

Department of Electronics and Communication

SEMESTER :VI	NAME OF THE FACULTY : Sutapa Sarkar
BRANCH : ECE	DATE OF COMMENCEMENT : 13.02.2017
SUBJECT : Antenna and Wave Propagation	DATE OF CLOSING : 24.05.2017
SUBJECT CODE: 10EC64	CLASS STRENGTH : 65
NO OF LECTURES/WK : 5	TOTAL HRS : 52

Sessi on No	Chapter no (No of hrs planed for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignme nts/ Tests planned for the chapter	Topics covere d As per plan
1	1/Prerequisites	13.02.2017	Discussion of spherical coordinates, Poynting's theorem	Board, chalk, duster		
2	2/ Prerequisites	14.02.2017	Retarded potential, concept of standing waves	„		
3	Unit 1	15.02.2017	Antenna and radiation mechanism, Radiation Patterns	„	Assignme nt on Prerequisit es	
4		16.02.2017	Beam area , beam solid angle	„		
5		18.02.2017	Numerical	Board, chalk, duster		
6		20.02.2017	radiation intensity,	„		
7		21.02.2017	beam efficiency	„		
8		22.02.2017	directivity and gain,	„		
10		23.02.2017	ICP-Directivity calculation using exact and approximate method.	„		

11		28.02.2017	Antenna apertures, Effective aperture, Effective height,	„		
13	Unit 2	01.03.2017	bandwidth, antenna efficiency	„		
14		02.03.2017	Antenna temperature and antenna field zones.Numericals.	„		
15		06.03.2017	Introduction, point sources, power patterns, power theorem			
16		07.03.2017	radiation intensity, field patterns, Numericals			
17		09.03.2017	phase patterns, Numericals		Assignment -II	
18		10.03.2017	Array of two isotropic point sources, Broadside array	„		
19		11.03.2017	Array of two isotropic point sources, End-fire array	„		
20		13.03.2017	Array of n isotropic point sources.	„		
21		14.03.2017	ICP	„		
22		16.03.2017	ICP	„		
23	Unit 3	17.03.2017	short electric dipole, concept of retarded potential	„		
24		18.03.2017	Fields of a short dipole, Magnetic field components	„		
25		20.03.2017	Electric field components	Board, chalk, duster	Assignment –III	
26		21.03.2017	radiation resistance of short dipole	„		
27		23.03.2017	radiation resistances of $\lambda/2$ Antenna	„		
28		24.03.2017	thin linear antenna	„		
IAT1						
29		31.03.2017	long wire antenna, Low side lobe arrays,	„		
30		01 .04.2017	folded dipole antennas, Derivation of R_r in folded dipole antenna	„		

31	Unit 4	03 .04.2017	Small loop, comparison of far fields of small loop and short dipole	„	Assignmnt –IV	
32		05 .04.2017	loop antenna general case,	„		
33		06 .04.2017	far field patterns of circular loop,	Board, chalk, duster		
34		07 .04.2017	radiation resistance, directivity	„		
35		08 .04.2017	slot antennas, slot antenna types	„		
36		10 .04.2017	Babinet’s principle and complementary antennas, impedance of complementary and slot antennas,	„		
37		12 .04.2017	patch antennas micro strip arrays,	„		
38		13 .04.2017	Horn antennas, rectangular horn antennas,	„		
39		17 .04.2017	Helical Antenna	„		
40	Unit 5,6	18 .04.2017	Yagi-Uda array	„	Assignme nt -V	
41		19 .04.2017	log periodic antenna	„		
42		21 .04.2017	corner reflectors	„		
43		22 .04.2017	parabolic reflectors	„		
44		24 .04.2017	lens antenna	„		
45		25 .04.2017	antenna for special applications – sleeve antenna	„		
46		26 .04.2017	turnstile antenna,	„		
47		28.04.2017	Omni-directional antennas	„		

