

SESSION WISE – COURSE PLAN

DEPARTMENT OF ELECTRICAL & ELECTRONIC ENGINEERING

SEMESTER	: IV	NAME OF THE FACULTY	: R.REVATHI
BRANCH	: TC(B)	DATE OF COMMENCEMENT	: 18 TH JAN 2016
SUBJECT	: ENNG. MATHS-4	DATE OF CLOSING	: 21 ST MAY 2016
SUBJECT CODE	: 10MAT41	CLASS STRENGTH	: 37
NO OF HRS/WK	: 6	TOTAL HRS	: 75

Session No.	Chapter No. (No of hours planned for the chapter)	Date	Topics planned for the Session	Teaching Aids	Assignments (IA) /Tests planned for the chapter	Topics covered As per plan
1	1/1	18/01/2016	Unit I: Numerical Solution of ordinary differential equations of first order	Board, chalk, duster	Assignment- I	
2	2/1	19/01/2016	Numerical methods for initial value problems	„		
3	3/1	20/01/2016	Picard’s method	„		
4	4/1	21/01/2016	Taylor’s series method	„		
5	5/1	22/01/2016	Modified Euler’s method	„		
6	6/1	23/01/2016	Runge-Kutta method of fourth order	„		
7	7/1	25/01/2016	Predictor and corrector methods Milne’s Method	„		
8	8/1	27/01/2016	Predictor and corrector methods Adams-Bashforth)	Board, chalk, duster		
9	9/1	28/01/2016	Numerical Solution of ordinary differential equations of first order	„		
10	10/1	29/01/2016	Numerical methods for initial value problems	„		

11	1/2	30/01/2016	Unit II: Numerical solution of simultaneous first order ODEs	„	Assignment - II	
12	2/2	01/02/2016	Picard's Method	„		
13	3/2	02/02/2016	Picard's Method	„		
14	4/2	03/02/2016	Problems on Picard's Method and Runge-Kutta method of fourth order	„		
15	5/2	04/02/2016	Runge-Kutta method of fourth order			
16	6/2	05/02/2016	Numerical solution of second order ODES -Picard's Method			
17	7/2	08/02/2016	Problems on Picards method			
18	8/2	09/02/2016	Numerical solution of second order ODES Runge-Kutta method	„		
19	9/2	10/02/2016	Problems on Runge-Kutta method. concept on Milne's method	„		
20	10/2	11/02/2016	Tutorial class	„		
21	1/3	12/02/2016	Unit III: Introduction to Probability, Definitions	„	Assignment – III	
22	2/3	13/02/2016	Probability theorems, addition theorem of probability	„		
23	3/3	15/02/2016	problems			
24	4/3	16/02/2016	Probability associated with set theory	Board, chalk, duster		
25	5/3	17/02/2016	Random experiments, Sample Space and events	„		
26	6/3	18/02/2016	Axioms of probability	„		
27	7/3	22/02/2016	Conditional Probability, problems	„		
28	8/3	23/02/2016	Multiplication Law, problems	„		
29	9/3	24/02/2016	Baye's Theorem-proof	„		
30	10/3	25/02/2016	Problems on Baye's Theorem	„		
31	1/4	26/02/2016	Unit IV: Random Variables(Discrete random and continuous variables)	„	Assignment – IV	

32	2/4	29/02/2016	Bernoulli's theorem,-Binomial Distribution(Mean and Standard deviation of the Binomial Distribution)	„		
33	3/4	01/03/2016	Problems on Binomial Distribution	Board, chalk, duster		
34	4/4	02/03/2016	Problems on Binomial Distribution	„		
35	5/4	03/03/2016	Poisson distribution(Mean and Standard deviation of the Poisson Distribution)	„		
36	6/4	04/03/2016	Continuous Probability distributions	„		
37	7/4	05/03/2016	Exponential distribution(Mean and Standard deviation of the Exponential Distribution and problems)	„		
38	8/4	08/03/2016	Normal distribution and Standard Normal distribution	„		
39	9/4	09/03/2016	Problems on Normal distribution and Standard Normal distribution	„		
40	10/4	10/03/2016	Problems on Normal distribution and Standard Normal distribution	„		
41	1/5	17/03/2016	Unit V: Function of a complex variable, limit, continuity, differentiability	„	Assignment - V	
42	2/5	18/03/2016	Cauchy-Riemann equations in Cartesian and Polar form	„		
43	3/5	19/03/2016	Harmonic function, orthogonal property	„		
44	4/5	21/03/2016	Finding the derivative of an analytic function Milne-Thompson method	„		
45	5/5	22/03/2016	Problems	„		
46	6/5	23/03/2016	Finding the conjugate harmonic function and the analytic function	„		
47	7/5	24/03/2016	Properties of analytic functions	„		
48	8/5	28/03/2016	Harmonic Property	„		
49	9/5	29/03/2016	Orthogonal Property	Board, chalk, duster		
50	10/5	30/03/2016	Application to flow problems	„		

