CMR Institute of Technology, Bangalore		
Department(s): TCE		
Semester: 03		
Engineering Mathematics III	15MAT31	Lectures/week: 06
Course Instructor(s): D.PRATHAP		
Course duration: 25th July to 19th November 2016		

Class	Chapter Title / Reference Literature	Topic	Percentage of portion covered	
			Reference	Cumulative
01-10	**Module 5 Vector integration Calculus of Variations**	Line integral, definition and problems, surface and volume integrals-defnition,Green's theorem in a plane, Stokes and Gauss divergence theorem (without proof) and problems.	14	14
11-17	**Module 4 Finite differences**	Forward and backward differences, Newton's forward and backward interpolation formulae, divided differences-Newton's divided difference formula, Lagrange's interpolation formula and inverse interpolation formula. Numerical integration Simpson' s 1/3,3/8 rule Weddle's rule (only problems)	20.0	34
18-38	**Module 3 Numerical methods Statistical methods**	Numerical solution of algebraic and transcendental equations, Regula-Falsi method, Newton Raphson method, and, Correlation , Regression Coefficients, lines of Regression. Curve fitting by the method of least squares, Fitting of curves of the form y=a+bx, $y=ax^2+bx+c$, $y=ae^{bx}$	20	54
39-51	**Module 1 Fourier Series**	Periodic functions, Dirichlet's conditions, Fourier series of periodic functions of period 2π and arbitrary period, half range Fourier series, practical harmonic analysis	20	74

52-62	**Module 2** **Fourier Transforms** **Z transforms**	Infinite Fourier transform, Fourier sine and cosine transforms, inverse transforms. Z transform: difference equations,Basic definition, standard z transforms, Damping rule, shifting rule,Initial and final value theorem(without proof)and problems,Inverse Z-Transform. Applications to solve difference equations.	20	94
63-67	**Module 5** **Calculus of Variations**	Calculus of variations: variation of function and functional, variational problems, Euler's equation, Geodesics, minimal surface of revolution, hanging chain problems.	6	100

*** See calendar of events for the schedules of IATs.**

Sessional	**Syllabus**
T1	Class 01-31
T2	Class 32-56
T3	Class 57-64

Literature:

Book Type	**Code**	**Author & Title**	**Publication information**	
			Edition & Publisher	**ISBN**
Text Book	TB1	B.S. Grewal, Higher Engineering Mathematics, Latest Edition, Khanna publishers	Latest edition, Khanna publications	8174091955
Text Book	TB2	Erwin Kreyszig, Advanced Engineering Mathematics	Latest Edition Wiley India publishers	978812653135
References	RB1	B.V Ramana, Higher Engineering Mathematics,.	Latest Edition, Tata Mc. Graw Hill Publications	---
References	RB2	Peter V . O'Neil, Engineering Mathematics.	Cengage Learning India Pvt. Ltd. Publishers	---
References	RB3	Dr. D.S.C , Engineering Mathematics III	5th Edition 2016	978-81-7686-675-4
References	RB4	Dr. K.S.C , Engineering Mathematics III	2016	---

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CMR INSTITUTEOF TECHNOLOGY

Session wise – Course Plan

Department of Telecommunication

SEMESTER : III
BRANCH : TCE
SUBJECT : AEC
SUBJECT CODE : 15EC32
NO OF HRS/WK : 6

NAME OF THE FACULTY : Ms. Priya R.
DATE OF COMMENCEMENT : 28.07.2016
DATE OF CLOSING : 09.11.2016
CLASS STRENGTH : 88(A & B Section)
TOTAL HRS : 69

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	**1/1**	01/08/2016	**Module 1: BJT AC Analysis** Basics- BJT configurations	Board, Chalk, Duster		
2	**2/1**	2/8/2016	BJT- DC biasing, fixed bias (pre-requisite)	"		
3	**3/1**	3/8/2016	Emitter and voltage divider bias	"		
4	**4/1**	4/8/2016	BJT Transistor Modeling, The re transistor model,	"		
5	**5/1**	5/8/2016	Common emitter fixed bias, Voltage divider bias,	"		
6	**6/1**	6/8/2016	Emitter follower configuration. Darlington connection-DC bias;	"	Assignment-1	
7	**7/1**	8/8/2016	The Hybrid equivalent model,	"		

