PRASAD V.POTLURI

SIDDHARTHA INSTITUTE OF TECHNOLOGY, KANURU, VIJAYAWADA

DEPARTMENT OF INFORMATION TECHNOLOGY

ACADEMIC YEAR: 2020-2021

II B.TECH – SEMESTER – I

SECTION – S1

S.NO	SUBJECT CODE	SUBJECT NAME	NAME OF THE FACULTY
1	19BS1302	ENGINEERING MATHEMATICS III (DISCRETE MATHEMATICAL STRUCTURES)	Dr. J. RAJENDRA PRASAD
2	19ES1301	AI TOOLS	Mr. CH. PRANEETH
3	19ES1302	DESIGN THINKING	Mr. CH. LAKSHMI KANTH
4	19IT3301	FUNDAMENTALS OF DIGITAL LOGIC DESIGN	Dr. R.VIJAY KUMAR REDDY
5	19IT3302	OBJECT ORIENTED PROGRAMMING USING C++	Dr. Y.SURESH
6	19IT3303	DATA STRUCTURES	Mr. CH. CHANDRA MOHAN
7	19MC1302	CONSTITUTION OF INDIA	Dr. CH. SREENIVASA RAO
8	19ES1351	AI TOOLS LAB	Mr. CH. PRANEETH
9	19ES1352	DESIGN THINKING LAB	Mr. CH.LAKSHMI KANTH
10	19IT3351	OBJECT ORIENTED PROGRAMMING USING C++LAB	Dr. Y.SURESH
11	19IT3352	DATA STRUCTURES LAB	Mr. CH.CHANDRA MOHAN

(Dr. B.V.Subba Rao)

Information Technology Department
PRASAD V.POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007.

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SIDDHARTHA INSTITUTE OF TECHNOLOGY, KANURU, VIJAYAWADA

DEPARTMENT OF INFORMATION TECHNOLOGY

ACADEMIC YEAR: 2020-2021

II B.TECH – SEMESTER – I **SECTION – S2**

S.NO	SUBJECT CODE	SUBJECT NAME	NAME OF THE FACULTY
1	19BS1302	ENGINEERING MATHEMATICS III (DISCRETE MATHEMATICAL STRUCTURES)	Dr. V. SEETA MAHALAKSHMI
2	19ES1301	AI TOOLS	Mr. CH. PRANEETH
3	19ES1302	DESIGN THINKING	Mr. CH. LAKSHMI KANTH
4	19IT3301	FUNDAMENTALS OF DIGITAL LOGIC DESIGN	Dr. R.VIJAY KUMAR REDDY
5	19IT3302	OBJECT ORIENTED PROGRAMMING USING C++	Mrs. J. SIRISHA
6	19IT3303	DATA STRUCTURES	Mr.IMV KRISHNA
7	19MC1302	CONSTITUTION OF INDIA	Dr. CH. SREENIVASA RAO
8	19ES1351	AI TOOLS LAB	Mr. CH. PRANEETH
9	19ES1352	DESIGN THINKING LAB	Mr.CH.LAKSHMI KANTH
10	19IT3351	OBJECT ORIENTED PROGRAMMING USING C++LAB	Mrs.J.SIRISHA
11	19IT3352	DATA STRUCTURES LAB	Mr.IMV KRISHNA

(Dr. B. V. Subba Rao)
HEAD
Information Technology Department
PRASAD V.POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007.

PROCESS RECORD FOR ACADEMICS

LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : 2020-2021 (PVP19)
Year & Semester : II B.Tech / I SEM
Branch : Information Technology –S1 &S2
Subject Code & Name : AIToolsLab(19ES1351)
Name of Faculty : Ch. Praneeth

Program No.	Experiment Name	Learning Outcomes	Teaching Mode BB/ LCD/ OHP.	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				L	T			
i	Python Programing-- data types, conditional statements and loop statements	Knowledge on python basic programming	LCD	2		2		
ii	Python Programing-- pandas, matplotlib	Knowledge on pandas and matplotlib libraries	LCD	2		4		
I	Apply Data preprocessing techniques.	Knowledge on preprocessing of data	LCD	2		6		
II	Construct a Machine Learning model using supervised learning method.	Knowledge on building a supervised model using ML and using for prediction	LCD	2		8		
III	Construct a Machine Learning model using Unsupervised learning method.	Knowledge on building anunsupervised model using ML and using for prediction nowledge on rational thinking and behavior for AI	LCD	2		10		

PROCESS RECORD FOR ACADEMICS

IV	Construct a Machine Learning model using Semi supervised learning method.	Knowledge on building a semisupervised model using ML and using for prediction	LCD	2	1	12		
V	Develop a Deep Learning model using supervised learning method.	Knowledge on building a supervised model using DL and using for prediction	LCD	2		14		
VI	Develop a Deep Learning model using Unsupervised learning method.	Knowledge on building an unsupervised model using DL and using for prediction nowledge on rational thinking and behavior for AI	LCD	2		16		
VII	Apply a Convolutional Neural Network for Image Classification.	Knowledge on applying convolution neural network for image classification	LCD	2		18		
VIII	Build an AI application.	Knowledge on using AI algorithms for applicationsof AI.	LCD	2		20		

Legend: Teaching Mode

LCD: Power Point Presentation (online) VL: Video Lesson
L: Lecture Hours T: Tutorial Hours

Signature of the Faculty

Signature of the HOD
Date:

PROCESS RECORD FOR ACADEMICS

LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : 2020-2021 (PVP19)
Year & Semester : II B.Tech / I SEM
Branch : Information Technology –S1 & S2
Subject Code & Name : AITools (19ES1301)
Name of Faculty : Ch. Praneeth

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode BB/ LCD/ OHP.	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				L	T			
I	Introduction to Artificial Intelligence	Basic Knowledge on AI Domain	LCD	1		1		
I	What is AI: Acting humanly, Thinking humanly	Knowledge on human thinking and behavior for AI	LCD	1		2		
I	What is AI: Thinking rationally, Acting rationally	Knowledge on rational thinking and behavior for AI	LCD	1		3		
I	Tutorial				1	4		
I	Foundations of AI: Philosophy, Mathematics, Economics	Knowledge on Foundations of AI	LCD	1		5		
I	Foundations of AI: Neuroscience, Psychology, Computer engineering	Knowledge on Foundations of AI	LCD	1		6		
I	Foundations of AI: Control theory and cybernetics, Linguistics.	Knowledge on Foundations of AI	LCD		1	7		
I	Goals of AI, Applications of AI	Knowledge on goals and applications of AI.	LCD	1		8		

PROCESS RECORD FOR ACADEMICS

I	Tutorial				1	9		
II	Machine Learning: Definition, introduction & need	Basic Knowledge on ML	LCD	1		10		
II	Types of Machine Learning	Basic Knowledge on types of learning methods	LCD	1		12		
II	Supervised Learning: Definition, Classification	Knowledge on classification	LCD	1		13		
II	Supervised Learning: Regression	Knowledge on Regression	LCD	1		14		
II	Tutorial				1	15		
II	Unsupervised Learning: Definition, Discovering Clusters	Knowledge on unsupervised clustering method	LCD	1		16		
II	Unsupervised Learning: : Discovering Latent Factors Discovering Graph Structure	Knowledge on unsupervised-latent factor & graph structure	LCD	1		17		
II	Tutorial				1	18		
II	Semisupervised Learning: : definition & Example	Knowledge on Semisupervised Learning	LCD	1		19		
II	Reinforcement Learning : definition & Example	Basic Knowledge on Reinforcement Learning	LCD	1		20		
II	Reinforcement Learning: types of environments	Knowledge on Reinforcement Learning environment	LCD	1		21		
II	Tutorial				1	22		
III	Machine Learning Applications: Computer vision Introduction	Knowledge on Computer vision	LCD	1		23		
III	Preprocessing in Computer vision and applications	Knowledge on Computer vision applications	LCD	1		24		
III	Speech Recognition Introduction	Knowledge on Speech Recognition	LCD	1		25		
III	Speech Recognition applications	Knowledge on Speech Recognition applications	LCD	1		26		
III	Tutorial				1	27		
III	NLP Introduction	Knowledge on NLP	LCD	1		28		

III	NLP applications	Knowledge on NLP applications	LCD	1		29		
III	Decision Making Process Introduction	Knowledge on Decision Making Process	LCD	1		30		
III	Decision Making Process applications	Knowledge on Decision Making Process applications	LCD	1		31		
III	Tutorial				1	32		
IV	Basics of Deep Learning: Introduction & Need for DL	Basic idea on Deep Learning	LCD	1		33		
IV	Basics of Deep Learning: Artificial Neuron	Knowledge on Artificial Neuron	LCD	1		34		
	Basics of Deep Learning: Activation Function	Knowledge on Activation Function	LCD	1		35		
IV	Tutorial				1	36		
IV	Feedforward Neural Network	Knowledge on Feedforward Neural Network	LCD	1		37		
IV	Feedforward Neural Network example	Knowledge on Feedforward Neural Network	LCD	1		38		
IV	Back Propagation algorithm	Knowledge on Back Propagation	LCD	1		39		
IV	Back Propagation example	Knowledge on Back Propagation	LCD	1		40		
IV	Tutorial				1	41		
IV	Convolution Neural Network	Knowledge on Introduction to Sequential circuits	LCD	2		43		
IV	DL Applications	Knowledge on latches	LCD	2		44		
IV	Tutorial				1	45		
V	Deep learning Applications: Computer vision Introduction	Knowledge on Computer vision	LCD	1		46		
V	Preprocessing in Computer vision and applications	Knowledge on Computer vision applications	LCD	1		47		
V	Speech Recognition Introduction	Knowledge on Speech Recognition	LCD	1		48		
V	Speech Recognition applications	Knowledge on Speech Recognition applications	LCD	1		49		

PROCESS RECORD FOR ACADEMICS

V	Tutorial				1	50		
V	NLP Introduction	Knowledge on NLP	LCD	1		51		
V	NLP applications	Knowledge on NLP applications	LCD	1		52		
V	Decision Making Process Introduction	Knowledge on Decision Making Process	LCD	1		53		
V	Decision Making Process applications	Knowledge on Decision Making Process applications	LCD	1		54		
V	Tutorial				1	55		

Legend: Teaching Mode

LCD: Power Point Presentation (online) VL: Video Lesson
L: Lecture Hours T: Tutorial Hours

Signature of the Faculty

Signature of the HOD
Date:

LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : 2020 – 2021 (PVP19)
Year & Semester : II B.Tech & II SemesterS2
Branch : Information Technology
Subject Code &Name : **19IT3303**&Data Structures
Name of Faculty :CH.Chandra Mohan

Unit No	Topics of Syllabus to be covered	Learning outcomes	Teaching Mode	Hours Required		Total No. of Hours (Cumulative)	Expected date of completion (for each Unit) by HOD	Review/ Remarks (by HOD)
				L	T			
1	Algorithm Specification	Knowledge about algorithms	LCD	1		1		
1	Time complexity	Understanding of Time complexity	LCD	1		2		
1	Space Complexity and their notations	Understanding of Time complexity, and notations	LCD	1		3		
1	Recursion, & Why Recursion	Understanding of recursion	LCD	1		4		
1	Tutorial	Tutorial			1	5		
1	Format of Recursive Functions, Recursion and Memory	Knowledge about Recursive Functions, Recursion and Memory	LCD	1		6		
1	Recursion Vs Iterations	Knowledge about Recursion Vs Iterations	LCD	1		7		
1	Linear search,	Knowledge about Linear search	LCD	1		8		
1	Tutorial	Tutorial			1	9		
1	Binary search Algorithm	Knowledge about Binary search Algorithm	LCD	1		10		
1	BoLCDle sort Insertion Sort	Knowledge about BoLCDle sort Insertion Sort	LCD	1		11		

1	Merge sort Algorithm	Understanding of Control function	LCD	1		12		
1	Tutorial	Tutorial			1	13		
1	Quick sort algorithm	Understanding of Merge sort Algorithm	LCD	1		14		
2	Single Linked list	Understanding of Single Linked list	LCD	1		15		
2	Double Linked list	Understanding of Double Linked list	LCD	1		16		
2	Tutorial	Tutorial			1	17		
2	Circular linked list	Understanding of Circular linked list	LCD	1		18		
2	Operations on single linked lists	Knowledge about Programming Operations on single linked lists	LCD	1		19		
2	Operations on Double linked lists	Knowledge about Operations on Double linked lists	LCD	1		20		
2	Operations on circular Linked lists	Understanding of Operations on circular Linked lists	LCD	1		21		
2	Tutorial	Tutorial			1	22		
3	Introduction to stacks	Knowledge about stacks	LCD	1		23		
3	Stack definition and operations	Knowledge about Stack definition and operations	LCD	1		24		
3	Stack array Implementation	Understanding of Stack array Implementation	LCD	1		25		
3	Tutorial	Tutorial	LCD		1	26		
3	Stack Linked list Implementation and Applications	Knowledge about Linked list Implementation and Applications	LCD	1		27		
3	Queues Definition	Understanding of Queues Definition	LCD	2		29		
3	Tutorial	Tutorial			1	30		
3	Queue	Knowledge about	LCD	1		31		

	operations	Queue						
3	Queue array Implementation	Understanding of Queue array Implementation	LCD	2		33		
3	Tutorial	Tutorial			1	34		
3	Linked list Implementation and Applications	Understanding of Translation, Rotation, Scaling	LCD	1		35		
3	Circular Queue	Linked list Implementation and Applications	LCD	1		36		
3	Tutorial	Tutorial			1	38		
4	Tree Introduction-Terminology	Understanding of Tree	LCD	1		39		
4	Representation of trees	Understanding of Representation of trees	LCD	1		40		
4	Binary Trees	Knowledge about Binary Trees	LCD	1		41		
4	Tutorial	Tutorial			1	42		
4	Abstract Data Type	Understanding of Abstract Data Type	LCD	1		43		
4	Properties of Binary Trees	Knowledge about Binary Trees	LCD	LCD		44		
4	Binary tree Representation	Understanding of Binary tree Representation	LCD	1		45		
4	Binary tree Traversals Inorder.pre order,post order	Understanding of Traversals Inorderpre order,post order	LCD	1		46		
4	Tutorial	Tutorial			1	47		
4	Binary search trees definition	Knowledge about Binary search trees definition	LCD	1		48		
4	Searching BST	Knowledge about BST	LCD	1		49		

4	Tutorial	Tutorial			1	51		
4	Insert &Delete into BST	Understanding of Insert &Delete into BST	LCD	1		52		
4	Height of binary tree	Understanding of Height of binary tree	LCD	1		53		
5	Introduction to Graphs	Knowledge about Clipping, Line segment clipping	LCD	1		54		
5	ADT Graph Introduction	Understanding of Graphs	LCD	1		56		
5	Graph Definition& Graph Representation	Knowledge about Graph Representation	LCD	1		57		
5	Elementary graph Representations BFS &DFS	Understanding of Graph Representations BFS &DFS	LCD	1		58		
5	Minimum Spanning tree	Understanding of Minimum Spanning tree	LCD	1		59		
5	Tutorial	Tutorial	LCD		1	60		

Legend: Teaching Mode
BB: Black Board / **LCD**: Power Point Presentation /**OHP**: Over Head Projector

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LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : 2020 – 2021 (PVP19)
Year & Semester : II B.Tech & II SemesterS2
Branch : Information Technology
Subject Code &Name : **19IT3303**&Data Structures
Name of Faculty :I.M.V.Krishna

Unit No	Topics of Syllabus to be covered	Learning outcomes	Teaching Mode	Hours Required		Total No. of Hours (Cumulative)	Expected date of completion (for each Unit) by HOD	Review/ Remarks (by HOD)
				L	T			
1	Algorithm Specification	Knowledge about algorithms	LCD	1		1		
1	Time complexity	Understanding of Time complexity	LCD	1		2		
1	Space Complexity and their notations	Understanding of Time complexity, and notations	LCD	1		3		
1	Recursion, & Why Recursion	Understanding of recursion	LCD	1		4		
1	Tutorial	Tutorial			1	5		
1	Format of Recursive Functions, Recursion and Memory	Knowledge about Recursive Functions, Recursion and Memory	LCD	1		6		
1	Recursion Vs Iterations	Knowledge about Recursion Vs Iterations	LCD	1		7		
1	Linear search,	Knowledge about Linear search	LCD	1		8		
1	Tutorial	Tutorial			1	9		
1	Binary search Algorithm	Knowledge about Binary search Algorithm	LCD	1		10		18/9/20
1	BoLCDle sort Insertion Sort	Knowledge about BoLCDle sort Insertion Sort	LCD	1		11		

1	Merge sort Algorithm	Understanding of Control function	LCD	1		12		
1	Tutorial	Tutorial			1	13		
1	Quick sort algorithm	Understanding of Merge sort Algorithm	LCD	1		14		
2	Single Linked list	Understanding of Single Linked list	LCD	1		15		
2	Double Linked list	Understanding of Double Linked list	LCD	1		16		
2	Tutorial	Tutorial			1	17		
2	Circular linked list	Understanding of Circular linked list	LCD	1		18		
2	Operations on single linked lists	Knowledge about Programming Operations on single linked lists	LCD	1		19		
2	Operations on Double linked lists	Knowledge about Operations on Double linked lists	LCD	1		20		
2	Operations on circular Linked lists	Understanding of Operations on circular Linked lists	LCD	1		21		
2	Tutorial	Tutorial			1	22		
3	Introduction to stacks	Knowledge about stacks	LCD	1		23		
3	Stack definition and operations	Knowledge about Stack definition and operations	LCD	1		24		
3	Stack array Implementation	Understanding of Stack array Implementation	LCD	1		25		
3	Tutorial	Tutorial	LCD		1	26		
3	Stack Linked list Implementation and Applications	Knowledge about Linked list Implementation and Applications	LCD	1		27		
3	Queues Definition	Understanding of Queues Definition	LCD	2		29		
3	Tutorial	Tutorial			1	30		
3	Queue	Knowledge about	LCD	1		31		

	operations	Queue						
3	Queue array Implementation	Understanding of Queue array Implementation	LCD	2		33		
3	Tutorial	Tutorial			1	34		
3	Linked list Implementation and Applications	Understanding of Translation, Rotation, Scaling	LCD	1		35		
3	Circular Queue	Linked list Implementation and Applications	LCD	1		36		
3	Tutorial	Tutorial			1	38		
4	Tree Introduction-Terminology	Understanding of Tree	LCD	1		39		
4	Representation of trees	Understanding of Representation of trees	LCD	1		40		
4	Binary Trees	Knowledge about Binary Trees	LCD	1		41		
4	Tutorial	Tutorial			1	42		
4	Abstract Data Type	Understanding of Abstract Data Type	LCD	1		43		
4	Properties of Binary Trees	Knowledge about Binary Trees	LCD	LCD		44		
4	Binary tree Representation	Understanding of Binary tree Representation	LCD	1		45		
4	Binary tree Traversals Inorder.pre order,post order	Understanding of Traversals Inorderpre order,post order	LCD	1		46		
4	Tutorial	Tutorial			1	47		
4	Binary search trees definition	Knowledge about Binary search trees definition	LCD	1		48		
4	Searching BST	Knowledge about BST	LCD	1		49		

4	Tutorial	Tutorial			1	51		
4	Insert &Delete into BST	Understanding of Insert &Delete into BST	LCD	1		52		
4	Height of binary tree	Understanding of Height of binary tree	LCD	1		53		
5	Introduction to Graphs	Knowledge about Clipping, Line segment clipping	LCD	1		54		
5	ADT Graph Introduction	Understanding of Graphs	LCD	1		56		
5	Graph Definition& Graph Representatio n	Knowledge about Graph Representation	LCD	1		57		
5	Elementary graph Representatio ns BFS &DFS	Understanding of Graph Representations BFS &DFS	LCD	1		58		
5	Minimum Spanning tree	Understanding of Minimum Spanning tree	LCD	1		59		
5	Tutorial	Tutorial	LCD		1	60		

55
85
105

Legend: Teaching Mode
BB: Black Board / **LCD**: Power Point Presentation /**OHP**: Over Head Projector

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LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : 2020 -2021 (PVP19)
Year & Semester : III B.Tech & I Semester S2
Branch : Information Technology
Subject Code & Name : 19IT3352 & Data Structures Lab
Name of Faculty : I.M.V.Krishna

Unit No	Topics of Syllabus to be covered	Learning outcomes	Teaching Mode	Hours Required		Total No. of Hours (Cumulative)	Expected date of completion (for each Unit) by HOD	Review/ Remarks (by HOD)
				L	T			
1	**Exercise 1A** Execute program Demonstrate recursive algorithms with examples	Execute a program Demonstrate recursive algorithms with examples..	LCD	3		3		
2	**Exercise 2A** Execute program Implement various searching techniques.	Execute program Implement various searching techniques.	LCD	6		6		
3	**Exercise 3A** Program to Develop programs for different sorting techniques	program to Develop programs for different sorting techniques	LCD	3		9		
4	**Exercise 4A** Implement and perform different operations on Single, Double and Circular Linked Lists.	Implement and perform different operations on Single, Double and Circular Linked Lists.	LCD	6		15		
5	**Exercise 5A** Develop a program to perform operations of a	Develop a program to perform operations of a Stack using	LCD	3		18		

	Stack using arrays and linked Lists.	arrays and linked Lists.						
6	**Exercise 6A** Develop programs to implement Stack applications.	Develop programs to implement Stack applications.	LCD	6		24		
7	**Exercise 7A** Develop a program to perform operations of Linear Queue using arrays and linked Lists.	Develop a program to perform operations of Linear Queue using arrays and linked Lists.		6		27 30		Cond 2/11/2021
8	**Exercise 8A** Write& Implement Circular Queues..	Implement Circular Queues..	LCD	6		36		
9	**Exercise 9A** Develop a program to represent a tree data structure..	Develop a program to represent a tree data structure..	LCD	6		42		
10	**Exercise 10A** Develop a program to demonstrate operations on Binary Search Tree.	Develop a program to demonstrate operations on Binary Search Tree.	LCD	3		45		Sylla
11	**Exercise 11A** Demonstrate Graph Traversal Techniques.	Demonstrate Graph Traversal Techniques.	LCD	3		48		
12	**Exercise 12A** Develop a program to find Minimum cost Spanning tree.	Develop a program to find Minimum cost Spanning tree.	LCD	3		51		

Legend: Teaching Mode
BB: Black Board / **LCD**: Power Point Presentation / **OHP**: Over Head Projector

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LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : 2020 -2021 (PVP19)
Year & Semester : III B.Tech & II Semester S1
Branch : Information Technology
Subject Code & Name : 19IT3352 & Data Structures Lab
Name of Faculty : CH.Chandra Mohan

Unit No	Topics of Syllabus to be covered	Learning outcomes	Teaching Mode	Hours Required		Total No. of Hours (Cumulative)	Expected date of completion (for each Unit) by HOD	Review/ Remarks (by HOD)
				L	T			
1	**Exercise 1A** Execute program Demonstrate recursive algorithms with examples	Execute a program Demonstrate recursive algorithms with examples..	LCD	3		3		
2	**Exercise 2A** Execute program Implement various searching techniques.	Execute program Implement various searching techniques.	LCD	6		6		
3	**Exercise 3A** Program to Develop programs for different sorting techniques	program to Develop programs for different sorting techniques	LCD	3		9		
4	**Exercise 4A** Implement and perform different operations on Single, Double and Circular Linked Lists.	Implement and perform different operations on Single, Double and Circular Linked Lists.	LCD	6		15		
5	**Exercise 5A** Develop a program to perform operations of a	Develop a program to perform operations of a Stack using	LCD	3		18		

	Stack using arrays and linked Lists.	arrays and linked Lists.						
6	**Exercise 6A** Develop programs to implement Stack applications.	Develop programs to implement Stack applications.	LCD	6		24		
7	**Exercise 7A** Develop a program to perform operations of Linear Queue using arrays and linked Lists.	Develop a program to perform operations of Linear Queue using arrays and linked Lists.		6		30		
8	**Exercise 8A** Write& Implement Circular Queues..	Implement Circular Queues..	LCD	6		36		
9	**Exercise 9A** Develop a program to represent a tree data structure..	Develop a program to represent a tree data structure..	LCD	6		42		
10	**Exercise 10A** Develop a program to demonstrate operations on Binary Search Tree.	Develop a program to demonstrate operations on Binary Search Tree.	LCD	3		45		
11	**Exercise 11A** Demonstrate Graph Traversal Techniques.	Demonstrate Graph Traversal Techniques.	LCD	3		48		
12	**Exercise 12A** Develop a program to find Minimum cost Spanning tree.	Develop a program to find Minimum cost Spanning tree.	LCD	3		51		

Legend: Teaching Mode
BB: Black Board / **LCD**: Power Point Presentation / **OHP**: Over Head Projector

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LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : 2020-2021 (PVP19)
Year & Semester : II B.Tech / I SEM
Branch : Information Technology –S1 & S2
Subject Code & Name : Fundamentals of Digital Logic Design (19IT3301)
Name of Faculty : Dr. R. Vijaya Kumar Reddy

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode BB/ LCD/ OHP.	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				L	T			
I	Digital Systems	Introduction to Digital systems	LCD	1		1		
I	Binary numbers	Knowledge on various Binary systems: Binary, Dec,Oct,Hex numbers and conversions	LCD	2		3		
I	Tutorial				1	4		
I	Representation of Signed Binary numbers	Knowledge on Signed Number Representation, 1's and 2's complement,	LCD	1		5		
I	Representation of Signed Binary numbers	Knowledge on Arithmetic Addition and Subtraction	LCD	1		6		
I	Binary Codes	Basic Knowledge on BCD code.	LCD	1		7		
I	Tutorial				1	8		
I	Binary Codes	ASCII, 2412, Excess-3 code and Gray code.	LCD	1		9		
I	Logic Gates	Basic idea on Logic Gates	LCD	1		10		
II	Boolean Algebra	Introduction to Boolean Algebra	LCD	1		11		
II	Tutorial				1	12		
II	Boolean Algebra	Basic Knowledge on Axiomatic Definition of Boolean Algebra	LCD	1		13		
II	Theorems and Properties of Boolean Algebra	Basic Knowledge on Theorems and Properties of Boolean Algebra	LCD	1		14		
II	Boolean Functions	Knowledge on Boolean Functions	LCD	1		15		
II	Tutorial				1	16		
II	Canonical and Standard Forms	Knowledge on Min terms(SOP),Max terms(POS)	LCD					