51	1/6	31/03/2016	Unit VI: Conformal transformation	„	Assign ment - VI	
52	2/6	01/04/2016	Bilinear transformation	„		
53	3/6	02/04/2016	Discussion of $w = z^2$	„		
54	4/6	04/04/2016	Discussion of $w = e^z$	„		
55	5/6	05/04/2016	Problems	„		
56	6/6	06/04/2016	Discussion of $w = z+a^2/z$	„		
57	7/6	07/04/2016	Complex line integral	„		
58	8/6	11/04/2016	Cauchy's theorem and integral formula	„		
59	1/7	12/04/2016	Unit VII: Solution of Laplace Equation in cylindrical system leading to Bessel differential equation	„	Assign ment - VII	
60	2/7	13/04/2016	Solution of Laplace Equation in Spherical system leading to Bessel differential equation	„		
62	3/7	15/04/2016	Properties on Bessel functions, Legendre's equation	„		
63	4/7	16/04/2016	Bessel's function and properties	„		
64	5/7	18/04/2016	Orthogonal Property of Bessel's function	„		
65	6/7	20/04/2016	Series Solution of Legendre's Differential equation	„		
66	7/7	21/04/2016	Rodrigue's formula-Derivation and problems	„		
67	1/8	22/04/2016	Unit VIII: Sampling distribution	„	Assign ment - VIII	
68	2/8	23/04/2016	Testing Hypothesis	„		
69	3/8	28/04/2016	Standard error	„		
70	4/8	29/04/2016	Test for hypothesis for means	„		
71	5/8	30/04/2016	Limits for means	„		
72	6/8	02/05/2016	Student's t distribution	„		
73	7/8	03/05/2016	Test of Significance of Difference between sample means	„		

74	8/8	04/05/2016	Chi square distribution	„		
75	9/8	07/05/2016	Sampling distribution	„		

Syllabus for Internal Assessment Tests (IAT)*

Sessional	Syllabus
T1	01-40
T2	41-66
T3	67-75

* See calendar of events for the schedules of IATs.

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, Willey Publication	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 IV	5 th Edition 2011	978-81-7686-675-4
References	RB4	Dr.K.S.C, Engineering Mathematics IV	2011-2012	---

Note : From time to time, assignments will be posted on

<https://sites.google.com/a/cmrit.ac.in/m-kamal-kumar2624/home/courses-offered/engineering-mathematics---iv>

Signature of faculty

Signature of HOD

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Session wise – Course Plan

Department of Telecommunication

SEMESTER :IV
BRANCH : TCE
SUBJECT : MC
SUBJECT CODE: 10ES42
NO OF HRS/WK: 5

NAME OF THE FACULTY : Mrs.Meenakshi Devikar
DATE OF COMMENCEMENT : 18.01.2016
DATE OF CLOSING : 20.5.2016
CLASS STRENGTH : 57
TOTAL HRS : 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	1/1	18.01.16	Introduction	Board, chalk, duster	Assignment- 0	
2	2/1	19.01.16	About computer	„		
3	3/1	21.01.16	Types of Memory	„		
4	4/1	23.01.16	Microprocessor and Micro- controller system.	„		
5	5/1	23.01.16	Differences of Microprocessors & Micro controller, Von Neumann & Harvard Architecture, RISC and CISC architecture	„		
6	6/1	25.01.16	Features of 8051& family	„		
7	7/1	28.01.16	Block diagram of 8051	„	Assignment- I	
8	8/1	29.01.16	CPU of 8051 in detail	Board, chalk, duster		
9	9/1	01.02.16	Internal RAM structure of 8051	„		
10	10/1	01.02.16	Programming Model of 8051	„		

11	11/1	02.02.16	Memory Organization	„		
12	12/1	04.02.16	Memory Interfacing	„		
13	1/2	05.02.16	Instruction syntax, Data types	„	Assignment -II	
14	2/2	09.02.16	Addressing Modes in detail, types, disadvantages of each type	„		
15	3/2	09.02.16				
16	4/2	10.02.16	Subroutine and stack of 8051			
17	5/2	12.02.16	Instruction set in detail with example			
18	6/2	13.02.16		„		
19	7/2	16.02.16		„		
20	8/2	16.02.16	Simple 8051 program	„		
21	9/2	17.02.16		„		
22	10/2	22.02.16		„		
23	1/3	23.02.16	Assembler Directives. Machine cycle, instruction cycle.		Assignment –III	
24	2/3	25.02.16	Time delay calculation for given instruction	Board, chalk, duster		
25	3/3	25.02.16	Execution time calculation of program	„		
26	4/3	26.02.16	Time delay calculation	„		
27	5/3	01.03.16		„		
28	1/4	02.03.16	Port operation. Simple port programs	„	Assignment –IV	
29	2/4	04.03.16	Simple port programs	„		
30	3/4	04.03.16	Interfacing of DAC and program for waveform generation	„		
31	4/4	05.03.16		„		
32	5/4	09.03.16	ADC interfacing and program	„		