8	**8/1**	9/8/2016	Approximate Hybrid Equivalent Circuit-	"		
9	**9/1**	10/8/2016	Fixed bias, Voltage divider, Emitter follower configuration;	"		
10	**10/1**	11/8/2016	Complete Hybrid equivalent model	"		
11	**11/1**	12/8/2016	Hybrid π Model.	,,		
12	**12/1**	13/8/2016	Problems and revision	Board, Chalk, Duster		
13	**13/1**	16/8/2016	Problems and revision	"		
14	**1/2**	17/8/2016	**Module 2: Field Effect Transistors** Pre- requisites	"		
15	**2/2**	18/8/2016	Construction and Characteristics of JFETs,	"		
16	**3/2**	19/8/2016	Transfer Characteristics,	,,		
17	**4/2**	20/8/2016	Depletion type MOSFET, Enhancement type MOSFET.			
18	**5/2**	22/8/2016	**FET Amplifiers:** JFET small signal model,	"		
19	**6/2**	23/8/2016	Fixed bias configuration, Self bias configuration,	"	Assignment-2	
20	**7/2**	24/8/2016	Voltage divider configuration,	"		
21	**8/2**	25/8/2016	Common Gate configuration.	"		

22	**9/2**	26/8/2016	Source-Follower Configuration,	"		
23	**10/2**	27/8/2016	Cascade configuration.	"		
24	**11/2**	29/8/2016	Problems & revision	"		
25	**12/2**	30/8/2016	Problems & revision	"		
26	**1/3**	31/8/2016	**Module 3: BJT and JFET Frequency Response:** Pre- requisites	"		
27	**2/3**	1/9/2016	Logarithms, Decibels,	"		
28	**3/3**	2/9/2016	Low frequency response – BJT Amplifier with RL	"		
29	**4/3**	9/9/2016	, Low frequency response- FET Amplifier	"		
30	**5/3**	10/9/2016	Miller effect capacitance	"	Assignment-3	
31	**6/3**	13/9/2016	High frequency response – BJT Amplifier,	"		
32	**7/3**	14/9/2016	High frequency response-FET Amplifier	"		
33	**8/3**	15/9/2016	Multistage Frequency Effects.	"		
34	**9/3**	16/9/2016	Problems & revision	"		
35	**10/3**	17/9/2016	Problems & revision	"		
36	**1/4**	19/9/2016	**Module 4:Feedback and Oscillator Circuits:** Pre- requisites	"		
37	**2/4**	20/9/2016	Feedback concepts,	"		
38	**3/4**	21/9/2016		"		

39	**4/4**	22/9/2016	Feedback connection types	"		
40	**5/4**	23/9/2016		"		
41	**6/4**	24/9/2016	Practical feedback circuits	"		
42	**7/4**	26/9/2016	Oscillator operation	Board, Chalk, Duster	Assignment-4	
43	**8/4**	27/9/2016	FET Phase shift oscillator	"		
44	**9/4**	28/9/2016	Wein bridge oscillator	"		
45	**10/4**	29/9/2016	Tuned Oscillator circuit	"		
46	**11/4**	3/10/2016		"		
47	**12/4**	4/10/2016	Crystal oscillator, UJT Construction UJT Oscillator	"		
48	**13/4**	5/10/2016	Problems and revision	"		
49	**14/4**	6/10/2016	Problems and revision	"		
50	**1/5**	7/10/2016	**Module 5:Power Amplifiers:** Pre- requisites	"		
51	**2/5**	8/10/2016	Definition and amplifier types,	"		
52	**3/5**	13/10/2016	Series fed class A amplifier	"		
53	**4/5**	14/10/2016	Transformer coupled class A amplifier	"		
54	5/5	17/10/2016	Class B amplifier operation and circuits	"	Assignment-5	
55	**6/5**	18/10/2016		"		
56	**7/5**	19/10/2016	Amplifier distortion	"		
57	**8/5**	20/10/2016	Class C and Class D	"		

