Bhoj Reddy Engineering College for Women: Hyderabad

Department of Electrical and Electronics Engineering

Lesson plan of faculty member for the academic year 2018–19

Class: I B Tech Branch-Section: ECE-B Semester: II

Subject: Basic Electrical Engineering Lectures per week: 3

Lecture Number	Topics to be covered	Date (s)
	UNIT – I: D.C Circuits	
1	Introduction to D.C Circuits	3 January 2019
2	Circuits elements R, L and C	4 January 2019
3	Types of sources and voltage and current sources	5 January 2019
4	KCL & KVL, Numerical on R, L and C	10 January 2019
5	Analysis of simple Circuits with d.c excitation	11 January 2019
6	Superposition Theorem, Thevenin's Theorem Norton's Theorem	12 January 2019
7	Time domain analysis of first order RL circuit, Time domain analysis of first order RC circuit	17 January 2019
	UNIT-II: A.C circuits	
8	Introduction to A.C circuits, Representation of sinusoidal wave form	18 January 2019
9	Average value, RMS value and peak value	19 January 2019
10	Phase representation	24 January 2019
11	Reactive power, apparent power	25 January 2019
12	Power factor	31 January 2019
13	Analysis of single phase ac circuits consisting of R, L and C	1 February 2019
14	RL, RC and RLC series and parallel combination	2 February 2019
15	Resonance in series R-L-C circuit, Three phase circuits V and I relations in star and delta connections	7 February 2019
	UNIT-III : Transformers	
16	Ideal and practical transformers	8 February 2019
17	Equivalent circuit	9 February 2019
18	Losses in transformers	14 February 2019
19	Regulation and efficiency	15 February 2019
20	Auto-transformer	16 February 2019
21	Three phase transformer connections	21 February 2019
	UNIT-IV: Electrical Machines	
22	Generating rotating magnetic fields	22 February 2019
23	Construction and working three phase induction motor	23 February 2019
24	Significance of torque slip characteristics	2 March 2019
25	Loss component and efficiency	7 March 2019
26	Parent Teacher Meeting	9 March 2019
27	Starting and speed control of induction motor	14 March 2019
28	Single phase induction motor construction and working	15 March 2019
29	Torque –speed characteristics of d c motor , Speed control of separately excited d.c motor	16 March 2019
30	Construction and working of synchronous generator, Components of LT Switchgear	22 March 2019
	UNIT-V: Electrical Installation	
31	Switch Fuse Unit(SFU)	23 March 2019
32	MCB	28 March 2019

33	ELCB	29 March 2019
34	MCCB	30 March 2019
35	Types of cables Types of wires	4 April 2019
36	Types of batteries	11 April 2019
37	Earthling	12 April 2019
38	Important characteristics of batteries	13 April 2019
39	Elementary calculations for energy consumption	18 April 2019
40	Power factor improvement, Battery backup	20 April 2019

Text books / Reference books:

1. Basic Electrical Engineering – D.P. Kothari and I.J.Nagarath, 3rd edition 2010 Tata McGraw Hill
2. D.C. Kulshreshtha," Basic Electrical Engineering - McGraw Hill, 2009.
3. L.S. Bobrow, Fundamentals of Electrical Engineering, Oxford University Press, 2011
5. Electrical and Electronics Technology, E. Hughes, 10th edition, Pearson, 2010
6. Electrical Engineering Fundamentals, Vincent Deltoro, Second edition, Prentice Hall of India 1989.

Name and signature of the faculty: Ms. R Manju Bhargavi ----

Name and signature of Head of the Department: Ms. R Manju Bhargavi ----

Ms. N Shribala ----