33	6/4	10.03.16	Serial ADC interfacing	Board, chalk, duster		
34	7/4	17.03.16	8051 interfacing of stepper motor & programming	„		
35	8/4	17.03.16	8051 interfacing to DC Motor and programming	„		
36	9/4	18.03.16	8051 interfacing to LCD	„		
37	10/4	21.03.16	8051 interfacing to keyboard	„		
38	11/4	24.03.16		„		
39	1/5	24.03.16	Basics of interrupts, 8051 interrupt structure of 8051	„	Assignment -V	
40	2/5	28.03.16	Interrupt Priority register, Interrupt Enable register.	„		
41	3/5	30.03.16	8051 timer and counter: TMOD register, TCON register	„		
42	4/5	31.03.16	Timer programming to generate delay	„		
43	5/5	02.04.16		„		
44	6/5	02.04.16	8051 programming using interrupt	„		
45	7/5	04.04.16		„		
46	1/6	06.04.16	Basic data communication in various modes. SCON register.	„	Assignment -VI	
47	2/6	07.04.16	Setting of baud rate. Serial communication programming assembly and C programming	„		
48	3/6	12.04.16		„		
49	4/6	12.04.16		Board, chalk, duster		
50	5/6	13.04.16	8255 block diagram	„		
51	6/6	16.04.16	Interfacing of 8255 with 8051	„		
52	7/6	18.04.16		„		
53	1/7	21.04.16	MSP 430 RISC CPU Architecture, families and features	„	Assignment -VII	
54	2/7	21.04.16	Registers of MSP 430	„		

55	3/7	22.04.16	Instruction set and programming	„		
56	4/7	28.04.16	Clock system, memory sub system.	„		
57	5/7	29.04.16	Interrupt Programming, Digital I/O ports	„		
58	6/7	02.05.16	Mixing scheme of MSP 430 pins	„		
59	7/7	02.05.16	Low power modes of MSP 430	„		
60	1/8	03.05.16	Watch-dog timer, basic timer and programming	„	Assignment -VIII	
61	2/8	05.05.16	comparator, op-amps, real-time clock(RTC)			
62	3/8	06.05.16	ADC, DAC			
63	4/8	10.05.16	Interfacing of LCD, LED and external memory.			
64	5/8	10.05.16	Case Studies of application of MSP 430: data acquisition system, wired sensor network, wireless sensor network with chip on RF interfaces.			
65	6/8	11.05.16	DMA			

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SESSION WISE – COURSE PLAN

DEPARTMENT OF ELECTRICAL & ELECTRONIC ENGINEERING

SEMESTER	: IV B	NAME OF THE FACULTY	: RICHA TENGSHI
BRANCH	: EEE	DATE OF COMMENCEMENT	: 18 TH JAN 2016
SUBJECT	: CONTROL SYSTEMS	DATE OF CLOSING	: 21 ST MAY 2016
SUBJECT CODE	: 10ES43	CLASS STRENGTH	: 61
NO OF HRS/WK	: 6	TOTAL HRS	: 75

Session No.	Chapter No. (No of hours planned for the chapter)	Date	Topics planned for the Session	Teaching Aids	Assignments (IA) /Tests planned for the chapter	Topics covered As per plan
1.	1/0	18/01/16	Pre-requisites complex numbers	Board, chalk, duster	I	
2.	2/0	19/01/16	Laplace Transforms	„		
3.	3/0	19/01/16	Inverse Laplace Transforms	„		
4.	4/0	20/01/16	Differential equations	„		
5.	5/0	21/01/16	Solving Differential equations using Laplace Transforms	„		
6.	6/0	21/01/16	Problems	„		
7.	1/1	25/01/16	Modeling of Systems: Introduction to control system, Types of control system Effect of feedback systems	„		
8.	2/1	27/01/16	Differential equation of physical system – Mechanical system	„		
9.	3/1	27/01/16	Analogous systems (force voltage analogy)	„		
10.	4/1	28/01/16	Analogous systems (force current analogy)	„		
11.	5/1	29/01/16	Differential equation of physical system – Rotational System	„		
12.	6/1	29/01/16	Analogous systems (Torque voltage analogy)	„	II	