48		02.05.2017	antennas for satellite , antennas for ground penetrating radars	„		
49		03.05.2017	embedded antennas, ultra wide band antennas, plasma antenna, high-resolution data	Board, chalk, duster		
50		04.05.2017	intelligent antennas, Antenna for remote sensing.	„		
51		05.05.2017	ICP	„		
IAT2						
52		12.05.2017	Introduction, Ground wave propagation	„		
53	Unit 7 and 8	13.05.2017	Ground wave propagation	„		
54		15.05.2017	free space propagation	„		
55		16.05.2017	ground reflection,	„		
56		17.05.2017	surface wave	„		
57		19.05.2017	diffraction	„		
58		20.05.2017	Tropospheric wave propagation,	„		
59		22.05.2017	Troposcopic scatter	„		
60		02.05.2017	Ionosphere propagation,	„		
61		23.05.2017	electrical properties of the ionosphere			
62		24.05.2017	effects of earth's magnetic field			

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OF TECHNOLOGY

Session wise – Course Plan

Department of Computer Science and Engineering

SEMESTER : VI
 BRANCH : EC/TC
 SUBJECT : PROGRAMMING IN C++
 SUBJECT CODE: 10EC661
 NO OF HRS/WK : 5

NAME OF THE FACULTY : POONAM TIJARE
 DATE OF COMMENCEMENT: 27 JAN 2016
 DATE OF CLOSING : 11 MAY 2016
 CLASS STRENGTH : 50
 TOTAL HRS : 63

Sessi on No	Chapter no (No of hrs planed for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignm ents/ Tests planned for the chapter	Topics covered As per plan
1	1/3	16/02/2017	Discussing Prerequisites Review of Functions Simple C and C++ Programs	Chalk & Talk		
2	2/3	16/02/2017	Simple C and C++ Programs cont..	„		
3	3/3	18/02/2017	Simple C and C++ Programs cont..			
4	1/8	20/02/2017	C++, AN OVERVIEW: Getting started, the C++ program,	„	Assignm ent- I	
5	2/8	20/02/2017	Pre-processor Directive	„		
6	3/8	21/02/2017	The Built-In Array Data Type	„		
7	4/8	23/02/2017	Dynamic Memory Allocation and Pointers	„		
8	5/8	28/02/2017	Dynamic Memory Allocation and Pointers	„		
9	6/8	1/03/2017	An Object – based Design, An Object-Oriented Design	„		
10	7/8	2/03/2017	An Exception – based Design, An array	„		
11	8/8	7/03/2017	THE BASIC LANGUAGE Literal Constant, Variables,	„	Assignm ent –II	
12	1/8	9/03/2017	Pointer Type, String Types	„		
13	2/8	10/03/2017	const Qualifier, Reference Types	„		
14	3/8	10/03/2017	the bool type, Enumeration types	„		

15	4/8	11/03/2017	Array types	”		
16	5/8	14/03/2017	Programs on arrays	“		
17	6/8	16/03/2017	The vector container type.	”		
18	7/8	17/03/2017	Programs on unit 2, review of unit2	”		
19	1/7	17/03/2017	OPERATORS: Arithmetic Operators, Equality	”		
20	2/7	18/03/2017	Relational and Logical operators, Assignment operators	”		
21	3/7	21/03/2017	Increment and Decrement operator, The conditional Operator,	”		
22	4/7	23/03/2017	Bitwise operator, bitset operations.	”		
23	5/7	24/03/2017	Statements: if, switch for Loop, while,	”		
24		24/03/2017	Revision for 1 st Internal portion	“		
25	6/7	31/03/2017	Programs on control statements	”		
26	7/7	31/03/2017	break, goto, continue statements. Review of unit 3	”		
27	1/6	31/03/2017	FUNCTIONS: Prototype, Argument passing	”	Assignm ent –III	
28	2/6	3/04/2017	Types of functions	”		
29	3/6	5/04/2017	Programs on Argument pass ing	”		
30	4/6	6/04/2017	linear function.	”		
31	5/6	6/04/2017	Programs on linear function.	”		
32	6/6	7/04/2017	Recursion	”		
33	1/5	10/04/2017	EXCEPTION HANDLING: Throwing an Exception, Catching an exception,	“		
34	2/5	12/04/2017	Programs on Throwing an Exception, Catching an exception,	”		
35	3/5	13/04/2017	Exception Specification and Exceptions and Design Issues.	”		
36	4/5	13/04/2017	Exception Specification and Exceptions and Design Issues.	”		
37	5/5	17/04/2017	Programs on Exception handling	”		

