



## LESSON PLAN

**Course Name:** DESIGN AND ANALYSIS OF ALGORITHMS  
**Programme:** B.Tech

**SEM:** V  
**Department:** IT

### Course Educational objectives:

- Students will have an appreciation of the history and evolution of computer graphics, both hardware and software. Assessed by written homework assignment.
- Students will have an understanding of 2D graphics and algorithms which includes line drawing, polygon filling, clipping, and transformations.
- Students will understand the concepts of and techniques used in 3D computer graphics, including viewing transformations, hierarchical modelling, colour, lighting and texture mapping.
- Students will be introduced to algorithms and techniques fundamental to 3D computer graphics and will understand the relationship between the 2D and 3D versions of such algorithms.

### Course Outcomes:

This course will enable you to:

- Able to understand the graphics applications and various interactive input and output devices.
- Able to understand and draw line, circle and ellipse using algorithms and functions to implement graphic primitives
- Able to know different geometrical transformations in 2D
- Able to learn regarding 2D Coordinate transformation, viewing functions and clipping algorithms
- Able to understand the 3D display methods, geometrical transformations and coordinate transformations.

**Pre requisite:** Knowledge of Coordinate system in Mathematics.

S.NO	Tentative Date	Topics to be covered	Actual Date	Num. of classes	Content Delivery Methods
<b>UNIT-1</b>					
1	22-6-15	Introduction	22	1	DM1
2	23-6-15	Algorithm	23	1	DM1/DM6
3	24-6-15	Design & analysis of Algorithms	24	1	DM1/DM6
4	25-6-15	Space Complexity	25	1	DM1/ DM6
5	27-6-15	Time complexity	26	1	DM1/ DM6
6	29-6-15	Asymptotic Notations	27	1	DM1/ DM6
7	30-6-15	Tutorial-1	1	1	DM2
8	1-7-15	Divide & Conquer General method	29	1	DM1/DM6
9	2-7-15	Binary Search	30	1	DM1/DM6
10	4-7-15	Finding Maximun and Minimum	2	1	DM1/ DM6
11	6-7-15	Example	4	1	DM1
12	7-7-15	Merge sort	6	1	DM2
13	8-7-15	Example	8	1	DM1
14	9-7-15	Tutorial-2	9	1	DM2
<b>UNIT-II</b>					
15	11-7-15	Greedy Method General method	11	1	DM1/ DM6
16	13-7-15	Knapsack problem	13	1	DM1/ DM6
17	14-7-15	Example	13		
18	15-7-15	Tree Vertex Splitting	15	1	DM1/ DM6
19	16-7-15	Example	16		
20	20-7-15	Job –Sequencing with deadlines	20	1	DM1/ DM6
21	21-7-15	Example	20	1	DM1
22	22-7-15	Tutorial-3	21	1	DM2
23	23-7-15	Minimum cost spanning tree-prim's algorithm	25	1	DM1/ DM6
24	25-7-15	Krushkals algorithm	27	1	DM1
25	27-7-15	Optimal Storage on Tapes	27	1	DM1/ DM6
26	28-7-15	Example	29		
27	29-7-15	Optimal Merge Pattern	30	1	DM1
28	30-7-15	Example	1		
29	1-8-15	Single source Shortest path	3	1	DM1
30	3-8-15	Example	4	1	DM1
		Tutorial-4	5	1	DM2
<b>UNIT – III</b>					
		Dynamic Programming-General method		1	DM1/ DM6
		Multistage Graph		1	DM1/ DM6
		All pairs Shortest path		1	DM1/ DM6
31	4-8-15	Example		1	DM1
32	5-8-15	Single source Shortest path		1	DM1/ DM6
33	6-8-15	Example		1	DM1
34	8-8-15	Optimal Binary Search Trees		1	DM1
35	18-8-15	Tutorial-5		1	DM2