13.	7/1	2/02/16	Analogous systems (Torque current analogy)	„		
14.	8/1	3/02/16	Gear train, Modeling of electromechanical system(DC motor)	„		
15.	1/2	3/02/16	Unit 2 Block diagrams and signal flow graphs:Definition of transfer function and block diagram, Effect of feedback	„		
16.	2/2	4/02/16	Block diagram representation and reduction	„		
17.	3/2	5/02/16	Problems on block diagram reduction	„	III	
18.	4/2	5/02/16	Problems on block diagram reduction	„		
19.	5/2	10/02/16	Signal flow graph	„		
20.	6/2	11/02/16	Problems on signal flow graph	„		
21.	7/2	11/02/16	Problems on signal flow graph	„		
22.	1/3	12/02/16	Unit 3 Time Response of feedback control systems: Time response of feedback system for standard test signals	„		
23.	2/3	13/02/16	Unit step response of second order system	„		
24.	3/3	13/02/16	Unit step response of second order system	„		
25.	4/3	17/02/16	Time response, specifications of second order system	„	IV	
26.	5/3	18/02/16	Time response, specifications of second order system	„		
27.	6/3	18/02/16	Illustrative examples,	„		
28.	7/3	22/02/16	Illustrative examples,	„		
29.	8/3	23/02/16	Steady state errors and error constant,	„		
30.	9/3	23/02/16	Illustrative examples,	„		
31.	10/3	26/02/16	PID controllers introduction	„		
32.	1/4	29/02/16	Unit 4 Stability analysis: Concepts of stability	„		
33.	2/4	29/02/16	Necessary conditions for stability			
34.	3/4	1/03/16	Routh Hurwitz criterion for stability analysis	Board, chalk,	V	

				duster		
35.	4/4	2/03/16	Illustrative examples	„		
36.	5/4	2/03/16	Illustrative examples	„		
37.	6/4	5/03/16	Illustrative examples	„		
38.	7/4	8/03/16	Relative stability analysis	„		
39.	8/4	8/03/16	Illustrative examples	„		
40.	9/4	9/03/16	Illustrative examples	„		
41.	1/5	10/03/16	Unit 5 Root–Locus Techniques: Introduction of root locus	„		
42.	2/5	10/03/16	Root locus technique and properties, Construction of root locus, Illustrative examples	„	VI	
43.	3/5	18/03/16	Root locus technique and properties, Construction of root locus, Illustrative examples	„		
44.	4/5	19/03/16	Root locus technique and properties, Construction of root locus, Illustrative examples	„		
45.	5/5	19/03/16	Root locus technique and properties, Construction of root locus, Illustrative examples	„		
46.	6/5	21/03/16	Root locus technique and properties, Construction of root locus, Illustrative examples	„		
47.	7/5	22/03/16	Problems	„		
48.	8/5	22/03/16	Problems	„		
49.	9/5	28/03/16	Problems	„		
50.	10/5	29/03/16	Problems	„		
51.	1/6	29/03/16	Unit 6 Frequency domain analysis: Frequency domain analysis and introduction	Board,chalk, duster		

52.	2/6	30/03/16	Correlation b/w time and frequency domain	„		
53.	3/6	31/03/16	Bode plot explanation and Illustrative examples	„		
54.	4/6	31/03/16	Problems		VII	
55.	5/6	4/4/16	Problems	„		
56.	6/6	5/4/16	Problems	„		
57.	7/6	5/4/16	Problems	„		
58.	8/6	6/4/16	Experimental determination of transfer function with Illustrative examples	„		
59.	9/6	7/4/16	Relative stability using bode plot and Illustrative examples	„		
60.	10/6	7/4/16	Introduction to lead, lag and lead-lag compensating networks	„		
61.	1/7	13/4/16	Unit 7 Stability in the frequency domain: Introduction to Polar Plots, Mathematical preliminaries	„		
62.	2/7	15/4/16	Nyquist stability criterion Illustrative examples,	„		
63.	3/7	15/4/16	Illustrative examples	„	VIII	
64.	4/7	16/4/16	Illustrative examples	„		
65.	1/7	18/4/16	Illustrative examples	„		
66.	2/7	18/4/16	Illustrative examples	„		
67.	3/7	22/4/16	Illustrative examples	„		
68.	4/7	23/4/16	Illustrative examples	„		
69.	5/7	23/4/16	Assessment of relative stability using Nyquist criterion, Illustrative examples	„		
70.	6/7	28/4/16	Illustrative examples	„		
71.	7/7	29/4/16	Illustrative examples	„		
72.	1/8	29/4/16	Unit 8 Introduction to State variable analysis: Concept of state and related definitions, State variable and state models for electrical systems	„		

73.	2/8	3/4/16	Illustrative examples,	Board, chalk, duster		
74.	3/8	4/05/16	Solution of state equations, Illustrative examples	„	IX	
75.	4/8	4/05/16	Illustrative examples	„		
76.	5/8	5/05/16	Illustrative examples	„		
77.	6/8	6/05/16-	Illustrative examples	„		
78.		6/05/16	Revision	„		
79.		11/05/16	Revision	„		

Syllabus for Internal Assessment Tests (IAT)*

Sessional	Syllabus
T1	01-40
T2	41-66
T3	67-75

* See calendar of events for the schedules of IATs.