38	1/6	19/04/2017	CLASSES: Definition, Class Objects, Class Initialization, , Class Object	„	Assignm ent -IV	
39	2/6	21/04/2017	Programs on classes	„		
40	3/6	22/04/2017	Class constructor, Examples	“		
41	4/6	22/04/2017	The class destructor, Examples	”		
42	5/6	23/04/2017	Arrays of Objects, Examples	”		
43	6/6	24/04/2017	Vectors of Objects, Examples	”		
44	1/6	26/04/2017	Overload Operators,	”		
45	2/6	28/4/2017	Examples on Opearator Overloading	”		
46	3/6	2/5/2017	Operators ++ and --	”		
47	4/6	2/5/2017	Examples on Operators ++ and --	”		
48	5/6	2/5/2017	Operators new and delete.	“		
49	6/6	5/5/2017	Examples on Operators new and delete.	”		
50	1/6	12/5/2017	Multiple Inheritances	”		
51	2/6	13/5/2017	Examples on Inheritances	„	Assignm ent -V	
52	3/6	13/5/2017	public, private & protected inheritance,	”		
53	4/6	15/5/2017	Examples on public, private & protected inheritance	”		
54	5/6	17/5/2017	Class scope under Inheritance.	”		
55	6/6	19/5/2017	Cont...Class scope under Inheritance	”		
56		20/5/2017	Revision	“		
57		20/5/2017	Revision	”		
58		22/5/2017	Revision	”		
59		23/5/2017	Revision	”		

Syllabus for Internal Assessment Tests (IAT)*

IAT #	Syllabus
IAT-1	Class # 01 – 23
IAT-2	Class # 24 – 32
IMPROVEMENT	Class # 33 - 59

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

Literature:

Book Type	Code	Author & Title	Publication information	
			Edition // Publisher	ISBN #
Text Book	TB1	C++ Primer, S. B. Lippman & J. Lajoie,	3rd Edition, Addison Wesley, 2000.	ISBN-10: 0-321-71411-3; ISBN-13: 978-0-321-71411-4
References	RB1	C++ Program Design: An Introduction to Programming and Object- Oriented Design. Cohoon and Davidson,	3rd Edn. TMH publication. 2004.	ISBN-13: 978-0-07-292196-0, ISBN: 0-07-292196-X.
References	RB2	Object Oriented Programming using C++, R. Lafore,	Galgotia Publications, 2004.	ISBN-10: 0672323087; ISBN-13: 978-0672323089

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Department of ECE/TCE

SEMESTER : VI
BRANCH : ECE/TCE
SUBJECT : DSDV
SUBJECT CODE: 10EC667

NAME OF THE FACULTY : Mr Chetan H
DATE OF COMMENCEMENT: 13.01.2017/
DATE OF CLOSING : 22.5.2015
CLASS STRENGTH : 45 (ECE),

NO OF HRS/WK : 5

TOTAL HRS : 61

25(TCE)

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	1/5	16.02.17	Digital Systems and Embedded Systems	PPT, Board, chalk, duster		13.5%
2		18.02.17	Binary representation and Circuit Elements	„		
3		20.02.17	Real-World Circuits	„		
4		22/21.02.17	Real-World Circuits(cont.)	„		
5		22.02.17	Models	„		
6	2/10	23.02.17	Design Methodology	„		27%
7		27.02.17	Design Methodology(cont.)	„	Assignment- I	
8		28.02.17	Boolean Functions	PPT, Board, chalk, duster		
9		1.03.17	Boolean Algebra	„		
10		2.03.17	Boolean Algebra(cont.)	„		
11		6.03.17	Binary Coding	„		