58	**9/5**	21/10/2016	amplifiers	"		
59	**10/5**	22/10/2016	**Voltage regulators:** Discrete transistor voltage regulation	"		
60	**11/5**	27/10/2016	Series and Shunt Voltage regulators	"		
61	**12/5**	28/10/2016	Problems & revision	"		
62	**13/5**	1/11/2016	Problems & revision	"		
63	**1/revision**	2/11/2016	Revision for module 1	"		
64	**2/revision**	3/11/2016	Revision for module 2	Board, Chalk, Duster		
65	**3/revision**	4/11/2016	Revision for module 3	"		
66	**4/revision**	5/11/2016	Revision for module 4	"		
67	**5/revision**	7/11/2016	Revision for module 5	"		
68	**6/revision**	8/11/2016	Revision for improvement test	"		
69	**7/revision**	9/11/2016	Revision for improvement test	"		

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CMR INSTITUTE

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Session wise – Course Plan

Department of Telecommunication Engineering

SEMESTER : III
BRANCH : TCE
SUBJECT : Digital Electronics
SUBJECT CODE : 15EC33
NO OF HRS/WK : 5

NAME OF THE FACULTY : Mrs. Jyothi. G
DATE OF COMMENCEMENT : 28-7-2016
DATE OF CLOSING : 19-11-2016
CLASS STRENGTH : 40
TOTAL HRS : 52

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	**1/1**	1/08/2016 2/08/2016	**Module : 1** **Principles of combinational logic-1:** Definition of combinational logic, Canonical forms	Board, chalk, duster		
2	**2/1**	4/08/2016	Generation of switching equations from truth tables	,,		
3	**3/1**	6/08/2016	Karnaugh maps-3, 4 and 5 variables	,,		
4	**4/1**	8/08/2016	Karnaugh maps- 4 and 5 variables Incompletely specified functions (Don't Care terms)	,,		
5	**5/1**	9/08/2016	Incompletely specified functions (Don't Care terms) Simplifying Max term equations	,,		
6	**6/1**	10/08/2016	Quine-McCluskey minimization technique	,,		
7	**1/2**	11/08/2016	Quine-McCluskey using don't care	,,		

			terms			
8	**2/2**	13/08/2016	Quine-McCluskey using don't care terms	Board, chalk, duster		
9	**3/2**	16/08/2016	Reduced Prime Implicant Tables	,,		
10	**4/2**	17/08/2016	Reduced Prime Implicant Tables	,,	Assignment- I	
11	**5/2**	18/08/2016	**Module: 2** **Analysis and design of combinational logic** Introduction, General approach	,,		
12	**6/2**	19/08/2016	Decoders	,,		
13	**7/2**	20/08/2016	BCD decoders,	,,		
14	**1/3**	23/08/2016	Encoders.	,,		
15	**2/3**	24/08/2016	Digital Multiplexers			
16	**3/3**	25/08/2016	Using multiplexers as Boolean function generators			
17	**4/3**	26/08/2016	Adders and subtractors- Cascading full adders			
18	**5/3**	27/08/2016	Adders and subtractors- Cascading full adders	,,		
19	**6/3**	30/08/2016	Look ahead carry	,,		
20	**1/4**	31/08/2016	Binary comparators	,,	Assignment - II	
21	**2/4**	1/09/2016	**Module : 3** **Flip-Flops** Basic Bistable Element, Latches, timing considerations SR Latch	,,		
22	**3/4**	2/09/2016	Application of SR Latch, A Switch Debouncer			

23	**4/4**	9/09/2016	The Master-Slave Flip-Flops (Pulse-Triggered Flip-Flops)	Board, chalk, duster		
24	**5/4**	13/09/2016	The Master-Slave SR Flip-Flops	,,		
25	**6/4**	14/09/2016	The SR Latch, The gated SR Latch,	,,		
26	**7/4**	15/09/2016	The gated D Latch			
27	**1/5**	16/09/2016	The Master-Slave JK Flip- Flop	,,		
28	**2/5**	17/09/2016	Edge Triggered Flip-Flop: The Positive Edge-Triggered	,,		
29	**3/5**	20/09/2016	Edge Triggered Flip-Flop: D Flip-Flop	,,		
30	**4/5**	21/09/2016	Negative-Edge Triggered D Flip-Flop	,,	Assignment – III	
31	**5/5**	22/09/2016	**Module : 4** **Simple Flip Flop Applications** Registers	,,		
32	**6/5**	23/09/2016	Counters	,,		
33	**7/5**	24/09/2016	Binary Ripple Counters, Synchronous Binary counters			
		27/09/2016	Binary Ripple Counters, Synchronous Binary counters			
34	**1/6**	28/09/2016	Counters based on Shift Registers	Board, chalk, duster		
35	**2/6**	29/09/2016	Design of a Synchronous counters	,,		
36	**3/6**	3/10/2016	Design of a Synchronous counters	,,		
37	**4/6**	4/10/2016	Design of a Synchronous Mod-n Counter using clocked T, JK Flip-Flops	,,		
38	**5/6**	6/10/2016	Design of a Synchronous Mod-n Counter using clocked T, JK Flip-Flops	,,		