36	19-8-15	String Editing		1	DM1
37	20-8-15	0/1 Knapsack		1	DM1
38	22-8-15	Reliability Design		1	DM1
39	24-8-15	Travelling Salesman Problem		1	DM1/ DM6
40	25-8-15	Example		1	DM1
41	26-8-15	Flow shop Scheduling		1	DM1/ DM6
42	27-8-15	Example		1	DM1
43	29-8-15	Tutorial-6		1	DM2
<b>UNIT – IV</b>					
44	31-8-15	Techniques for Binary trees		1	DM1/ DM6
45	1-9-15	Techniques for Graphs		1	DM1/ DM6
46	2-9-15	Connected components		1	DM1/ DM6
47	3-9-15	Spanning Trees		1	DM1/ DM6
45	7-9-15	Bi-Connected Components		1	DM1
46	8-9-15	DFS		1	DM1
47	9-9-15	Tutorial-7		1	DM2
48	10-9-15	Back tracking –General method		1	DM1
49	12-9-15	The 8-Queens Problem		1	DM1
50	14-9-15	Sum of Subsets		1	DM1/ DM6
48	15-9-15	Graph Coloring		1	DM1
49	16-9-15	Hamiltonian cycle		1	DM1
50	17-9-15	Knapsack problem		1	DM1
51	19-9-15	Example		1	DM1
52	21-9-15	Tutorial-8		1	DM2
<b>UNIT – V</b>					
53	22-9-15	Branch and Bound –method		1	DM1
54	23-9-15	0/1 Knapsack Problem		1	DM1/ DM6
55	26-9-15	Travelling Sales person		1	DM1/ DM6
56	28-9-15	Example		1	DM1
57	29-9-15	Efficiency Considerations		1	DM1/ DM6
58	30-9-15	Tutorial-9		1	DM2
59	1-10-15	NP hard and NP complete- Basic concepts		1	DM1
60	3-10-15	Cook's Theorem		1	DM1
61	5-10-15	NP-hard Graph Problems		1	DM1
62	6-10-15	NP –hard Scheduling Problem		1	DM1
63	7-10-15	Example		1	DM1
64	8-10-15	Some Simplified NP –hard Problems		1	DM1/ DM6
65	10-10-15	Examples		1	DM1
66	12-10-15	Tutorial-10		1	DM2
67	13-10-15	Revision		1	DM1/ DM6
68	14-10-15	Revision		1	DM1/ DM6
69	15-10-15	Revision		1	DM1/ DM6
70	17-10-15	Revision		1	DM1/ DM6
<b>TOTAL</b>					
Total number of classes required to complete the syllabus				66	
Total number of classes available as per Schedule				70	

**NOTE: DELIVERY METHODS: DM1:** Lecture interspersed with discussions/BB, **DM2:** Tutorial, **DM3:** Lecture with a quiz, **DM4:** Assignment/Test, **DM5:** Demonstration (laboratory, field visit ), **DM6:** Presentations/PPT

At the End of the course, students attained the **Course Outcomes: CO1, CO2, CO3, CO4, CO5**& sample proofs are enclosed in Course file.

<b>Signature</b>			
	<b>Name of the Faculty</b>	<b>Name of Course Co-ordinator</b>	<b>HOD</b>
	Mr. M. Mahesh Kumar	T.V. NAGARAJU	Dr. N. Ravi Sankar

36	15-9-2014&16-9-2014	Inter conversion	
37	17-9-2014&18-9-2014	Chomsky hierarchy of languages	
38	20-9-2014&22-9-2014	Chomsky hierarchy of languages and context sensitive language	
39	23-9-2014&24-9-2014	LR(0) grammar	
40	25-9-2014&27-9-2014	decidability problems,	
41	29-9-2014&30-9-2014	Universal Turing Machine	
42	8-10-2014&9-10-2014	NP complete and NP hard problems	
43	13-10-2014	Turing Machine	
44	14-10-2014	definition,	
45	15-10-2014	Computable functions	
46	16-10-2014	recursively enumerable languages	
47	18-10-2014	Church's hypothesis	
48	20-10-2014	counter machine	
49	21-10-2014	types of Turing machines	
50	22-10-2014	design of TM	

**Lakireddy Balireddy College of Engineering (Autonomous)**

**Lesson Plan: TC (V Sem)**

**Faculty:Dr.N.Ravi Shankar**

**A:Y:2014-15**

S.NO	Date	TOPICS COVERED	REMARKS
1	19-06-2014	Fundamentals : Strings, Alphabet	
2	21-6-2014	Language, Operations, Finite state machine	
3	23-6-2014	definitions, finite automaton model	
4	24-6-2014	acceptance of strings, languages	
5	25-6-2014	deterministic finite automaton and non deterministic finite automaton,	
6	26-6-2014	transition diagrams and Language recognizers.	
7	28-6-2014	Finite Automata : NFA with $\epsilon$ transitions	
8	30-6-2014	Finite Automata : NFA with $\epsilon$ transitions - Significance, acceptance of languages.	
9	1-7-2014	Conversions and Equivalence : Equivalence between NFA with and without $\epsilon$ transitions	
10	2-7-2014	NFA to DFA conversion	
11	3-7-2014	minimization of FSM, equivalence between two FSM's,	
12	5-7-2014	Finite Automata with output- Moore and Melay machines.	
13	7-7-2014&8-7-2014	Regular Languages : Regular sets	
14	9-7-2014&10-7-2014	regular expressions, identity rules	
15	14-7-2014& 15-7-2014	Constructing finite Automata for a given regular expressions	
16	16-7-2014&17-7-2014	Conversion of Finite Automata to Regular expressions	
17	19-7-2014&21-7-2014	Pumping lemma of regular sets	
18	22-7-2014&23-7-2014	closure properties of regular sets (proofs not required).	