II	Canonical and Standard Forms	Sum of Min terms, Product of Max terms	LCD	1		17		
II	Canonical and Standard Forms	Knowledge on Conversion between Canonical Forms and other Logic operations	LCD	1		18		
II	Digital Logic Gates	Knowledge on Digital Logic Gates	LCD	1		19		
II	Tutorial				1	20		
II	Integrated Circuits.	Knowledge on Integrated Circuits.	LCD	1		21		
II	Gate level Minimization	Introduction on Two, Three K-map's	LCD	1		22		
II	K-map's	Knowledge on Four variable K-map's	LCD	1		23		
II	Tutorial				1	24		
II	Product-of-Sums Simplification	Knowledge on Product-of-Sums Simplification	LCD	1		25		
II	Don't – Care conditions	Knowledge on Don't – Care conditions	LCD	1		26		
II	NAND and NOR Implementation	Basic idea on Implementation of circuits	LCD	1		27		
II	Tutorial				1	28		
III	Combinational Logic	Basic idea on Introduction, Combinational circuits,	LCD	1		29		
III	Analysis Procedure, Design Procedure,	Basic Knowledge on Analysis Procedure, Design Procedure,	LCD	1		30		
III	Binary Adder	Basic Knowledge on Half Adder, Full Adder and Binary Adder,	LCD	1		31		
III	Tutorial				1	32		
III	Binary Sub tractor	Basic idea on Half and Full Sub tractor	LCD	2		34		
III	Look Ahead Carry Adder	Basic idea on Look Ahead Carry Adder	LCD	1		35		
III	Magnitude Comparator	Basic idea on Magnitude Comparator	LCD	1		36		
III	Tutorial				1	37		
III	Encoders and Decoders	Basic idea on Encoders and Decoders	LCD	1		38		
III	Multiplexers	Basic idea on Multiplexers	LCD	2		40		
III	De multiplexers	Basic idea on De multiplexers	LCD	2		42		
III	Tutorial				1	43		
IV	Sequential Logic	Knowledge on Introduction to Sequential circuits	LCD	1		44		

PROCESS RECORD FOR ACADEMICS

IV	Storage elements: Latches	Knowledge on latches	LCD	2		46		
IV	Tutorial				1	47		
IV	Storage elements: Flip-Flops	Knowledge on flip-flops	LCD	2		49		
IV	Registers	Knowledge on Registers, Shift Registers	LCD	1		50		
IV	Tutorial				1	51		
V	Registers and Counters	Knowledge on Introduction to Registers and Counters	LCD	1		52		
V	Shift registers	Introduction to Shift registers	LCD	1		53		
V	Shift registers	Universal Shift Register	LCD	2		54		
V	Tutorial				1	55		
V	Ripple Counters	Knowledge on Binary Ripple Counter	LCD	2		57		
V	Synchronous Counters	Knowledge on Binary, Up-Down Counter	LCD	1		58		
V	Tutorial				1	59		
V	Ring counter	Knowledge on Binary Ripple Counter	LCD	2		61		
V	Johnson counter	Knowledge on Binary Ripple Counter	LCD	1		62		
	Revision				1	63		

Legend: Teaching Mode

LCD: Power Point Presentation (online) VL: Video Lesson
L: Lecture Hours T: Tutorial Hours

Signature of the Faculty

Signature of the HOD
Date:

PROCESS RECORD FOR ACADEMICS
LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : 2020-21
Year & Semester : II B. Tech, I Semester
Branch : IT Sec 1
Subject Code & Name : 19BS1302 & Engineering Mathematics III
Name of Faculty : Dr J Rajendra Prasad

CO1 : Interpret the logical sentences using connectives and predicates.	12
CO2 : Apply rules of inference and methods of proof on Mathematical Logic and Predicate Calculus.	13
CO3 : Apply recurrence relations to solve problems in different domains.	13
CO4 : Construct Hasse diagram and various lattices from Partial Ordered Sets.	13
CO5 : Construct different types of Trees from Graphs.	13

Unit No.	Topic of Syllabus to be covered	Learning Outcomes	Teaching Mode BB / LCD / OHP	Hours Required		Total No. of Hours (Cumulative)	Expected Date of completion	Actual Date of Completion	Review / Remarks (by HOD)
				Lecture	Tutorial				
I	Mathematical Logic Statements and notations, connectives	Introduction of statements, definitions & symbolic notations and various types of connectives CO1 L1	BB	1		1			
I	Definition of Conjunction and Disjunction and Conditional and Biconditional Problems	Definitions, Symbolic notations AND, OR connectives , Implies and implied by and corresponding truth tables, problems. CO1 L1	BB	1		2			

I	Well Formed Formulas, Tautologies, Equivalence of formulas, Duality Law	Definition of Well Formed Formulas, Tautology and corresponding formulas. Practice the problems based on Equivalence of Formulas CO 1 L1	BB	1		3			
1	Tautological Implications, Functionally complete sets of connectives, Other connectives	Solve problems based on Tautological Implications, functionally complete sets, various remaining connectives and problems CO1 L2	BB	1		4			
1	**Normal Forms:** Disjunctive Normal Forms (DNF), Conjunctive Normal Forms (CNF).	Introduction to Normal Forms, Understanding different normal forms-DNF,CNF CO1 L2	BB	2		6			
1	Principal of Disjunctive Normal Forms (PDNF), Principal of Conjunctive Normal Forms (PCNF).	Understanding different normal forms-PDNF,PCNF CO1 L2	BB	2		8			
II	**Theory of Inference for Statement Calculus**	Explanation about Inference for the statement calculus, Validity using Truth Tables-Rules of Inference – Consistency of Premises CO2 L2	BB	1		9			

	Conditional proof & Indirect Method Proof.	Introduction to Solving Problems based on condition i.e., additional premise & Indirect Method Proof. CO2 L3	BB	2		11			
	Predicate calculus, The Statement Function ,Variables, and Quantifiers	Explaining the basics for Predicate calculus, Explanation of Statement Function, Variable and Quantifier CO2 L2	BB	2		13			
	Predicate Formulas-Free and Bound Variables	Explaining the rules of Predicate WFF, Free and Bound Variables, CO2 L2	BB	1		14			
	The Universe of discourse	Representation of statements into symbols and related problems CO2 L3	BB	1		15			
	Recurrence Relations-	Introduction, Definition of recurrence relation and formulation of recurrence relations CO3, L3	BB	2		17			
	The Method of Characteristic Roots	problems based on Characteristic Roots CO3, L3	BB	2		19			
	Inhomogeneous Recurrence Relation	Solving In-homogeneous recurrence relations and problems CO3, L3	BB	2		21			
	Relations and Directed Graphs	Introduction, Definition of relation, directed graphs with examples and problems CO4, L2	BB	2		23			
	Special Properties of Binary Relations-	Various types and properties of binary relations CO4, L2	BB	2		25			
	Equivalence Relations-Ordering Relations	definition of equivalence relation and problems, Definition of various ordering relations CO4, L2	BB	2		27			
	Lattices, and Enumerations-	Definitions, Examples and solving problems on Lattices, Explanation about Lattices CO4, L2	BB	3		30			

IV	Operations on Relations	Understanding different operations on relations CO4, L2	BB	1		31			
IV	Paths and Closures-	Definitions of path, closure of graphs and examples CO4, L2	BB	2		33			
IV	Directed Graphs and Adjacency Matrices	Defintion of digraph and represention of a digraph as an adjacency matrix and problems CO4, L2	BB	2		35			
V	**Graphs – Basic Concepts –**	Explaining the Fundamentals and Definitions on Graphs CO5 L3	BB	1		36			
V	**isomorphism**-sub graphs	Solving problems on Isomorphism Solving problems on sub graphs CO5 L3	BB	2		38			
V	Trees and Their Properties	Explaining the Properties of Tree, Theorems, Example Problems on Trees CO5 L3	BB	2		40			
V	Spanning Trees	Understanding the Algorithm, Theorems in Spanning Trees, Problems on Minimum Spanning Tree and How to calculate cost of Minimum Spanning Tree CO5 L3	BB	1		41			
V	Spanning Trees	Understanding the Algorithm, Theorems in Spanning Trees, Problems on Minimum Spanning Tree and How to calculate cost of Minimum Spanning Tree CO5 L3	BB	2		42			
V	**Planar Graphs**	Definition, Problems on Planar Graphs CO5 L3	BB	1		43			
V	Euler Graphs	Introduction, Problems on Euler Graphs CO5 L3	BB	2		45			
V	Multigraphs	Understanding Multigraphs and the Theorems, Applications, and Example problems CO5 L3	BB	1		46			
V	Euler Circuits, Example Problems	Understanding Euler Circuits and the Theorems, Applications, and problems on Euler Circuits CO4 L3	BB	2		48			
V	Introduction - Hamiltonian Graphs	Introduction on Hamiltonian Graphs CO5 L3	BB	1		49 50			
V	Rules for Hamiltonian Graphs	Rules for constructing paths and Circuits, Theorems, Example problems on Hamiltonian Graphs CO5 L3	BB	2		51			
V	Problems on	Theorems, Exercise problems on Hamiltonian Graphs CO5 L3	BB	2		53			

Complex Numbers	Understanding the Rules for Cartesian number, Theorems, Example problems CO5 L3	BB	2		35	70		

Signature of the Faculty

Signature of the HOD

Date: 13/2021

LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : 2020-2021
Year & Semester : II B.Tech I Semester Section - II
Branch : Information Technology
Subject Code & Name : 19IT3351, Object Oriented Programming Using C++ Lab
Name of Faculty : **J.Sirisha**

S.No	Experiment Name	Hours Required	Total number of hours required	Expected date of completion (for each unit) By HOD	Review / Remarks (By HOD)
1	Practicing C Programs	3	3		
2	**Exercise 1** a)Write a C++ program to convert decimal to binary b) A Fibonacci sequence is defined as follows: the first and second terms in the sequence are 0 and 1.Subsequent terms are found by adding the preceding two terms in the sequence. Write a C++ program to generate the first n terms of the sequence. c) Write a C++ program to generate all the prime numbers between 1 and n, where n is a value supplied by the user. d) Write a program to find transpose of 2-D matrix by allocating memory dynamically to the matrix. Initialize and display contents of the matrix and deallocate memory.	3	6		
3	**Exercise 2** Implement the C++ programs by using the concepts of a) Function overloading. b)Static data members c)Static member functions	3	9		
4	**Exercise 3** Implement the C++ programs by using the concepts of a)Classes and Objects b) Arrays of Objects c)Constructors d) Constructor overloading	3	12		

5	**Exercise 4** Implement the C++ programs by using the concepts of a) Binary operator overloading b)Unary operator overloading c) Friend function d) Friend class	3	15		
6	**Exercise 5** Implement the C++ programs by using the concepts of a)Simple inheriatnce b)Multilevel inheritance c)Multiple inheritance d)Hybrid inheritance through virtual base class	3	18		24/1
7	**Exercise 6** Implement the C++ programs by using the concepts of a)Virtual function b)Run Time polymorphism c)Abstract class	3	21		
8	**Exercise 7** a) Write a C++ program to display elements of an array using pointer and also display addresses of elements. b) Write a C++ program to pass elements of an array to a function by using call by value. c) Write a C++ program to pass elements of an array to a function by using call by reference.	3	24		
9	**Exercise 8** a) Write a C++ program to display the contents of text file b) Write a C++ program by accepting two file names and produces a new file that contains the contents of two accepted files c) Write a C++ program that produces the sum of all the numbers in a file of white space separated integers.	3	27		24/1/2024

10	**Exercise 9** Write a C++ program to illustrate a) Class templates b) Class templates with multiple parameters c) Function templates	3	30		
11	**Exercise 10** a) Write a C++ program to declare string objects and Perform assignment and concatenation operations with the string objects. b) Write a C++ program to compare two strings using standard function comparc(). c) Write a C++ program to remove specified characters from the string. d) Write a program to display the capacity of the string object. Use member function capacity().	3	33		
12	**Exercise 11** a)Write a C++ program to declare string objects. Perform assignment and concatenation operations with the string objects. b)Write a C++ program to compare two strings using standard function compare(). c)Write a C++ program to remove specified characters from the string. d)Write a program to display the capacity of the string object. Use member function capacity().	3	36		
13	**Exercise 12** a.) Write a C++ program to illustrate i. Division by zero ii. Array index out of bounds exception b.)Write a C++ program to illustrate the concept of multiple catch block c.) Write a C++ program to illustrate rethrowing an exception.	3	39		
14	Internal exam	3	42		

5/- Coordinator 11/3/24

Signature of Faculty

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LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : 2020-2021
Year & Semester : II B.Tech I Semester Section - II
Branch : Information Technology
Subject Code & Name : 19IT3351, Object Oriented Programming Using C++ Lab
Name of Faculty : Y.Suresh

S.No	Experiment Name	Hours Required	Total number of hours required	Expected date of completion (for each unit) By HOD	Review / Remarks (By HOD)
1	Practicing C Programs	3	3		
2	**Exercise 1** a)Write a C++ program to convert decimal to binary b) A Fibonacci sequence is defined as follows: the first and second terms in the sequence are 0 and 1.Subsequent terms are found by adding the preceding two terms in the sequence. Write a C++ program to generate the first n terms of the sequence. c) Write a C++ program to generate all the prime numbers between 1 and n, where n is a value supplied by the user. d) Write a program to find transpose of 2-D matrix by allocating memory dynamically to the matrix. Initialize and display contents of the matrix and deallocate memory.	3	6		
3	**Exercise 2** Implement the C++ programs by using the concepts of a) Function overloading. b)Static data members c)Static member functions	3	9		
4	**Exercise 3** Implement the C++ programs by using the concepts of a)Classes and Objects b) Arrays of Objects c)Constructors d) Constructor overloading	3	12		

5	**Exercise 4** Implement the C++ programs by using the concepts of a) Binary operator overloading b)Unary operator overloading c) Friend function d) Friend class	3	15		
6	**Exercise 5** Implement the C++ programs by using the concepts of a)Simple inheriatnce b)Multilevel inheritance c)Multiple inheritance d)Hybrid inheritance through virtual base, class	3	18		
7	**Exercise 6** Implement the C++ programs by using the concepts of a)Virtual function b)Run Time polymorphism c)Abstract class	3	21		
8	**Exercise 7** a) Write a C++ program to display elements of an array using pointer and also display addresses of elements. b) Write a C++ program to pass elements of an array to a function by using call by value. c) Write a C++ program to pass elements of an array to a function by using call by reference.	3	24		
9	**Exercise 8** a) Write a C++ program to display the contents of text file b) Write a C++ program by accepting two file names and produces a new file that contains the contents of two accepted files c) Write a C++ program that produces the sum of all the numbers in a file of white space separated integers.	3	27		
10	**Exercise 9** Write a C++ program to illustrate a) Class templates b) Class templates with multiple parameters c) Function templates	3	30		

11	**Exercise 10** a) Write a C++ program to declare string objects and Perform assignment and concatenation operations with the string objects. b) Write a C++ program to compare two strings using standard function compare(). c) Write a C++ program to remove specified characters from the string. d) Write a program to display the capacity of the string object. Use member function capacity().	3	33		
12	**Exercise 11** a)Write a C++ program to declare string objects. Perform assignment and concatenation operations with the string objects. b)Write a C++ program to compare two strings using standard function compare(). c)Write a C++ program to remove specified characters from the string. d)Write a program to display the capacity of the string object. Use member function capacity().	3	36		
13	**Exercise 12** a.) Write a C++ program to illustrate i. Division by zero ii. Array index out of bounds exception b.)Write a C++ program to illustrate the concept of multiple catch block c.) Write a C++ program to illustrate rethrowing an exception.	3	39		
14	Internal exam	3	42		

54—completed 1/5/14

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PROCESS RECORD FOR ACADEMICS

LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : 2020-2021
Year & Semester : II B.Tech Semester I
Branch : Information Technology –Section II
Subject Code & Name : 19IT3302 & Object Oriented Programming Using C++
Name of Faculty : Dr Y.Suresh

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode BB/ LCD/ OHP.	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				L	T			
I	Introduction to C++	Introduction basics of C and C++	LCD online	2		2		
I	Input and output in C++	Knowledge Input and output in C++	LCD online	2		4		
I	Declarations	Basic idea on C++ declaration statements	LCD onlne	1		5		
	Interactive Session/ Doubt Clarification Session				1	6		
I	Decision statements	Basic idea on Decision statements	LCD online	2		8		
I	Control loop structures	Knowledge on control loop structures	LCD online	2		10		10/9/2020
I	Function in C++	Knowledge on function in C++	LCD online	2		12		
	Interactive Session/ Doubt Clarification Session		LCD online		1	13		
II	Classes and Objects	Basic idea on Classes and Objects	LCD online	3		16		
II	Constructors and destructors	Knowledge on constructors and destructors	LCD online	3		19		
	Interactive Session/ Doubt Clarification Session				1	20		16/9/20
II	Operator overloading	Basic Knowledge on operator overloading	LCD online	4		24		
II	Inheritance	Knowledge on reusability	LCD online	3		27		21/1/20
	Interactive Session/ Doubt Clarification Session				1	28		

III	Arrays	Basic idea on Arrays	LCD online	2		30		
III	Pointers	Basic Knowledge on Pointers	LCD online	3		33		
	Interactive Session/ Doubt Clarification Session		LCD online		1	34		
III	Memory Models	Basic idea on Memory Models	LCD online	2		36		
III	Binding and Polymorphism	Basic idea on Binding and Polymorphism	LCD online	3		39		
	Interactive Session/ Doubt Clarification Session				1	40		
IV	Files	Knowledge on Files	LCD online	3		43		
IV	Templates: Introduction	Need of generic programming	LCD online	1		44		
IV	Need for templates, definition of class templates, working of function templates, class templates with more parameters	Knowledge on Generic programming	LCD online	2		46		
	Interactive Session/ Doubt Clarification Session				1	47		
IV	Function templates with more arguments, overloading of template function	Knowledge on function templates with more arguments, overloading of template function	LCD online	1		48		
IV	Member function templates	Knowledge on member function templates	LCD online	1		49		
IV	Recursion with function templates	Knowledge on recursion with function templates	LCD online	2		51		
	Interactive Session/ Doubt Clarification Session				1	52		
V	Strings Introduction	Knowledge on String c and C++	LCD online	1		53		
V	Handling string objects	Knowledge on string objects in c++	LCD online	2		55		
V	Comparing and exchanging	Knowledge on String manipulation methods	LCD online	2		57		
	Interactive Session/ Doubt Clarification				1	58		

	Session							
V	Exception Handling	Introducing basic Knowledge on Exception Handling	LCD	2		60		
V	keywords try, throw and catch	Knowledge on keywords in Exception handling		2		62		
V	Re-throwing an exception	Knowledge on Re-throwing an exception		1		63		
V	Specifying exceptions	Knowledge on specifying an exception		1		64		
	Interactive Session/ Doubt Clarification Session				1	65		

Legend: Teaching Mode
BB: Black Board / LCD: Power Point Presentation / OHP: Over Head Projector

Signature of the Faculty

Signature of the HOD
Date:

PROCESS RECORD FOR ACADEMICS

LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : 2020-2021
Year & Semester : II B.Tech Semester I
Branch : Information Technology –Section II
Subject Code & Name : 19IT3302 & Object Oriented Programming Using c++
Name of Faculty : J. Sirisha

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode BB/ LCD/ OHP.	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				L	T			
I	Introduction to C++	Introduction basics of C and C++	LCD online	2		2		
I	Input and output in C++	Knowledge Input and output in C++	LCD online	2		4		
I	Declarations	Basic idea on C++ declaration statements	LCD onlne	1		5		
	Interactive Session/ Doubt Clarification Session				1	6		
I	Decision statements	Basic idea on Decision statements	LCD online	2		8		
I	Control loop structures	Knowledge on control loop structures	LCD online	2		10		
I	Function in C++	Knowledge on function in C++	LCD online	2		12		
	Interactive Session/ Doubt Clarification Session		LCD online		1	13		
II	Classes and Objects	Basic idea on Classes and Objects	LCD online	3		16		
II	Constructors and destructors	Knowledge on constructors and destructors	LCD online	3		19		
	Interactive Session/ Doubt Clarification Session				1	20		
II	Operator overloading	Basic Knowledge on operator overloading	LCD online	4		24		
II	Inheritance	Knowledge on reusability	LCD online	3		27		
	Interactive Session/ Doubt Clarification				1	28		

PROCESS RECORD FOR ACADEMICS

	Session							
III	Arrays	Basic idea on Arrays	LCD online	2		30		
III	Pointers	Basic Knowledge on Pointers	LCD online	3		33		
	Interactive Session/ Doubt Clarification Session		LCD online		1	34		
III	Memory Models	Basic idea on Memory Models	LCD online	2		36		
III	Binding and Polymorphism	Basic idea on Binding and Polymorphism	LCD online	3		39		
	Interactive Session/ Doubt Clarification Session				1	40		
IV	Files	Knowledge on Files	LCD online	3		43		
V	Templates: Introduction	Need of generic programming	LCD online	1		44		
IV	Need for templates, definition of class templates, working of function templates, class templates with more parameters	Knowledge on Generic programming	LCD online	2		46		
	Interactive Session/ Doubt Clarification Session				1	47		
IV	Function templates with more arguments, overloading of template function	Knowledge on function templates with more arguments, overloading of template function	LCD online	1		48		
V	Member function templates	Knowledge on member function templates	LCD online	1		49		
IV	Recursion with function templates	Knowledge on recursion with function templates	LCD online	2		51		
	Interactive Session/ Doubt Clarification Session				1	52		
V	Strings Introduction	Knowledge on String c and C++	LCD online	1		53		
V	Handling string objects	Knowledge on string objects in c++	LCD online	2		55		
V	Comparing and exchanging	Knowledge on String manipulation methods	LCD online	2		57		

	Interactive Session/ Doubt Clarification Session				1	58		
V	Exception Handling	Introducing basic Knowledge on Exception Handling	LCD online	2		60		
V	keywords try, throw and catch	Knowledge on keywords in Exception handling	LCD online	2		62		
V	Re-throwing an exception	Knowledge on Re-throwing an exception	LCD online	1		63		
V	Specifying exceptions	Knowledge on specifying an exception	LCD online	1		64		
	Interactive Session/ Doubt Clarification Session				1	65		

Legend: Teaching Mode
BB: Black Board / LCD: Power Point Presentation / OHP: Over Head Projector

Signature of the Faculty

Signature of the HOD
Date:

PROCESS RECORD FOR ACADEMICS

LESSON PLAN

(PVPSIT/ACD/01)

Academic Year : 2020-21
Year & Semester : II B. Tech, I Semester
Branch : IT Sec II
Subject Code & Name : 19BS1302 & Engineering Mathematics III
Name of Faculty : Dr V Seethamahalakshmi

CO1 : Interpret the logical sentences using connectives and predicates.	L2
CO2 : Apply rules of inference and methods of proof on Mathematical Logic and Predicate Calculus.	L3
CO3 : Apply recurrence relations to solve problems in different domains.	L3
CO4 : Construct Hasse diagram and various lattices from Partial Ordered Sets.	L3
CO5 : Construct different types of Trees from Graphs.	L3

Unit No.	Topic of Syllabus to be covered	Learning Outcomes	Teaching Mode BB / LCD / OHP	Hours Required		Total No. of Hours (Cumulative)	Expected Date of completion	A D C e
				Lecture	Tutorial			
I	Mathematical Logic Statements and notations, connectives	Introduction of statements, definitions & symbolic notations and various types of connectives CO1 L1	BB	1		1		
I	Definition of Conjunction and Disjunction and Conditional and Biconditional Problems	Definitions, Symbolic notations AND, OR connectives , Implies and implied by and corresponding truth tables, problems. CO1 L1	BB	1		2		

Well Formed Formulas, Tautologies, Equivalence of formulas, Duality Law	Definition of Well Formed Formulas, Tautology and corresponding formulas. Practice the problems based on Equivalence of Formulas CO 1 L1	BB	1		3			
Tautological Implications, Functionally complete sets of connectives, Other connectives	Solve problems based on Tautological Implications, functionally complete sets, various remaining connectives and problems CO1 L2	BB	1		4			
Normal Forms: Disjunctive Normal Forms (DNF), Conjunctive Normal Forms (CNF),	Introduction to Normal Forms, Understanding different normal forms-DNF,CNF CO1 L2	BB	2		6			
Principal of Disjunctive Normal Forms (PDNF), Principal of Conjunctive Normal Forms (PCNF),	Understanding different normal forms-PDNF,PCNF CO1 L2	BB	2		8			
Theory of Inference for Statement Calculus	Explanation about Inference for the statement calculus, Validity using Truth Tables-Rules of Inference – Consistency of Premises CO2 L2	BB	1		9			

	Conditional proof & Indirect Method Proof.	Introduction to Solving Problems based on condition i.e., additional premise & Indirect Method Proof. CO2 L3	BB	2		11			
	Predicate calculus, The Statement Function ,Variables, and Quantifiers	Explaining the basics for Predicate calculus, Explanation of Statement Function, Variable and Quantifier CO2 L2	BB	2		13			
	Predicate Formulas-Free and Bound Variables	Explaining the rules of Predicate WFF, Free and Bound Variables, CO2 L2	BB	1		14			
I	The Universe of discourse	Representation of statements into symbols and related problems CO2 L3	BB	1		15			
I	**Recurrence Relations-**	Introduction, Definition of recurrence relation and formulation of recurrence relations CO3, L3	BB	2		17			
I	The Method of Characteristic Roots	problems based on Characteristic Roots CO3, L3	BB	2		19			
I	Inhomogeneous Recurrence Relation	Solving In-homogeneous recurrence relations and problems CO3, L3	BB	2		21			
	Relations and Directed Graphs	Introduction, Definition of relation, directed graphs with examples and problems CO4, L2	BB	2		23			
	Special Properties of Binary Relations-	Various types and properties of binary relations CO4, L2	BB	2		25			
	Equivalence Relations- Ordering Relations	definition of equivalence relation and problems, Definition of various ordering relations CO4, L2	BB	2		27			
	Lattices, and Enumerations-	Definitions, Examples and solving problems on Lattices, Explanation about Lattices CO4, L2	BB	3		30			