39	**6/6**	7/10/2016	Design of a Synchronous Mod-n Counter using clocked D, T, or SR Flip-Flops	,,		
40	**7/6**	8/10/2016	Design of a Synchronous Mod-n Counter using clocked D, T, or SR Flip-Flops	,,	Assignment - VI	
41	**1/7**	13/10/2016	**Module : 5** **Sequential Circuit Design:** Introduction	,,		
42	**2/7**	14/10/2016	Mealy and Moore Models	,,		
43	**3/7**	18/10/2016	Mealy and Moore Models	,,		
44	**4/7**	19/10/2016	State Machine Notation	,,		
45	**5/7**	20/10/2016	State Machine Notation	,,		
46	**6/7**	21/10/2016	Synchronous Sequential Circuit Analysis and Design	,,		
		22/10/2016	Synchronous Sequential Circuit Analysis and Design			
47	**1/8**	28/10/2016	Construction of state Diagrams	,,		
48	**2/8**	2/11/2016	Construction of state Diagrams	,,		
49	**3/8**	3/11/2016	Construction of state Diagrams	,,		
50	**4/8**	4/11/2016	Counter Design	Board, chalk, duster		
51	**5/8**	5/11/2016	Counter Design	,,	Assignment - V	
52		8/11/2016	Revision of Unit -1	,,		
53			Revision of Unit – 2	,,		
54			Revision of Unit –3	,,		
55			Revision of Unit –4	,,		

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Session wise – Course Plan

Department of Telecommunication

SEMESTER : III
BRANCH : TCE
SUBJECT : NA
SUBJECT CODE : 15EC34
NO OF HRS/WK : 06

NAME OF THE FACULTY : Mr. Mahesh Kumar Jha
DATE OF COMMENCEMENT : 28.07.2016
DATE OF CLOSING : 19.11.2016
CLASS STRENGTH : 88(A&B)
TOTAL HRS : 62

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	**1/1**		**Prerequisites:** Network basics, classifications and terminologies.	Board, chalk, duster		
2	**2/1**		**Prerequisites:** Basic laws, electrical elements, series parallel R, L, C combinations.	,,		
3	**3/1**		**Prerequisites:** Redundancy, KVL&KCL Short and open circuit concepts Ideal and practical sources.	,,		
4	**4/1**		**Prerequisites:** Series & Parallel connection (components & sources)	,,		
5	**5/1**		**Prerequisites:** Redundancy, KVL&KCL	,,	Assignment- I	
6	**6/1**		**Module-1:Basic concept** Ideal and practical sources.	Board, chalk, duster		
7	**7/1**		Source transformation, source shifting			
8	**8/1**		Voltage and current divider, Loop	,,		

			analysis			
9	**9/1**		Loop and node analysis With linearly dependent ac and dc sources	,,		
10	**10/1**		Loop and node analysis With linearly independent sources	,,		
11	**11/1**		Concepts of super node and super mesh.	,,		
12	**12/1**		star-delta transformations	,,		
13	**13/1**		PROBLEM Discussion	,,		
14	**1/2**		**Module-2: Network Theorems** Superposition Theorem-Proof	Board, chalk, duster		
15	**2/2**		Problems on Superposition	,,	Assignment - II	
16	**3/2**		Reciprocity Theorem -proof	,,		
17	**4/2**		Reciprocity Theorem -Problems	,,		
18	**5/2**		Millman's theorem -Proof	,,		
19	**6/2**		Millman's theorem -Problems	,,		
20	**7/2**		Thevinin's Theorem -Proof	"		
21	**8/2**		Thevinin's Theorem -Problems	,,		
22	**9/2**		Norton's theorem -Proof	,,	Assignment –III	
23	**10/2**		Norton's theorem -Problems	,,		
24	**11/2**		Maximum Power transfer theorem	,,		
25	**12/2**		Maximum Power transfer theorem Problems.	,,		
26	**13/2**		Miller's Theorem			
27	**14/2**		Miscellaneous PROBLEM Discussion	,,		
28	**1/4**		**Module-4: Resonant Circuits** Series resonance	Board, chalk, duster		