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, Willey Publication	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 IV	5 th Edition 2011	978-81-7686-675-4

References	RB4	Dr.K.S.C, Engineering Mathematics IV	2011-2012	---
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Note : From time to time, assignments will be posted on
<https://sites.google.com/a/cmrit.ac.in/m-kamal-kumar2624/home/courses-offered/engineering-mathematics---iv>

Signature of faculty

Signature of HOD

Signature of Principal

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T:+9180 28524466 / 77

**CMR INSTITUTE
OF TECHNOLOGY**



Session wise – Course Plan

Department of Telecommunication

SEMESTER :IV
BRANCH :TCE
SUBJECT :Signals & Systems
SUBJECT CODE :10EC44
NO OF HRS/WK :6

NAME OF THE FACULT : Mr. Mahesh Kumar Jha
DATE OF COMMENCEMENT :18.01.2016
DATE OF CLOSING :21.5.2016
CLASS STRENGTH :62
TOTAL HRS :73

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	18 Jan 2016	INTRODUCTION TO THE SUBJECTS.WHAT IS SIGNALS? WHAT IS SYSTEMS?	Board, chalk, duster		
2	2/1	18 Jan 2016	CLASSIFICATION OF SIGNALS: CONT. AND DISCRETE TIME SIGNALS,DETERMINISTIC AND NON-DETERMINISTIC SIGNALS	”		

3	3/1	19 Jan 2016	CLASSIFICATION OF SIGNALS: EVEN AND ODD SIGNALS	”		
4	4/1	22 Jan 2016	CONJUGATE SYMMETRY, PERIODIC AND NON-PERIODIC SIGNALS	”		
5	5/1	22 Jan 2016	ENERGY SIGNALS AND POWER SIGNALS	”	A1	
6	6/1	23 Jan 2016	ELEMENTARY SIGNALS	”		
7	7/1	25 Jan 2016	ELEMENTARY SIGNALS: CONTINUOUS AND DISCRETE TIME SIGNALS	”		
8	8/1	25 Jan 2016	OPERATIONS ON SIGNALS: DISCRETE SIGNALS, DIFFERENTIATION & INTEGRATION	”		
9	9/1	27 Jan 2016	PROBLEMS SOLVING ON SIGNALS	”		
10	10/1	30 Jan 2016	PROPERTIES OF SYSTEMS	”		
11	11/1	30 Jan 2016	PROPERTIES OF SYSTEMS	”		
12	12/1	01 Feb 2016	TEST			
13	1/2	02 Feb 2016	LTI SYSTEM, CONVOLUTION SUM	”		
14	2/2	02 Feb 2016	PROBLEMS ON CONVOLUTION SUM	”		
15	3/2	03 Feb 2016	PROBLEMS ON CONVOLUTION SUM	”	A2	
16	4/2	08 Feb 2016	PROPERTIES OF CONVOLUTION	”		
17	5/2	08 Feb 2016	STABILITY AND CAUSALITY OF THE SYSTEM FOR THE IMPULSE RESPONSE	”		
18	6/2	10 Feb 2016	CONVOLUTION INTEGRAL	”		
19	7/2	10 Feb 2016	PROPERTIES OF CONVOLUTION INTEGRAL	”		
20	8/2	11 Feb 2016	PROPERTIES OF IMPULSE FUNCTION AND PROPERTIES OF CONVOLUTION	”		
21	9/2	15 Feb 2016	GRAPHICAL METHOD OF CONVOLUTION	”		
22	10/2		TEST			
23	10/2		PROBLEMS AND DOUBT SOLVING ON CONVOLUTION	”		
24	1/3	15 Feb 2016	DIFFERENCE /DIFFERENTIAL EQUATION	”		