IV	Operations on Relations	Understanding different operations on relations CO4, L2	BB	1		33	
IV	Paths and Closures-	Definitions of path, closure of graphs and examples CO4, L2	BB	2		33	
IV	Directed Graphs and Adjacency Matrices	Definition of digraph and represention of a digraph as an adjacency matrix and problems CO4, L2	BB	2		35	
V	**Graphs – Basic Concepts –**	Explaining the Fundamentals and Definitions on Graphs CO5 L3	BB	1		36	
V	**isomorphism**-sub graphs	solving problems on Isomorphism Solving problems on sub graphs CO5 L3	BB	2		38	
V	Trees and Their Properties	Explaining the Properties of Tree, Theorems, Example Problems on Trees CO5 L3	BB	2		40	
V	Spanning Trees	Understanding the Algorithm, Theorems in Spanning Trees. Problems on Minimum Spanning Tree and How to calculate cost of Minimum Spanning Tree CO5 L3	BB	1		41	
V	Spanning Trees	Understanding the Algorithm, Theorems in Spanning Trees. Problems on Minimum Spanning Tree and How to calculate cost of Minimum Spanning Tree CO5 L3	BB	2		42	
V	**Planar Graphs**	Definition, Problems on Planar Graphs CO5 L3	BB	1		43	
V	Euler Graphs	Introduction, Problems on Euler Graphs CO5 L3	BB	2		45	
V	Multigraphs	Understanding Multigraphs and the Theorems, Applications, and Example problems CO5 L3	BB	1		46	
V	Euler Circuits, Example Problems	Understanding Euler Circuits and the Theorems, Applications, and problems on Euler Circuits CO4 L3	BB	2		48	
V	Introduction - Hamiltonian Graphs	Introduction on Hamiltonian Graphs CO5 L3	BB	1		49	
V	Rules for Hamiltonian Graphs	Rules for constructing paths and Circuits. Theorems, Example problems on Hamiltonian Graphs CO5 L3	BB	2		51	
V	Problems on	Theorems, Exercise problems on Hamiltonian Graphs CO5 L3	BB	2		53	

	Hamiltonian Graphs							
V	Chromatic Numbers	Understanding the Rules for Chromatic number, Theorems, Example problems CO5 L3	BB	2		55		

Legend: Teaching Mode
BB: Black Board/ LCD: Power Point Presentation/ OHP: Over Head Projector

Dr V. Sitamaha Lakshmi
Signature of the Faculty

Date: 19/8/2020

Signature of the HOD

PROCESS RECORD FOR ACADEMICS
LESSON PLAN
(PVPSIT/ACD/01)

Academic Year	: 2020-21
Year & Semester	: II B. Tech, I Semester
Branch	: IT Sec II
Subject Code & Name	: 19BS1302 & Engineering Mathematics III
Name of Faculty	: Dr V Seethamahalakshmi

CO1 : **Interpret** the logical sentences using connectives and predicates.	L3
CO2 : **Apply rules** of inference and methods of proof on Mathematical Logic and Predicate Calculus.	L3
CO3 : **Apply** recurrence relations to solve problems in different domains.	L3
CO4 : **Construct** Hasse diagram and various lattices from Partial Ordered Sets.	L3
CO5 : **Construct** different types of Trees from Graphs.	L3

In t o.	Topic of Syllabus to be covered	Learning Outcomes	Teaching Mode BB / LCD / OHP	Hours Required		Total No. of Hours (Cumulative)	Expected Date of completion	Actual Date of Completion	Revie / Rema ks (by HOD
				Lecture	Tutorial				
	Mathematical Logic Statements and notations, connectives	Introduction of statements, definitions & symbolic notations and various types of connectives CO1 L1	BB	1		1			
	Definition of Conjunction and Disjunction and Conditional and Biconditional Problems	Definitions, Symbolic notations AND, OR connectives , Implies and implied by and corresponding truth tables, problems. CO1 L1	BB	1		2			

I	Well Formed Formulas, Tautologies, Equivalence of formulas, Duality Law	Definition of Well Formed Formulas, Tautology and corresponding formulas, Practice the problems based on Equivalence of Formulas CO 1 L1	BB	1		3			
I	Tautological Implications, Functionally complete sets of connectives, Other connectives	Solve problems based on Tautological Implications, functionally complete sets, various remaining connectives and problems CO1 L2	BB	1		4			
I	**Normal Forms:** Disjunctive Normal Forms (DNF), Conjunctive Normal Forms (CNF).	Introduction to Normal Forms, Understanding different normal forms-DNF,CNF CO1 L2	BB	2		6			
I	Principal of Disjunctive Normal Forms (PDNF), Principal of Conjunctive Normal Forms (PCNF).	Understanding different normal forms-PDNF,PCNF CO1 L2	BB	2		8			
II	**Theory of Inference for Statement Calculus**	Explanation about Inference for the statement calculus, Validity using Truth Tables-Rules of Inference – Consistency of Premises CO2 L2	BB	1		9			

conditional proof & Indirect Method Proof.	Introduction to Solving Problems based on condition i.e., additional premise & Indirect Method Proof. CO2 L3	BB	2		11			
Predicate calculus, The Statement Function, Variables, and Quantifiers	Explaining the basics for Predicate calculus, Explanation of Statement Function, Variable and Quantifier CO2 L2	BB	2		13			
Predicate Formulas-Free and Bound Variables	Explaining the rules of Predicate WFF, Free and Bound Variables, CO2 L2	BB	1		14			
The Universe of discourse	Representation of statements into symbols and related problems CO2 L3	BB	1		15			
Recurrence Relations-	Introduction, Definition of recurrence relation and formulation of recurrence relations CO3, L3	BB	2		17			
The Method of Characteristic Roots	problems based on Characteristic Roots CO3, L3	BB	2		19			
Inhomogeneous Recurrence Relation	Solving In-homogeneous recurrence relations and problems CO3, L3	BB	2		21			
Relations and Directed Graphs	Introduction, Definition of relation, directed graphs with examples and problems CO4, L2	BB	2		23			
Special Properties of Binary Relations-	Various types and properties of binary relations CO4, L2	BB	2		25			
Equivalence Relations- Ordering Relations	definition of equivalence relation and problems, Definition of various ordering relations CO4, L2	BB	2		27			
Lattices, and Enumerations-	Definitions, Examples and solving problems on Lattices, Explanation about Lattices CO4, L2	BB	3		30			

Operations on Relations	Understanding different operations on relations CO4, L2	BB	1		31			
Paths and Closures	Definitions of path, closure of graphs and examples CO4, L2	BB	2		33			
Directed Graphs and Adjacency Matrices	Definition of digraph and representation of a digraph as an adjacency matrix and problems CO4, L2	BB	2		35			
Graphs – Basic Concepts – Isomorphism- sub graphs	Explaining the Fundamentals and Definitions on Graphs CO5 L3	BB	1		36			
	solving problems on Isomorphism Solving problems on sub graphs CO5 L3	BB	2		38			
Trees and Their Properties	Explaining the Properties of Tree, Theorems, Example Problems on Trees CO5 L3	BB	2		40			
Spanning Trees	Understanding the Algorithm, Theorems in Spanning Trees, Problems on Minimum Spanning Tree and How to calculate cost of Minimum Spanning Tree CO5 L3	BB	1		41			
Spanning Trees	Understanding the Algorithm, Theorems in Spanning Trees, Problems on Minimum Spanning Tree and How to calculate cost of Minimum Spanning Tree CO5 L3	BB	2		42			
Planar Graphs	Definition, Problems on Planar Graphs CO5 L3	BB	1		43			
Euler Graphs	Introduction, Problems on Euler Graphs CO5 L3	BB	2		45			
Multigraphs	Understanding Multigraphs and the Theorems, Applications, and Example problems CO5 L3	BB	1		46			
Euler Circuits, Example Problems	Understanding Euler Circuits and the Theorems, Applications, and problems on Euler Circuits CO4 L3	BB	2		48			
Introduction - Hamiltonian Graphs	Introduction on Hamiltonian Graphs CO5 L3	BB	1		49			
Rules for Hamiltonian Graphs	Rules for constructing paths and Circuits, Theorems, Example problems on Hamiltonian Graphs CO5 L3	BB	2		51			
Problems on	Theorems, Exercise problems on Hamiltonian Graphs CO5 L3	BB	2		53			

	Hamiltonian Graphs							
9	Chromatic Numbers	Understanding the Rules for Chromatic number, Theorems, Example problems	CO5	L3	BB	2		S5

Legend: Teaching Mode
BB: Black Board LCD: Power Point Presentation /OHP: Over Head Projector

Dr V Stenalbe Latshi
Signature of the Faculty

Signature of the HOD

Date: 19/8/2020

PRASAD V.POTLURI

SIDDHARTHA INSTITUTE OF TECHNOLOGY, KANURU, VIJAYAWADA

DEPARTMENT OF INFORMATION TECHNOLOGY

ACADEMIC YEAR: 2020-2021

III B.TECH – SEMESTER – I SECTION – S1

S.NO	SUBJECT CODE	SUBJECT NAME	NAME OF THE FACULTY
1	IT5T1	UNIX	Mrs.D.L.DHARANI
2	IT5T2	DESIGN METHODS & ANALYSIS OF ALGORITHMS	Mrs.Y.PADMA
3	IT5T3	DATA COMMUNICATIONS AND COMPUTER NETWORKS	Ms.K.SRI VIJAYA
4	IT5T4	WEB TECHNOLOGIES	Mr.P.RAVI PRAKASH/
5	IT5T5	MICROPROCESSORS AND MICRO CONTROLLERS	Mrs.D.SWATHI
6	IT5L1	UNIX LAB	Mrs.D.L.DHARANI
7	IT5L2	MICROPROCESSORS AND MICRO CONTROLLERS LAB	Mrs.D.SWATHI/Mrs.B.V.SUBBAYAMMA
8	IT5L3	WEB TECHNOLOGIES LAB	Mr.P.RAVI PRAKASH
9	IT5L4	ADVANCED ENGLISH LANGUAGE COMMUNICATION SKILLS LAB	Mrs.M.RUDRAMADEVI/ Mrs.P.LAKSHMI LAVANYA

(Dr. B.V.Subba Rao)

HEAD
Information Technology Department
PRASAD V.POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007.

PRASAD V.POTLURI

SIDDHARTHA INSTITUTE OF TECHNOLOGY, KANURU, VIJAYAWADA

DEPARTMENT OF INFORMATION TECHNOLOGY

ACADEMIC YEAR: 2020-2021

III B.TECH – SEMESTER – I

SECTION – S2

S.NO	SUBJECT CODE	SUBJECT NAME	NAME OF THE FACULTY
1	IT5T1	UNIX	Mrs. K. SWARUPA RANI
2	IT5T2	DESIGN METHODS & ANALYSIS OF ALGORITHMS	Mrs. Y. PADMA
3	IT5T3	DATA COMMUNICATIONS AND COMPUTER NETWORKS	Ms. K. SRI VIJAYA
4	IT5T4	WEB TECHNOLOGIES	Dr. K. PAVAN KUMAR
5	IT5T5	MICROPROCESSORS AND MICRO CONTROLLERS	Mrs. D. SWATHI
6	IT5L1	UNIX LAB	Mrs. K. SWARUPA RANI
7	IT5L2	MICROPROCESSORS AND MICRO CONTROLLERS LAB	Mr. K. P.RAMA KRISHNA/ Mrs VSD REKHA
8	IT5L3	WEB TECHNOLOGIES LAB	Dr. K. PAVAN KUMAR
9	IT5L4	ADVANCED ENGLISH LANGUAGE COMMUNICATION SKILLS LAB	Dr. M. SYAM SUNDAR Mr M.KRISHNA

(Dr. B.V.Subba Rao)
HEAD
Information Technology Department
PRASAD V.POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007.

PVP SIDDHARTHA INSTITUTE OF TECHNOLOGY

PROCESS RECORD FOR ACADEMICS

LESSON PLAN

(PVPSIT/ACD /01)

Academic year : 2020-2021

Year & Sem : III B.Tech. I SEM / Section 1

Branch : Information Technology

Subject code & Name : IT5L4 / Advanced English Language Communication Skills Lab

Names of the faculty : Mrs.M.Rudrama Devi&Mrs.P.Lakshmilavanya

S. No.	Topic of syllabus to be covered	Learning outcomes	Teaching Mode	Hours required		Total no. of Hours	Expected Date of Completion	Remarks
				L	P	Cumulative		
I	Public Speaking and Emceeing	Speaking skills and procedure of conducting an event.	CALL		6	6		
II	Group Discussions	Do's and Don'ts in discussion	CALL		6	12		
III	Seminars and Presentations	Presentation of topics at seminars and using PPTs	CALL		9	21 18		
III	Preparing Resume and Covering Letter, Interview Skills	Drafting skills for covering letter and resume preparation. Interview etiquette and self grooming	CALL		12	27 33		
V	Vocabulary Development Report Writing	Antonyms, synonyms, word fillers Forms of reports and its usage	CALL		9	39 42		

Legend: Teaching Mode-**BB:** Black Board; **LCD:** Power Point Presentation; **CALL: Computer Aided Language Lab**

Hours Required- **L**: Lecture **T**: Tutorial **P**: Practical

M. Rudrama Devi / Lavanya
Signature of the Faculty

Signature of the HOD

To GVRs for filing in lesson plan file

20/8/2020

LESSON PLAN (FOR LABS)

SUBJECT CODE & NAME : IT5L2 & Microprocessors & Microcontrollers
YEAR & PROGRAM / SECTION : III B.TECH / SECTION – I
BRANCH / SEMESTER / SESSION : IT / I-SEM / 2020-21
FACULTY NAMES : Mrs Swathi, Assistant Professor/Mrs B.V.Subbayamma, Assistant Professor

WEEK	EXPT. NO.	TITLE OF THE EXPERIMENT	REMARKS
		I- Cycle	
1,2	1.	Introduction to Debugger / XT86 / TASM: 8-bit Arithmetic Operations	
3,4	2.	16-bit Signed and unsigned Arithmetic operations, ASCII – arithmetic operations	
5	3.	Arithmetic operations – Multi byte Addition and Subtraction, Sum of Squares, Sum of Cubes	
6	4.	Logic operations – Shift and rotate – Converting packed BCD to unpacked BCD, BCD to ASCII conversion	
7	5.	Using string operation and Instruction prefix: Move Block, Reverse string, String comparison	
8	6.	Write ALP to find smallest, largest number, arrange numbers in Ascending order, Descending order in a given series	
9		Repetition	
		II- Cycle	
10	7.	Stepper Motor Interface	
11	8.	8279 – Keyboard Display: Write a small program to display a string of characters.	
12	9.	ADC Interface / DAC Interface	
13	10.	Arithmetic Operations using 8051	
14		Repetition	
15		INTERNAL EXAMINATION	

Signature of faculty: 1. Swathi
2. B.V. Subbayamma

Signature of the HOD

LESSON PLAN (FOR LABS)

UBJECT CODE & NAME : **IT5L2 & Microprocessors & Microcontrollers**
'EAR & PROGRAM / SECTION : **III B.TECH / SECTION – I**
3RANCH / SEMESTER / SESSION : **IT / I-SEM / 2020-21**
FACULTY NAMES : **Mrs Swathi, Assistant Professor/Mrs B.V.Subbayamma, Assistant Professor**

WEEK	EXPT. NO.	TITLE OF THE EXPERIMENT	REMARKS
		I- Cycle	
1,2	1.	Introduction to Debugger / XT86 / TASM: 8-bit Arithmetic Operations	
3,4	2.	16-bit Signed and unsigned Arithmetic operations, ASCII – arithmetic operations	
5	3.	Arithmetic operations – Multi byte Addition and Subtraction, Sum of Squares, Sum of Cubes	
6	4.	Logic operations – Shift and rotate – Converting packed BCD to unpacked BCD, BCD to ASCII conversion	
7	5.	Using string operation and Instruction prefix: Move Block, Reverse string, String comparison	
8	6.	Write ALP to find smallest, largest number, arrange numbers in Ascending order, Descending order in a given series	
9		Repetition	
		II- Cycle	
10	7.	Stepper Motor Interface	
11	8.	8279 – Keyboard Display: Write a small program to display a string of characters.	
12	9.	ADC Interface / DAC Interface	
13	10.	Arithmetic Operations using 8051	
14		Repetition	
15		**INTERNAL EXAMINATION**	

Signature of faculty: 1. Swt
2. B.V.Subbayamma

Signature of the HOD

LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : 2020-2021
Year & Semester : III/IV & I SEMESTER
Branch : IT
Subject Code & Name : IT5T5 & Microprocessors & Microcontrollers
Name of Faculty : Mrs D.Swathi, Assistant Professor

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode BB/LCD/ OHP	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				Lecture	Tutorial			
	UNIT-I Introduction to Microprocessors							
I	Introduction and evaluation of microprocessors	Understand the importance and different types of processors.	LCD(online)	2		3		
I	Architecture of 8085 processor	Understand the functional block diagram of 8085.	LCD(online)	2		5		
I	Pin configuration of 8085	Understand the operation of pins.	LCD(online)	2	1	7		
I	Bus organization, Basic instruction set	Able to write programmes using instructions of 8085.	LCD(online)	2		9		
	UNIT-II Instruction sets and programming of 8086							
II	Architecture of 8086microprocessor	Understand the Functional block diagram, Functional Schematic of 8086.	LCD(online)	2		11		
II	Pin diagram of 8086, Timing diagram	Differentiate minimum mode and maximum modes of operation.	LCD(online)	2		13		
II	Addressing modes of 8086	Identify different Addressing modes.	LCD(online)	2		15		
II	Instruction set	Understand Instruction set of 8086.	LCD(online)	2		17		
II	Simple programs	Able to write programs using instructions of 8086.	LCD(online)	2	1	20		

	UNIT-III Microcontroller							
III	Introduction to 8051 microcontroller, Architecture	Understand the functional block diagram ,functional schematic of 8051	LCD(online)	3		23		
III	Memory Organization, Special function registers	Understand the function of special registers	LCD(online)	3	1	27		
III	On chip resources, addressing modes of 8051	Identify different addressing modes	LCD(online)	3		30		
III	Basic instruction set of 8051	Understand Instruction set of 8051.	LCD(online)	2	1	33		
	UNIT- IV ARM Architecture							
IV	Introduction to 16/32 bit processor, ARM architecture	Understand the importance of 16/32 processor and architecture of ARM processor	LCD(online)	3		36		
IV	ARM instruction set ,thumb instruction set, format	Understand instruction set of ARM processor and thumb instruction set.	LCD(online)	3	1	40		
	UNIT-V Development tools for ARM							
V	Introduction to microcontroller development tool	Understand development tools of microcontroller	LCD(online)	3		43		
V	Serial peripheral interface, I^2C bus	Understand the interfaces for serial communication.	LCD(online)	3		46		
V	ADC, UART, stepper motor and DC motor control	Able to control different peripherals through 8051 microcontroller.	LCD(online)	3	1	50		

Legend: Teaching Mode
LCD: Power Point Presentation

Signature of the Faculty
Date: 19/08/20

Signature of the HOD

LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : 2020-2021
Year & Semester : III/IV & I SEMESTER
Branch : IT
Subject Code & Name : IT5T5 & Microprocessors & Microcontrollers
Name of Faculty : Mrs D.Swathi, Assistant Professor

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode BB/LCD/ OHP	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD
				Lecture	Tutorial		
	UNIT-I Introduction to Microprocessors						
I	Introduction and evaluation of microprocessors	Understand the importance and different types of processors.	LCD(online)	2		3	
I	Architecture of 8085 processor	Understand the functional block diagram of 8085.	LCD(online)	2		5	
I	Pin configuration of 8085	Understand the operation of pins.	LCD(online)	2	1	7	
I	Bus organization, Basic instruction set	Able to write programmes using instructions of 8085.	LCD(online)	2		9	
	UNIT-II Instruction sets and programming of 8086						
II	Architecture of 8086microprocessor	Understand the Functional block diagram, Functional Schematic of 8086.	LCD(online)	2		11	
II	Pin diagram of 8086, Timing diagram	Differentiate minimum mode and maximum modes of operation.	LCD(online)	2		13	
II	Addressing modes of 8086	Identify different Addressing modes.	LCD(online)	2		15	
II	Instruction set	Understand Instruction set of 8086.	LCD(online)	2		17	
II	Simple programs	Able to write programs using instructions of 8086.	LCD(online)	2	1	20	

	UNIT-III Microcontroller							
III	Introduction to 8051 microcontroller, Architecture	Understand the functional block diagram ,functional schematic of 8051	LCD(online)	3		23		
III	Memory Organization, Special function registers	Understand the function of special registers	LCD(online)	3	1	27		
III	On chip resources, addressing modes of 8051	Identify different addressing modes	LCD(online)	3		30		
III	Basic instruction set of 8051	Understand Instruction set of 8051.	LCD(online)	2	1	33		
	UNIT- IV ARM Architecture							
IV	Introduction to 16/32 bit processor, ARM architecture	Understand the importance of 16/32 processor and architecture of ARM processor	LCD(online)	3		36		
IV	ARM instruction set ,thumb instruction set, format	Understand instruction set of ARM processor and thumb instruction set.	LCD(online)	3	1	40		
	UNIT-V Development tools for ARM							
V	Introduction to microcontroller development tool	Understand development tools of microcontroller	LCD(online)	3		43		
V	Serial peripheral interface, I^2C bus	Understand the interfaces for serial communication.	LCD(online)	3		46		
V	ADC, UART, stepper motor and DC motor control	Able to control different peripherals through 8051 microcontroller.	LCD(online)	3	1	50		

Legend: Teaching Mode
LCD: Power Point Presentation

Signature of the Faculty
Date: 19/08/20

Signature of the HOD

PROCESS RECORD FOR ACADEMICS

LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : 2020-2021
Year & Semester : III B.TECH / I SEM
Branch : IT –S1
Subject Code & Name : IT5T1 & UNIX
Name of Faculty : Mrs. D.LEELA DHARANI

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				L	T			
I	Introduction To Unix File System	Knowledge on Unix File System	LCD (online)	I		1		
I	Vi Editor, Basic Utilities	Knowledge on Vi Editor, Basic Utilities	LCD (online)	II		3		
I	File Handling Utilities	Knowledge on File Handling Utilities	LCD (online)	II		5		
	Tutorial		LCD (online)		I	6		
I	Security And File Permissions	Knowledge on Security and File Permissions	LCD (online)	III		9		
I	Tutorial		LCD (online)		I	10		
I	Disk Utilities	Knowledge on Disk Utilities	LCD (online)	I		11		
I	Process Utilities	Knowledge on Process Utilities	LCD (online)	I		12		
I	Text Processing Utilities	Knowledge on Text Processing Utilities	LCD (online)	I		13		
I	Tutorial		LCD (online)		I	14		
I	Backup Utilities	Knowledge on Backup Utilities	LCD (online)	I		15		
1	Revision		LCD (online)	I		16		

PROCESS RECORD FOR ACADEMICS

II	Working With The Bourne Shell: What Is Shell, Shell Responsibilities,	Knowledge on Shell & Responsibilities	LCD (online)	II		18		
II	Pipes and Input Redirection, Output Redirection ,here Documents,	Knowledge on Pipes, Input and Output Redirection	LCD (online)	II		20		
II	Tutorial		LCD (online)		I	21		
II	The Shell as A Programming Language, Shell Meta Characters ,	Knowledge on Shell Programming Language& Shell Meta Characters	LCD (online)	II		23		
II	Shell Variables, Shell Environment,	Basic Idea on Shell Variables, Shell Environment	LCD (online)	I		24		
II	Tutorial		LCD (online)		I	25		
II	Control Structures,	Basic Idea on Control Structures	LCD (online)	II		27		
II	Shell Script Examples.	Basic Idea on Shell Script Examples	LCD (online)	I		28		14/9/20
II	Tutorial		LCD (online)		I	29		
II	Revision		LCD (online)	I		30		
III	Unix File structure	Basic Idea on Unix File Structure	LCD (online)	I		31		
II	Directories, Files and Devices, System calls	Basic Idea on Directories, Files and Devices, System calls,	LCD (online)	II		33		
III	Tutorial		LCD (online)		I	34		
III	Library functions, low level file access, usage of open, creat, read, write, close, lseek, stat, fstat, octl, dup, dup2, system calls.,	Basic Idea on library functions	LCD (online)	II		36		
III	File Handling System Calls using Standard I/O	Basic Idea on File Handling System Calls using Standard I/O	LCD (online)	II		38		
III	Tutorial		LCD (online)		I	39		
III	Directory handling system calls	Basic Idea on Directory handling	LCD (online)	II		41		

PROCESS RECORD FOR ACADEMICS

		system calls						
III	Revision		LCD (online)	II		43		
III	Tutorial				I	44		
IV	Unix process: What is process, process structure, starting new process, waiting for a process	Basic idea on process& process structure	LCD (online)	II		46		
IV	Zombie process	Knowledge on Zombie process	LCD (online)	I		47		
IV	Tutorial		LCD (online)		I	48		
IV	Process control	Knowledge on Process control	LCD (online)	I		49		
IV	process identifiers, System call interface for process management	Knowledge on process identifiers, System call interface	LCD (online)	III		52		
	Tutorial		LCD (online)		I	53		
IV	Revision		LCD	I		54		
V	Signals: Signal functions	Knowledge on Signals: Signal functions	LCD (online)	I		55		
V	unreliable signals, interrupted system calls	Knowledge on unreliable signals, interrupted system calls	LCD (online)	II		57		
V	Tutorial		LCD (online)		I	58		
V	kill and raise functions, alarm, pause functions	Knowledge on kill and raise functions, alarm, pause functions	Video Lessons (online)	II		60		
V	Abort, sleep functions.	Knowledge on Abort, sleep functions.	Video Lessons (online)	I		61		
V	Tutorial		LCD (online)		I	62		
V	Introduction to Inter process communication: pipes, FIFOs	Knowledge on Introduction to Inter process communication	Video Lessons (online)	III		65		
V	Tutorial		LCD (online)		I	66		
V	Revision		LCD (online)		I	67		

Legend: Teaching Mode
BB: Black Board /LCD: Power Point Presentation / OHP: Over Head Projector

Signature of the Faculty

Signature of the HOD
Date:

PROCESS RECORD FOR ACADEMICS

LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : 2020-2021
Year & Semester : III B.TECH / I SEM
Branch : IT –S2
Subject Code & Name : IT5T1 & UNIX
Name of Faculty : Mrs. K.SWARUPA RANI

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				L	T			
I	Introduction To Unix File System	Knowledge on Unix File System	LCD (online)	I		1		
I	Vi Editor, Basic Utilities	Knowledge on Vi Editor, Basic Utilities	LCD (online)	II		3		
I	File Handling Utilities	Knowledge on File Handling Utilities	LCD (online)	II		5		
	Tutorial		LCD (online)		I	6		
I	Security And File Permissions	Knowledge on Security and File Permissions	LCD (online)	III		9		
I	Tutorial		LCD (online)		I	10		
I	Disk Utilities	Knowledge on Disk Utilities	LCD (online)	I		11		
I	Process Utilities	Knowledge on Process Utilities	LCD (online)	I		12		
I	Text Processing Utilities	Knowledge on Text Processing Utilities	LCD (online)	I		13		
I	Tutorial		LCD (online)		I	14		
I	Backup Utilities	Knowledge on Backup Utilities	LCD (online)	I		15		
I	Revision		LCD (online)	I		16		