19	24-7-2014&26-7-2014	Grammar Formalism	
20	28-7-2014&30-7-2014	Regular grammars-right linear and left linear grammars	
21	31-7-2014&1-8-2014	equivalence between regular linear grammar and FA	
22	2-8-2014&14-8-2014	inter conversion	
23	5-8-2014&6-8-2014	Context free grammar,	
24	7-8-2017&11-8-2014	derivation trees	
25	12-8-2014&13-8-2014	sentential forms,	
26	14-8-2014&16-8-2014	Right most and leftmost derivation of strings	
27	18-8-2014&19-8-2014	Context Free Grammars : Ambiguity in context free grammars,	
28	20-8-2014&21-8-2014	Minimization of Context Free Grammars	
29	23-8-2014&25-8-2014	Chomsky normal form	
30	26-8-2014&27-8-2014	Pumping Lemma for Context Free Languages.	
31	30-8-2014&1-9-2014	Push Down Automata	
32	2-9-2014&3-9-2014	Push down automata, definition	
33	4-9-2014&6-9-2014	model, acceptance of CFL	
34	8-9-2014&9-9-2014	Acceptance by final state and acceptance by empty state and its equivalence	
35	10-9-2014&11-9-2014	Equivalence of CFL and PDA	

**Faculty**

**Head of the Department**

# LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING (Autonomous)

DEPARTMENT OF INFORMATION TECHNOLOGY

## LESSON PLAN

Subject : OPERATING SYSTEMS

Course : B.Tech

Semester : V

Faculty: Anupriya

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Academic

year:

Academic Year: 2014-15

S.NO		DATE	TOPIC TO BE COVERED	Hrs	TEACH. METHOD/ AID	Remarks
1	Week 1	19/06/2014	Introduction to computer components	1	Black Board	
2		20/06/2014	UNIT 1: Computer System Organization	1	Black Board	
3		21/06/2014	Computer System Architecture	1	Black Board	
4	Week 2	23/06/2014	Operating System Structure	1	Black Board	
5		25/06/2014	Operating System Operations	1	Black Board	
6		26/06/2014	Video tutorial on system assembling and installing different os	1	Black Board	
7		27/06/2014	Processes Management	1	Black Board	
8		28/06/2014	Memory Management	1	Black Board	
9	Week 3	30/06/2014	Storage Management	1	Black Board	
10		07-02-2014	Protection and Security	1	Black Board	
11		07-03-2014	Distributed Systems and Special Purpose Systems	1	Black Board	
12		07-04-2014	Tutorial-1	1	LCD	
13		07-05-2014	Operating System Services	1	Black Board	
14	Week 4	07-07-2014	User Operating System Interface	1	Black Board	
15		07-09-2014	System Programs	1	Black Board	
16		07-10-2014	Operating System Design and Implementation	1	Black Board	
17		07-11-2014	Virtual Machines	1	Black Board	
18	Week 5	14/07/2014	Operating System Generation, System Boot	1	Black Board	
19		16/07/2014	Tutorial-2, Review of 1st unit	1	LCD	
20		17/07/2014	UNIT 2: Introduction to processes	1	Black Board	
21		18/07/2014	Process Scheduling	1	Black Board	
22		19/07/2014	Operations on Processes	1	Black Board	
23	Week 6	21/07/2014	Inter-Process Communication, Examples of IPC Systems	1	Black Board	

24		23/07/2014	Inter-Process Communication, Examples of IPC Systems	1	Black Board	
25		24/07/2014	Communication in Client-Server Systems	1	Black Board	
26		25/07/2014	Tutorial-3	1	LCD	
27		26/07/2014	Multithreading Models	1	Black Board	
28	Week 7	28/07/2014	Thread Libraries , Threading issues	1	Black Board	
29		30/07/2014	Scheduling criteria	1	Black Board	
30		31/07/2014	Scheduling Algorithms	1	Black Board	
31		08-01-2014	Multiple-Processor Scheduling	1	Black Board	
32		08-02-2014	Tutorial-4, Review of 2nd unit		LCD	
<b>04/08/2014 to 06/08/2014 I-MID Examination</b>						
33	Week 8	08-07-2014	UNIT 3: The Critical-Section Problem	1	Black Board	
34		08-08-2014	Peterson's Solution	1	Black Board	
35		08-11-2014	Synchronization Hardware	1	Black Board	
36	Week 9	13/08/2014	Semaphores	1	Black Board	
37		14/08/2014	Classic Problems of Synchronization	1	Black Board	
38		16/08/2014	Monitors	1	Black Board	
39	Week 10	18/08/2014	Tutorial-5	1	LCD	
40		20/08/2014	Synchronization Examples and Atomic Transactions	1	Black Board	
41		21/08/2014	System Model, Deadlock Characterization	1	Black Board	
42	Week 11	22/08/2014	Methods for handling Deadlocks	1	Black Board	
43		23/08/2014	Deadlock Prevention	1	Black Board	
44		25/08/2014	Deadlock Avoidance	1	Black Board	
45	Week 12	27/08/2014	Deadlock Detection and recovery	1	Black Board	
46		28/08/2014	Tutorial-6, Review of 3rd unit	1	LCD	
47		30/08/2014	UNIT 4: Swapping, Contiguous Memory Allocation	1	Black Board	
48	Week 13	09-01-2014	Paging Structure of the Page Table	1	Black Board	
49		09-03-2014	Segmentation	1	Black Board	
50		09-04-2014	Tutorial-7	1	LCD	
51	Week 13	09-05-2014	Demand Paging	1	Black Board	
52		09-06-2014	Page replacement	1	Black Board	
53		09-08-2014	Allocation of Frames	1	Black Board	
54		09-10-2014	Thrashing	1	Black Board	