12		7/8.03.17	Combinational Components and Circuits	„		
13		8.03.17	Combinational Components and Circuits(cont.)	„	Assignment -II	
14		9.03.17	Verification of Combinational Circuits	„		
15		10.03.17	Example Programs			
16	3/6	11.03.17	Unsigned Integers			38.5%
17		13.03.17	Unsigned Integers(cont.)			
18		14.03.17	Signed Integers	„		
19		15.03.17	Signed Integers(cont.)	„	Assignment – III	
20		16.03.17	Fixed and Floating-point Numbers	„		
21		10.03.17	Fixed and Floating-point Numbers(cont.), Tutorials	„		
22	4/7	10.03.17	Storage elements	„		50%
23		11.03.17	Storage elements(cont.)			
24		12.03.17	Counters	PPT, Board, chalk, duster		
25		14.03.17	Sequential Datapaths and Control	„		
26		17.03.17	Clocked Synchronous Timing Methodology	„		
27		18.03.17	Clocked Synchronous Timing Methodology(cont.)	„	Assignmnt –IV	
28		20.03.17	Example Programs	„		
29	5/6	21.03.17	Concepts, Memory Types	„		63.5%
30		22.03.17	Memory Types	„		
31		23.3.17	Memory Types(cont.)	„		
32		24.03.17	Memory Types(cont.)	„		
33		24.03.17	Error Detection and Correction,	PPT, Board, chalk, duster	Assignment -V	

34	6/9	31.03.17	ICs	„		75%
35		31.04.17	PLDs	„		
36		1.04.17	Packaging and Circuit Boards, Interconnection and Signal Integrity, Tutorials	„		
37		3.04.17	Embedded Computer Organization	„		
38		4.04.17	Instruction and Data	„		
39		5.04.17	Instruction and Data(cont.)	„		
40	5/7	7.04.17	Instruction and Data(cont.)	„		75%
41		8.04.17	Interfacing with memory	„		
42		10.04.17	Interfacing with memory(cont.)	„		
43		11.04.17	Example Programs	„		
44	7/8	12.04.17	I/O devices	„		86.5%
45		17.04.17	I/O devices(cont.)	„		
46		18.04.17	I/O devices(cont.)	„		
47		20.04.17	I/O controllers	„		
48		21.04.17	Parallel Buses	„		
49		24.04.17	Parallel Buses(cont.)	PPT, Board, chalk, duster		
50		27.4.17	Serial Transmission	„		
51		2.5.17	I/O software	„		
52	4/8	3.5.17	I/O software(cont.), Tutorials	„		100%
53		5.5.17	Concepts	„		
54		12.4.17	Case study	„		
55		13.4.17	Case study(cont.)	„		

56		16.4.17	Verification of accelerators	„		
57		18.5.17	Verification of accelerators	„		
58		20.5.17	Design flow	„		
59		22.5.17	Design flow(cont.)	„		
60		23.5.17	Revision	„		
61		24.5.17	Revision	„		

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**CMR INSTITUTE
OF TECHNOLOGY**



Session wise – Course Plan

Department of Electronics and Communication

SEMESTER :	VI	NAME OF THE FACULTY :	SUNIL KUMAR K H, SUMA S
BRANCH :	ECE/TCE	DATE OF COMMENCEMENT :	13/02/2017
SUBJECT :	MICROPROCESSOR	DATE OF CLOSING :	02/06/2017
SUBJECT CODE :	10EC62	CLASS STRENGTH :	60
NO OF HRS/WK :	5	TOTAL HRS :	52

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	UNIT-1: 8086 PROCESSORS (8 Hours)	13/02/2017	Introduction	Board, chalk, duster		
2		13/02/2017	A Historical Background	„		