II	Working With The Bourne Shell: What Is Shell, Shell Responsibilities,	Knowledge on Shell & Responsibilities	LCD (online)	II		18		
II	Pipes and Input Redirection, Output Redirection ,here Documents,	Knowledge on Pipes, Input and Output Redirection	LCD (online)	II		20		
II	Tutorial		LCD (online)		I	21		
II	The Shell as A Programming Language, Shell Meta Characters ,	Knowledge on Shell Programming Language& Shell Meta Characters	LCD (online)	II		23		
II	Shell Variables, Shell Environment,	Basic Idea on Shell Variables, Shell Environment	LCD (online)	I		24		
II	Tutorial		LCD (online)		I	25		
II	Control Structures,	Basic Idea on Control Structures	LCD (online)	II		27		
II	Shell Script Examples.	Basic Idea on Shell Script Examples	LCD (online)	I		28		
II	Tutorial		LCD (online)		I	29		
II	Revision		LCD (online)	I		30		
III	Unix File structure	Basic Idea on Unix File Structure	LCD (online)	I		31		
III	Directories, Files and Devices, System calls	Basic Idea on Directories, Files and Devices, System calls,	LCD (online)	II		33		
III	Tutorial		LCD (online)		I	34		
III	Library functions, low level file access, usage of open, creat, read, write, close, lseek, stat, fstat, octl, dup, dup2, system calls.,	Basic Idea on library functions	LCD (online)	II		36		
III	File Handling System Calls using Standard I/O	Basic Idea on File Handling System Calls using Standard I/O	LCD (online)	II		38		
III	Tutorial		LCD (online)		I	39		
III	Directory handling system calls	Basic Idea on Directory handling	LCD (online)	II		41		

		system calls						
III	Revision		LCD (online)	II		43		
III	Tutorial				I	44		
IV	Unix process: What is process, process structure, starting new process, waiting for a process	Basic idea on process& process structure	LCD (online)	II		46		
IV	Zombie process	Knowledge on Zombie process	LCD (online)	I		47		
IV	Tutorial		LCD (online)		I	48		
IV	Process control	Knowledge on Process control	LCD (online)	I		49		
IV	process identifiers, System call interface for process management	Knowledge on process identifiers, System call interface	LCD (online)	III		52		
	Tutorial		LCD (online)		I	53		
IV	Revision		LCD	I		54		
V	Signals: Signal functions	Knowledge on Signals: Signal functions	LCD (online)	I		55		
V	unreliable signals, interrupted system calls	Knowledge on unreliable signals, interrupted system calls	LCD (online)	II		57		
V	Tutorial		LCD (online)		I	58		
V	kill and raise functions, alarm, pause functions	Knowledge on kill and raise functions, alarm, pause functions	Video Lessons (online)	II		60		
V	Abort, sleep functions.	Knowledge on Abort, sleep functions.	Video Lessons (online)	I		61		
V	Tutorial		LCD (online)		I	62		
V	Introduction to Inter process communication: pipes, FIFOs	Knowledge on Introduction to Inter process communication	Video Lessons (online)	III		65		
V	Tutorial		LCD (online)		I	66		
V	Revision		LCD (online)		I	67		

Legend: Teaching Mode
BB: Black Board /LCD: Power Point Presentation / OHP: Over Head Projector

K. Swarupa rani
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Signature of the HOD
Date: 2/1/2021

LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : **2020 -2021**
Year & Semester : **III B.Tech I Semester Section - I**
Branch : **Information Technology**
Subject Code & Name : **IT5T2, DESIGN METHODS & ANALYSIS OF ALGORITHMS**
Name of Faculty : **Y.Padma**

Unit No	Topics of Syllabus to be covered	Learning outcomes	Teaching Mode	Hours Required		Total No. of Hours (Cumulative)	Expected date of completion(for each Unit) by HOD	Review /Remarks (by HOD)
				L	T/ Interaction			
I	INTRODUCTION: Notion of Algorithm	Understanding features of algorithms	LCD(Online)	1		1		
I	Understanding the problem	Understanding Problem solving process	LCD(Online)	1		2		
I	deciding on appropriate data structures	Understanding the suitable data structures	LCD(Online)	1	1	4		
I	Algorithm Design techniques	Approaches to solving problems algorithmically	LCD(Online)	1		5		
I	Methods of specifying an algorithm	Designing algorithm by using pseudo code/flow charts	LCD(Online)	1		6		
I	proving an algorithm's correctness	Proving the correctness of algorithm	LCD(Online)	1	1	8		
I	Analyzing and coding an Algorithm	Analyzes the efficiency of the algorithm, implemented as a program	LCD(Online)	1		9		
I	Fundamentals of the Analysis of Algorithm Efficiency	Need of analyzing the efficiency	LCD(Online)	1		10		
I	Analysis framework	Time &space efficiency factors	LCD(Online)	1	1	12		
I	Asymptotic Notations and Basic Efficiency Classes	Different notations to find the efficiency factors	LCD(Online)	1		15		
II	BRUTE FORCE AND EXHAUSTIVE SEARCH:	Approaches for selection	NPTEL Video	1		17		

	Selection sort, Bubble sort	and bubble sort techniques	Lectures					
II	Sequential search, Brute-Force String Matching	General Value search problem, string matching problem	LCD(Online)	1	1	19		
II	Travelling salesman problem	Application of exhaustive search to find the shortest tour	LCD(Online)	1		21		
II	knapsack problem	Application of exhaustive search To find the valuable subset of items in a knapsack	LCD(Online)	1		22		
II	Assignment problem	Application of exhaustive search to job assignment	LCD(Online)	1	1	24		
III	**DIVIDE-AND-CONQUER:** Mergesort, Quicksort	Using divide and conquer how to merge and quick sort	LCD(Online)	1		25		
III	Binary Search, Binary Tree Traversals and Related Properties	Using divide and conquer how to do Binary search , Tree Traversals and Knowing Tree properties	LCD(Online)	1	1	27		
III	Multiplication of large integers	Understanding Multiplying two numbers	LCD(Online)	1		28		
III	Strassen's Matrix Multiplication.	Multiplying two square matrices	LCD(Online)	1		29		
III	DECREASE-AND-CONQUER Insertion Sort	Insertion sort using decrease and conquer	LCD(Online)	1	1	31		
III	Topological Sorting	To know the given graph is a digraph or not	LCD(Online)	1		32		
III	Decrease-by-Constant-Factor Algorithms: fake-coin	fake coin identification problem	LCD(Online)	1		33		

	problem							
III	Josephus problem and TRANSFORM-AND-CONQUER: Presorting	solving Josephus problem and Sorting the array	LCD(Online)	1	1	35		
III	Heaps and heap sort	Implementing priority queues	LCD(Online)	1		38		
III	Horner's rule	How to evaluate a polynomial	LCD(Online)	1		39		
IV	**GREEDY TECHNIQUE:** Prim's Algorithm, Kruskal's Algorithm	To find a minimal spanning tree	LCD(Online)	1	1	40/41		
IV	Disjoint Subsets and Union-Find Algorithms	How to union and find the elements of disjoint sets	LCD(Online)	1		42		
IV	Dijkstra's Algorithm	Single source shortest path problem	LCD(Online)	1		43		
IV	Huffman trees	Constructing a Huffman's tree	LCD(Online)	1	1	45		
IV	DYNAMIC PPROGRMMING: Elements of DP	Understand the basic elements of DP	LCD(Online)	1		46		
IV	Matrix chain multiplication	Solve the matrix chain multiplication problem	LCD(Online)	1		47		
IV	knapsack problem and Memory Functions	obtain the optimal solution using d.p method	LCD(Online)	1		48		
IV	Optimal Binary Search Trees	Finding the optimal binary tree	LCD(Online)	1	1	50		
IV	Warshall's and Floyd's Algorithms	To compute the transitive closure of a directed graph, all pair shortest paths problem	LCD(Online)	1		51		
IV	Greedy Techniques & Dynamic Programming		LCD(Online)		1	52		
V	**LIMITATIONS OF ALGORITHM**	Comparison of	LCD(Online)	1		53		

	POWER: Decision Trees, Decision Trees for Sorting Algorithms	performance of algorithms and Application of decision trees for sorting						
V	Decision Trees for Searching Sorted Array	Application of decision trees to search the sorted array	LCD(Online)	1		54		
V	P, NP definitions and NP-complete Problems	Different class of P problems and compute NP complete problems	LCD(Online)	1	1	56		
V	COPING WITH THE LIMITATIONS OF ALGORITHM POWER : Backtracking, n-queens problem	4&8 queens problem solving using backtracking method	NPTEL, Video Lectures	1		57		
V	Hamiltonian Circuit problem Subset-sum problem	Finding the Hamiltonian cycle of a graph Finding the different subsets which gives the resultant value	LCD(Online)	1	1	59		
V	Branch-and-Bound Assignment Problem	Assigning n jobs to n persons problem	LCD(Online)	1		60		
V	Knapsack Problem	To get the feasible solution using B&B technique	LCD(Online)	1		61		
V	Travelling Salesman problem	To find the tour B&B technique	LCD(Online)	1	1	63		

Legend: Teaching Mode
BB: Black Board / **PPT**: Power Point Presentation / **LCD**(Online)

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LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : **2020 -2021**
Year & Semester : **III B.Tech I Semester Section - II**
Branch : **Information Technology**
Subject Code & Name : **IT5T2, DESIGN METHODS & ANALYSIS OF ALGORITHMS**
Name of Faculty : **Y.Padma**

Unit No	Topics of Syllabus to be covered	Learning outcomes	Teaching Mode	Hours Required		Total No. of Hours (Cumulative)	Expected date of completion(for each Unit) by HOD	Review /Remarks (by HOD)
				L	T/ Interaction			
I	INTRODUCTION: Notion of Algorithm	Understanding features of algorithms	LCD(Online)	1		1		
I	Understanding the problem	Understanding Problem solving process	LCD(Online)	1		2		
I	deciding on appropriate data structures	Understanding the suitable data structures	LCD(Online)	1	1	4		
I	Algorithm Design techniques	Approaches to solving problems algorithmically	LCD(Online)	1		5		
I	Methods of specifying an algorithm	Designing algorithm by using pseudo code/flow charts	LCD(Online)	1		6		
I	proving an algorithm's correctness	Proving the correctness of algorithm	LCD(Online)	1	1	8		
I	Analyzing and coding an Algorithm	Analyzes the efficiency of the algorithm, implemented as a program	LCD(Online)	1		9		
I	Fundamentals of the Analysis of Algorithm Efficiency	Need of analyzing the efficiency	LCD(Online)	1		10		
I	Analysis framework	Time &space efficiency factors	LCD(Online)	1	1	12		
I	Asymptotic Notations and Basic Efficiency Classes	Different notations to find the efficiency factors	LCD(Online)	1		13 15		
II	BRUTE FORCE AND EXHAUSTIVE SEARCH:	Approaches for selection	NPTEL Video	1		17		

	Selection sort, Bubble sort	and bubble sort techniques	Lectures					
II	Sequential search, Brute-Force String Matching	General Value search problem, string matching problem	LCD(Online)	1	1	19		
II	Travelling salesman problem	Application of exhaustive search to find the shortest tour	LCD(Online)	1		21		
II	knapsack problem	Application of exhaustive search To find the valuable subset of items in a knapsack	LCD(Online)	1		22		
II	Assignment problem	Application of exhaustive search to job assignment	LCD(Online)	1	1	24		
III	**DIVIDE-AND-CONQUER:** Mergesort, Quicksort	Using divide and conquer how to merge and quick sort	LCD(Online)	1		25		
III	Binary Search, Binary Tree Traversals and Related Properties	Using divide and conquer how to do Binary search , Tree Traversals and Knowing Tree properties	LCD(Online)	1	1	27		
III	Multiplication of large integers	Understanding Multiplying two numbers	LCD(Online)	1		28		
III	Strassen's Matrix Multiplication.	Multiplying two square matrices	LCD(Online)	1		29		
III	DECREASE-AND-CONQUER Insertion Sort	Insertion sort using decrease and conquer	LCD(Online)	1	1	31		
III	Topological Sorting	To know the given graph is a digraph or not	LCD(Online)	1		32		
III	Decrease-by-Constant-Factor Algorithms: fake-coin	fake coin identification problem	LCD(Online)	1		33		

	problem							
III	Josephus problem and TRANSFORM-AND-CONQUER: Presorting	solving Josephus problem and Sorting the array	LCD(Online)	1	1	35		
III	Heaps and heap sort	Implementing priority queues	LCD(Online)	1		38		
III	Horner's rule	How to evaluate a polynomial	LCD(Online)	1		39		
IV	**GREEDY TECHNIQUE:** Prim's Algorithm, Kruskal's Algorithm	To find a minimal spanning tree	LCD(Online)	1	1	41		
IV	Disjoint Subsets and Union-Find Algorithms	How to union and find the elements of disjoint sets	LCD(Online)	1		42		
IV	Dijkstra's Algorithm	Single source shortest path problem	LCD(Online)	1		43		
IV	Huffman trees	Constructing a Huffman's tree	LCD(Online)	1	1	45		
IV	DYNAMIC PPROGRMMING: Elements of DP	Understand the basic elements of DP	LCD(Online)	1		46		
IV	Matrix chain multiplication	Solve the matrix chain multiplication problem	LCD(Online)	1		47		
IV	knapsack problem and Memory Functions	obtain the optimal solution using d.p method	LCD(Online)	1		48		
IV	Optimal Binary Search Trees	Finding the optimal binary tree	LCD(Online)	1	1	50		
IV	Warshall's and Floyd's Algorithms	To compute the transitive closure of a directed graph, all pair shortest paths problem	LCD(Online)	1		51		
IV	Greedy Techniques & Dynamic Programming		LCD(Online)		1	52		
V	**LIMITATIONS OF ALGORITHM**	Comparison of	LCD(Online)	1		53		

	POWER: Decision Trees, Decision Trees for Sorting Algorithms	performance of algorithms and Application of decision trees for sorting						
V	Decision Trees for Searching Sorted Array	Application of decision trees to search the sorted array	LCD(Online)	1		54		
V	P, NP definitions and NP-complete Problems	Different class of P problems and compute NP complete problems	LCD(Online)	1	1	56		
V	COPING WITH THE LIMITATIONS OF ALGORITHM POWER : Backtracking, n-queens problem	4&8 queens problem solving using backtracking method	NPTEL, Video Lectures	1		57		
V	Hamiltonian Circuit problem Subset-sum problem	Finding the Hamiltonian cycle of a graph Finding the different subsets which gives the resultant value	LCD(Online)	1	1	59		
V	Branch-and-Bound Assignment Problem	Assigning n jobs to n persons problem	LCD(Online)	1		60		
V	Knapsack Problem	To get the feasible solution using B&B technique	LCD(Online)	1		61		
V	Travelling Salesman problem	To find the tour B&B technique	LCD(Online)	1	1	63		

Legend: Teaching Mode
BB: Black Board / **PPT**: Power Point Presentation / **LCD**(Online)

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PVP SIDDHARTHA INSTITUTE OF TECHNOLOGY

PROCESS RECORD FOR ACADEMICS

LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : **2020-2021**
Year & Semester : **III B.TECH / I SEM (S1)**
Branch : **INFORMATION TECHNOLOGY**
Subject Code & Name : **IT5T3 &DATA COMMUNICATIONS AND COMPUTER NETWORKS**
Name of Faculty : **Ms.K.SRI VIJAYA**

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode BB/ LCD(Online)/ OHP	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				Lecture	Tutorial			
I	Introduction	History of computer networks	LCD	1		1		
I	Data communication	Components and computer networks	LCD	1		2		
I	Networks	Network models ,categories of networks	LCD	1		3		
I	Tutorial	Revision	LCD		1	4		
I	OSI	OSI reference model, a critique of OSI model& protocol	LCD	1		5		
I	TCP/IP and other network models	TCP/IP, comparison of OSI and TCP/IP reference model	LCD	1		6		
I	Tutorial	Revision	LCD		1	7		
I	TCP/IP protocol suite	Diff layers in TCP/IP suite	LCD	1		8		
I	Addressing	Diff types of address	LCD	1		9		
I	Tutorial	Exam on unit 1	LCD		1	10		
II	Framing	Introduction	LCD	1		11		
II	Framing	Types of framing	LCD	1		12		
II	Error correction &detection	Block coding, linear block codes	LCD	1		13		

PROCESS RECORD FOR ACADEMICS

II	Tutorial	Revision	LCD		1	14		
II	Cyclic codes	CRC	LCD	1		15		
II	CRC	Advantage, dis advantage	LCD	1		16		
II	Checksum	1's compliment checksum	LCD	1		17		
II	Check sum	Services provided to checksum	LCD	1		18		
II	Tutorial	Exam	LCD		1	19		
II	Data link layer protocols	Unrestricted simplex protocol	LCD	1		20		
II	Stop and wait protocol	Stop and wait protocol	LCD	1		21		
III	Noisy Channels	Introduction to noisy channels	LCD	1		22		
III	Sliding window protocols	One bit, go back N, selective repeat	LCD	1		23		
III	Tutorial	Revision	LCD		1	24		
III	Piggy backing	Explain piggy backing concept	LCD	1		25		
III	Network Layer	Explain logical addressing	LCD	1		26		
III	IPV4 addresses	Explain Classful and Classless addresses	LCD	1		27		
III	Tutorial	Revision	LCD		1	28		
III	IPV6 addresses	Explain Structure and address space	LCD	1		29		
III	Packet Format	Explain base header and priority	LCD	1		30		
III	Extension Headers	Explain Hop-by Hop, fragmentation ,authentication	LCD	1		31		
III	Tutorial	Revision	LCD		1	32		
III	Extension Headers	Differences between IPV4 and IPV6 extension headers	LCD	1		33		
III	Transition IPV4 to IPV6 from	Explain transition from one version to another	LCD	1		34		
III	Tutorial	Exam	LCD		1	35		
IV	Network Layer	Introduction to network layer	LCD	1		36		

IV	Delivery, Forwarding and Routing	Explain Delivery, Forwarding and Routing	LCD	1		37		
IV	Tutorial	Revision	LCD		1	38		
IV	Routing table	explain different types of routing tables	LCD	1		39		
IV	Unicast Routing	Explain intra-interdomain routing	LCD	1		40		
IV	Distance Vector Routing	Explain Distance vector Routing	LCD	1		41		
IV	Tutorial	Revision	LCD		1	42		
IV	Link State Routing	Explain Link State Routing	LCD	1		43		
IV	Dijsktra Algortihm	Explain Dijsktra Algortihm	LCD	1		44		
IV	OSPF	Explain OSPF algorithm	LCD	1		45		
IV	Tutorial	Revision	LCD		1	46		
IV	Path Vector Routing	Explain Path Vector Routing	LCD	1		47		
IV	Multicast Routing Protocols	Explain Multicast ,unicast and broadcast	LCD	1		48		
V	Transport Layer	Introduction to transport layer	LCD	1		49		
V	Process-to-Process delivery	Explain Process-to-Process delivery	LCD	1		50		
V	Client / Server paradigm	Explain Client / Server paradigm	LCD	2		52		
V	Tutorial	Revision	LCD		1	53		
V	Multiplexing and Demultiplexing	Explain Multiplexing and Demultiplexing	LCD	1		54		
V	UDP	Explain different type of ports in UDP	LCD	1		55		
V	UDP Operations	Explain different UDP operations	LCD	2		57		
V	TCP	Explain TCP	LCD	2		59		
V	TCP Services	Explain services of TCP	LCD	3		62		
V	TCP Features	Explain Features	LCD	1		63		

		of TCP						
V	Flow Control and Congestion Control	Flow Control and Congestion Control of TCP	LCD	2		65		

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Legend: Teaching Mode

BB: Black Board / **LCD**: Liquid Crystal Display (Online) / **OHP**: Over Head Projector

14/8/2020

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Date:

PVP SIDDHARTHA INSTITUTE OF TECHNOLOGY

PROCESS RECORD FOR ACADEMICS

LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : **2020-2021**
Year & Semester : **III B.TECH / I SEM (S2)**
Branch : **INFORMATION TECHNOLOGY**
Subject Code & Name : **IT5T3 &DATA COMMUNICATIONS AND COMPUTER NETWORKS**
Name of Faculty : **Ms.K.SRI VIJAYA**

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode BB/ LCD(Online)/ OHP	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				Lecture	Tutorial			
I	Introduction	History of computer networks	LCD	1		1		
I	Data communication	Components and computer networks	LCD	1		2		
I	Networks	Network models ,categories of networks	LCD	1		3		
I	Tutorial	Revision	LCD		1	4		
I	OSI	OSI reference model, a critique of OSI model& protocol	LCD	1		5		
I	TCP/IP and other network models	TCP/IP, comparison of OSI and TCP/IP reference model	LCD	1		6		
I	Tutorial	Revision	LCD		1	7		
I	TCP/IP protocol suite	Diff layers in TCP/IP suite	LCD	1		8		
I	Addressing	Diff types of address	LCD	1		9		
I	Tutorial	Exam on unit 1	LCD		1	10		
II	Framing	Introduction	LCD	1		11		
II	Framing	Types of framing	LCD	1		12		
II	Error correction &detection	Block coding, linear block codes	LCD	1		13		

II	Tutorial	Revision	LCD		1	14		
II	Cyclic codes	CRC	LCD	1		15		
II	CRC	Advantage, dis advantage	LCD	1		16		
II	Checksum	1's compliment checksum	LCD	1		17		
II	Check sum	Services provided to checksum	LCD	1		18		
II	Tutorial	Exam	LCD		1	19		
II	Data link layer protocols	Unrestricted simplex protocol	LCD	1		20		
II	Stop and wait protocol	Stop and wait protocol	LCD	1		21		
III	Noisy Channels	Introduction to noisy channels	LCD	1		22		
III	Sliding window protocols	One bit, go back N, selective repeat	LCD	1		23		
III	Tutorial	Revision	LCD		1	24		
III	Piggy backing	Explain piggy backing concept	LCD	1		25		
III	Network Layer	Explain logical addressing	LCD	1		26		
III	IPV4 addresses	Explain Classful and Classless addresses	LCD	1		27		
III	Tutorial	Revision	LCD		1	28		
III	IPV6 addresses	Explain Structure and address space	LCD	1		29		
III	Packet Format	Explain base header and priority	LCD	1		30		
III	Extension Headers	Explain Hop-by Hop, fragmentation ,authentication	LCD	1		31		
III	Tutorial	Revision	LCD		1	32		
III	Extension Headers	Differences between IPV4 and IPV6 extension headers	LCD	1		33		
III	Transition IPV4 to IPV6 from	Explain transition from one version to another	LCD	1		34		
III	Tutorial	Exam	LCD		1	35		
IV	Network Layer	Introduction to network layer	LCD	1		36		

IV	Delivery, Forwarding and Routing	Explain Delivery, Forwarding and Routing	LCD	1		37		
IV	Tutorial	Revision	LCD		1	38		
IV	Routing table	explain different types of routing tables	LCD	1		39		
IV	Unicast Routing	Explain intra-interdomain routing	LCD	1		40		
IV	Distance Vector Routing	Explain Distance vector Routing	LCD	1		41		
IV	Tutorial	Revision	LCD		1	42		
IV	Link State Routing	Explain Link State Routing	LCD	1		43		
IV	Dijsktra Algortihm	Explain Dijsktra Algortihm	LCD	1		44		
IV	OSPF	Explain OSPF algorithm	LCD	1		45		
IV	Tutorial	Revision	LCD		1	46		
IV	Path Vector Routing	Explain Path Vector Routing	LCD	1		47		
IV	Multicast Routing Protocols	Explain Multicast ,unicast and broadcast	LCD	1		48		
V	Transport Layer	Introduction to transport layer	LCD	1		49		
V	Process-to-Process delivery	Explain Process-to-Process delivery	LCD	1		50		
V	Client / Server paradigm	Explain Client / Server paradigm	LCD	2		51 52		
V	Tutorial	Revision	LCD		1	53		
V	Multiplexing and Demultiplexing	Explain Multiplexing and Demultiplexing	LCD	1		54		
V	UDP	Explain different type of ports in UDP	LCD	1		55		
V	UDP Operations	Explain different UDP operations	LCD	2		57		
V	TCP	Explain TCP	LCD	2		59		
V	TCP Services	Explain services of TCP	LCD	3		62		
V	TCP Features	Explain Features	LCD	1		63		

		of TCP						
V	Flow Control and Congestion Control	Flow Control and Congestion Control of TCP	LCD	2		65 74 92		

Legend: Teaching Mode

BB: Black Board / **LCD**: Liquid Crystal Display (Online) / **OHP**: Over Head Projector

14/8/2020

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Date:

PVP SIDDHARTHA INSTITUTE OF TECHNOLOGY

PROCESS RECORD FOR ACADEMICS

LESSON PLAN
WEB TECHNOLOGIES

Academic Year : 2020-2021
Year & Semester : III B.TECH & I SEM S2
Branch : INFORMATION TECHNOLOGY
Subject Code & Name : IT5T4 & WEB TECHNOLOGIES
Name of Faculty : Dr. K. Pavan Kumar

Unit No	Topic of Syllabus to be covered	Learning outcomes	Teaching mode	Hours Required		Total no. of Hours (Cumulative)	Expected date of completion (for each unit) By HOD	Review / Remarks(By HOD)
				L	T			
I	Introduction to web Technologies: History of the web	Understand the Concepts of Web Architecture	LCD	1		1		
I	Overview of HTTP, Introducing HTML Document structure	Know about the HTTP	LCD	1		2		
I	creating Headings ,links,paragraph,images,tables,	Understand the Creation of a web page	LCD	1		3		
	Tutorial				1	4		
I	frames,forms and html controls on a web page	Understand the Creation of frames, forms and html controls on a web page		3		7		
	Tutorial				1	8		
	Introducing Cascading style sheets:Inline,External,Internal,Style class,Multiple Styles	Knowledge on concepts of cascading style sheets	LCD	3		11		
	Tutorial				1	12		
I	Introducing javascript, Using variables,using operators,working with Control flow statements	Develop advanced HTML pages with the help of tags and scripting language.	LCD	1		13		
I	Working with functions,Handling Events,Using Arrays,Creating Objects in Java Script	Develop advanced HTML pages with the help of tags and scripting language.	LCD	3		16		
	Tutorial				1	17		
II	Working with XML :introducing to XML,XML Basics,XML Technologies	Develop user defined tags to exchange the data.	LCD	1		18		
II	Extensible HTML,Java	Develop user defined tags	LCD	2		20		