55	Week 14	09-11-2014	Memory-Mapped Files	1	Black Board	
56		09-12-2014	Allocating Kernal Memory	1	Black Board	
57		15/09/2014	Tutorial-8, Review of 4th unit	1	LCD	
58		17/09/2014	UNIT 5: The Concept of a File, Access Methods	1	Black Board	
59		18/09/2014	Directory Structure	1	Black Board	
60		19/09/2014	File System Mounting	1	Black Board	
61		20/09/2014	File sharing, Protection	1	Black Board	
62		22/09/2014	Tutorial-9	1	Black Board	
63		24/09/2014	File System Structure,Implementation	1	Black Board	
64		25/09/2014	Allocation Methods	1	Black Board	
65	Week 15	26/09/2014	Free space Management	1	Black Board	
66		27/09/2014	Efficiency and Performance	1	Black Board	
67		29/09/2014	Recovery	1	Black Board	
68		30/09/2014	Tutorial-10, Review of 5th Unit	1	LCD	
<b>8/10/2014 to 10/10/2014 II-MID EXAMINATION</b>						

**TEXT BOOK :**

1. Silberschatz & Galvin, 'OPERATING SYSTEM CONCEPTS', 7th edition, Wiley

**REFERENCES :**

1. William Stallings-"OPERATING SYSTEMS"-5th Edition-PHI
2. Charles Crowley, 'OPERATING SYSTEMS: A DESIGN-ORIENTED APPROACH', Tata McGraw Hill Co.,1998 edition
3. Andrew S.Tanenbaum, 'MODERN OPERATING SYSTEMS', 2nd edition,1995,PHI.

**Prepared By :**

**Head of the Department**

# LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING (Autonomous)

DEPARTMENT OF Information Technology

## LESSON PLAN

Subject :SOFTWARE ENGINEERING

Course : B.Tech

Semester :V

Academic Year 2014-2015

S.NO		DATE	TOPIC TO BE COVERED	Hrs	TEACH. METHOD/ AID	Remarks
1	Week 1	19-Jun-14	Objectives of Software Engineering	1	BLACK BOARD	
2		21-Jun-14	The evolving role of Software	1	BLACK BOARD	
3	Week 2	23-Jun-14	software	1	BLACK BOARD	
4		24-Jun-14	software	1	BLACK BOARD	
5		26-Jun-14	legacy software	1	BLACK BOARD	
6		27-Jun-14	software myths	1	BLACK BOARD	
7		28-Jun-14	software myths	1	BLACK BOARD	
8	Week 3	30-Jun-14	Software process: layered technology	1	BLACK BOARD	
9		1-Jul-14	process frame work	1	BLACK BOARD	
10		2-Jul-14	CMMI,	1	BLACK BOARD	
11		3-Jul-14	process patterns, assessment, personal and team process models	1	BLACK BOARD	
12		5-Jul-14	product and process	1		
14	Week 4	7-Jul-14	Review of UNIT-1	1	BLACK BOARD	
14		8-Jul-14	TUTORIAL - 1	1	BLACK BOARD	
15		9-Jul-14	Process models: Prescriptive models	1	BLACK BOARD	
16		10-Jul-14	water fall model, incremental	1	BLACK BOARD	
17	Week 5	14-Jul-14	evolutionary and specialized process models	1	BLACK BOARD	
18		15-Jul-14	evolutionary and specialized process models	1	BLACK BOARD	
19		16-Jul-14	unified process	1	BLACK BOARD	
20		17-Jul-14	Software engineering practice: communication practices	1	BLACK BOARD	
21		19-Jul-14	planning practices	1	BLACK BOARD	
22	Week 6	21-Jul-14	modeling Practices	1	BLACK BOARD	
23		22-Jul-14	construction practice and deployment	1	BLACK BOARD	
24		23-Jul-14	Review of UNIT-2	1	BLACK BOARD	
25		24-Jul-14	TUTORIAL-2	1	BLACK BOARD	