25	2/3	16 Feb 2016	SOLVING DIFFERENTIAL EQUATION	”		
26	3/3	17 Feb 2016	SOLVING DIFFERENTIAL EQUATION	”		
27	4/3	17 Feb 2016	IMPULSE RESPONSE FOR DIFFERENCE EQUATION	”	A3	
28	5/3	18 Feb 2016	BLOCK DIAGRAM REPRESENTATION	”		
29	6/3	24 Feb 2016	BLOCK DIAGRAM REPRESENTATION	”		
30	7/3	24 Feb 2016	TEST	“		
31	1/4	25 Feb 2016	FOURIER SERIES: COMPLEX SINUSOIDALS	”		
32	2/4	26 Feb 2016	FREQUENCY RESPONSE, MAGNITUDE SPECTRUM, PHASE SPECTRUM	”		
33	3/4	26 Feb 2016	PROBLEMS ON FOURIER COEFFICIENT, MAGNITUDE SPECTRUM AND PHASE SPECTRUM	”	A4	
34	4/4	29 Feb 2016	PROBLEMS ON FOURIER COEFFICIENT, MAGNITUDE SPECTRUM AND PHASE SPECTRUM & FINDING FOURIER SERIES	”		
35	5/4	03 Mar 2016	PROBLEMS ON FOURIER SERIES	”		
36	6/4	03 Mar 2016	PROPERTIES OF FOURIER SERIES	”		
37	7/4	04 Mar 2016	PROBLEMS ON FOURIER SERIES	”		
38	8/4	05 Mar 2016	DTFS: PROPERTIES	”		
39	9/4	05 Mar 2016	PROBLEMS ON DTFS	”		
40	10/4	08 Mar 2016	CONJUGATE PROPERTIES OF FOURIER COEFFICIENT	”		
41	11/4	17 Mar 2016	TEST			
42	1/5	18 Mar 2016	FOURIER TRANSFORM, MAGNITUDE AND PHASE SPECTRUM	”		
43	2/5	18 Mar 2016	FOURIER TRANSFORM: BASIC PROBLEMS	”		
44	3/5	19 Mar 2016	PROPERTIES OF FOURIER TRANSFORM	”		

45	4/5	23 Mar 2016	PROPERTIES OF FOURIER TRANSFORM	„	A5	
46	5/5	23 Mar 2016	PROBLEMS ON CTFT	„		
47	6/5	24 Mar 2016	PROBLEMS ON CTFT	„		
48	7/5	28 Mar 2016	PROBLEMS BASED ON PROPERTIES OF CTFT	„		
49	8/5	28 Mar 2016	DTFT AND BASIC PROBLEMS	„		
50	9/5	29 Mar 2016	PROBLEMS ON DTFT	„		
51	10/5	01 Apr 2016	PROPERTIES OF DTFT	„		
52	11/5	01 Apr 2016	PROBLEMS BASED ON PROPERTIES OF DTFT	„		
53	12/5	02 Apr 2016	TEST			
54	1/7	04 Apr 2016	Z-TRANSFORM: BASIC CONCEPTS	„		
55	2/7	04 Apr 2016	PROBLEMS ON Z-TRANSFORM & ROC CONCEPT	„		
56	3/7	04 Apr 2016	PROBLEMS ON Z-TRANSFORM AND ROC	„	A6	
57	4/7	05 Apr 2016	PROPERTIES OF Z-TRANSFORM	„		
58	5/7	11 Apr 2016	PROBLEMS BASED ON PROPERTIES OF Z-TRANSFORM	„		
59	6/7	11 Apr 2016	TEST			
60	1/8	12 Apr 2016	INVERSE Z-TRANSFORM	„		
61	2/8	13 Apr 2016	INVERSE Z-TRANSFORM	„		
62	3/8	13 Apr 2016	LTI SYSTEM USING Z-TRANSFORM, SYSTEM FUNCTION	„		
63	4/8	15 Apr 2016	SYSTEM FUNCTION ,STABLE AND CAUSAL CONDITION	„	A7	
64	5/8	20 Apr 2016	UNILATERAL Z-TRANSFORM	„		
65	6/8	21 Apr 2016	TEST			

66	1/6	22 Apr 2016	FREQUENCY RESPONSE OF THE SYSTEM	”		
67	2/6	22 Apr 2016	FREQUENCY RESPONSE AND IMPULSE RESPONSE	”	A8	
68	3/6	23 Apr 2016	SAMPLING THEOREM:PROBLEMS	”		
69	4/6	21 Apr 2016	REVISION: PROBLEMS DISCUSSION	”		
70	5/6	02 May 2016	TEST			
71		03 May 2016	SOLVING VTU QUESTIONS			
72		04 May 2016	SOLVING VTU QUESTIONS			
73		05 May 2016	SOLVING VTU QUESTIONS			

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**CMR INSTITUTE
OF TECHNOLOGY**



Session wise – Course Plan

Department of Electronics and Communication

SEMESTER :IV
BRANCH : ECE/TCE
SUBJECT : Fundamentals Of HDL
SUBJECT CODE : 10EC45
NO OF HRS/WK : 5

NAME OF THE FACULTY : SunilKumar/Jyoti/Mahesh
DATE OF COMMENCEMENT : 18.01.2016
DATE OF CLOSING : 15.5.2016
CLASS STRENGTH : 60
TOTAL HRS : 65