	API for XML Processing	to exchange the data.						
	Tutorial				1	21		
II	Document Object Model(DOM), Extensible style sheet Transformation(XSLT)	Develop user defined tags to exchange the data.	LCD	2		23		
II	Working with Java Beans: Introducing java beans, Introspection	Understand the object to object communication using JAVA Beans	LCD	1		24		
					1	25		
II	Design patterns for properties, methods, events	Understand the object to object communication using JAVA Beans	LCD	2		27		
II	Creating of a Simple Bean Using BDK(optional),Bean API	Understand the object to object communication using JAVA Beans	LCD	1		28		
	Tutorial				1	29		
III	Working with Database: Getting started with JDBC, Defining ODBC, Introduction to JDBC	Understand the concepts of JDBC,ODBC	LCD	2		31		
III	Components of JDBC,JDBC Architecture, Types of drivers	Knowledge on drivers	LCD	2		33		
	Tutorial				1	34		
III	Working with JDBC APIs, Creating a simple application,	Knowledge on JDBC APIs to build Applications	LCD	2		36		
III	working with prepared statement, using callable statement	Knowledge on JDBC APIs to build Applications	LCD	2		38		
	Tutorial				1	39		
III	Working with servlets: introducing MVC Architecture. Describing servlets, Understanding Servlets	Got acquaintance on capabilities of servlet architecture, cookies and session management.	LCD	2		41		
III	What are servlets, Introducing servlet API,Servlet Life Cycle	Got acquaintance on capabilities of servlet architecture, cookies and session Management.	LCD	2		43		
	Tutorial				1	44		
III	Developing first servlet Application, Generic Servlet Class	Got acquaintance on capabilities of servlet architecture, cookies and session management.	LCD	1		45		
IV	Working with Requests& responses: understanding Request Processing and HTTP ,Describing the ServletRequest Interface	Developing servlets by learing these Interfaces	LCD	3		48		
	Tutorial				1	49		

IV	Working with Initialization Parameters,Describibng Request Dispatcher Interface	Developing servlets by learning these Interfaces	LCD	3		52		
	Tutorial				1	53		
IV	Describing Request attributes, Describing HTTP Basics, Problem with Servlets	Understand dynamic content by using JSP architecture and application model	LCD	2		55		
V	Working with JSP:introduction to JSP,Understanding JSP,Describing JSP Life cycle,Creating a Simple JSP Pages,Working with JSP Basic tags and implicit Objects	Understand dynamic content by using JSP architecture and application model.	LCD	3		58		
	Tutorial				1	59		
V	Working with Java Beans and action tags in JSP	Build robust web applications using JSP with JDBC.	LCD	1		60		
V	Working with JSP Standard Tag Library, Introduction to AJAX	Build robust web applications using JSP with JDBC.	LCD	3		63		
	Revision		LCD	2		65		

Legend: Teaching mode
BB: Black Board LCD: Power Point Presentation (online) VL: Video Lesson
L: Lecture Hours T: Tutorial Hours

Signature of Faculty

Signature of HOD

PVP SIDDHARTHA INSTITUTE OF TECHNOLOGY

PROCESS RECORD FOR ACADEMICS

LESSON PLAN
WEB TECHNOLOGIES

Academic Year : 2020-2021
Year & Semester : III B.TECH & I SEM S1
Branch : INFORMATION TECHNOLOGY
Subject Code & Name : IT5T4 & WEB TECHNOLOGIES
Name of Faculty : Mr.P.RAVI PRAKASH

Unit No	Topic of Syllabus to be covered	Learning outcomes	Teaching mode	Hours Required		Total no. of Hours (Cumulative)	Expected date of completion (for each unit) By HOD	Review / Remarks(By HOD)
				L	T			
I	Introduction to web Technologies:History of the web	Understand the Concepts of Web Architecture	LCD	1		1		
I	Overview of HTTP, Introducing HTML Document structure	Know about the HTTP	LCD	1		2		
I	creating Headings ,links,paragraph,images,tables,	Understand the Creation of a web page	LCD	1		3		
	Tutorial				1	4		
I	frames,forms and html controls on a web page	Understand the Creation of frames,forms and html controls on a web page		3		7		
	Tutorial				1	8		
I	Introducing Cascading style sheets:Inline,External,Internal,Style class,Multiple Styles	Knowledge on concepts of cascading style sheets	LCD	3		11		
	Tutorial				1	12		
I	Introducing javascript, Using variables,using operators,working with Control flow statements	Develop advanced HTML pages with the help of tags and scripting language.	LCD	1		13		
I	Working with functions,Handling Events,Using Arrays,Creating Objects in Java Script	Develop advanced HTML pages with the help of tags and scripting language.	LCD	3		16		
	Tutorial				1	17		
II	Working with XML :introducing to XML,XML Basics,XML Technologies	Develop user defined tags to exchange the data.	LCD	1		18		
II	Extensible HTML,Java	Develop user defined tags	LCD	2		20		

	API for XML Processing	to exchange the data.						
	Tutorial				1	21		
II	Document Object Model(DOM), Extensible style sheet Transformation(XSLT)	Develop user defined tags to exchange the data.	LCD	2		23		
II	Working with Java Beans:Introducing java beans,Introspection	Understand the object to object communication using JAVA Beans	LCD	1		24		
					1	25		
II	Design patterns for properties,methods,events	Understand the object to object communication using JAVA Beans	LCD	2		27		
II	Creating of a Simple Bean Using BDK(optional),Bean API	Understand the object to object communication using JAVA Beans	LCD	1		28		
	Tutorial				1	29		
	Working with Database:Getting started with JDBC,Defining ODBC,Introduction to JDBC	Understand the concepts of JDBC,ODBC	LCD	2		31		
III	Components of JDBC,JDBC Architecture,Types of drivers	Knowledge on drivers	LCD	2		33		
	Tutorial				1	34		
III	Working with JDBC APIs, Creating a simple application,	Knowledge on JDBC APIs to build Applications	LCD	2		36		
III	working with prepared statement,using callable statement	Knowledge on JDBC APIs to build Applications	LCD	2		38		
	Tutorial				1	39		
III	Working with servlets:introducing MVC Architecture.Describing servlets,Understanding Servlets	Got acquaintance on capabilities of servlet architecture, cookies and session management.	LCD	2		41		
III	What are servlets,Introducing servlet API,Servlet Life Cycle	Got acquaintance on capabilities of servlet architecture, cookies and session management.	LCD	2		43		
	Tutorial				1	44		
III	Developing first servlet Application,Generic Servlet Class	Got acquaintance on capabilities of servlet architecture, cookies and session management.	LCD	1		45		
IV	Working with Requests& responses:understanding Request Processing and HTTP ,Describing the	Developing servlets by learing these Interfaces	LCD	3		48		

	ServletRequest Interface							
	Tutorial				1	49		
IV	Working with Initialization Parameters,Describibng Request Dispatcher Interface	Developing servlets by learning these Interfaces	LCD	3		52		
	Tutorial				1	53		
IV	Describing Request attributes, Describing HTTP Basics, Problem with Servlets	Understand dynamic content by using JSP architecture and application model	LCD	2		55		
V	Working with JSP:introduction to JSP,Understanding JSP,Describing JSP Life cycle,Creating a Simple JSP Pages,Working with JSP Basic tags and implicit Objects	Understand dynamic content by using JSP architecture and application model.	LCD	3		58		
	Tutorial				1	59		
V	Working with Java Beans and action tags in JSP	Build robust web applications using JSP with JDBC.	LCD	1		60		
V	Working with JSP Standard Tag Library, Introduction to AJAX	Build robust web applications using JSP with JDBC.	LCD	3		63		
	Revision		LCD	2		65		

Legend: Teaching mode
BB: Black Board LCD: Power Point Presentation(online) VL:Video Lesson
L: Lecture Hours T: Tutorial Hours

P. Ravi Reddy

Signature of Faculty

Signature of HOD

LESSON PLAN

(PVPSIT/ACD /01)

Academic Year : **2020-2021**
Year & Semester : **III B.TECH & I SEMESTER**
Branch : **IT-S1**
Subject Code & Name : **IT5L1 & UNIX LAB**
Name of Faculty : **Mrs. D.LEELA DHARANI**

Sl No.	Experiment Name	Hours Required	Total No. of Hours (Cumulative)	Expected date of Completion (For each Unit) By HOD	Review/ Remarks (By HOD)
1	**Exercise 1**a) Practice session on basic Unix Utilities b) Practice Session on File related Utilities	3	3		
2	**Exercise 2**a)Practice session on Security and File permission Utilities b)Practice Session on Disk utilities c) Practice Session on Process Utilities	6	9		
3	**Exercise 3** Practice Session on Text Processing Utilities.	3	12		
4	**Exercise 4** Session-1 (Introduction to Vi editor) a)Log into the system b)Use vi editor to create a file called myfile.txt which contains some text. c)correct typing errors during creation. d)Save the file z e)logout of the system Session-2 a)Log into the system b)open the file created in session 1 c)Add some text d)Change some text e)Delete some text f)Save the Changes g)Logout of the system.	3	15		
5	**Exercise 5**a)Log into the system b)Use the cat command to create a file containing the following data. Call it mytable use tabs to separate the fields. 1425 Ravi 15.65 4320 Ramu 26.27 6830 Sita 36.15 1450 Raju 21.86 c)Use the cat command to display the file, mytable. d)Use the vi command to correct any errors in the file, mytable. e)Use the sort command to sort the file mytable	3	18		

	according to the first field. Call the sorted file my table (same name) f)Print the file mytable g)Use the cut and paste commands to swap fields 2 and 3 of mytable. Call it my table (same name) h)Print the new file, mytable i)Logout of the system.				
6	**Exercise 6**a)Login to the system b)Use the appropriate command to determine your login shell c)Use the /etc/passwd file to verify the result of step b. d)Use the who command and redirect the result to a file called myfile1. Use the more command to see the contents of myfile1. e)Use the date and who commands in sequence (in one line) such that the output of date will display on the screen and the output of who will be redirected to a file called myfile2. Use the more command to check the contents of myfile2.	3	21		2/11/20
7	**Exercise 7** a) Write a shell script to generate a multiplication table. b) Write a shell script that copies multiple files to a directory. c) Write a shell script which counts the number of lines and words present in a given file	3	24		
8	**Exercise 8** Write a shell script which displays list of all files in the given directory. b) Write a shell script (small calculator) that adds, subtracts, multiplies and divides the given two integers. There are two division options: one returns the quotient and the other returns reminder. The script requires 3 arguments: The operation to be used and two integer numbers. The options are add (-a), subtract (-s), multiply (-m), quotient (-c) and reminder (-r).	3	27		
9	**Exercise 9** Implement in C the following unix commands using system calls. (a)cat (b)ls (c)mv	3	30		
10	**Exercise 10** Write a C program that takes one or more file or directory names as	3	33		02/11/2021

	according to the first field. Call the sorted file my table (same name) f)Print the file mytable g)Use the cut and paste commands to swap fields 2 and 3 of mytable. Call it my table (same name) h)Print the new file, mytable i)Logout of the system.				
6	**Exercise 6**a)Login to the system b)Use the appropriate command to determine your login shell c)Use the /etc/passwd file to verify the result of step b. d)Use the who command and redirect the result to a file called myfile1. Use the more command to see the contents of myfile1. e)Use the date and who commands in sequence (in one line) such that the output of date will display on the screen and the output of who will be redirected to a file called myfile2. Use the more command to check the contents of myfile2.	3	21		
7	**Exercise 7** a) Write a shell script to generate a multiplication table. b) Write a shell script that copies multiple files to a directory. c) Write a shell script which counts the number of lines and words present in a given file	3	24		
8	**Exercise 8** Write a shell script which displays list of all files in the given directory. b) Write a shell script (small calculator) that adds, subtracts, multiplies and divides the given two integers. There are two division options: one returns the quotient and the other returns reminder. The script requires 3 arguments: The operation to be used and two integer numbers. The options are add (-a), subtract (-s), multiply (-m), quotient (-c) and reminder (-r).	3	27		
9	**Exercise 9** Implement in C the following unix commands using system calls. (a)cat (b)ls (c)mv	3	30		
10	**Exercise 10** Write a C program that takes one or more file or directory names as	3	33		

	command line input and reports the following information on the file: (a) File type (b) Number of links (c) Read, write and execute permissions (d) Time of last access (Note : Use stat/fstat system calls)				
11	**Exercise 11** Write a C program to create a child process and to print odd numbers in child process where as the parent process prints even numbers	3	36		
12	**Exercise 12** Write a C Program to illustrate the concept of Signal handling. For Example when user press Cntl+C the system has to display "Don"t Type Cntl+C"	3	39		
13	**Exercise 13** Write a C program to illustrate the concept of pipe and FIFO.	3	42		

Signature of Faculty

Signature of HOD

LESSON PLAN

(PVPSIT/ACD /01)

Academic Year : 2020-2021
Year & Semester : III B.TECH & I SEMESTER
Branch : IT-S2
Subject Code & Name : IT5L1 & UNIX LAB
Name of Faculty : Mrs. K.SWARUPA RANI

Sl No.	Experiment Name	Hours Required	Total No. of Hours (Cumulative)	Expected date of Completion (For each Unit) By HOD	Review/ Remarks (By HOD)
1	**Exercise 1**a) Practice session on basic Unix Utilities b) Practice Session on File related Utilities	3	3		
2	**Exercise 2**a)Practice session on Security and File permission Utilities b)Practice Session on Disk utilities c) Practice Session on Process Utilities	6	9		
3	**Exercise 3** Practice Session on Text Processing Utilities.	3	12		
4	**Exercise 4** Session-1 (Introduction to Vi editor) a)Log into the system b)Use vi editor to create a file called myfile.txt which contains some text. c)correct typing errors during creation. d)Save the file z e)logout of the system Session-2 a)Log into the system b)open the file created in session 1 c)Add some text d)Change some text e)Delete some text f)Save the Changes g)Logout of the system.	3	15		
5	**Exercise 5**a)Log into the system b)Use the cat command to create a file containing the following data. Call it mytable use tabs to separate the fields. 1425 Ravi 15.65 4320 Ramu 26.27 6830 Sita 36.15 1450 Raju 21.86 c)Use the cat command to display the file, mytable. d)Use the vi command to correct any errors in the file, mytable. e)Use the sort command to sort the file mytable	3	18		

	according to the first field. Call the sorted file my table (same name) f)Print the file mytable g)Use the cut and paste commands to swap fields 2 and 3 of mytable. Call it my table (same name) h)Print the new file, mytable i)Logout of the system.				
6	**Exercise 6**a)Login to the system b)Use the appropriate command to determine your login shell c)Use the /etc/passwd file to verify the result of step b. d)Use the who command and redirect the result to a file called myfile1. Use the more command to see the contents of myfile1. e)Use the date and who commands in sequence (in one line) such that the output of date will display on the screen and the output of who will be redirected to a file called myfile2. Use the more command to check the contents of myfile2.	3	21		
7	**Exercise 7** a) Write a shell script to generate a multiplication table. b) Write a shell script that copies multiple files to a directory. c) Write a shell script which counts the number of lines and words present in a given file	3	24		
8	**Exercise 8** Write a shell script which displays list of all files in the given directory. b) Write a shell script (small calculator) that adds, subtracts, multiplies and divides the given two integers. There are two division options: one returns the quotient and the other returns reminder. The script requires 3 arguments: The operation to be used and two integer numbers. The options are add (-a), subtract (-s), multiply (-m), quotient (-c) and reminder (-r).	3	27		
9	**Exercise 9** Implement in C the following unix commands using system calls. (a)cat (b)ls (c)mv	3	30		
10	**Exercise 10** Write a C program that takes one or more file or directory names as	3	33		

2/1/2024

	command line input and reports the following information on the file: (a) File type (b) Number of links (c) Read, write and execute permissions (d) Time of last access (Note : Use stat/fstat system calls)				
11	**Exercise 11** Write a C program to create a child process and to print odd numbers in child process where as the parent process prints even numbers	3	36		
12	**Exercise 12** Write a C Program to illustrate the concept of Signal handling. For Example when user press Cntl+C the system has to display "Don"t Type Cntl+C"	3	39		
13	**Exercise 13** Write a C program to illustrate the concept of pipe and FIFO.	3	42		

Total 51 class

K. Swarupa Rani

Signature of Faculty

Signature of HOD

PVP SIDDHARTHA INSTITUTE OF TECHNOLOGY
PROCESS RECORD FOR ACADEMICS

LESSON PLAN
WEB TECHNOLOGIES LAB

Academic Year : 2020-2021
Year & Semester : III B.TECH & I SEM S2
Branch : INFORMATION TECHNOLOGY
Subject Code & Name : IT5L3 & WEB TECHNOLOGIES LAB
Name of Faculty : Dr. K. Pavan Kumar

S. No	Experiment Name	Hours Required	Total number of hours required	Expected date of completion (for each unit) By HOD	Review / Remarks (By HOD)
1	Basic HTML programs	3	3		
2	**WEEK 1:** Design the following static web pages required for an online book store web site.1.)HOME PAGE: - The static home page must contain three frames. 2) LOGIN PAGE 3) CATOLOGUE PAGE	6	9		
3	**WEEK 2:** Design of the cart page and the registration page required for online book store. 4) CART PAGE 5) REGISTRATION PAGE	3	12		
4	**WEEK 3:** Write JavaScript to validate the following fields of the above registration page. 1. Name (Name should contains alphabets and the length should not be less than 6 characters). 2. Password (Password should not be less than 6 characters length). 3. E-mail id (should not contain any invalid and must follow the standard pattern name@domain.com) 4. Phone number (Phone number should contain 10 digits only). Note : You can also validate the login page with these parameters.	3	15		
5	**WEEK 4:** Design a web page using **CSS** (Cascading Style Sheets) which includes the following: 1) Use different font, styles: In the style definition you define how each selector should work .Then, in the body of your pages, you refer to these selectors to activate the styles.	3	18		

	2. Read the user id and passwords entered in the Login form (week1) and authenticate with the values (user id and passwords) available in the cookies. If he is a valid user(i.e., user-name and password match) you should welcome him by name(user-name) else you should display " You are not an authenticated user ". Use init-parameters to do this. Store the user-names and passwords in the webinf.xml and access them in the servlet by using the getInitParameters() method.		33		
9	**WEEK 8:** Install a database(Mysql or Oracle). Create a table which should contain at least the following fields: name, password, email-id, phone number(these should hold the data from the registration form).Practice 'JDBC' connectivity. Write a java program/servlet/JSP to connect to that database and extract data from the tables and display them. Experiment with various SQL queries. Insert the details of the users who register with the web site, whenever a new user clicks the submit button in the registration page (week2).	6	36		
10	**WEEK 9:** Write a JSP which does the following job: Insert the details of the 3 or 4 users who register with the web site (week9) by using registration form. Authenticate the user when he submits the login form using the user name and password from the database (similar to week8 instead of cookies).	6	42		
11	**WEEK 10:** Create tables in the database which contain the details of items (books in our case like Book name , Price, Quantity, Amount)) of each category. Modify your catalogue page (week 2)in such a way that you should connect to the database and extract data from the tables and display them in the catalogue page using JDBC.	3	45		

14/08/20

Signature of Faculty

51 classes

Signature of HOD

PVP SIDDHARTHA INSTITUTE OF TECHNOLOGY
PROCESS RECORD FOR ACADEMICS

LESSON PLAN
WEB TECHNOLOGIES LAB

Academic Year : 2020-2021
Year & Semester : III B.TECH & I SEM S1
Branch : INFORMATION TECHNOLOGY
Subject Code & Name : IT5L3 & WEB TECHNOLOGIES LAB
Name of Faculty : Mr.P.RAVI PRAKASH

S. No	Experiment Name	Hours Required	Total number of hours required	Expected date of completion (for each unit) By HOD	Review / Remarks (By HOD)
1	Basic HTML programs	3	3		
2	**WEEK 1:** Design the following static web pages required for an online book store web site.1.)HOME PAGE: - The static home page must contain three frames. 2) LOGIN PAGE 3) CATOLOGUE PAGE	6	9		
3	**WEEK 2:** Design of the cart page and the registration page required for online book store. 4) CART PAGE 5) REGISTRATION PAGE	3	12		
4	**WEEK 3:** Write JavaScript to validate the following fields of the above registration page. 1. Name (Name should contains alphabets and the length should not be less than 6 characters). 2. Password (Password should not be less than 6 characters length). 3. E-mail id (should not contain any invalid and must follow the standard pattern name@domain.com) 4. Phone number (Phone number should contain 10 digits only). Note : You can also validate the login page with these parameters.	3	15		
5	**WEEK 4:** Design a web page using **CSS (C**ascading **S**tyle **S**heets**)** which includes the following: **1)** Use different font, styles: In the style definition you define how each selector should work .Then, in the body of your pages, you refer to these selectors to activate the styles.	3	18		

	2) Set a background image for both the page and single elements on the page. **3)** Control the repetition of the image with the background-repeat property 4) Define styles for links as A:link A:visited A:active A:hover 5) Work with layers: 6) Add a customized cursor: Selector {cursor:value}				
6	**WEEK 5:** Write an XML file which will display the Book information which includes the following: 1) Title of the book 2) Author Name 3) ISBN number 4) Publisher name 5) Edition6) Price Write a Document Type Definition (DTD) to validate the above XML file. Display the XML file as follows. The contents should be displayed in a table. The header of the table should be in color GREY. And the Author names column should be displayed in one color and should be capitalized and in bold. Use your own colors for remaining columns. Use XML schemas XSL and CSS for the above purpose. Note: Give at least for 4 books. It should be valid syntactically. Hint: You can use some xml editors like XML-spy	3	21		
7	**WEEK 6:** 1.) Install TOMCAT web server and APACHE. While installation assign port number 4040 to TOMCAT and 8080 to APACHE. Make sure that these ports are available i.e., no other process is using this port. 2.) Access the above developed static web pages for books web site, using these servers by putting the web pages developed in week-1 and week-2 in the document root. Access the pages by using the urls : http://localhost:4040/rama/books.html (for tomcat) http://localhost:8080/books.html (for Apache)	3	24		
8	**WEEK 7: User Authentication :** Assume four users user1,user2,user3 and user4 having the passwords pwd1,pwd2,pwd3 and pwd4 respectively. Write a servelet for doing the following. 1. Create a Cookie and add these four user id's and passwords to this Cookie.	6	30		

	2. Read the user id and passwords entered in the Login form (week1) and authenticate with the values (user id and passwords) available in the cookies. If he is a valid user(i.e., user-name and password match) you should welcome him by name(user-name) else you should display " You are not an authenticated user ". Use init-parameters to do this. Store the user-names and passwords in the webinf.xml and access them in the servlet by using the getInitParameters() method.		33		
9	**WEEK 8:** Install a database(Mysql or Oracle). Create a table which should contain at least the following fields: name, password, email-id, phone number(these should hold the data from the registration form).Practice 'JDBC' connectivity. Write a java program/servlet/JSP to connect to that database and extract data from the tables and display them. Experiment with various SQL queries. Insert the details of the users who register with the web site, whenever a new user clicks the submit button in the registration page (week2).	6	36		
10	**WEEK 9:** Write a JSP which does the following job: Insert the details of the 3 or 4 users who register with the web site (week9) by using registration form. Authenticate the user when he submits the login form using the user name and password from the database (similar to week8 instead of cookies).	6	42		
11	**WEEK 10:** Create tables in the database which contain the details of items (books in our case like Book name , Price, Quantity, Amount)) of each category. Modify your catalogue page (week 2)in such a way that you should connect to the database and extract data from the tables and display them in the catalogue page using JDBC.	3	45		

P Ravi Prakash
Signature of Faculty

Signature of HOD

PRASAD V.POTLURI

SIDDHARTHA INSTITUTE OF TECHNOLOGY, KANURU, VIJAYAWADA

DEPARTMENT OF INFORMATION TECHNOLOGY

ACADEMIC YEAR: 2020-2021

IV B.TECH – SEMESTER – I

SECTION – S1

S.NO	SUBJECT CODE	SUBJECT NAME	NAME OF THE FACULTY
1	IT7T1	MANAGERIAL ECONOMICS AND FINANCIAL ACCOUNTANCY	Dr.M.D.NAIK
2	IT7T2	SOFTWARE TESTING	Dr.PVS LAKSHMI
3	IT7T3	MOBILE COMPUTING	Mr.M.SUNDARA BABU
4	IT7T4	DISTRIBUTED OBJECT TECHNOLOGIES	Mrs.G.RESHMA
5	IT7T5C	**ELECTIVE –I** ELEMENTS OF SOFTWARE PROJECT MANAGEMENT	Dr.B.V.SUBBA RAO
6	IT7T6A	**ELECTIVE –II** HUMAN COMPUTER INTERACTION	Dr.A.HARITHA
7	IT7L1	MOBILE COMPUTING LAB	Mr.M.SUNDARA BABU
8	IT7L2	DISTRIBUTED OBJECT TECHNOLOGIES LAB	Mrs.G.RESHMA

(Dr. B.V.Subba Rao)
HEAD
Information Technology Department
PRASAD V.POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007.

PRASAD V.POTLURI

SIDDHARTHA INSTITUTE OF TECHNOLOGY, KANURU, VIJAYAWADA

DEPARTMENT OF INFORMATION TECHNOLOGY

ACADEMIC YEAR: 2020-2021

IV B.TECH – SEMESTER – I

SECTION – S2

S.NO	SUBJECT CODE	SUBJECT NAME	NAME OF THE FACULTY
1	IT7T1	MANAGERIAL ECONOMICS AND FINANCIAL ACCOUNTANCY	Mr. V. PRAVEEN
2	IT7T2	SOFTWARE TESTING	Dr.PVS LAKSHMI
3	IT7T3	MOBILE COMPUTING	Dr.D.KAVITHA
4	IT7T4	DISTRIBUTED OBJECT TECHNOLOGIES	Dr.G.LAKSHMI
5	IT7T5C	**ELECTIVE –I** ELEMENTS OF SOFTWARE PROJECT MANAGEMENT	Dr.S.SAI KUMAR
6	IT7T6A	**ELECTIVE –II** HUMAN COMPUTER INTERACTION	Dr.A.HARITHA
7	IT7L1	MOBILE COMPUTING LAB	Dr.D.KAVITHA
8	IT7L2	DISTRIBUTED OBJECT TECHNOLOGIES LAB	Dr.G.LAKSHMI

(Dr. B.V.Subba Rao)
HEAD
Information Technology Department
PRASAD V.POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007.