26		26-Jul-14	Requirements Engineering: A bridge to design and construction,	1	BLACK BOARD	
27	Week 7	28-Jul-14	RE tasks	1	BLACK BOARD	
28		30-Jul-14	initiating the RE process	1	BLACK BOARD	
29		31-Jul-14	Eliciting Requirements,	1	BLACK BOARD	
30		2-Aug-14	Eliciting Requirements,	1	BLACK BOARD	
31		Week 8	4-Aug-14	I MID EXAM	1	
32	5-Aug-14		I MID EXAM	1		
33	6-Aug-14		I MID EXAM	1		
34	7-Aug-14		developing use cases	1	BLACK BOARD	
35	Week 9	11-Aug-14	building the analysis models	1	BLACK BOARD	
36		12-Aug-14	negotiating and validating requirements	1	BLACK BOARD	
37		13-Aug-14	negotiating and validating requirements	1	BLACK BOARD	
38		14-Aug-14	requirements analysis	1	BLACK BOARD	
39		16-Aug-14	analysis modeling approaches	1	BLACK BOARD	
40		Week 10	18-Aug-14	data modeling concepts	1	BLACK BOARD
41	19-Aug-14		OOA	1	BLACK BOARD	
42	#####		scenario based modeling	1	BLACK BOARD	
43	21-Aug-14		flow rated modeling	1	BLACK BOARD	
44	#####		flow rated modeling	1	BLACK BOARD	
45	Week 11	#####	class based modeling	1	BLACK BOARD	
46		#####	class based modeling	1	BLACK BOARD	
47		#####	creating a behavior model	1	BLACK BOARD	
48		#####	Review of UNIT-3	1	BLACK BOARD	
49		#####	TUTORIAL - 3	1		
50	Week 12	1-Sep-14	Design Engineering: Design within the context of software engineering	1	BLACK BOARD	
51		2-Sep-14	design process and software quality	1	BLACK BOARD	
52		3-Sep-14	design concepts	1	BLACK BOARD	
53		4-Sep-14	design model	1	BLACK BOARD	
54		6-Sep-14	design model	1	BLACK BOARD	
55	Week 13	8-Sep-14	pattern based software design	1	BLACK BOARD	
56		9-Sep-14	Creating an architectural design: software architecture	1	BLACK BOARD	
57		10-Sep-14	data design	1	BLACK BOARD	
58		11-Sep-14	data design	1	BLACK BOARD	

59	Week 14	15-Sep-14	architectural styles and patterns, architectural design	1	BLACK BOARD		
60		16-Sep-14	architectural styles and patterns, architectural design	1	BLACK BOARD		
61		17-Sep-14	architectural styles and patterns, architectural design	1	BLACK BOARD		
62		18-Sep-14	Review of UNIT-4		1	BLACK BOARD	
63		20-Sep-14	TUTORIAL-4		1		
64	Week 15	22-Sep-14	Testing Strategies: A strategic to software testing, strategic issues	1	BLACK BOARD		
65		23-Sep-14	test strategies for conventional software, object oriented software	1	BLACK BOARD		
66		24-Sep-14	validation testing, system testing, the art of debugging	1	BLACK BOARD		
67		25-Sep-14	validation testing, system testing, the art of debugging	1	BLACK BOARD		
68		27-Sep-14	Testing tactics: software testing fundamentals		1	BLACK BOARD	
69	week 16	29-Sep-14	white box testing: basis path testing	1	BLACK BOARD		
70		30-Sep-14	control structure testing. Black box testing, OO testing methods	1	BLACK BOARD		

**TEXT BOOK :**

1

**Prepared By :**

**K LAVANYA**

**Head of the Department**



**LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING (Autonomous)**

L.B.REDDY NAGAR, MYLAVARAM-521 230.A.P. INDIA

Affiliated to JNTUK, Kakinada & Approved by AICTE, New Delhi

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**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

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Academic year	:	2014-15
Course	:	B.Tech., (V-Semester)
Branch	:	INFORMATION TECHNOLOGY
Subject / Code	:	Micro Processors & Interfacing (T254)

### **Syllabus:**

#### **UNIT-I:**

An over view of 8085, Architecture of 8086 Microprocessor. Special functions of General purpose registers. 8086 flag register and function of 8086 Flags. Addressing modes of 8086. Instruction set of 8086. Assembler directives, simple programs, procedures, and macros.

#### **UNIT-II:**

Assembly language programs involving logical, Branch & Call instructions, sorting, evaluation of arithmetic expressions, string manipulation.

#### **UNIT-III:**

Pin diagram of 8086-Minimum mode and maximum mode of operation. Timing diagram. Memory interfacing to 8086 (Static RAM & EPROM). Need for DMA. DMA data transfer Method. Interfacing with 8237/8257.

