2/16	Energy use profiles	„		
22	7/3	13/2/16	Measurements in energy audits	„		

23	8/3	18/2/16	Presentation of energy audit results			
24	1/4	18/2/16	Electrical system optimization	Board, chalk, duster		
25	2/4	25/2/16	Introduction to electric power supply systems	„		
26	3/4	25/2/16	Power triangle, advantages of PF improvement	„		
27	4/4	26/2/16	Cost benefits of PF improvement	„	Assignmmt -IV	
28	5/4	26/2/16	Selection and location of capacitors	„		
29	6/4	3/3/16	System distribution losses	„		
30	7/4	3/3/16	Motor horse power	„		
31	8/4	4/3/16	Power flow concept	„		
32	1/5	4/3/16	Power factor	„		
33	2/5	5/3/16	Correction & location of capacitors	Board, chalk, duster		
34	3/5	5/3/16	Benefits of power factor correction	„	Assignmen t -V	
35	4/5	10/3/16	Rotary equipments Synchronous condensers	„		
36	5/5	10/3/16	Energy efficient motors	„		
37	1/6	11/3/16	tariffs	„		
38	2/6	11/3/16	Aims and objectives of tariffs	„		
39	3/6	17/3/16	Factors governing tariff	„		
40	4/6	17/3/16	Requirement of good tariff	„	Assignmen t -VI	
41	5/6	18/3/16	Electrical equipments	„		
42	6/6	18/3/16	Lighting basics	„		

43	7/6	19/3/16	Concept of ABT	„		
44	1/7	19/3/16	Demand side management-introduction	„		
45	2/7	24/3/16	Concept of DSM	„		
46	3/7	24/3/16	Benefits of DSM	„		
47	4/7	31/3/16	Different techniques of DSM	„		
48	5/7	31/3/16	Time of day pricing	„	Assignment -VII	
49	6/7	1/4/16	Energy storage	Board, chalk, duster		
50	7/7	1/4/16	Multi-utility power exchange model	„		
51	8/7	2/4/16	Time of day models for planning	„		
52	1/8	2/4/16	Load management	„		
53	2/8	7/4/16	Load priority technique	PPT		
54	3/8	7/4/16	Peak clipping	„		
55	4/8	15/4/16	Peak shifting	Board/Chalk		
56	5/8	15/4/16	Valley filling	„		
57	6/8	16/4/16	Strategic conservation	PPT/Board/Chalk,,	Assignment -VIII	
58	7/8	16/4/16	Energy efficient equipment	„		
59	8/8	21/4/16	Management of energy	„		
60	9/8	21/4/16	Organization of energy	„		
61	10/8	22/4/16	Organization of energy	„		
62	11/8	22/4/16	conservation awareness programs	„		
63		23/4/16	Revision of unit-1	„		
64		23/4/16	question paper discussion	„		
65		28/4/16	Revision of unit-2	„		
66		28/4/16	question paper discussion	„		

67		29/4/16	Revision of unit-3	„		
68		29/4/16	question paper discussion	„		
69		30/4/16	Revision of unit-4	„		
70		30/4/16	question paper discussion	„		
71		5/5/16	Revision of unit-5	„		
72		5/5/16	question paper discussion	„		
73		6/5/16	Revision of unit-6	„		
74		6/5/16	question paper discussion	„		
75		7/5/16	Revision of unit-7&8	„		
76		7/5/16	question paper discussion	“		

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**CMR INSTITUTE
OF TECHNOLOGY**



Session wise – Course Plan

Department of Electrical And Electronics Engg

SEMESTER : VIII
BRANCH : EEE
SUBJECT : DCN
SUBJECT CODE : 10EE843

NAME OF THE FACULTY : Ms. Anju Das
DATE OF COMMENCEMENT : 21.01.2016
DATE OF CLOSING : 07.05.2016
CLASS STRENGTH : 15
NO OF HRS/WK : 6
TOTAL HOURS : 62

Sessi on No	Chapter no (No of hrs planed for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignmen ts/ Tests planned for the chapter	Topics covered As per plan
1	1/7	21/1/16	Data Communications; Networks	blackboard		
2	2/7	21/1/16	The Internet;	PPT		