PVP SIDDHARTHA INSTITUTE OF TECHNOLOGY

PROCESS RECORD FOR ACADEMICS

LESSON PLAN

(PVPSIT/ACD/01)

Academic Year : 2020-2021 PVP14
Year & Semester : IV B.Tech Sem - I Section- I
Branch : Information Technology
Subject Code & Name : SOFTWARE TESTING IT7T2
Faculty Name : Dr P.V.S.Lakshmi

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode	Hours Required		Total Number of hours (Cumulative)	Expected date of completion (for each unit by HOD)	Review/ Remarks by HOD
				L	T			
I	Introduction: Purpose of testing		ON LINE	2		2		
I	Dichotomies		ON LINE	2		4		
I	Model for testing		ON LINE	1		5		
I	DOUBTS CLARIFICATION		ON LINE		1	6		
I	Consequences of bugs		ON LINE	1		7		
I	Taxonomy of bugs		ON LINE	2		9		
II	Basics of path testing:		ON LINE	1		10		
II	Predicates Introduction		ON LINE	1		11		
II	DOUBTS CLARIFICATION		ON LINE		1	12		
II	path predicates and achievable paths		ON LINE	1		13		
II	PATH SENSITIZING & path instrumentation		ON LINE	1		14		

	FLIPCLASS		ON LINE	1		15		
II	Path instrumentation Application of path testing		ON LINE	1		16		
II	Transaction flows		ON LINE	1		17		
II	DOUBTS CLARIFICATION		ON LINE		1	18		
II	Transaction flow testing techniques		ON LINE	2		20		
II	Basics of data flow testing		ON LINE	1		21		
II	Strategies of data flow testing		ON LINE	2		23		
II	DOUBTS CLARIFICATION		ON LINE		1	24		
II	Application of data flow testing		ON LINE	2		26		
III	Domains and paths		ON LINE	1		27		
III	Nice and ugly domains		ON LINE	1		28		
III	Domain testing		ON LINE	1		29		
III	DOUBTS CLARIFICATION		ON LINE		1	30		
III	Domain and interface testing Domains and testability		ON LINE	2		32		
	FLIP CLASS		ON LINE	1		33		
III	Paths, path products and regular expression		ON LINE	1		34		

	s							
III	**Reduction procedure**		ON LINE	1		35		
III	**DOUBTS CLARIFI CATION**		ON LINE		1	36		
III	Reduction procedure		ON LINE	1		37		
	FLIP CLASS		ON LINE	1		38		
III	Applications		ON LINE	1		39		
III	Regular expressions and flow anomaly detection		ON LINE	1		40		
IV	Testing : Overview,		ON LINE	1		41		
	DOUBTS CLARIFICATI ON		ON LINE		1	42		
IV	decision tables, path expressions		ON LINE	1		43		
IV	Kv charts, specifications.		ON LINE	2		45		
IV	State graphs, good & bad state graphs,		ON LINE	1		46		
IV	State testing, Testability tips.		ON LINE	1		47		
IV	**DOUBTS CLARIFICATI ON**		ON LINE		1	48		
V	Motivational overview		ON LINE	1		49		
V	Matrix of graph		ON LINE	2		51		
V	Relations, power of a matrix		ON LINE	2		53		
V	**DOUBTS CLARIFICATI ON/DISCUSSI ON**		ON LINE		1	54		
V	Node reduction algorithm		ON LINE	2		56		

V	Building tools.		ON LINE	2		58		
	REVIEW OF UNIT I		ON LINE		1	59		
	REVIEW OF UNIT II		ON LINE		1	60		
	REVIEW OF UNIT III		ON LINE		1	61		
	REVIEW OF UNIT IV		ON LINE		1	62		
	REVIEW OF UNIT V		ON LINE		1	63		
		CONTENT BEYOND SYLABUS	ON LINE	2		65		

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BB: Black Board
L: Lecture Hours

LCD: Power Point Presentation
T: Tutorial Hours

OHP: Over Head Projector

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2/1/2021

27/12/2021

Signature of the Faculty
Date: 14-08-2020

Signature of the Head
Date:

PVP SIDDHARTHA INSTITUTE OF TECHNOLOGY

PROCESS RECORD FOR ACADEMICS

LESSON PLAN

(PVPSIT/ACD/01)

Academic Year : 2020-2021 PVP14
Year & Semester : IV B.Tech Sem - I Section- II
Branch : Information Technology
Subject Code & Name : SOFTWARE TESTING IT7T2
Faculty Name : Dr P.V.S.Lakshmi

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode	Hours Required		Total Number of hours (Cumulative)	Expected date of completion (for each unit by HOD)	Review/ Remarks by HOD
				L	T			
I	Introduction: Purpose of testing		ON LINE	2		2		
I	Dichotomies		ON LINE	2		4		
I	Model for testing		ON LINE	1		5		
I	DOUBTS CLARIFICATION		ON LINE		1	6		
I	Consequences of bugs		ON LINE	1		7		
I	Taxonomy of bugs		ON LINE	2		9		
II	Basics of path testing:		ON LINE	1		10		
II	Predicates Introduction		ON LINE	1		11		
II	DOUBTS CLARIFICATION		ON LINE		1	12		
II	path predicates and achievable paths		ON LINE	1		13		
II	PATH SENSITIZING & path instrumentation		ON LINE	1		14		

	FLIPCLASS		ON LINE	1		15		
II	Path instrumentation Application of path testing		ON LINE	1		16		
II	Transaction flows		ON LINE	1		17		
II	DOUBTS CLARIFICATION		ON LINE		1	18		
II	Transaction flow testing techniques		ON LINE	2		20		
II	Basics of data flow testing		ON LINE	1		21		
II	Strategies of data flow testing		ON LINE	2		23		
II	DOUBTS CLARIFICATION		ON LINE		1	24		
II	Application of data flow testing		ON LINE	2		26		
III	Domains and paths		ON LINE	1		27		
III	Nice and ugly domains		ON LINE	1		28		
III	Domain testing		ON LINE	1		29		
III	DOUBTS CLARIFICATION		ON LINE		1	30		
III	Domain and interface testing Domains and testability		ON LINE	2		32		
	FLIP CLASS		ON LINE	1		33		
III	Paths, path products and regular expression		ON LINE	1		34		

	s							
III	**Reduction procedure**		ON LINE	1		35		
III	**DOUBTS CLARIFI CATION**		ON LINE		1	36		
III	Reduction procedure		ON LINE	1		37		
	FLIP CLASS		ON LINE	1		38		
III	Applications		ON LINE	1		39		
III	Regular expressions and flow anomaly detection		ON LINE	1		40		
IV	Testing : Overview,		ON LINE	1		41		
	DOUBTS CLARIFICATI ON		ON LINE		1	42		
IV	decision tables, path expressions		ON LINE	1		43		
IV	Kv charts, specifications.		ON LINE	2		45		
IV	State graphs, good & bad state graphs,		ON LINE	1		46		
IV	State testing, Testability tips.		ON LINE	1		47		
IV	**DOUBTS CLARIFICATI ON**		ON LINE		1	48		
V	Motivational overview		ON LINE	1		49		
V	Matrix of graph		ON LINE	2		51		
V	Relations, power of a matrix		ON LINE	2		53		
V	**DOUBTS CLARIFICATI ON/DISCUSSI ON**		ON LINE		1	54		
V	Node reduction algorithm		ON LINE	2		56		

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V	Building tools.		ON LINE	2		58		
	REVIEW OF UNIT I		ON LINE		1	59		
	REVIEW OF UNIT II		ON LINE		1	60		
	REVIEW OF UNIT III		ON LINE		1	61		
	REVIEW OF UNIT IV		ON LINE		1	62		
	REVIEW OF UNIT V		ON LINE		1	63		
		CONTENT BEYOND SYLABUS	ON LINE	2		65		

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BB: Black Board
L: Lecture Hours

LCD: Power Point Presentation
T: Tutorial Hours

OHP: Over Head Projector

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Signature of the Faculty
Date: 14-08-2020

Signature of the Head
Date:

PROCESS RECORD FOR ACADEMICS

LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : 2020-2021
Year & Semester : IV B.Tech / I Sem (S2)
Branch : IT
Subject Code & Name : IT7T3 & Mobile Computing
Name of Faculty : D.Kavitha

Unit No.	Topic of syllabus to be covered	Learning out comes	Teaching Mode LCD/ LCD/ OHP.	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				Lecture	Tutorial			
I	Introduction to Mobile Communications and Computing	Introduction to Mobile Communications and Computing	LCD	1		1		
I	novel applications, limitations, and architecture	Knowledge about novel applications, limitations, and architecture.	LCD	2		3		
I	GSM, Mobile services	Knowledge about GSM Mobile services	LCD	1		4		
I	System architecture, Radio interface	Knowledge about System architecture, Radio interface	LCD	1		5		
I	Interaction/Tutorial	Interaction			1	6		
I	Protocols, Localization and calling	Knowledge about Protocols, Localization and calling	LCD	2		8		
I	Handover , Security, New data services	Knowledge about handover, security, HSCSD and GPRS	LCD	2		10		
	Interaction/Tutorial	Interaction			1	11		
I	Wireless Medium Access Control, Motivation for a specialized MAC	Knowledge about Introduction to Medium Access Control	LCD	1		12		
I	SDMA, FDMA	Knowledge about SDMA, FDMA	LCD	1		13		
I	TDMA, CDMA	Knowledge about TDMA,CDMA	LCD	1		14		
	Interaction/Tutorial	Review Unit -I			1	15		
II	Introduction to Mobile Network Layer, Mobile IP	Knowledge Mobile Network and Mobile IP	LCD	1		16		

II	Goals, assumptions, entities and terminology, IP packet delivery	Knowledge about Goals and terminology	LCD	2		18		
II	Agent advertisement and discovery, Registration	Knowledge about Agent advertisement	LCD	2		20		
	Interaction/Tutorial	Interaction			1	21		
II	Tunneling and Encapsulation	Knowledge about Tunneling and Encapsulation	LCD	2		23		
II	Optimizations, Dynamic Host Configuration Protocol (DHCP)	Knowledge about optimizations, DHCP	LCD	1		24		
II	Introduction to Mobile Transport Layer, Traditional TCP	Knowledge about Introduction to Mobile Transport Layer	LCD	1		25		
II	Indirect TCP, Snooping TCP, Mobile TCP	Knowledge about Traditional TCP, Indirect TCP, Mobile TCP	LCD	2		27		
	Interaction/Tutorial	Interaction			1	28		
II	Fast retransmit/ fast recovery	Knowledge about Fast retransmit/ fast recovery	LCD	2		30		
II	Transmission /time-out freezing	Knowledge about Transmission /time-out freezing	LCD	1		31		
II	Selective retransmission, Transaction oriented TCP	Knowledge about Selective retransmission, Transaction oriented TCP	LCD	1		32		
	Interaction/Tutorial	Review on unit II			1	33		
III	Introduction to Synchronization	Knowledge about Synchronization	LCD	1		34		
III	Synchronization in Mobile Computing Systems	Knowledge about Synchronization in Mobile Computing Systems	LCD	2		36		
III	Usage Models for Synchronization in mobile applications	Knowledge on Usage Models for Synchronization in mobile applications	LCD	2		38		
	Interaction/Tutorial	Interaction			1	39		
III	Domain dependent Specific rules for data synchronization	Knowledge about Domain dependent Specific rules for data synchronization	LCD	1		40		
III	Mobile Agent	Knowledge about Mobile Agent	LCD	1		41		

IV	Introduction to Mobile Ad hoc Networks (MANETs)	Knowledge about MANETs	LCD	1		42		
	Interaction/Tutorial	Review Unit-III			1	43		
IV	Fixed , MANET Infrastructure Architecture	Knowledge about Fixed, MANET Infrastructure Architecture	LCD	2		45		
IV	Properties of a MANET	Knowledge about Properties of a MANET	LCD	2		47		
IV	spectrum	Knowledge about spectrum	LCD	1		48		
	Interaction/Tutorial	Interaction			1	49		
IV	Applications, security in ad-hoc networks	Knowledge about applications , security in ad-hoc networks	LCD	2		51		
IV	Wireless Sensor Networks	Knowledge about Wireless Sensor Networks	LCD	1		52		
	Interaction/Tutorial	Review on Unit IV		1		53		
V	Wireless Networking and Wireless LAN	Knowledge about WN and WLAN	LCD	1		54		
V	Wireless LAN Architecture	Knowledge about WLAN Architecture	LCD	1		55		
V	IEEE 802.11 Protocol	Knowledge about IEEE 802.11, WAP	LCD	2		57		
	Interaction/Tutorial	Interaction			1	58		
V	Wireless Datagram Protocol	Knowledge about WDP	LCD	1		59		
V	Wireless Transport Layer Security	Knowledge about WTLS	LCD	1		60		
V	WTSL,WAE	Knowledge about WTSL	LCD	1		61		
V	Case study on mobile operating system	Knowledge about Mobile Operating System	LCD	1		62		
V	Interaction	Review on Unit V/Doubt clarification				63		

Legend: Teaching Mode
LCD: Black Board / **LCD**: Power Point Presentation / **OHP**: Over Head Projector
* Add on topics

D. kavi

Signature of the Faculty

Signature of the HOD
Date:

LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : 2020-2021
Year & Semester : IV B.Tech / I Sem (SI)
Branch : IT
Subject Code & Name : IT7T3 & Mobile Computing
Name of Faculty : M SUNDARABABU

Unit No.	Topic of syllabus to be covered	Learning out comes	Teaching Mode LCD/ LCD/ OHP.	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				Lecture	Tutorial			
I	Introduction to Mobile Communications and Computing	Introduction to Mobile Communications and Computing	LCD	1		1		
I	novel applications, limitations, and architecture	Knowledge about novel applications, limitations, and architecture.	LCD	2		3		
I	GSM, Mobile services	Knowledge about GSM Mobile services	LCD	1		4		
I	System architecture, Radio interface	Knowledge about System architecture, Radio interface	LCD	1		5		
I	Interaction/Tutorial	Interaction			1	6		
I	Protocols, Localization and calling	Knowledge about Protocols, Localization and calling	LCD	2		8		
I	Handover , Security, New data services	Knowledge about handover, security, HSCSD and GPRS	LCD	2		10		
	Interaction/Tutorial	Interaction			1	11		
I	Wireless Medium Access Control, Motivation for a specialized MAC	Knowledge about Introduction to Medium Access Control	LCD	1		12		
I	SDMA, FDMA	Knowledge about SDMA, FDMA	LCD	1		13		
I	TDMA, CDMA	Knowledge about TDMA,CDMA	LCD	1		14		
	Interaction/Tutorial	Review Unit -I			1	15		
II	Introduction to Mobile Network Layer, Mobile IP	Knowledge Mobile Network and Mobile IP	LCD	1		16		

II	Goals, assumptions, entities and terminology, IP packet delivery	Knowledge about Goals and terminology	LCD	2		18		
II	Agent advertisement and discovery, Registration	Knowledge about Agent advertisement	LCD	2		20		
	Interaction/Tutorial	Interaction			1	21		
II	Tunneling and Encapsulation	Knowledge about Tunneling and Encapsulation	LCD	2		23		
II	Optimizations, Dynamic Host Configuration Protocol (DHCP)	Knowledge about optimizations, DHCP	LCD	1		24		
II	Introduction to Mobile Transport Layer, Traditional TCP	Knowledge about Introduction to Mobile Transport Layer	LCD	1		25		
II	Indirect TCP, Snooping TCP, Mobile TCP	Knowledge about Traditional TCP, Indirect TCP, Mobile TCP	LCD	2		27		
	Interaction/Tutorial	Interaction			1	28		
II	Fast retransmit/ fast recovery	Knowledge about Fast retransmit/ fast recovery	LCD	2		30		
II	Transmission /time-out freezing	Knowledge about Transmission /time-out freezing	LCD	1		31		
II	Selective retransmission, Transaction oriented TCP	Knowledge about Selective retransmission, Transaction oriented TCP	LCD	1		32		
	Interaction/Tutorial	Review on unit II			1	33		
III	Introduction to Synchronization	Knowledge about Synchronization	LCD	1		34		
III	Synchronization in Mobile Computing Systems	Knowledge about Synchronization in Mobile Computing Systems	LCD	2		36		
III	Usage Models for Synchronization in mobile applications	Knowledge on Usage Models for Synchronization in mobile applications	LCD	2		38		
	Interaction/Tutorial	Interaction			1	39		
III	Domain dependent Specific rules for data synchronization	Knowledge about Domain dependent Specific rules for data synchronization	LCD	1		40		
III	Mobile Agent	Knowledge about Mobile Agent	LCD	1		41		

IV	Introduction to Mobile Ad hoc Networks (MANETs)	Knowledge about MANETs	LCD	1		42		
	Interaction/Tutorial	Review Unit-III			1	43		
IV	Fixed , MANET Infrastructure Architecture	Knowledge about Fixed, MANET Infrastructure Architecture	LCD	2		45		
IV	Properties of a MANET	Knowledge about Properties of a MANET	LCD	2		47		
IV	spectrum	Knowledge about spectrum	LCD	1		48		
	Interaction/Tutorial	Interaction			1	49		
IV	Applications, security in ad-hoc networks	Knowledge about applications , security in ad-hoc networks	LCD	2		51		
IV	Wireless Sensor Networks	Knowledge about Wireless Sensor Networks	LCD	1		52		
	Interaction/Tutorial	Review on Unit IV		1		53		
V	Wireless Networking and Wireless LAN	Knowledge about WN and WLAN	LCD	1		54		
V	Wireless LAN Architecture	Knowledge about WLAN Architecture	LCD	1		55		
V	IEEE 802.11 Protocol	Knowledge about IEEE 802.11, WAP	LCD	2		57		
	Interaction/Tutorial	Interaction			1	58		
V	Wireless Datagram Protocol	Knowledge about WDP	LCD	1		59		
V	Wireless Transport Layer Security	Knowledge about WTLS	LCD	1		60		
V	WTSL,WAE	Knowledge about WTSL	LCD	1		61		
V	Case study on mobile operating system	Knowledge about Mobile Operating System	LCD	1		62		
V	Interaction	Review on Unit V/Doubt clarification			1	63		

2/11/20

93

2/1/2021

125

27/2/2021

Legend: Teaching Mode
LCD: Black Board / **LCD**: Power Point Presentation / **OHP**: Over Head Projector
* Add on topics

M. Sundar

Signature of the Faculty

Signature of the HOD
Date:

LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : **2020-2021**

Year & Semester : **IV B.Tech / I Sem-Section: S1**

Branch : **Information Technology**

Subject Code & Name : **(IT7T4) DISTRIBUTED OBJECT TECHNOLOGIES**

Name of Faculty : **Mrs.G.Reshma**

Unit No.	Topic of syllabus to be covered	Learning out comes	Teaching Mode BB/ LCD/ OHP.	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				Lecture	Tutorial			
I	PHP Introduction	Introducing PHP	LCD	1		1		
I	Creating & Running PHP	Writing & Executing PHP file	LCD	2		3		
I	Working with Variables & Constants	Defining variables and constats	LCD	2		5		
I	Datatypes	Overview on pre defined datatypes	LCD	1		6		
I	Operators	Overview on Arithematic Operators	LCD		1	7		
	Assignment, Comparison, Increment & Decrement, Logical	Overview on Assignment, Comparison, Increment & Decrement, Logical	LCD	2		9		
I	Strings & Arrays	Overview on Strings & Arrays	LCD	1		10		
II	PHP Strings	Overview on PHP Strings	LCD	1		11		
II	String operations	String length, count, search operations	LCD	2		13		
II	String operations	String replace, reverse operations	LCD		2	15		
II	Conditional Statements	If ,if-else, switch statements	LCD	2		17		

Speedy 16/9/20

	Control statements	For, while statements	LCD	2		19		
II	Arrays	Indexed, Associative, Multi dimensional	LCD	2		21		
II	Functions	User defined Fuctions, default arguments	LCD		1	**22**		
III	PHP Arrays	Overview on PHP two dimensional array	LCD	2		24		
III	PHP Object	Overview on date, time and include	LCD	2		26		
III	File Operations	File Handling-Read/Open	LCD	2		28		
I	File Operations	File Handling-Create/Write	LCD		2	30		
III	File Operation	Overview on file upload	LCD	2		32		
III	PHP Error	Overview on diff types on errors,Exceptions	LCD	2		**34**		
IV	My Sql Database	Knowledge on Back End	LCD	2		36		
IV	Database connect	Overview on connect function	LCD	2		38		
IV	Create Database	Knowledge on creating database	LCD		2	40		
V	Create Table	Knowledge on creating Table	LCD	2		42		
IV	INSERT,SELECT,DELETE UPDATE	Knowledge on INSERT,SELECT, DELETE UPDATE	LCD	2		44		
IV	Database using Mysql	Cookies,Sessions	LCD	2		46		
IV	Php Form Validation	Overview on form validation	LCD	2		48		
IV	PHP super global variables	Ovverview on Super global variables	LCD		1	**49**		
V	AJAX	Introduction on AJAX	LCD	2		51		
V	AJAX with XML	AJAX XML HTTP	LCD	3		54		

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21/11/20

	AJAX with XML	AJAX XML – Request	LCD	2		56		
V	AJAX with XML	AJAX XML – Response	LCD	4		60		
V	AJAX XML	AJAX PHP-GETHINIT.php	LCD		2	62		
V	AJAX DATABASE	Overview on AJAX Database	LCD	4		66		

Teaching Mode :
BB: Black Board / **LCD**: Power Point Presentation / **OHP**: Over Head Projector

Signature of the Faculty
Date:

Signature of the HOD:

LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : **2020-2021**

Year & Semester : **IV B.Tech / I Sem-Section:S2**

Branch : **Information Technology**

Subject Code & Name : **(IT7T4) DISTRIBUTED OBJECT TECHNOLOGIES**

Name of Faculty : **Dr G.Lakshmi**

Unit No.	Topic of syllabus to be covered	Learning out comes	Teaching Mode BB/ LCD(Online)/ OHP.	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				Lecture	Tutorial			
I	PHP Introduction	Introducing PHP	LCD(Online)	1		1		
I	Creating & Running PHP	Writing & Executing PHP file	LCD(Online)	2		3		
I	Working with Variables & Constants	Defining variables and constats	LCD(Online)	2		5		
I	Datatypes	Overview on pre defined datatypes	LCD(Online)	1		6		
I	Operators	Overview on Arithematic Operators	Tutorial		1	7		
I	Assignment, Comparison, Increment & Decrement, Logical	Overview on Assignment, Comparison, Increment & Decrement, Logical	LCD(Online)	2		9		
I	Strings & Arrays	Overview on Strings & Arrays	LCD(Online)	1		**10**		
II	PHP Strings	Overview on PHP Strings	LCD(Online)	1		11		
II	String operations	String length, count, search operations	LCD(Online)	2		13		
II	String operations	String replace, reverse operations	Tutorial		1	14		
II	Conditional Statements	If ,if-else, switch statements	LCD(Online)	2		16		

II	Control statements	For, while statements	LCD(Online)	2		18		
II	Arrays	Indexed, Associative, Multi dimensional	LCD(Online)	2		20		
II	Functions	User defined Fuctions, default arguments	Tutorial		1	**21**		
III	PHP Arrays	Overview on PHP two dimensional array	LCD(Online)	2		23		
III	PHP Object	Overview on date, time and include	LCD(Online)	2		25		
III	File Operations	File Handling-Read/Open	LCD(Online)	2		27		
III	File Operations	File Handling-Create/Write	Tutorial		1	28		
III	File Operation	Overview on file upload	LCD(Online)	2		30		
III	PHP Error	Overview on diff types on errors,Exceptions	LCD(Online)	2		**32**		
IV	My Sql Database	Knowledge on Back End	LCD(Online)	2		34		
IV	Database connect	Overview on connect function	LCD(Online)	2		36		
IV	Create Database	Knowledge on creating database	Tutorial		1	37		
IV	Create Table	Knowledge on creating Table	LCD(Online)	2		39		
IV	INSERT,SELECT,DELETE UPDATE	Knowledge on INSERT,SELECT, DELETE UPDATE	LCD(Online)	3		42		
IV	Database using Mysql	Cookies, Sessions	LCD(Online)	2		44		
IV	Php Form Validation	Overview on form validation	LCD(Online)	2		46		
IV	PHP super global variables	Overview on Super global variables	Tutorial		1	**47**		
V	AJAX	Introduction on AJAX	LCD(Online)	2		49		
V	AJAX with XML	AJAX XML HTTP	LCD(Online)	3		52		

V	AJAX with XML	AJAX XML – Request	LCD(Online)	2		54		
V	AJAX with XML	AJAX XML – Response	LCD(Online)	4		58		
V	AJAX XML	AJAX PHP-GETHINIT.php	Tutorial		1	59		
V	AJAX DATABASE	Overview on AJAX Database	LCD(Online)	4		**63**		

Teaching Mode :
LCD(Online mode): Power Point Presentation

Signature of the Faculty
Date: 17/8/2020

Signature of the HOD
Date:

PVP SIDDHARTHA INSTITUTE OF TECHNOLOGY

PROCESS RECORD FOR ACADEMICS

LESSON PLAN

(PVPSIT/ACD/01)

Academic Year : 2020-2021
Year & Semester : IV B.Tech, Sem-I, Section-I,
Branch : Information Technology
Subject Code & Name: IT7T5C, Elements of Software Project Management
Faculty Name : Dr.B.V.Subba Rao

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode	Hours Required		Total Number of hours (Cumulative)	Expected date of completion (for each unit by HOD)	Review/ Remarks by HOD
				L	T			
I	Conventional software management-The water fall model	Introduction to Conventional software management-The water fall model	LCD (Online)	1		1		
I	Conventional software management performance	Knowledge about Conventional software management performance	LCD (Online)	1		2		
I	Evolution of software economics:software economics	Knowledge about Evolution of software economics:software economics	LCD (Online)	1		3		
I	Pragmatic software cost estimation	Knowledge about Pragmatic software cost estimation	LCD (Online)	1		4	2-9-2020	
I	Improving software economics:reducing software product size, Improving software processes,improving team effectiveness,imp	Knowledge about Improving software economics:reducing software product size, Improving software processes,improving team	LCD (Online)	2	1	7		

	roving automation	effectiveness,improving automation						
I	Achieving required quality,peer inspections.	Knowledge about Achieving required quality,peer inspections.	LCD (Online)	1		8		
II	The old way and the new:the principals of conventional software engineering	Knowledge about The old way and the new:the principals of conventional software engineering	LCD (Online)	1		9		
II	Principles of modern software management	Knowledge about Principles of modern software management	LCD (Online)	1		10		
II	Transitioning to an iterative process	Knowledge about Transitioning to an iterative process	LCD (Online)	2		12		
II	Life Cycle Phases:Engineering and production stages,inception	Knowledge about Life Cycle Phases:Engineering and production stages,inception	LCD (Online)	2		14		
II	Elaboration,construction transition phases	Knowledge about Elaboration,construction transition phases	LCD (Online)	2		16		
II	Artifacts of the process:Tha artefact sets,management artifacts	Knowledge about Artifacts of the process:Tha artefact sets,management artifacts	LCD (Online)	2	1	19		
II	Engineering artefacts,programmatic artifacts.	Knowledge about Engineering artefacts,programmatic artifacts.	LCD (Online)	3		22		
III	Model based software architectures:A management perspective and technical perspective.	Knowledge about Model based software architectures:A management perspective and technical perspective.	LCD (Online)	3		25		