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
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1	Prerequisites	18/1/2016	Digital logic, Review of sequential circuits (ALU, state machines), Review of combinational logic circuits (adders, multipliers, decoders, encoders, DE multiplexers)	Board, chalk, duster		
2		19/1/2016		„		
3		20/1/2016		„		
4	1/1	21/1/2016	Why HDL?	„		
5	1/ 2	21/1/2016	A brief history of HDL	„		
6	1/3	22/1/2016	Structure of HDL	„		
7	$\frac{1}{4}$	23/1/2016	Operators	„		
8	1/5	27/1/2016	Data types	Board, chalk, duster	Assignment I	
9	1/6	02/2/2016	Types of description	„		
10	1/7	9/02/2016	Simulation and synthesis	„		
11	1/8	10/02/2016	Brief comparison of VHDL and Verilog	„		
12	1/9	11/02/2016	Some small examples with respect to description.	„		
13	2/1	15/02/2016	High lights of data flow descriptions	„		
14	2/2	15/02/2016	Structure of data flow description	„		
15	2/3	16/02/2016	Some programs on DF(VHDL)		Assignment II	
16	2/4	17/02/2016	Some programs on DF (Verilog)			
17	2/5	17/02/2016	Data type vectors			
18	2/6	18/02/2016	Example programs in VHDL	„		
19	2/7	20/02/2016	Example programs in Verilog	„		
20	2/8	22/02/2016	Signal declaration	„		
21	3/1	22/02/2016	High lights	„		
22	3/2	23/02/2016	Structure of VHDL behavioral	„		

			description			
23	3/3	24/02/2016	Structure of Verilog behavioral description		Assignment –III	
24	3/ 4	25/02/2016	VHDL variables	Board, chalk, duster		
25	3/5	26/02/2016	Assignment statements	”		
26	3/6	29/02/2016	Sequential statements	”		
27	3/7	1/3/2016	Tutorials	”		
28	4/1	2/3/2016	Highlights of structural description	”		
29	4/2	4/3/2016	Organization of structural description	”		
30	4/3	5/3/2016	Binding	”		
31	4/4	8/3/2016	State machines	”	Assignment –IV	
32	4/5	9/3/2016	Generate	”		
33	4/6	10/3/2016	Generic	Board, chalk, duster		
34	4/7	11/3/2016	Parameter statements	”		
35	4/8	17/3/2016	Programs	”		
36	5/1	18/3/2016	High lights of procedure	”		
37	5/2	19/3/2016	High lights of task	”		
38	5/3	21/3/2016	Function	”		
39	5/4	22/3/2016	Procedure and task	”		
40	5/5	23/3/2016	Function in Verilog	”		Assignment - V
41	5/6	24/3/2016	Advance HDL description	”		

42	5/7	28/3/2016	File processing	”		
43	5/8	29/3/2016	Examples	”		
44	6/1 6/2	30/3/2016	Why mixed type description?	”		
45	6/3	31/3/2016	VHDL user define type	”		
46	6/4	1/4/2016	VHDL package	”		
47	6/5	2/4/2016	Tutorials	”		Assign ment - VI
48	6/6	4/4/2016	Mixed type description examples	”		
49	6/7	5/4/2016	Examples on counters	Board, chalk, duster		
50	6/8	6/4/2016	Examples on FF	”		
51	7/1	7/4/2016	High lights of mixed language description	”		
52	7/2	11/4/2013	How to innovate one language from other	”		
53	7/3	12/4/2016	Examples	”		
54	7/4	13/4/2016	Mixed language description examples	”		
55	7/5	15/4/2016	Limitation of mixed language examples	”		
56	7/6	16/4/2016	Tutorials	”		
57	7/7	18/4/2016	tutorials	”		
58	8/1	20/4/2016	Highlights of synthesis	”		
59	8/2	21/4/2016	Synthesis information from entity	”		Assign ment - VII
60	8/3	22/4/2016	Synthesis information from module	”		
61	8/4	23/4/2016	Mapping process	Board and Chalk		
62	8/5	28/4/2016	Mapping of loop statements	”		
63	8/6	29/4/2016	Mapping of procedure, task	”		

64	8/7	30/4/2016	Mapping process in hardware domain	„		
65	8/8	2/5/2016	Example programs	„		
66		3/5/2016	Example programs	„		
67		4/5/2016	Example programs	„		
68		5/5/2016	Example programs	„		
69		6/5/2016	Example programs	„		
70		7/5/2016	Revision	„		
71		10/5/2016	Revision	„		
72		11/5/2016	Revision	„		

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**CMR INSTITUTE
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Session wise – Course Plan

Department of Telecommunication

SEMESTER : IV
BRANCH : TCE & ECE
SUBJECT : Linear IC's & Applications
SUBJECT CODE : 10EC46
NO OF HRS/WK : 5