29	**2/4**		Parallel Resonance	,,	Assignment –IV	
30	**3/4**		Frequency response of series resonance	,,		
31	**4/4**		Frequency response of Parallel resonance	,,		
32	**5/4**		Q-factor, Bandwidth	,,		
33	**6/4**		Problems on series resonance	,,		
34	**7/4**		Problems on Parallel resonance	,,		
35	**8/4**		Miscellaneous PROBLEM Discussion	,,		
36	**1/5**		**Module-5: Two port Network Parameter** z-parameters	Board, chalk, duster		
37	**2/5**		y -parameters	,,	Assignment -V	
38	**3/5**		h-parameters	,,		
39	**4/5**		Transmission Parameters	,,		
40	**5/5**		Relationship between parameters	,,		
41	**6/5**		Series & cascade connection of 2 port n/w	,,		
42	**7/5**		Problems	,,		
	8/5		Miscellaneous problems/Revision	,,		
43	**1/3**		**Module-3: Transient behavior and initial conditions:** Behavior of circuit elements under switching condition and their Representation	Board, chalk, duster		
44	**2/3**		Evaluation of initial and final conditions in RL for AC excitations	,,		
45	**3/3**		Evaluation of initial and final conditions in RL circuits for DC excitations	,,	Assignment -VI	
46	**4/3**		evaluation of initial and final conditions in RC circuits for AC excitations	,,		

47	**5/3**		Evaluation of initial and final conditions in RC circuits for D C excitations	,,		
48	**6/3**		evaluation of initial and final conditions in RLC circuits for AC excitations	,,		
49	**7/3**		Evaluation of initial and final conditions in RLC circuits for DC excitations	,,		
50	**8/3**		Problems	,,		
51	**9/3**		**Laplace Transformation & Applications :** Solution of networks	,,		
52	**10/3**		Step responses	Board, chalk, duster	Assignment -VII	
53	**11/3**		Ramp responses	,,		
54	**12/3**		Impulse responses	,,		
55	**13/3**		waveform Synthesis	,,	Assignment - VII	
56	**14/3**		Problems on waveform synthesis	,,		
57	**15/3**		Laplace problems	,,		
58	**16/3**		Miscellaneous problems/Revision	,,		
59	**17/3**		Miscellaneous problems/Revision	,,		
60	**--**		Revision	,,		
61	**--**		Revision	,,		
62	**--**		Revision	,,		

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CMR INSTITUTE
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Session wise – Course Plan

Department of Telecommunication

SEMESTER : III
BRANCH : TCE
SUBJECT : EI
SUBJECT CODE : 15EC35
NO OF HRS/WK : 5

NAME OF THE FACULTY : Suma Sannamani
DATE OF COMMENCEMENT : 28.07.2016
DATE OF CLOSING : 19.11.2016
CLASS STRENGTH : 55
TOTAL HRS : 58

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	**1/1**	28.07.16	Introduction to subject, Discussion on syllabus, Briefing on assignments and IAT.	Board, chalk, duster		
2	**2/1**	01.08.16	Measurement of error, Classification, causes and how to reduce error.	,,		
3	**3/1**	02.08.16	Accuracy, Precision, Resolution and Significant figures.	,,		
4	**4/1**	03.08.16	Numerical	,,		
5	**5/1**	05.08.16	Measurement Error Combinations and numerical	,,		
6	**6/1**	06.08.16	Numerical Contd.	,,		