III	Workflows of the process:software process workflows,iteration workflows.	Knowledge about Workflows of the process:software process workflows,iteration workflows.	LCD (Online)	2	1	28		
III	Checkpoints of the process:Major mile stones,minor mile stones,periodic status assessments.	Knowledge about Checkpoints of the process:Major mile stones,minor mile stones,periodic status assessments.	LCD (Online)	2		30		
IV	Iterative process planning:work break down structures,planning guidelines	Knowledge about Knowledge about Iterative process planning:work break down structures,planning guidelines	LCD (Online)	2		32	25-9-2020	
IV	Cost and schedule estimating,iteration planning process,pragmatic planning.	Knowledge about Cost and schedule estimating,iteration planning process,pragmatic planning.	LCD (Online)	3		35		
IV	Project Organizations and responsibilities:Line of business Organizations	Knowledge about Project Organizations and responsibilities:Line of business Organizations	LCD (Online)	2	1	38		
IV	Project organizations,evolution of organizations.	Knowledge about Project organizations,evolution of organizations.	LCD (Online)	3		41		
IV	Process automation: automation building blocks,the project environment.	Knowledge about Process automation: automation building blocks,the project environment.	LCD (Online)	2		43	15-10-2020	
V	project control and process instrumentation:the seven core metrics	Knowledge about project control and process instrumentation:	LCD (Online)	2		45		

V	Management indicators,quality indicators	Knowledge about Management indicators,quality indicators	LCD (Online)	2	1	48		
V	Life cycle expectations,pragmatic software metrics,metrics automation	Knowledge about Life cycle expectations,pragmatic software metrics,metrics automation	LCD (Online)	2		50		
V	Tailoring the process:process discriminants	Knowledge about Tailoring the process:process discriminants	LCD (Online)	2		52		
V	Future software project management:modern project profiles	Knowledge about Future software project management:modern project profiles	LCD (Online)	2	1	55		
V	Next generation software economics,modern process transitions	Knowledge about Next generation software economics,modern process transitions	LCD (Online)	2		57		
V	Next generation software economics,modern process transitions	Knowledge about Next generation software economics,modern process transitions	LCD (Online)	3		60		
V	Next generation software economics,	Knowledge about Next generation software economics,	LCD (Online)	3		63		
V	Case Study:the command centre processing	Case Study: the command replacement(CCPDS-R)	LCD (Online)	2	1	66		

LCD(Online): Power Point Presentation BB: Black Board OHP: Over Head Projector
L: Lecture Hours T: Tutorial Hours

Signature of the Faculty
Date:

Signature of the Head

PVP SIDDHARTHA INSTITUTE OF TECHNOLOGY

PROCESS RECORD FOR ACADEMICS

LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : **2020-2021**
Year & Semester : **IV B.Tech, Sem-I, Section-II**
Branch : **Information Technology**
Subject Code & Name : **IT7T5C, Elements of Software Project Management**
Faculty Name : **Dr.S.Sai Kumar**

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode	Hours Required		Total Number of hours (Cumulative)	Expected date of completion (for each unit by HOD)	Review/ Remarks by HOD
				L	T			
I	Conventional software management-The water fall model	Introduction to Conventional software management-The water fall model	LCD (Online)	1		1		
I	Conventional software management performance	Knowledge about Conventional software management performance	LCD (Online)	1		2		
I	Evolution of software economics:software economics	Knowledge about Evolution of software economics:software economics	LCD (Online)	1		3		
I	Pragmatic software cost estimation	Knowledge about Pragmatic software cost estimation	LCD (Online)	1		4	2-9-2020	
I	Improving software economics:reducing software product size, Improving software processes,improving team effectiveness,imp	Knowledge about Improving software economics:reducing software product size, Improving software processes,improving team	LCD (Online)	2	1	7		

	roving automation	effectiveness,improving automation						
I	Achieving required quality,peer inspections.	Knowledge about Achieving required quality,peer inspections.	LCD (Online)	1		8		
II	The old way and the new:the principals of conventional software engineering	Knowledge about The old way and the new:the principals of conventional software engineering	LCD (Online)	1		9		
II	Principles of modern software management	Knowledge about Principles of modern software management	LCD (Online)	1		10		
II	Transitioning to an iterative process	Knowledge about Transitioning to an iterative process	LCD (Online)	2		12		
II	Life Cycle Phases:Engineering and production stages,inception	Knowledge about Life Cycle Phases:Engineering and production stages,inception	LCD (Online)	2		14		
II	Elaboration,construction transition phases	Knowledge about Elaboration,construction transition phases	LCD (Online)	2		16		
II	Artifacts of the process:Tha artefact sets,management artifacts	Knowledge about Artifacts of the process:Tha artefact sets,management artifacts	LCD (Online)	2	1	19		
II	Engineering artefacts,programmatic artifacts.	Knowledge about Engineering artefacts,programmatic artifacts.	LCD (Online)	3		22		
III	Model based software architectures:A management perspective and technical perspective.	Knowledge about Model based software architectures:A management perspective and technical perspective.	LCD (Online)	3		25		

III	Workflows of the process:software process workflows,iteration workflows.	Knowledge about Workflows of the process:software process workflows,iteration workflows.	LCD (Online)	2	1	28		
III	Checkpoints of the process:Major mile stones,minor mile stones,periodic status assessments.	Knowledge about Checkpoints of the process:Major mile stones,minor mile stones,periodic status assessments.	LCD (Online)	2		30		
IV	Iterative process planning:work break down structures,planning guidelines	Knowledge about Knowledge about Iterative process planning:work break down structures,planning guidelines	LCD (Online)	2		32	25-9-2020	
IV	Cost and schedule estimating,iteration planning process,pragmatic planning.	Knowledge about Cost and schedule estimating,iteration planning process,pragmatic planning.	LCD (Online)	3		35		
IV	Project Organizations and responsibilities:Line of business Organizations	Knowledge about Project Organizations and responsibilities:Line of business Organizations	LCD (Online)	2	1	38		
IV	Project organizations,evolution of organizations.	Knowledge about Project organizations,evolution of organizations.	LCD (Online)	3		41		
IV	Process automation: automation building blocks,the project environment.	Knowledge about Process automation: automation building blocks,the project environment.	LCD (Online)	2		43	15-10-2020	
V	project control and process instrumentation:the seven core metrics	Knowledge about project control and process instrumentation:	LCD (Online)	2		45		

V	Management indicators,quality indicators	Knowledge about Management indicators,quality indicators	LCD (Online)	2	1	48		
V	Life cycle expectations,pragmatic software metrics,metrics automation	Knowledge about Life cycle expectations,pragmatic software metrics,metrics automation	LCD (Online)	2		50		
V	Tailoring the process:process discriminants	Knowledge about Tailoring the process:process discriminants	LCD (Online)	2		52		
V	Future software project management:modern project profiles	Knowledge about Future software project management:modern project profiles	LCD (Online)	2	1	55		
V	Next generation software economics,modern process transitions	Knowledge about Next generation software economics,modern process transitions	LCD (Online)	2		57		
V	Next generation software economics,modern process transitions	Knowledge about Next generation software economics,modern process transitions	LCD (Online)	3		60		
V	Next generation software economics,	Knowledge about Next generation software economics,	LCD (Online)	3		63		
V	Case Study:the command centre processing	Case Study: the command replacement(CCPDS-R)	LCD (Online)	2	1	66		

LCD (Online): Power Point Presentation BB: Black Board OHP: Over Head Projector
L: Lecture Hours T: Tutorial Hours

Signature of the Faculty
Date: 17/8/2020

Signature of the Head

PROCESS RECORD FOR ACADEMICS

LESSON PLAN

Academic Year : **2020-2021**
Year & Semester : **IV B.Tech / I SEM**
Branch : **IT Sec II**
Subject Code & Name : **IT7T6A & Human Computer Interaction**
Name of Faculty : **Dr. A. Haritha**

Unit No.	Topic of syllabus to be covered	Learning out comes	Teaching Mode LCD	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				Lecture	Tutorial			
	Introduction	Student will be able to understand the need for the course	LCD(online)	1		1		
I	Importance of user Interface	Knowledge about UI and its importance	LCD(online)	1		2		
I	Definition	Defining the user interface	LCD(online)	1		3		
I	Importance of good design	Importance of well designed interface and screen	LCD(online)	1		4		
I	Benefits of good design	Reduced decision making time ,training cost customers benefit	LCD(online)	1		5		
I	Interaction		LCD(online)		1	6		
I	A brief history of screen design	Knowledge on Screens history	LCD(online)	1		7		
I	The graphical user interface	Knowledge on Objects ,actions	LCD(online)	1		8		
I	Popularity of graphics	Importance of graphic screens	LCD(online)	2		10		
I	The concept of direct manipulation	Knowledge on visibility of Objects actions	LCD(online)	1		11		
I	Interaction	LCD(online)			1	12		
I	Graphical systems	Advantages disadvantages	LCD(online)	1		13		
I	Characteristics of the graphical user interface	Knowledge on GUI	LCD(online)	2		15		
I	Web user	Web interface design	LCD(online)	2		17		

PROCESS RECORD FOR ACADEMICS

I	Interaction		LCD(online)		1	18		
I	Characteristics	GUI versus web page design, printed pages versus web pages, Principles for the XEROX STAR	LCD(online)	1		19		
II	Design process	Knowledge on design and usability issues	LCD(online)	1		20		
II	Human interaction with computers	Knowledge on troubles humans face with computers	LCD(online)	2		22		
II	Interaction		LCD(online)		1	23		
II	Importance of human characteristics human consideration	Knowledge on different human characteristics and consideration which have to be measured in the design	LCD(online)	1		24		
II	Human interaction speeds, Understanding business functions	Knowledge on performance versus preference, Knowledge on all the various business functions	LCD(online)	1		25		
III	Screen designing Design goals	Knowledge on Human considerations in screen design	LCD(online)	1		26		
III	Screen planning and purpose	Meaning to screen users, purpose in performing tasks	LCD(online)	1		27		
III	Organizing screen elements	Knowledge on how to present the display elements	LCD(online)	1		28		
III	Interaction		LCD(online)		1	29		
III	Ordering of screen data and content	Knowledge on logical ,meaningful ,and sensible arrangement of data	LCD(online)	1		30		
III	Screen navigation and flow, Visually pleasing composition	Knowledge on Screen navigation	LCD(online)	2		32		
III	Interaction		LCD(online)		1	33		
III	Presenting Information- Amount of	Knowledge on Proper amount of information	LCD(online)	1		34		

PROCESS RECORD FOR ACADEMICS

	information							
III	Focus and emphasis	Knowledge on Focus and emphasis techniques	LCD(online)	2		36		
III	Presentation information simply and meaningfully	Knowledge on legibility, readability, usability, contrasting display features	LCD(online)	2		38		
III	Interaction		LCD(online)		1	39		
III	Information retrieval on web	Knowledge on Reading, Browsing, searching on the web	LCD(online)	1		40		
III	Statistical graphics	Types of Statistical graphics, flow charts	LCD(online)	2		42		
III	Technological consideration in interface design	Knowledge on Graphical systems, web systems	LCD(online)	2		44		
III	Interaction		LCD(online)		1	45		
IV	Windows	Knowledge different kinds of windows	LCD(online)	1		46		
IV	New and navigation schemes , selection of window, Types of Windows	Knowledge on various navigational schemes	LCD(online)	1		47		
IV	Screen based controls	Knowledge on Screen based controls	LCD(online)	1		48		
IV	Characteristics of device based controls	Knowledge on Device based controls	LCD(online)	1		49		
IV	Interaction		LCD(online)		1	50		
IV	Trackball-joystick-graphic tablet-touch screen-light pen-voice mouse-keyboard	Acquaintance on different types	LCD(online)	1		51		
IV	Selecting proper device based controls-keyboard Vs mouse-printer	Knowledge on Selecting different device based controls	LCD(online)	1		52		

15/10/2024

PROCESS RECORD FOR ACADEMICS

	guidelines.							
V	Components ,Text and messages, Icons and Images	Knowledge on Components	LCD(online)	1		53		
V	Interaction		LCD(online)		1	54		
V	Multimedia, Icons and Images	Knowledge on multimedia	LCD(online)	1		55		
V	Choosing colors	Knowledge on choosing color	LCD(online)	1		56		
V	Review-tasks -Content Beyond Syllabus				6	62		

Legend: Teaching Mode

LCD: Power Point Presentation(online)

Signature of the Faculty

Signature of the HOD:
Date:

PROCESS RECORD FOR ACADEMICS

LESSON PLAN

Academic Year : **2020-2021**
Year & Semester : **IV B.Tech / I SEM**
Branch : **IT Sec 1**
Subject Code & Name : **IT7T6A & Human Computer Interaction**
Name of Faculty : **Dr. A. Haritha**

Unit No.	Topic of syllabus to be covered	Learning out comes	Teaching Mode LCD	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				Lecture	Tutorial			
	Introduction	Student will be able to understand the need for the course	LCD(online)	1		1		
I	Importance of user Interface	Knowledge about UI and its importance	LCD(online)	1		2		
I	Definition	Defining the user interface	LCD(online)	1		3		
I	Importance of good design	Importance of well designed interface and screen	LCD(online)	1		4		
I	Benefits of good design	Reduced decision making time ,training cost customers benefit	LCD(online)	1		5		
I	Interaction		LCD(online)		1	6		
I	A brief history of screen design	Knowledge on Screens history	LCD(online)	1		7		
I	The graphical user interface	Knowledge on Objects ,actions	LCD(online)	1		8		
I	Popularity of graphics	Importance of graphic screens	LCD(online)	2		10		
I	The concept of direct manipulation	Knowledge on visibility of Objects actions	LCD(online)	1		11		
I	Interaction	LCD(online)			1	12		
I	Graphical systems	Advantages disadvantages	LCD(online)	1		13		
I	Characteristics of the graphical user interface	Knowledge on GUI	LCD(online)	2		15 16		16/9/2020
I	Web user	Web interface design	LCD(online)	2		17		

PROCESS RECORD FOR ACADEMICS

I	Interaction		LCD(online)		1	18		
I	Characteristics	GUI versus web page design, printed pages versus web pages, Principles for the XEROX STAR	LCD(online)	1		19		
II	Design process	Knowledge on design and usability issues	LCD(online)	1		20		
II	Human interaction with computers	Knowledge on troubles humans face with computers	LCD(online)	2		22		
II	Interaction		LCD(online)		1	23		
II	Importance of human characteristics human consideration	Knowledge on different human characteristics and consideration which have to be measured in the design	LCD(online)	1		24		
II	Human interaction speeds, Understanding business functions	Knowledge on performance versus preference, Knowledge on all the various business functions	LCD(online)	1		25		
III	Screen designing Design goals	Knowledge on Human considerations in screen design	LCD(online)	1		26		
III	Screen planning and purpose	Meaning to screen users, purpose in performing tasks	LCD(online)	1		27		
III	Organizing screen elements	Knowledge on how to present the display elements	LCD(online)	1		28		
III	Interaction		LCD(online)		1	29		
III	Ordering of screen data and content	Knowledge on logical ,meaningful ,and sensible arrangement of data	LCD(online)	1		30		
III	Screen navigation and flow, Visually pleasing composition	Knowledge on Screen navigation	LCD(online)	2		32		
III	Interaction		LCD(online)		1	33		
III	Presenting Information- Amount of	Knowledge on Proper amount of information	LCD(online)	1		34		

PROCESS RECORD FOR ACADEMICS

	information							
III	Focus and emphasis	Knowledge on Focus and emphasis techniques	LCD(online)	2		36		
III	Presentation information simply and meaningfully	Knowledge on legibility, readability, usability, contrasting display features	LCD(online)	2		38		
III	Interaction		LCD(online)		1	39		
III	Information retrieval on web	Knowledge on Reading, Browsing, searching on the web	LCD(online)	1		40 41		
III	Statistical graphics	Types of Statistical graphics, flow charts	LCD(online)	2		42		
III	Technological consideration in interface design	Knowledge on Graphical systems, web systems	LCD(online)	2		44		
III	Interaction		LCD(online)		1	45		
IV	Windows	Knowledge different kinds of windows	LCD(online)	1		46		
IV	New and navigation schemes , selection of window, Types of Windows	Knowledge on various navigational schemes	LCD(online)	1		47		
IV	Screen based controls	Knowledge on Screen based controls	LCD(online)	1		48		
IV	Characteristics of device based controls	Knowledge on Device based controls	LCD(online)	1		49		
IV	Interaction		LCD(online)		1	50		
IV	Trackball-joystick-graphic tablet-touch screen-light pen-voice mouse-keyboard	Acquaintance on different types	LCD(online)	1		51		
IV	Selecting proper device based controls-keyboard Vs mouse-printer	Knowledge on Selecting different device based controls	LCD(online)	1		52		

PROCESS RECORD FOR ACADEMICS

	guidelines.							
V	Components ,Text and messages, Icons and Images	Knowledge on Components	LCD(online)	1		53		
V	Interaction		LCD(online)		1	54		
V	Multimedia, Icons and Images	Knowledge on multimedia	LCD(online)	1		55		
V	Choosing colors	Knowledge on choosing color	LCD(online)	1		56		
V	Review-tasks -Content Beyond Syllabus				6	62		

Legend: Teaching Mode

LCD: Power Point Presentation(online)

Signature of the Faculty

Signature of the HOD:
Date:

LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : **2020 -2021**
Year & Semester : **IV B. Tech & I Semester Section I**
Branch : **Information Technology**
Subject Code & Name: IT7L1 & MOBILE COMPUTING LAB
Name of Faculty : **Mr M SUNDARABABU**

Unit No	Topics of Syllabus to be covered	Learning outcomes	Teaching Mode	Hours Required		Total No. of Hours (Cumulative)	Expected date of completion (for each Unit) by HOD	Review/ Remarks (by HOD)
				L	T			
1	Write a J2ME program to show how to change the font size and color	To execute the J2ME program for change the font size and color	LCD	6		6		
2	Write a J2ME program which creates the following kind of menu 1.cut 2.copy 3.past 4.delete 5.select all 6.unselect all	Execute the J2ME program to create the menu 1.cut 2.copy 3.past 4.delete 5.select all 6.unselect all	LCD	6		12		
3	Create a J2ME menu which has the following options(Event handling) 1.cut(on/off) 2.copy(on/off) 3.past(on/off) 4.delete(on/off) 5.select all(on/off) 6.unselect all (on/off)	Create the menu 1.cut(on/off) 2.copy(on/off) 3.past(on/off) 4.delete(on/off) 5.select all(on/off) 6.unselect all (on/off)	LCD	3		15		
4	Create MIDP applications which examine that a phone number.	To execute a MIDP application for phone number	LCD	3		18		
5	Write an Android application program that displays Hello	To execute Android application program that	LCD	3		21		

	World using Terminal	displays Hello World using Terminal				21		
6	Write an Android application program that displays Hello World using Eclipse	To execute Android application program that displays Hello World using Eclipse	LCD	3		24		
7	Write an Android application program that accepts a name from the user and displays the hello name to the user in response as output using Eclipse	To execute Android application program that accepts a name from the user and displays the hello name to the user in response as output using Eclipse	LCD	3		28		
8	Write an Android application program that demonstrates the following 1.Linear Layout 2.Relative Layout 3.Table Layout	To execute Android application program 1.Linear Layout 2.Relative Layout 3.Table Layout	LCD	6		34 36		2/11/2021
9	Write an Android application program that demonstrates the Grid Layout	To execute Android application demonstrates the Grid Layout	LCD	3		37		
10	Write an Android application program that converts the temperature in Celsius to Fahrenheit	To execute Android application demonstrates converts the temperature in Celsius to Fahrenheit	LCD	6		43		

Legend: Teaching Mode
BB: Black Board / **LCD**: Power Point Presentation / **OHP**: Over Head Projector

M. Sundar
Signature of the Faculty

27/11/2021
Signature of the HOD

LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : **2020 -2021**
Year & Semester : **IV B. Tech & I Semester Section II**
Branch : **Information Technology**
Subject Code & Name: IT7L1 & MOBILE COMPUTING LAB
Name of Faculty : **D.KAVITHA**

Unit No	Topics of Syllabus to be covered	Learning outcomes	Teaching Mode	Hours Required		Total No. of Hours (Cumulative)	Expected date of completion (for each Unit) by HOD	Review/ Remarks (by HOD)
				L	T			
1	Write a J2ME program to show how to change the font size and color	To execute the J2ME program for change the font size and color	LCD	6		6		
2	Write a J2ME program which creates the following kind of menu 1.cut 2.copy 3.past 4.delete 5.select all 6.unselect all	Execute the J2ME program to create the menu 1.cut 2.copy 3.past 4.delete 5.select all 6.unselect all	LCD	6		12		
3	Create a J2ME menu which has the following options(Event handling) 1.cut(on/off) 2.copy(on/off) 3.past(on/off) 4.delete(on/off) 5.select all(on/off) 6.unselect all (on/off)	Create the menu 1.cut(on/off) 2.copy(on/off) 3.past(on/off) 4.delete(on/off) 5.select all(on/off) 6.unselect all (on/off)	LCD	3		15		
4	Create MIDP applications which examine that a phone number.	To execute a MIDP application for phone number	LCD	3		18		
5	Write an Android application program that displays Hello	To execute Android application program that	LCD	3		21		

	World using Terminal	displays Hello World using Terminal						
6	Write an Android application program that displays Hello World using Eclipse	To execute Android application program that displays Hello World using Eclipse	LCD	3		24		
7	Write an Android application program that accepts a name from the user and displays the hello name to the user in response as output using Eclipse	To execute Android application program that accepts a name from the user and displays the hello name to the user in response as output using Eclipse	LCD	3		28		
8	Write an Android application program that demonstrates the following 1.Linear Layout 2.Relative Layout 3.Table Layout	To execute Android application program 1.Linear Layout 2.Relative Layout 3.Table Layout	LCD	6		34		
9	Write an Android application program that demonstrates the Grid Layout	To execute Android application demonstrates the Grid Layout	LCD	3		37		
10	Write an Android application program that converts the temperature in Celsius to Fahrenheit	To execute Android application demonstrates converts the temperature in Celsius to Fahrenheit	LCD	6		43		

Legend: Teaching Mode
BB: Black Board / **LCD**: Power Point Presentation / **OHP**: Over Head Projector

Signature of the Faculty

Signature of the HOD

LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : **2020 -2021**
Year & Semester : **IV B. Tech & I Semester Section I**
Branch : **Information Technology**
Subject Code & Name : **IT7L2 & Distributed Object Technologies LAB**
Name of Faculty : **Mrs.G.Reshma**

Unit No	Topics of Syllabus to be covered	Learning outcomes	Teaching Mode	Hours Required		Total No. of Hours (Cumulative)	Expected date of completion (for each Unit) by HOD	Review/ Remarks (by HOD)
				L	T			
1	**Exercise 1** a)Steps for the installation of Wamp Server and run through local host.	To implement a basic php program	LCD	3		3		
2	b) Write a php program to perform Arithmetic Operations.	To implement basic opertions	LCD	3		6		
3	**Exercise 2** a)Write a PHP Program to accepts a number from the form and check whether the given number is Armstrong or not. b)Write a PHP program to accepts an integer from form and display it reverse order and check whether it is palindrome or not.	To implement looping control statements	LCD	3		9		
4	**Exercise3** a) Write a PHP program to insert an image into a database and fetch the image from the database. b) Write a PHP program to apply CSS to the Exercise 2(a) & 2(b).	To implement fetching an image from database	LCD	3		12		
5	Write a PHP program to perform user authentication by using static sessions,	To implement sessions	LCD	3		15		

	the login and password values are initialized by using arrays.							
6	**Exercise 5** Write a PHP program to perform operations on files	To implement and file operations using php	LCD	6		21		
7	**Exercise 6** Write a PHP program to perform CRUD operations on data by using MYSQL.	To implement CRUD using mysql	LCD	3		24		
8	**Exercise 7** Write a PHP program to submit the data into the database and fetch the result and display in the table	To implement select command	LCD	6		30		
9	**Exercise 8** Write a PHP Program to perform user authentication by using cookies and perform the CRUD operations..	To implement Create Delete Update	LCD	3		33		
10	**Exercise 9** Write a PHP Program to perform user authentication by an user registration and login to maintain sessions and perform the CRUD operations.	To Implement User authentication system	LCD	6		36 39		
11	**Exercise 10** Write a php program to execute join operators in Mysql database.	To implement MYSQL operations	LCD	3		42		
12	**Exercise 11** Write a PHP program to fetch the data and iterate the fetched data through the result set and displayed it in the form of table view. **Exercise 12:** Write a PHP program which reads the data from XML file and display it in the	To implement XML PHP	LCD	6		48		

	localhost							
13	**Lab Exam**			3				

60 corrected 27/3/24

Legend: Teaching Mode
BB: Black Board / **LCD**: Power Point Presentation / **OHP**: Over Head Projector

Signature of the Faculty

Signature of the HOD

LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : 2020 -2021
Year & Semester : IV B. Tech & I Semester Section II
Branch : Information Technology
Subject Code & Name: IT7L2 & Distributed Object Technologies Lab
Name of Faculty : Dr G.Lakshmi

Unit No	Topics of Syllabus to be covered	Learning outcomes	Teaching Mode	Hours Required		Total No. of Hours (Cumulative)	Expected date of completion (for each Unit) by HOD	Review/ Remarks (by HOD)
				L	T			
1	**Exercise 1** a)Steps for the installation of Wamp Server and run through local host.	To implement a basic php program	LCD(Online)	3		3		
2	b) Write a php program to perform Arithmetic Operations.	To implement basic operations	LCD(Online)	3		6		
3	**Exercise 2** a) Write a PHP Program to accept a number from the form and check whether the given number is Armstrong or not. b)Write a PHP program to accepts an integer from form and display it reverse order and check whether it is palindrome or not.	To implement looping control statements	LCD(Online)	3		9		
4	**Exercise3** a) Write a PHP program to insert an image into a database and fetch the image from the database. b) Write a PHP program to apply CSS to the Exercise 2(a) & 2(b).	To implement fetching an image from database	LCD(Online)	3		12		
5	Write a PHP program to perform user authentication by	To implement sessions	LCD(Online)	3		15		

	using static sessions, the login and password values are initialized by using arrays.							
6	**Exercise 5** Write a PHP program to perform operations on files	To implement and file operations using php	LCD(Online)	6		21		
7	**Exercise 6** Write a PHP program to perform CRUD operations on data by using MYSQL.	To implement CRUD using mysql	LCD(Online)	3		24		
8	**Exercise 7** Write a PHP program to submit the data into the database and fetch the result and display in the table	To implement select command	LCD(Online)	6		30		
9	**Exercise 8** Write a PHP Program to perform user authentication by using cookies and perform the CRUD operations..	To implement Create Delete Update	LCD(Online)	3		33		
10	**Exercise 9** Write a PHP Program to perform user authentication by an user registration and login to maintain sessions and perform the CRUD operations.	To Implement User authentication system	LCD(Online)	3		36 39		
11	**Exercise 10** Write a PHP program to execute join operators in MySql database.	To implement MYSQL operations	LCD(Online)	3		42		
12	**Exercise 11** Write a PHP program to fetch the data and iterate the fetched data through the result set and displayed it in the form of table view. **Exercise 12:** Write a PHP program which reads the data from XML file and	To implement XML PHP	LCD(Online)	6		48		

	display it in the local host							

Teaching Mode
LCD(Online): Power Point Presentation

48-end
27/12/2021

Signature of the Faculty
Date: 17/8/22

Signature of the HOD
Date:

PRASAD V.POTLURI

SIDDHARTHA INSTITUTE OF TECHNOLOGY, KANURU, VIJAYAWADA

DEPARTMENT OF INFORMATION TECHNOLOGY

ACADEMIC YEAR: 2020-2021

II B.TECH – SEMESTER – II **SECTION – S1**

S.NO	SUBJECT CODE	SUBJECT NAME	NAME OF THE FACULTY
1	19BS1403	Engineering Mathematics - IV (Number Theory and Cryptography)	Mr. P. RAVI PRAKASH
2	19BS1404	Life Sciences for Engineers	Ms. M. ANUPAMA AMMULU
3	19IT3401	Computer Organization and Architecture	Dr.PVS LAKSHMI
4	19IT3402	Operating Systems	Ms. V.RASHMI
5	19IT3403	Software Engineering Paradigms	Mr. CH. CHANDRA MOHAN
6	19IT3404	Design and Analysis of Algorithms	Dr. Y. PADMA ~~Mr. CH. PRANEETH~~
7	19IT3405	Programming with JAVA	Dr. Y. SURESH
8	19MC1401	Environmental Sciences	Mrs. T. PREETHI RANGAMANI
9	19BS1451	Life Sciences for Engineers Lab	Ms. M. ANUPAMA AMMULU
10	19IT3451	Design and Analysis of Algorithms Lab	Dr. Y.PADMA
11	19IT3452	Programming with JAVA Lab	Mrs. J.SIRISHA

(Dr. B.V.Subba Rao)
HEAD
Information Technology Department
PRASAD V.POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007.