3		15/02/2017	The Microprocessor Based Personal Computer System	„		
4		16/02/2017	Architecture of 8086	„		
5		18/02/2017	Machine Language Instruction	„		
6		20/02/2017	Instruction Execution time	„		
7		22/02/2017	Exercise	„	Assignment 1	
8		23/02/2017	Revision	„		
9		23/02/2017	Assembler Instruction Format	„		
10		28/02/2017	Data Transfer and Arithmetic Instr.,	Board, chalk, duster		
11	UNIT-2: INSTRUCTION SET OF 8086 (8 Hours)	/03/2017	Branch, Loop Instr.,	„		
12		01/03/2017	NOP & HALT, Flag Manipulation	„		
13		01/03/2017	Logical and Shift and Rotate instr.,	„	Assignment 2	
14		06/03/2017	Illustration of these instr.,	„		
15		07/03/2017	Directives and Operators	„		
16		09/03/2017	Revision	„		
17		10/03/2017	String Instr.,	„		
18		13/03/2017	REP Prefix	„		
19	UNIT-3: BYTE AND STRING MANIPULATION (9 Hours)	14/03/2017	Table Translation	Board, chalk, duster		
20		16/03/2017	Number Format Conversions	„		
21		16/03/2017	Procedures	„		
22		17/03/2017	Macros	„	Assignment 3	
23		20/03/2017	Programming using Keyboard and Video display	„		
24		21/03/2017	Programming using Keyboard and Video display(cont)	„		

25		23/03/2017	Revision	„		
26	UNIT-4: 8086 INTERRUPTS (5 Hours)	24/03/2017	8086 Interrupts	„		
27		24/03/2017	Interrupts responses	„		
28		01/04/2017	Hardware interrupt applications	Board, chalk, duster		
29		03/04/2017	Software interrupt applications	„	Assignment 4	
30		05/04/2017	Interrupt examples	„		
31		UNIT-5: 8086 INTERFACING (9 Hours)	06/04/2017	Interfacing microprocessor to keyboard	„	
32	06/04/2017		Interfacing microprocessor to keyboard(cont)	„	Assignment 5	
33	08/04/2017		Interfacing microprocessor to keyboard(cont)	„		
34	10/04/2017		Interfacing microprocessor to keyboard(cont)	„		
35	12/04/2017		Interfacing microprocessor to keyboard(cont)	„		
36	13/04/2017		Interfacing to alphanumeric displays	„		
37	13/04/2017		Interfacing to alphanumeric displays(cont)	Board, chalk, duster		
38	18/04/2017		Interfacing a microcomputer to a stepper motor	„	Assignment 6	
39	19/04/2017		Revision	„		
40	UNIT-6: 8086 BASED MULTIPROCESSING SYSTEMS (8 Hours)		21/04/2017	Coprocessor configurations	„	
41		22/04/2017	Coprocessor configurations(cont)	„		
42		22/04/2017	The 8087 numeric data processor: data types	„		
43		25/04/2017	The 8087 numeric data processor: data types(cont)	„		
44		26/04/2017	Processor architecture	„	Assignment 7	
45		28/04/2017	Processor architecture(cont)	„		
46		02/05/2017	Instruction set and examples	Board, chalk,		

				duster		
47		02/05/2017	Revision	„		
48	UNIT-7: SYSTEM BUS STRUCTURE (6 Hours)	04/05/2017	Basic 8086 configuration:	„		
49		05/05/2017	Minimum mode	„		
50		12/05/2017	Maximum mode	„		
51		13/05/2017	Bus interface: PCI	„		
52		13/05/2017	The parallel printer interface (LPT)	„		
53		16/05/2017	The universal serial bus (USB)	„	Assignment 8	
54		UNIT-8: 80386, 80486 AND PENTIUM PROCESSORS (6 Hours)	17/05/2017	Introduction to the 80386 microprocessor	„	
55	19/05/2017		Special 80386 registers	Board, chalk, duster		
56	20/05/2017		Introduction to the 80486 microprocessor	„	Assignment 9	
57	20/05/2017		Introduction to the Pentium microprocessor	„		
58	23/05/2017		Question paper solution	„		
59	24/05/2017		Question paper solution	„		

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Department of Electronics and Communication and Engineering

SEMESTER : VI
BRANCH : ECE C
SUBJECT : OS
SUBJECT CODE : 10EC65
NO OF HRS/WK : 5

NAME OF THE FACULTY : Madhuri M
DATE OF COMMENCEMENT : 13.02.2017
DATE OF CLOSING : 02.06.2017
CLASS STRENGTH : 67
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	13.02.17	Pre-requisite	Board, chalk, duster		
2	2/1	14.02.17	INTRODUCTION AND OVERVIEW OF OPERATING SYSTEMS: Operating system, Goals of an O.S, Operation of an O.S	„		
3	3/1	15.02.17	Resource allocation and related functions, User interface related functions	„		
4	4/1	17.02.17	Classes of operating systems, O.S and the computer system	„		
5	5/1	18.02.17	Batch processing system, Multi programming systems, Time sharing systems	„		
6	6/1	20.02.17	Real time operating systems, distributed operating systems	„		
7	7/1	21.02.17	Class Test -1		Assignment- I	