3	3/7	22/1/16	Protocols and Standards	PPT		
4	4/7	22/1/16	Layered Tasks; The OSI Model	PPT	Assignment no.1	
5	5/7	23/1/16	layers in the OSI model	PPT		
6	6/7	23/1/16	layers in the OSI model	PPT		
7	7/7	28/1/16	TCP / IP Protocol Suite.	PPT		
8	1/9	28/1/16	Analog and digital signals;	blackboard		
9	2/9	29/1/16	Analog and digital signals	blackboard		
10	3/9	29/1/16	Transmission Impairment	blackboard		
11	4/9	30/1/16	Transmission Impairment	blackboard		
12	5/9	30/1/16	;Data rate limits; Performance	blackboard	Assignment no.2	
13	6/9	4/2/16	Analog-to-Digital conversion;	blackboard		
14	7/9	4/2/16	Digital-to-Digital conversion	blackboard		
15	8/9	5/2/16	Transmission modes	PPT		
16	9/9	5/2/16	Transmission modes	PPT		
17	1/7	11/2/16	Digital - to - Analog conversion;	blackboard		
18	2/7	11/2/16	Digital - to - Analog conversion;	blackboard		
19	3/7	12/2/16	Analog - to -Analog conversion;	blackboard		
20	4/7	12/2/16	Analog - to -Analog conversion;	blackboard	Assignment no.3	
21	5/7	13/2/16	Multiplexing;	PPT		
22	6/7	13/2/16	Multiplexing;	PPT		
23	7/7	18/2/16	Spread spectrum	PPT		
24	1/8	18/2/16	Twisted pair cable,	PPT		
25	2/8	25/2/16	Coaxial Cable, Fiber-Optic cable,	blackboard		
26	3/8	25/2/16	Radio waves, Microwaves, Infrared	blackboard		
27	4/8	26/2/16	Introduction to error detection / correction;	blackboard	Assignment no.4	

28	5/8	26/2/16	Block coding	blackboard		
29	6/8	3/3/16	linear block codes	blackboard		
30	7/8	3/3/16	cyclic codes	blackboard		
31	8/8	4/3/16	Checksum	blackboard		
32	1/8	4/3/16	Framing; Flow and Error control;	blackboard		
33	2/8	5/3/16	Protocols;	PPT		
34	3/8	5/3/16	Noiseless channels;	PPT		
35	4/8	10/3/16	Noisy Channels	PPT	Assignment no.5	
36	5/8	10/3/16	HDLC	PPT		
37	6/8	11/3/16	Point-to-point Protocol	PPT		
38	7/8	11/3/16	framing,.	PPT		
39	8/8	17/3/16	transition phases	PPT		
40	1/8	17/3/16	Random Access;	PPT		
41	2/8	18/3/16	Controlled Access;	PPT		
42	3/8	18/3/16	Channelization.	PPT		
43	4/8	19/3/16	Ethernet-IEEE standards	PPT	Assignment no.6	
44	5/8	19/3/16	Standards Ethernet and changes in Standards	PPT		
45	6/8	24/3/16	Standards Ethernet and changes in Standards	PPT		
46	7/8	24/3/16	Fast Ethernet	PPT		
47	8/8	31/3/16	Gigabit Ethernet	PPT		
48	1/7	31/3/16	IEEE 802.11;	PPT		

49	2/7	1/4/16	IEEE 802.11;	PPT		
50	3/7	1/4/16	Bluetooth.	PPT		
51	4/7	2/4/16	Bluetooth.	PPT	Assignment no.7	
52	5/7	2/4/16	Connecting devices;	PPT		
53	6/7	7/4/16	Backbone networks	PPT		
54	7/7	7/4/16	Virtual LAN+ problems	PPT		
55	1/8	15/4/16	Cellular telephony;	PPT		
56	2/8	15/4/16	SONET / SDH: Architecture	PPT		
57	3/8	16/4/16	, Layers, Frames; STS Multiplexing.	PPT		
58	4/8	16/4/16	ATM: Design goals,	PPT	Assignment no.8	
59	5/8	21/4/16	problems,	PPT		
60	6/8	21/4/16	architecture	PPT		
61	7/8	22/4/16	Switching	PPT		
62	8/8	22/4/16	layers	PPT		
63		23/4/16	UNIT 1 REVISION			
64		23/4/16	UNIT 2 REVISION			
65		28/4/16	UNIT 3 REVISION			
66		28/4/16	UNIT 4 REVISION			
67		29/4/16	UNIT 5 REVISION			
68		29/4/16	UNIT 6 REVISION			
69		30/4/16	UNIT 7 REVISION			
70		30/4/16	UNIT 8 REVISION			
71		5/5/16				
72		5/5/16				

73		6/5/16				
74		6/5/16				
75		7/5/16				
76		7/5/16				

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CMR INSTITUTE OF TECHNOLOGY



Session wise – Course Plan

Department of Electrical and Electronics Engineering

SEMESTER : VIII
BRANCH : EEE
SUBJECT : EDS
SUBJECT CODE : 10EE844
NO OF HRS/WK : 6

NAME OF THE FACULTY : Ms. Shikha Gupta
DATE OF COMMENCEMENT : 21/01/16
DATE OF CLOSING : 21/05/16
CLASS STRENGTH :
TOTAL HRS : 6+6