#### **UNIT-IV:**

8255 PPI – various modes of operation and interfacing to 8086. Interfacing Keyboard, Displays, 8279 Stepper Motor and actuators. D/A and A/D converter interfacing.

#### **UNIT-V:**

Interrupt structure of 8086. Vector interrupt table. Interrupt service routines. Introduction to DOS and BIOS interrupts. 8259 PIC Architecture and interfacing cascading of interrupt controller and its importance.

#### **UNIT-VI:**

Serial data transfer schemes. Asynchronous and Synchronous data transfer schemes. 8251 USART architecture and interfacing. TTL to RS 232C and RS232C to TTL conversion. Sample program of serial data transfer. Introduction to High-speed serial communications standards, USB.

#### **UNIT-VII:**

**Advanced Micro Processors** - Introduction to 80286, Salient Features of 80386, Real and Protected Mode Segmentation & Paging, Salient Features of Pentium, Branch Prediction, Overview of RISC Processors.

#### **UNIT-VIII:**

8051 Microcontroller Architecture, Register set of 8051, Modes of timer operation, Serial port operation, Interrupt structure of 8051, Memory and I/O interfacing of 8051.

#### **TEXT BOOKS :**

1. Advanced microprocessor and Peripherals - A.K.Ray and K.M.Bhurchandi, TMH, 2000.
2. Micro Controllers – Deshmukh, Tata McGraw Hill Edition.

#### **REFERENCES :**

1. Micro Processors & Interfacing – Douglas U. Hall, 2007.
2. The 8088 and 8086 Micro Processors – PHI, 4<sup>th</sup> Edition, 2003.
3. Micro Computer System 8086/8088 Family Architecture, Programming and Design - By Liu and GA Gibson, PHI, 2<sup>nd</sup> Ed.,



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NAAC Accredited with "A" grade, Accredited by NBA  
New Delhi & Certified by ISO 9001:2008

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### TEACHING SCHEDULE

**NAME OF FACULTY : SASI BHUSHAN.K**

**ACADEMIC YEAR** : 2014-15  
**COURSE** : B.TECH., (V-SEMESTER)  
**BRANCH** : I INFORMATION TECHNOLOGY  
**SUBJECT / CODE** : MICRO PROCESSORS & INTERFACING (T254)

UNIT	S.No	Date - I	NAME OF THE TOPIC	Date -II	REMARKS
<b>I</b>			<b>8086 Processor Concepts</b>		
	1.	19-06-14	Introduction to subject and Course outcomes		
	2.	20-06-14	Overview of 8085 & 8086 processors,		
	3.	21-06-14	Architecture of 8086 Processor		
	4.	23-06-14	Special functions of General purpose registers		
	5.	25-06-14	8086 flag register & function Flags.		
	6.	26-06-14	<b>Tutorial – 1</b>		
	7.	27-06-14	Addressing modes of 8086		
	8.	28-06-14	Instruction set of 8086.		
	9.	30-06-14	Assembler directives of 8086.		
	10.	02-07-14	Procedures & Macros		
	11.	03-07-14	Assembler language Programs		
	12.	04-07-14	Branch & Call instructions		
	13.	05-07-14	Sorting and arithmetic operation programs		
	14.	07-07-14	String manipulation programs		
	15.	09-17-14	<b>Tutorial – 2</b>		
<b>II</b>			<b>8086 Peripheral Interfacing - I</b>		
	16.	10-07-14	Pin diagram of 8086 in Minimum mode		
	17.	11-07-14	Pin diagram of 8086 Maximum mode		
	18.	14-07-14	Timing diagram of minimum mode		

	19.	16-07-14	Timing diagram of maximum mode		
	20.	18-07-14	Static RAM interfacing to 8086		
	21.	19-07-14	Dynamic RAM interfacing to 8086		
	22.	21-07-14	<b>Tutorial - 3</b>		
	23.	23-07-14	DMA Controller 8257		
	24.	24-07-14	DMA data transfer and operation		
	25.	25-07-14	<b>Programmable DMA interface 8237</b>		
	26.	26-07-14	Programmable DMA interface 8257		
	27.	28-07-14	<b>Tutorial - 4</b>		
<b>III</b>			<b>8086 Peripheral Interfacing - II</b>		
	28.	30-07-14	8255 PPI – Modes of Operation		
	29.	31-07-14	8255 PPI – Modes of Operation		
	30.	01-08-14	8255 interfacing to 8086		
	31.	02-08-14	<b>Tutorial - 5</b>		
	32.	07-08-14	Interfacing an A/D Converter to 8086		
	33.	11-08-14	Interfacing D/A converters with 8086		
	34.	13-08-14	Problems on Interfacing		
	35.	14-08-14	Stepper motor interfacing with 8086		
	36.	16-08-14	Key board display interfacing		
	37.	18-08-14	<b>Tutorial - 6</b>		
<b>IV</b>			<b>Interrupt Structure &amp; Peripheral Interfacing-III</b>		
	38.	20-08-14	Interrupt structure of 8086		
	39.	21-08-14	Interrupt vector table of 8086		
	40.	22-08-14	Interrupt Service Routines		
	41.	23-08-14	<b>Tutorial - 7</b>		
	42.	25-08-14	Dedicated interrupt types		
	43.	27-08-14	8259 PIC Architecture		