8	1/2	22.02.17	STRUCTURE OF THE OPERATING SYSTEMS: Operation of an O.S,	„		
9	2/2	27.02.17	Structure of the supervisor	Board, chalk, duster		
10	3/2	28.02.17	Configuring and installing of the supervisor	„		
11	4/2	01.03.17	Operating system with monolithic structure, layered design	„		
12	5/2	02.03.17	Virtual machine operating systems	„		
13	6/2	06.03.17	Kernel based operating systems	„		
14	7/2	08.03.17	Microkernel based operating systems	„		
15	8/2	09.03.17	Class Test -2		Assignment -II	
16	1/3	10.03.17	PROCESS MANAGEMENT: Process concept	„		
17	2/3	11.03.17	Programmer view of processes,			
18	3/3	13.03.17	OS view of processes			
19	4/3	15.03.17	Interacting processes			
20	5/3	16.03.17	Threads, Processes in UNIX	„		
21	6/3	17.03.17	Threads in Solaris	„		
22	7/3	18.03.17	Class Test -3		Assignment -III	
23	1/4	20.03.17	MEMORY MANAGEMENT: Memory allocation to programs	„		
24	2/4	22.03.17	Memory allocation preliminaries	„		
25	3/4	23.03.17	Contiguous and noncontiguous allocation to programs	„		
26	4/4	24.03.17	Contiguous and noncontiguous allocation to programs			

27	5/4	31.03.17	Memory allocation for program controlled data	Board, chalk, duster		
28	6/4	1.04.17	Memory allocation for program controlled data	„		
29	7/4	04.04.17	kernel memory allocation	„		
30	8/4	05.04.17	Class Test -4		Assignment –IV	
31	1/5	06.04.17	VIRTUAL MEMORY: Virtual memory basics	„		
32	2/5	07.04.17	Virtual memory using paging, Demand paging	„		
33	3/5	08.04.17	Page replacement, Page replacement policies	„		
34	4/5	11.04.17	Memory allocation to programs	„		
35	5/5	12.04.17	Page sharing	„		
36	6/5	13.04.17	UNIX virtual memory	„		
37	7/5	17.04.17	Class Test -5		Assignment -V	
38	1/6	18.04.17	FILE SYSTEMS: File system and IOCS, Files and directories	„		
39	2/6	20.04.17	Overview of I/O organization	Board, chalk, duster		
40	3/6	21.04.17	Fundamental file organizations	„		
41	4/6	22.04.17	Interface between file system and IOCS	„		
42	5/6	24.04.17	Allocation of disk space	„		
43	6/6	25.04.17	Implementing file access	„		
44	7/6	27.04.17	UNIX file system	„		
45	8/6	28.04.17	Class Test -6		Assignment -VI	

46	1/7	02.05.17	SCHEDULING: Fundamentals of scheduling	„		
47	2/7	03.05.17	Long-term scheduling	„		
48	3/7	04.05.17	Medium and short term scheduling	„		
49	4/7	11.05.17	Real time scheduling	„		
50	5/7	12.05.17	Real time scheduling	„		
51	6/7	13.05.17	Process scheduling in UNIX.	„		
52	7/7	15.05.17	Class Test - 7		Assignment -VII	
53	1/8	16.05.17	MESSAGE PASSING: Implementing message passing	„		
54	2/8	18.05.17	MESSAGE PASSING: Implementing message passing	„		
55	3/8	19.05.17	Mailboxes	„		
56	4/8	20.05.17	Mailboxes	„		
57	5/8	22.05.17	Inter process communication in UNIX	Board, chalk, duster		
58	6/8	23.05.17	Inter process communication in UNIX	„		

Signature of faculty

Signature of HOD