S.No	Chapter no (No of hrs planed for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignments/ Tests planned for the chapter	Topics covered As per plan
1	1/1	21/1/16	UNIT-1) POWER SYSTEM PLANNING AND AUTOMATION: Introduction	Board, chalk, Duster	Prerequisite	
2	2/1	21/1/16	Factors affecting system planning,	„		
3	3/1	22/1/16	present planning techniques	„		
4	4/1	22/1/16	planning models	„	Assignment- I	
5	5/1	23/1/16	future trends in planning	„		

6	6/1	23/1/16	future trends in planning			
7	7/1	28/1/16	systems approach,	„		
8	8/1	28/1/16	distribution automation.	PPT		
9	9/1	29/1/16	distribution automation.	„		
10	10/1	29/1/16	Components and actions in DA			
11	1/2	30/1/16	UNIT-2) LOAD CHARACTERISTIC	Board, chalk, Duster		
12	2/2	30/1/16	Basic definition	„		
13	3/2	4/2/16	Basic definition	„	Assignment -II	
14	4/2	4/2/16	relation between load and load factor	„		
15	5/2	5/2/16	load growth.	PPT		
16	6/2	5/2/16	load growth.	„		
17	7/2	11/2/16	Numericals.			
18	8/2	11/2/16	Numericals.	„		
19	9/2	12/2/16	Numericals.			
20	1/3&4	12/2/16	UNIT-3&4) SYSTEM PLANNING	Board, chalk, Duster		
21	1/3&4	13/2/16	Planning process,	„		
22	2/3&4	13/2/16	planning criteria,	„		
23	3/3&4	18/2/16	system developers	„	Assignment – III	
24	4/3&4	18/2/16	dispersed generation,	PPT		
25	5/3&4	25/2/16	distribution systems,	„		
26	6/3&4	25/2/16	economics and finance,	„	Assignmnt – IV	
27	7/3&4	26/2/16	economics and finance,			

28	8/3&4	26/2/16	mapping.	„		
29	9/3&4	3/3/16	mapping.	„		
30	1/5&6	3/3/16	UNIT-5&6) DESIGN AND OPERATION	Board, chalk, Duster		
31	2/5&6	4/3/16	Engineering design	„		
32	3/5&6	4/3/16	operation criteria	„		
33	4/5&6	5/3/16	substation and feeder	PPT		
34	5/5&6	5/3/16	voltage control, harmonics		Assignment - V	
35	6/5&6	10/3/16	load variations			
36	7/5&6	10/3/16	system losses	„		
37	8/5&6	11/3/16	energy management	„		
38	9/5&6	11/3/16	PPT	„		
39	10/5&6	17/3/16	PPT	„		
40	11/5&6	17/3/16	substation and feeder			
41	12/5&6	18/3/16	energy management			
42	13/5&6	18/3/16	system losses			
43	14/5&6	19/3/16	Block diagrams			
44	1/7	19/3/16	UNIT-7)DISTRIBUTION AUTOMATION:	Board, chalk, Duster		
45	2/7	24/3/16	Definitions	„	Assignment – VII	
46	3/7	24/3/16	communication	„		

47	4/7	31/3/16	sensors	„		
48	5/7	31/3/16	SCADA	PPT		
49	6/7	1/4/16	FLOW CHART	„		
50	7/7	1/4/16	FLOW CHART	„		
51	1/8	2/4/16	UNIT-8) OPTIMIZATION: Introduction	Board, chalk, Duster	Assignment – VIII	
52	2/8	2/4/16	costing of schemes	„		
53	3/8	7/4/16	typical network configurations	„		
54	4/8	7/4/16	planning terms			
55	5/8	15/4/16	network cost modeling	PPT		
56	6/8	15/4/16	synthesis of optimum line network.			
57	7/8	16/4/16	synthesis of optimum line network.			
58	8/8	16/4/16	ppt			
59	9/8	21/4/16	ppt			
60		21/4/16	Revision			
61		22/4/16	Revision			
62		22/4/16	Revision			
63		23/4/16	Revision			
64		23/4/16	Revision			
65		28/4/16	Revision			
66		28/4/16	Revision			
67		29/4/16	Revision			
68		29/4/16	Revision			
69		30/4/16	Revision			
70		30/4/16	Revision			

71		5/5/16	Revision			
72		5/5/16	Revision			
73		6/5/16	Revision			