NAME OF THE FACULTY : Mrs. Pallavi Mishra
DATE OF COMMENCEMENT : 18.01.2016
DATE OF CLOSING : 11.05.2016
CLASS STRENGTH : 61(TCE) & 60(ECE)
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	18.01.16	Unit-1- OPERATIONAL AMPLIFIER FUNDAMENTALS Basic Op-Amp circuit,	Board, chalk, duster		
2	2/1	19.01.16	Op-Amp parameters – Input and output voltage, CMRR and PSRR, offset voltages and currents,	„	Assignment 1	
3	3/1	20.01.16	CMRR and PSRR, offset voltages and currents, Input and output impedances,	„		
4	4/1	21.01.16	Numericals & Slew rate and Frequency limitations;	„		
5	5/1	23.01.16	Op-Amps as DC Amplifiers- Biasing Op-Amps,	„		
6	6/1	27.01.16	Direct coupled –Voltage Followers, Non-inverting Amplifiers, Inverting amplifiers	„		
7	7/1	31.01.16	Summing amplifiers, Difference amplifier.	„		
8	8/1	03.02.16	Class Test of unit 1	Board, chalk, duster		
9	1/2	04.02.16	Unit-2- Op-Amps as AC Amplifiers: Capacitor coupled Voltage Follower,	„		
10	2/2	8.02.16	Numericals & High input impedance - Capacitor coupled Voltage Follower,	„	Assignment -II	
11	3/2	9.02.16	Capacitor coupled Non-inverting Amplifiers,	„		
12	4/2	10.02.16	Numericals & High input impedance - Capacitor coupled Non inverting Amplifiers,	„		
13	5/2	11.02.16	Capacitor coupled Inverting amplifiers, setting the upper cut-off frequency, Capacitor coupled Difference amplifier,	„		

14	6/2	16.02.16	Numericals & Use of a single polarity power supply			
15	7/2	18.02.16	Class Test of unit 2			
16	1/4	22.02.16	Unit-4 OP-AMP Applications: Voltage sources,	„	Assignment –IV	
17	2/4	25.02.16	current sources and current sinks,	Board, chalk, duster		
18	3/4	29.02.16	Current amplifiers,			
19	4/4	1.03.16	instrumentation amplifier, precision rectifiers,			
20	5/4	2.03.16	Limiting circuits.	„		
21	1/5	5.03.16	Unit 5- More Applications: Clamping circuits, Peak detectors, sample and hold circuits,	„		
22	2/5	8.03.16	V to I and I to V converters , Log and antilog amplifiers	„	Assignment –V	
23	3/5	9.03.16	Multiplier and divider,	„		
24	4/5	10.03.16	Triangular / rectangular wave generators, Wave form generator design,			
25	5/5	11.03.16	phase shift oscillator, Wein bridge oscillator.	Board, chalk, duster		
26	1/6	14.03.16	Unit-6 Non-linear circuit applications: crossing detectors, inverting Schmitt trigger circuits,	„	Assignment -VI	
27	2/6	17.03.16	Monostable & Astable multivibrator,	„		
28	3/6	18.03.16	Numericals	„		
29	4/6	21.03.16	Active Filters –First order Low pass & High pass filters	„		
30	5/6	24.03.16	second order Low pass & High pass filters	„		
31	6/6	28.03.16	Class test	„		
32	1/7	30.03.16	Unit-7 Voltage Regulators: Introduction, Series Op-Amp regulator	„	Assignment -VII	

33	2/7	4.04.16	IC Voltage regulators, 723 general purpose regulator	„		
34	3/7	7.04.16	Numericals & Switching regulator			
34	4/7	11.04.16	Class Test	Board, chalk, duster		
35	1/8	13.04.16	UNIT 8: Other Linear IC applications: 555 timer - Basic timer circuit,	„		
36	2/8	15.04.16	555 timer used as Astable MV	„		
37	3/8	18.04.16	monostable multivibrator, Schmitt trigger; PLL-operating principles,	„	Assignment -VIII	
38	4/8	20.04.16	Phase detector / comparator, VCO;	„		
39	5/8	21.04.16	D/A converters	„		
40	6/8	22.04.16	A/ D converters	„		
41	7/8	23.04.16	Basic DAC Techniques, AD converters	„		
42	8/8	28.04.16	Basic DAC Techniques, AD converters	„		
43	9/8	29.04.16	Class Test	„		
44	1/3	30.04.16	Unit –3- Op-Amps frequency response and compensation: Circuit stability, Frequency and phase response,	„	Assignment –III	
45	2/3	2.05.16	Frequency compensating methods,	„		
46	3/3	3.05.16	Bandwidth, Slew rate effects,	„		
47	4/3	4.05.16	Zin Mod compensation, circuit stability precautions.			
48		5.05.16	Revision of Unit -1 & 2			
49		6.05.16	Revision of Unit – 4 & 5			

50		7.05.16	Revision of Unit -6 & 7			
51		10.05.16	Revision of Unit -8 & 3			
52		11.05.15	Complete course test			
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