7	**7/1**	08.08.16	Basics of Statistical Analysis	,,		
8	**8/1**	09.08.16	Basic D'Arsonval meter, DC ammeter, Multirange ammeter and Problems.	Board, chalk, duster		
9	**9/1**	10.08.16	Universal Shunt/Ayrton Shunt	,,		
10	**10/1**	12.08.16	Numericals	,,		
11	**11/1**	16.08.16	Requirements of shunt Extending of ammeter Range	,,	Assignment- I	
12	**12/1**	17.08.16	RF ammeter (Thermocouple)	,,		
13	**13/1**	18.08.16	Introduction, Basic Meter as a DC Voltmeter, DC Voltmeter	,,		
14	**14/1**	19.08.16	Multirange Voltmeter, Extending Voltmeter Ranges, numerical	,,		
15	**15/1**	22.08.16	Loading, Numerical			
16	**16/1**	23.08.16	Transistor Voltmeter, AC Voltmeter using Rectifiers			
17	**17/1**	24.08.16	Numerical			
18	**18/1**	25.08.16	Differential Voltmeter, True RMS Voltmeter, Considerations in Choosing an Analog Voltmeter	,,		
19	**19/1**	26.08.16	Analog Multimeter	,,		
20	**1/2**	29.08.16	Introduction, RAMP technique, Dual Slope Integrating Type DVM, Integrating Type DVM	,,		
21	**2/2**	30.08.16	Most Commonly used principles	,,	Assignment -II	

			of ADC, Successive Approximations			
22	**3/2**	31.08.16	Numerical	,,		
23	**4/2**	01.09.16	Continuous Balance DVM, -Digit, Resolution and Sensitivity of Digital Meters, General Specifications of DVM			
24	**5/2**	02.09.16	Microprocessor based Ramp type DVM	Board, chalk, duster		
25	**6/2**	10.09.16	Digital Multimeter	,,		
26	**7/2**	13.09.16	Digital Frequency Meter	,,		
27	**8/2**	14.09.16	Digital Measurement of Time	,,		
28	**9/2**	15.09.16	Universal Counter, Digital Tachometer	,,		
29	**10/2**	16.09.16	Digital pH Meter, Digital Phase Meter	,,		
30	**11/2**	19.09.16	Digital Capacitance Meter, Microprocessor based Instruments	,,		
31	**1/3**	20.09.16	Oscilloscopes: Introduction, Basic principles, CRT features, Block diagram of Oscilloscope	,,		
32	**2/3**	21.09.16	Simple CRO, Vertical Amplifier	,,		
33	**3/3**	22.09.16	Horizontal Deflecting System, Sweep or Time Base Generator	Board, chalk, duster	Assignment -III	

34	**4/3**	23.09.16	Storage Oscilloscope, Digital Readout Oscilloscope	,,		
35	**5/3**	26.09.16	Measurement of Frequency by Lissajous Method	,,		
36	**6/3**	27.09.16	Digital Storage Oscilloscope	,,		
37	**7/3**	28.09.16	**Signal Generators:** Introduction, Fixed and Variable AF Oscillator, Standard Signal Generator	,,		
38	**8/3**	29.09.16	Laboratory Type Signal Generator	,,		
39	**9/3**	03.10.16	AF sine and Square Wave Generator, Function Generator	,,		
40	**10/3**	05.10.16	Square and Pulse Generator, Sweep Generator	,,		
41	**1/4**	06.10.16	**Bridges:** Introduction, Wheatstone's bridge,Numerical	,,		
42	**2/4**	07.10.16	Kelvin's Bridge	,,		
43	**3/4**	08.10.16	Numerical	,,	Assignment –IV	
44	**4/4**	13.10.16	AC bridges, Capacitance Comparison Bridge, Inductance Comparison Bridge	,,		
45	**5/4**	17.10.16	Numerical	,,		
46	**6/4**	18.10.16	Maxwell's bridge, Wein's bridge	,,		

47	**7/4**	19.10.16	Numerical	,,		
48	**8/4**	20.10.16	Wagner's earth connection	,,		
49	**9/4**	21.10.16	**Measuring Instruments:** Output Power Meters, Field Strength Meter	Board, chalk, duster		
50	**10/4**	22.10.16	Stroboscope, Phase Meter	,,		
51	**11/4**	27.10.16	Vector Impedance Meter, Q Meter	,,	Assignment -V	
52	**12/4**	28.10.16	Numericals	,,		
53	**13/4**	02.11.16	Megger, Analog pH Meter.	,,		
54	**1/5**	03.11.16	**Transducers:** Introduction, Electrical transducers, Selecting a transducer, Resistive transducer, Resistive position transducer	,,		
55	**2/5**	04.11.16	Strain gauges, Resistance thermometer, Thermistor, Inductive transducer	,,		
56	**3/5**	05.11.16	Differential output transducers, LVDT, Piezoelectric transducer, Photoelectric transducer	,,		
57	**4/5**	07.11.16	Photovoltaic transducer, Semiconductor photo diode and transistor	,,		
58	**5/5**	08.11.16	Temperature transducers-RTD	,,		