	44.	30-08-14	Interfacing cascaded interrupts		
	45.	01-09-14	<b>Tutorial - 8</b>		
	46.	03-09-14	Serial data Transfer schemes		
	47.	04-09-14	Asynchronous and Synchronous data transfers		
	48.	05-09-14	8251 USART architecture and interfacing		
	49.	06-09-14	TTL to RS232C and RS232 to TTL conversion		
	50.	08-09-14	Programs on serial data Transfer		
	51.	10-09-14	Introduction to High speed serial data transfer		
	52.	11-09-14	<b>Tutorial - 9</b>		
<b>V</b>			<b>Microcontroller</b>		
	53.	12-09-14	8051 Microcontroller introduction		
	54.	15-09-14	8051 Microcontroller Architecture		
	55.	17-09-14	Register set of 8051		
	56.	18-09-14	8051 Timer Modes of operation,		
	57.	20-09-14	<b>Tutorial - 10</b>		
	58.	22-09-14	8051 Serial port operation,		
	59.	24-09-14	Interrupt structure of 8051,		
	60.	25-09-14	Memory and I/O interfacing of 8051.		
	61.	26-09-14	<b>Tutorial - 11</b>		
<b>Total Classes Required</b>				<b>61</b>	

\*Date – I: Expected date to complete the topic

Date – li : Actual date of completion

**Signature of the Faculty**

**Signature of the HOD**

# LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING (Autonomous)

DEPARTMENT OF Information Technology  
LESSON PLAN

Subject : OPERATING SYSTEMS LAB

Course : B.Tech

Semester : V

Faculty : ANUPRIYA

AY: 2014-15

W.No	DATE	TOPIC TO BE COVERED	Hrs	Remarks
<b>Week-1</b>				
	<b>20/06/2014</b>	Practice programs on C++	<b>3</b>	
<b>week 2</b>				
	<b>27/06/2014</b>	Simulate FCFS	<b>3</b>	
<b>week 3</b>				
	<b>07-04-2014</b>	Simulate SJF	<b>3</b>	
<b>week 4</b>				
	<b>07-11-2014</b>	Simulate Priority scheduling	<b>3</b>	
<b>week 5</b>				
	<b>18/07/2014</b>	Simulate RR scheduling	<b>3</b>	
<b>week 6</b>				
	<b>25/07/2014</b>	Simulate File allocation strategies Sequential, Indexed and Linked	<b>3</b>	
<b>week 7</b>				
	<b>08-01-2014</b>	Simulate MVT and MFT	<b>3</b>	
<b>04/08/2014 to 06/08/2014 I-MID Examination</b>				
<b>week 8</b>				
	<b>08-08-2014</b>	simulate file organisation techniques	<b>3</b>	

<b>Week 9</b>	<b>22/08/2014</b>	simulate bankers algorithm for deadlock lock avoidance	<b>3</b>	
	<b>09-05-2014</b>	simulate bankers algorithm for deadlock lock avoidance	<b>3</b>	
<b>Week 10</b>				
<b>Week 11</b>	<b>09-12-2014</b>	simulate page replacement algorithms	<b>3</b>	
<b>Week 12</b>	<b>19/09/2014</b>	simulate paging techniques of m/m management	<b>3</b>	
<b>Week 13</b>	<b>26/09/2014</b>	LAB INTERNAL EXAM	<b>3</b>	
<b>08/10/2014 to 10/10/2014 II-MID EXAMINATION</b>				

**TEXT BOOK :** Silberschatz & Galvin, 'OPERATING SYSTEM CONCEPTS', 7th edition, Wiley

**REFERENCES :**

- William Stallings-"OPERATING SYSTEMS"- 5th Edition-PHI
- 2. Charles Crowley, 'OPERATING SYSTEMS: A DESIGN-ORIENTED APPROACH', Tata McGraw Hill Co., 1998 edition
- Andrew S. Tanenbaum, 'MODERN OPERATING SYSTEMS', 2nd edition, 1995, PHI.