Signature of faculty Signature of HOD Signature of Principal

CMR INSTITUTE OF TECHNOLOGY

Session wise – Course Plan

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Semester : B. E 3 sem — **NAME OF THE FACULTY :** Dr Ananda Babu

Branch: Telecommunication Engineering — **DATE OF COMMENCEMENT :** 01 – 08 - 2016

Subject 06 ES 36 — **DATE OF CLOSING :** 20 -11-2016

No. of Hours/Week : 6 — **TOTAL (Teaching)HOURS :** 54 — **CLASS STRENGTH :** A and B Sections

Text Book Referred : A: Engineering Electromagnetics , By W H Hayt and J A Buck, McGraw Hill Publishing Co, 6 edition

Session No.	Chapter Number (No. Hrs Planned for the chapter	Topics Planned for the Session	Date	Teaching Aids Used	Assignment / Tests Planned for the chapter	Topics covered as per Plan?	Remarks
1	**Unit -1 Ch 2**	Review of Vector Algebra and calculus		Board /Projector			
2		Coulombs law and Electric Field Intensity		"			
3		contd		"			
4		Field due to a continuous Volume charge Distribution		"			
5		Problem Solving		"			
6	Ch 3	Electric Flux density, Gauss's law, Divergence		"	Assignment 1		

Session No.	Chapter Number (No. Hrs Planned for the chapter	Topics Planned for the Session	Date	Teaching Aids Used	Assignment / Tests Planned for the chapter	Topics covered as per Plan?	Remarks
7		Application of Gauss law		"			
8		Contd		"			
9	UNIT 2	Energy and Potential		"			
10		Moving a Point Charge, Line Integral		"			
				"	Assignment 2		
				"			
11	**Unit -2, Ch:4**	System of Charges		"			
12		Energy Density		"			
13	Ch 5 and 6	Conductors, Dielectrics and Capacitors		"			
14		Contd		"	Assignment 3		
15		Contd		"			
16				"	I Internal		
17	Unit -3 ,Ch:7	Poisson and Laplace equations		"			
18		Uniqueness Theorem		"			
19		contd		"			
20		Solving Problems		"			
21	Unit 4, Ch 8	Steady Magnetic Fields		"			

Session No.	Chapter Number (No. Hrs Planned for the chapter	Topics Planned for the Session	Date	Teaching Aids Used	Assignment / Tests Planned for the chapter	Topics covered as per Plan?	Remarks
22		Biot Sawart, Ampere laws		"			
23		Contd		"			
24		Contd		"	Assignment 4		
25		Magnetic Flux Density		"			
26		contd		"			
27		Scalar and Vector Magnetic Fields		"			
28	Unit 5 , Ch 9	Magnetic Forces, Materials and Inductance		"			
29		Force on a Differential Current Element		"			
30		contd		"			
31		Nature of Magnetic materials		"			
32	UNIT -5, CH 9	Magnetization and Permiability		"			
33-35		Magnetic Current		"			
36		Inductance and Mutual Inductance		"			
37	Unit -6, Ch 10	Time Varying Fields and Maxwell's Equations		"			
38		Point form and Integral Form		"			
39		contd		"	Assignment 5		
40		Retarded Potentials		"	II Internal		
41	**UNIT-7,CH 12**	Uniform Plane wave		"			
42		Freespace wave propagation		"			
43		Propagation in Dielectrics		"			

Session No.	Chapter Number (No. Hrs Planned for the chapter	Topics Planned for the Session	Date	Teaching Aids Used	Assignment / Tests Planned for the chapter	Topics covered as per Plan?	Remarks
44		Pointing Theorem , wave Power		"			
45		Propagation in Good Conductors, Skin Effect		"			
46		Polarization		"			
47		Solving problems		"			
48	**UNIT-8, CH 13**	Plane wave Reflection and Dispersion		"			
49		Uniform Plane waves		"	Assignment 6		
50		Standing wave Ratio		"			
51		Reflection in Multiple Interfaces		"			
52		Dispersion		"			
53		contd		"			
54		contd					
		END			III Internal		
				"			
				"			