**Prepared By**

**Head Of the Department**



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**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

<http://www.lbrce.ac.in>, [ecdept4@gmail.com](mailto:ecdept4@gmail.com) Phone: 08659-222933, Fax: 08659-222931

## TEACHING SCHEDULE

**NAME OF FACULTY :** SASI BHUSHAN.K

**ACADEMIC YEAR :** 2014-15

**COURSE :** B.TECH., (V-SEMESTER)

**BRANCH :** INFORMATION TECHNOLOGY

**SUBJECT / CODE :** MICRO PROCESSORS & INTERFACING LAB  
(P854)

Cycle	Expt. No	Date - I	NAME OF THE EXPERIMENT	Date -II	REMARKS
<b>I</b>					
CYCLE – I [8086 Hard ware]	62.	24-06-14	Multi byte addition / subtraction		
	63.	01-07-14	Multiplication & Division of signed and unsigned numbers		
	64.	08-07-14	Addition & Subtraction of ASCII Numbers, Shift and Rotate operations		
	65.	15-07-14	Packed BCD to Unpacked BCD, BCD to HEX - conversion		
<b>II</b>					
CYCLE – II [MASM / 8051 $\mu$ C / Interfacinal]	66.	22-07-14	Display string on the monitor, Moving block of Data		
	67.	05-08-14	String Comparison Read a Character from keyboard		

68.	12-08-14	Reverse the String Sorting of hexadecimal numbers		
69.	19-08-14	8255- DAC interfacing Wave form generation (Square, Sawtooth & Triangular)		
70.	26-08-14	8279- Keyboard interfacing – Rollover display		
71.	02-09-14	8253 & 8251 USART interfacing		
72.	09-09-14	8259 Interrupt controller interfacing		
73.	16-09-14	Addition 7 Subtraction of multibyte using 8051 microcontroller		
74.	23-09-14	Multiplication & Division of numbers using 8051		
75.	30-09-14	Writing data in to parallel port, Byte Checking 7 Sum of series of numbers		

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## TEACHING SCHEDULE

**NAME OF FACULTY :** SASI BHUSHAN.K

**ACADEMIC YEAR :** 2014-15

**COURSE :** B.TECH., (V-SEMESTER)

**BRANCH :** INFORMATION TECHNOLOGY

**SUBJECT / CODE :** MICRO PROCESSORS & INTERFACING LAB  
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CYCLE – II [MASM / 8051 $\mu$ C / Interfacinal]	5.	17-07-14	Display string on the monitor, Moving block of Data		
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	7.	31-07-14	Reverse the String Sorting of hexadecimal numbers		
	8.	07-08-14	8255- DAC interfacing Wave form generation (Square, Sawtooth & Triangular)		
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	11.	28-08-14	8259 Interrupt controller interfacing		
	12.	04-09-14	Addition & Subtraction of multibyte using 8051 microcontroller		
	13.	11-09-14	Multiplication & Division of numbers using 8051		
	14.	18-09-14	Writing data in to parallel port, Byte Checking & Sum of series of numbers		

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**DEPARTMENT OF INFORMATION TECHNOLOGY**

Subject: **Design And Analysis Of Algorithms Lab**

Course: **B.TECH V SEM**

Lab Code: **P818**

Credits: **2**

Faculty: **Mahesh Kumar.M, K.Purushottam**

Academic Year: **2014-15**

**Notification Of cycles and schedules for conduction**

<b>S.No</b>	<b>CYCLE</b>	<b>DATE</b>	<b>List Of Programmes</b>	<b>SIGN</b>
1	Cycle-1	08/07/14	To write a program and analyze Time Complexity and Space Complexity of MergeSort	
2		15/07/14	To write a program and analyze Time Complexity and Space Complexity of BinarySearch	
3	Cycle-2	22/07/14	To write a program and analyze Time Complexity and Space Complexity of Knapsack Problem	
4		05/08/14	To write a program and analyze Time Complexity and Space Complexity of Kruskal's Algorithm	
5		12/08/14	To write a program and analyze Time Complexity and Space Complexity of Prim;s Algorithm	
6	Cycle-3	19/07/14	To write a program and analyze Time Complexity and Space Complexity of All Pair Shortest path	
7		26/08/14	To write a program and analyze Time Complexity and Space Complexity of Travelling Sales Person Problem	
8	Cycle-4	02/09/14	To write a program and analyze Time Complexity and Space Complexity of Graph coloring	
9		09/09/14	To write a program and analyze Time Complexity and Space Complexity of 8Queen Problem	
10	Cycle-5	16/09/14	To write a program and analyze Time Complexity and Space Complexity of NP-Graph hard Problem	
11		01/07/14	To write a program and analyze Time Complexity and Space Complexity of finding the maximum and minimum	

	LabWork Beyond Curriculum		element using Divide and Conquer Strategy	
12		23/09/14	Write a program to implement Dijkstra's Algorithm	
13	Practise Session	30/09/14	Practise Lab Cycles	
14	Exam	14/10/14	Internal Lab Examination	

Faculty Names: Mahesh.M, Purushottam.K

**Head of the Department**