PRASAD V.POTLURI

SIDDHARTHA INSTITUTE OF TECHNOLOGY, KANURU, VIJAYAWADA

DEPARTMENT OF INFORMATION TECHNOLOGY

ACADEMIC YEAR: 2020-2021

II B.TECH – SEMESTER – II **SECTION – S2**

S.NO	SUBJECT CODE	SUBJECT NAME	NAME OF THE FACULTY
1	19BS1403	Engineering Mathematics - IV (Number Theory and Cryptography)	Mr. P. RAVI PRAKASH
2	19BS1404	Life Sciences for Engineers	Ms. M. ANUPAMA AMMULU
3	19IT3401	Computer Organization and Architecture	Dr.PVS LAKSHMI
4	19IT3402	Operating Systems	Ms. V.RASHMI
5	19IT3403	Software Engineering Paradigms	Mr. CH. CHANDRA MOHAN
6	19IT3404	Design and Analysis of Algorithms	Mr. CH. PRANEETH
7	19IT3405	Programming with JAVA	Dr. Y. SURESH
8	19MC1401	Environmental Sciences	Mrs. T. PREETHI RANGAMANI
9	19BS1451	Life Sciences for Engineers Lab	Ms. M. ANUPAMA AMMULU
10	19IT3451	Design and Analysis of Algorithms Lab	Mr. CH. PRANEETH
11	19IT3452	Programming with JAVA Lab	Dr. Y.SURESH

(Dr. B.V. Subba Rao)
H.O.D
Information Technology Department
PRASAD V.POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007.

LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : 2020 – 2021 (PVP19)
Year & Semester : II B.Tech & II Semester S1
Branch : Information Technology
Subject Code & Name : 19IT3405 & SOFTWARE ENGINEERING PARADIGMS
Name of Faculty : CH. Chandra Mohan

Unit No	Topics of Syllabus to be covered	Learning outcomes	Teaching Mode	Hours Required		Total No. of Hours (Cumulative)	Expected date of completion (for each Unit) by HOD	Review/ Remarks (by HOD)
				L	T			
1	Software and Software Engineering	Knowledge Software and Software Engineering	LCD	1		1		
1	The Nature of Software	Understanding The Nature of Software	LCD	1		2		
1	The Unique Nature of Web Apps	Understanding of The Unique Nature of Web Apps	LCD	1		3		
1	Software Engineering	Understanding of Software Engineering	LCD	1		4		
1	**Tutorial**	**Tutorial**			1	5		
1	Software Process	Knowledge about Software Process	LCD	1		6		
1	Software Engineering Practice	Knowledge about Software Engineering Practice	LCD	1		7		
1	Software Myths	Knowledge about Software Myths	BB	1		8	31/3/21	
1	**Tutorial**	**Tutorial**			1	9		
1	Process Models: A Generic Process Model	Knowledge about Process Models: A Generic Process Model	LCD	1		10		
1	Defining a frame work activity	Knowledge about Defining a frame work activity	LCD	1		11		

1	The Waterfall Model ,Incremental Process Model	Understanding Prescriptive Process Models: The Waterfall Model ,Incremental Process Model	BB	1		12		
1	Evolutionary Process Model, The Unified Process	Understanding Evolutionary Process Model, The Unified Process	LCD	1		13		
1	What is an Agile Process?, XP Process	Understanding of What is an Agile Process?, XP Process	LCD	1		14	5/4/24	
1	**Tutorial**	**Tutorial**	BB		1	15		
2	Requirements Gathering and Analysis	Understanding of Requirements Gathering and Analysis	BB	1		16		
2	Software Requirement Specification (SRS):	Understanding of Software Requirement Specification (SRS):	LCD	1		17		
2	Characteristics of good SRS	Understanding of Characteristics of good SRS	BB	1		18		
2	Functional Requirements,	Knowledge about Functional Requirements,	LCD	1		19		
2	**Tutorial**	**Tutorial**			1	20		
2	**Software Design:** Overview of the Design Process	Understanding of **Software Design:** Overview of the Design Process	BB	1		21		
2	How to Characterize of a Design	Understanding of How to Characterize of a Design	LCD	1		22		
2	Cohesion and Coupling	Knowledge about Cohesion and Coupling	LCD	1		23		
2	Approaches to Software Design	Knowledge about Approaches to Software Design.	LCD	1		24	20/4/24	
2	**Tutorial**	**Tutorial**	BB		1	25		

He got Covid19 + and admitted in Hospital. So He took extra classes beyond college Hours after 6PM to complete

3	Function-Oriented Software Design: Overview of SA/SD Methodology	Knowledge about: Overview of SA/SD Methodology	BB	1		26		
3	Structured Analysis	Knowledge about Structured Analysis	BB	1		27		
3	Structured Design	Understanding of Structured Design	BB	2		29		
3	Detailed Design	Understanding of Detailed Design	LCD	1		30		
3	Design Review	Knowledge about Design Review	BB	1		31		
3	**Tutorial**	**Tutorial**	BB		1	33		
3	Characteristics of Good User Interface	Knowledge about Characteristics of Good User Interface	LCD	1		34		
3	Basic Concepts, Types of User Interfaces,	Understanding of Basic Concepts, Types of User Interfaces,	LCD	1		35		
3	A User Interface Design Methodology. Applications	A User Interface Design Methodology. Applications	LCD	1		36	10/5/24	
3	**Tutorial**	**Tutorial**			1	38		
4	Coding And Testing: Coding,	Understanding of Coding And Testing: Coding,	LCD	1		39		
4	Code Review	Understanding of Code Review	LCD	1		40		
4	Software Documentation	Knowledge about Software Documentation	BB	1		41		
4	**Tutorial**	**Tutorial**			1	42		
4	Testing	Understanding of Testing	LCD	1		43		
4	Unit Testing, Black-Box Testing	Knowledge about Unit Testing, Black-Box Testing	LCD	1		44		
4	White-Box Testing	Understanding of White-Box Testing	LCD	1		45		
4	Debugging	Understanding of Debugging	BB	1		46		

4	**Tutorial**	**Tutorial**	LCD		1	47		
4	Integration Testing,	Knowledge about Integration Testing,	BB	1		48		
4	, System Testing	Knowledge about System Testing	BB	1		49	31/5/21	
4	**Tutorial**	**Tutorial**			1	51		
4	Insert &Delete into BST	Understanding of Insert &Delete into BST	BB	1		52		
5	Software Reliability	Understanding of Software Reliability	BB	1		53		
5	Statistical Testing	Knowledge about Statistical Testing	LCD	1		54		
5	Software Quality	Understanding of Software Quality	BB	1		56		
5	Software Quality Manage ment System.	Knowledge about Software Quality Management System.	BB	1		57		
5	**Tutorial**	**Tutorial**	BB		1	58		
5	Software maintenance	Understanding of Software maintenance	BB	1		59		
5	Maintenance Process Models,	Understanding of Maintenance Process Models,	BB	1		60		
5	Maintena nce Cost.	Understanding of Maintenance Cost.	LCD	1		61		
5	What can be reused? Why almost No Reuse So Far	Knowledge on what can be reused? Why almost No Reuse So Far	LCD	1		62		
5	Basic Issues in Reuse Approach	Understanding of Basic Issues in Reuse Approach	LCD	1		63	20/6/21	

Legend: Teaching Mode

BB: Black Board / **LCD**: Power Point Presentation /**OHP**: Over Head Projector

Signature of the Faculty

Signature of the HOD

LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : 2020 – 2021 (PVP19)
Year & Semester : II B.Tech & II Semester S2
Branch : Information Technology
Subject Code & Name : 19IT3405 & SOFTWARE ENGINEERING PARADIGMS
Name of Faculty : CH. Chandra Mohan

Unit No	Topics of Syllabus to be covered	Learning outcomes	Teaching Mode	Hours Required		Total No. of Hours (Cumulative)	Expected date of completion (for each Unit) by HOD	Review/ Remarks (by HOD)
				L	T			
1	Software and Software Engineering	Knowledge Software and Software Engineering	LCD	1		1		
1	The Nature of Software	Understanding The Nature of Software	LCD	1		2		
1	The Unique Nature of Web Apps	Understanding of The Unique Nature of Web Apps	LCD	1		3		
1	Software Engineering	Understanding of Software Engineering	LCD	1		4		
1	**Tutorial**	**Tutorial**			1	5		
1	Software Process	Knowledge about Software Process	LCD	1		6		
1	Software Engineering Practice	Knowledge about Software Engineering Practice	LCD	1		7		
1	Software Myths	Knowledge about Software Myths	BB	1		8	31/3/21	
1	**Tutorial**	**Tutorial**			1	9		
1	Process Models: A Generic Process Model	Knowledge about Process Models: A Generic Process Model	LCD	1		10		
1	Defining a frame work activity	Knowledge about Defining a frame work activity	LCD	1		11		

1	The Waterfall Model ,Incremental Process Model	Understanding Prescriptive Process Models: The Waterfall Model ,Incremental Process Model	BB	1		12		
1	Evolutionary Process Model, The Unified Process	Understanding Evolutionary Process Model, The Unified Process	LCD	1		13		
1	What is an Agile Process?, XP Process	Understanding of What is an Agile Process?, XP Process	LCD	1		14	5/4/21	Covered
1	**Tutorial**	**Tutorial**	BB		1	15		
2	Requirements Gathering and Analysis	Understanding of Requirements Gathering and Analysis	BB	1		16		
2	Software Requirement Specification (SRS):	Understanding of Software Requirement Specification (SRS):	LCD	1		17		
2	Characteristics of good SRS	Understanding of Characteristics of good SRS	BB	1		18		
2	Functional Requirements,	Knowledge about Functional Requirements,	LCD	1		19		
2	**Tutorial**	**Tutorial**			1	20		
2	**Software Design:** Overview of the Design Process	Understanding of **Software Design:** Overview of the Design Process	BB	1		21		
2	How to Characterize of a Design	Understanding of How to Characterize of a Design	LCD	1		22		
2	Cohesion and Coupling	Knowledge about Cohesion and Coupling	LCD	1		23		
2	Approaches to Software Design	Knowledge about Approaches to Software Design.	LCD	1		24	20/4/21	
2	**Tutorial**	**Tutorial**	BB		1	25	Covered	

He got covid 19 + and took additional classes also on Sundays

3	Function-Oriented Software Design: Overview of SA/SD Methodology	Knowledge about: Overview of SA/SD Methodology	BB	1		26		
3	Structured Analysis	Knowledge about Structured Analysis	BB	1		27		
3	Structured Design	Understanding of Structured Design	BB	2		29		
3	Detailed Design	Understanding of Detailed Design	LCD	1		30		
3	Design Review	Knowledge about Design Review	BB	1		31		
3	**Tutorial**	**Tutorial**	BB		1	33		
3	Characteristics of Good User Interface	Knowledge about Characteristics of Good User Interface	LCD	1		34		
3	Basic Concepts, Types of User Interfaces,	Understanding of Basic Concepts, Types of User Interfaces,	LCD	1		35		
3	A User Interface Design Methodology.	A User Interface Design Methodology. Applications	LCD	1		36	10/5/21	
3	**Tutorial**	**Tutorial**			1	38		
4	Coding And Testing: Coding,	Understanding of Coding And Testing: Coding,	LCD	1		39		
4	Code Review	Understanding of Code Review	LCD	1		40		
4	Software Documentation	Knowledge about Software Documentation	BB	1		41		
4	**Tutorial**	**Tutorial**			1	42		
4	Testing	Understanding of Testing	LCD	1		43		
4	Unit Testing, Black-Box Testing	Knowledge about Unit Testing, Black-Box Testing	LCD	1		44		
4	White-Box Testing	Understanding of White-Box Testing	LCD	1		45		
4	Debugging	Understanding of Debugging	BB	1		46		

LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : **2021**
Year & Semester : **2/4 B.Tech. Fourth SEMESTER** - Section – 1
Branch : **~~ECE~~ / IT**
Subject Code & Name : **19BS1404/Life sciences for Engineers**
Name of Faculty : Manne Anupama Ammulu

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode BB/ LCD/ OHP.	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				Lecture	Tutorial			
Unit -1	Introduction to Biology	Student able to know about the importance of life sciences	**Offline**	**1**				
	Comparison of Biological organisms with manmade systems- eye and camera, flying bird and aircraft.	Comparison of Biological organisms with manmade systems- eye and camera, flying bird and aircraft.	**Offline**	**1**		2		
	Classification of living organisms- Cellular basis of life	Classification of living organisms- Cellular basis of life	**Offline**	**1**		3		
	differences between prokaryotes and eukaryotes	To know about the differences between prokaryotes and eukaryotes	**Offline**	**1**		**4**		
	classification on the basis of carbon sources	Student able to know about the classification on the basis of carbon sources	**Offline**	**1**		**5**		

	classification on the basis of energy sources	Student able to know about the classification on the basis of energy sources	**Offline**	**1**		**6**	8/4/21	
Unit -2	**Introduction to Bio-molecules**	Gain the knowledge of biomolecules	**Offline**	**1**		**7**		
	Structure and functions of proteins	Student able to know about the Structure and functions of proteins	**Offline**	**1**		**8**		
	Structure and functions of proteins keratin and fibrinogen	To learning about different protein structures	**Offline**	**1**		**9**		
	Structure nucleic acids	Understanding the structure of nucleic acids	**Offline**	**1**		**10**		
	Structure of hemoglobin	Student able to know about the Structure of hemoglobin	**Offline**	**1**		**11**		
	Structure and functions of antibodies	Student able to know about the Structure and functions of antibodies	**Offline**	**1**		**12**		
	.Enzymes-Industrial applications, Fermentation and its industrial applications	Gain the knowledge of enzymes and its applications and the process of fermentation and its applications	**Offline**	**1**		**13**	5/5/21	
Unit -3	Introduction to Bioenergetics and Respiration	Student able to gain he knowledge of Bioenergetics	**Offline**	**1**		**14**		
	Process of Glycolysis	Understanding the Process of Glycolysis	**Offline**	**1**		**15**		
	Process of TCA cycle	To learning about the process of TCA cycle	**Offline**	**1**		**16**		
	Electron transport chain and oxidative phosphorylation	Gain the knowledge of Electron transport chain and oxidative phosphorylation	**Offline**	**1**		**17**		
	Mechanism of photosynthesis	Understanding the mechanism of photosynthesis	**Offline**	**1**		**18**		

	Human physiology.	To learning about human physiology	**Offline**	**1**		**19**	20/5/21	
Unit -4	GeneticEngineering: Mendel's laws	Student able to gain the knowledge of mendal's laws	**Offline**	**1**		**20**		
	gene mapping	To know the concept of gene mapping	**Offline**	**1**		**21**		
	Mitosis	To understand the different stages of mitosis	**Offline**	**1**		**22**		
	Meiosis, Epistasis	To understand the different stages of meiosis	**Offline**	**1**		**23**		
	single gene disorders in humans	To learning about single gene disorders in humans	**Offline**	**1**		**24**		
	Genetic code.	To know the concept of genetic code	**Offline**	**1**		**25**	10/6/21	
Unit -5	Recombinant DNA Technology: Recombinant vaccines,	Student able to lean about Recombinant vaccines	**Offline**	**1**		**26**		
	transgenic microbes	To learning about transgenic microbes	**Offline**	**1**		**27**		
	Transgenic plants and animals	Gain the knowledge of Transgenic plants and animals	**Offline**	**2**		**28**		
	Animal cloning,	To know the concept of animal cloning	**Offline**	**1**		**30**		
	Biosensors	Student able to learn different types biosensors	**Offline**	**1**		**31**		
	Biochips	To know about biochips	**Offline**	**1**		**32**	29/6/21	

Legend: Teaching Mode

BB: Black Board / **LCD**: Power Point Presentation / **OHP**: Over Head Projector / **Offline**

Signature of the Faculty

Signature of the HOD

Date:

LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : **2021**
Year & Semester : **2/4 B.Tech. Fourth SEMESTER section_1**
Branch : **ECE / IT**
Subject Code & Name : **19BS1451/Life sciences for Engineers Lab**
Name of Faculty : Manne Anupama Anmulu

Experiment No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode BB/ LCD/ OHP.	Hours Required	Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
	Basic concepts	Student able to gain the knowledge of different equipment present in the lab	**Offline**	2			
1	Microscopy	Student able to learn the working of microscope	**Offline**	2	4	27/3/21	
2	Dissect & mount different parts of plants using Microscope	Student able to observe different plant parts under microscope	**Offline**	2	6	15/4/21	
3	Estimation of Proteins by using Biuret method	Gain the knowledge of concentration of proteins by using biurite method	**Offline**	2	8	30/4/21	

PVP SIDDHARTHA INSTITUTE OF TECHNOLOGY

PROCESS RECORD FOR ACADEMICS

LESSON PLAN

Engineering Mathematics IV
(Number Theory and Cryptography)

Academic Year : 2020-2021
Year & Semester : II B.TECH & II SEM S2
Branch : INFORMATION TECHNOLOGY
Subject Code & Name : 19BS1403 & Engineering Mathematics IV (Number Theory and Cryptography)
Name of Faculty : Mr.B.AJAY KUMAR

Unit No	Topic of Syllabus to be covered	Learning outcomes	Teaching mode	Hours Required	Total no. of Hours (Cumulative)	Expected date of completion (for each unit) By HOD	Review / Remarks(By HOD)
I	Introduction to Number Theory	Know the Importance of Number Theory	BB	1	1		
I	Divisibility and the Division Algorithm	Understand the Concept of Divisibility and the Division Algorithm	BB	1	2		
I	The Euclidean Algorithm	Understand the Concept of The Euclidean Algorithm	BB	1	3		
I	Modular arithmetic	Understand the Concept of Modular arithmetic	BB	1	4		
I	Prime numbers	Understand the Concept of Prime numbers	BB	1	5	31/3/21	
I	Fermat's Theorem and Euler's Theorems	Understand the Concepts of Fermat's Theorem and Euler's Theorems	BB	2	7		
I	Testing for Primality	Understand the Concept of Testing for Primality	BB	1	8		
I	The Chinese Remainder Theorem	Understand the Concept of the Chinese Remainder Theorem	BB	1	9		
I	Discrete Logarithms	Understand the Concept of Discrete Logarithms	BB	1	10		
II	Introduction to Cryptography	Get the Knowledge on Cryptography	LCD	1	11		
II	Symmetric Cipher Model	Get the Knowledge on Symmetric Cipher Model	LCD	1	12		

II	Substitution Techniques-Caesar Cipher	Get the Knowledge on Caesar Cipher	LCD	1	13		
II	Monoalphabetic Cipher: Playfair	Get the Knowledge on Playfair	LCD	1	14		
II	Hill Ciphers	Get the Knowledge on Hill Ciphers	LCD	1	15		
II	Polyalphabetic Ciphers	Get the Knowledge on Polyalphabetic Ciphers	LCD	1	16	30/4/14	
II	Onetime Pad	Get the Knowledge on Onetime Pad	LCD	1	17		
II	Transposition Techniques	Get the Knowledge on Transposition Techniques	LCD	1	18		
III	Block Ciphers	Get the Knowledge on Block Ciphers	LCD	1	19		
III	Traditional Block Cipher Structure	Get the Knowledge on Traditional Block Cipher Structure	LCD	2	21		
III	The Data Encryption Standard	Get the Knowledge on The Data Encryption Standard	LCD/VL	2	23		
III	Advanced Encryption Standard	Get the Knowledge on Advanced Encryption Standard	LCD	2	25		
III	Block Cipher modes of operations	Get the Knowledge on Block Cipher modes of operations	LCD	1	26		
IV	Public Key Cryptography	Learn the Principles of Public Key Cryptography	LCD	1	27		
IV	Principles of Public-Key Cryptosystems	Learn the Principles of Public Key Cryptography	LCD	2	29		
IV	The RSA Algorithm	Learn the Principles of Public Key Cryptography	LCD	1	30		
IV	Diffie-Hellman Key Exchange- The Algorithm,	Learn the Principles of Public Key Cryptography	LCD/VL	1	31	2/5/14	
IV	Key Exchange Protocols	Learn the Principles of Public Key Cryptography	LCD	1	32		
IV	Man-in-the-Middle Attack	Learn the Principles of Public Key Cryptography	LCD	1	33		
V	Cryptographic Hash Functions	Make Use of Cryptographic Hash Functions	LCD	1	34		
V	Applications of Cryptographic Hash Functions	Make Use of Cryptographic Hash Functions	LCD	1	35		
V	Two Simple Hash Functions	Make Use of Hash Functions	LCD	1	36		

PVP SIDDHARTHA INSTITUTE OF TECHNOLOGY

PROCESS RECORD FOR ACADEMICS

V	Message Authentication Requirements	Make Use of Message Authentication	LCD	1	37		
V	Message Authentication Functions	Make Use of Authentication Functions	LCD	1	38		
V	MACs based on Hash functions: HMAC	Make Use of HMAC	LCD	1	39		
	Revision		BB	1	40	30/6	

Legend: Teaching mode

BB: Black Board LCD: Power Point Presentation(online) VL:Video Lesson

L: Lecture Hours

Signature of Faculty

Signature of HOD

LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : **2020 -2021**
Year & Semester : **II B.Tech, II Semester, Section - I**
Branch : **Information Technology**
Subject Code & Name : **19IT3404, DESIGN AND ANALYSIS OF ALGORITHMS**
Name of Faculty : **Ch. Praneeth**

Unit No	Topics of Syllabus to be covered	Learning outcomes	Teaching Mode	Hours Required (L)	Total Hours (Cumulative)	Expected date of completion (for each Unit) by HOD	Review /Remarks (by HOD)
I	INTRODUCTION: Notion of Algorithm	Understanding basic features of algorithms	PPT	2	2		
I	Analysis framework	Analyzes the efficiency of the algorithm	PPT	1	3		
I	Asymptotic Notations	Various asymptotic notations to analyze complexity	PPT	2	5		
I	Basic Efficiency Classes	Standard notations to express complexity factor	PPT	1	6		
I	Introduction to Brute force Technique	Understanding brute force approach	PPT	2	8		
I	Exhaustive Search	Understanding Exhaustive search Method	PPT	2	10	3/4/21	
II	Divide and Conquer: Introduction	Understanding divide and conquer	PPT	1	11		
II	Merge sort	how to perform merge sort	BB	1	12		
II	Quick sort	how to perform quick sort	BB	1	13		
II	Strassen's Matrix Multiplication.	Multiplying two matrices	PPT	1	14	14/4/21	
III	GREEDY TECHNIQUE: Introduction	Basics of greedy method	PPT	1	15		
III	Huffman Trees and codes	Huffman trees construction and	BB	1	16		

Covered

		obtaining Huffman codes					
III	Minimum Coin change problem	To find the min no .of coins required for given amount	PPT	1	17		
III	knapsack problem	To find the valuable subset of items in a knapsack	PPT	2	19		
III	Job sequencing with deadlines	to find job sequences gives maximum profit	BB	1	20		
III	Minimum Cost Spanning Trees	To find a minimal spanning tree	BB	1	21		
III	Single source shortest path	Single source shortest path problem	BB	1	22	13/5/21	
IV	Dynamic Programming: Introduction	Understand the basic method of DP	PPT	1	23		
IV	0/1 knapsack problem	To find the optimal subset of items in a knapsack	PPT	2	25		
IV	All Pairs Shortest Paths	Finding all pairs shortest paths	BB	1	26		
IV	Optimal Binary Search Trees	Finding the optimal binary tree using dynamic programming	PPT	2	28		
IV	Travelling Sales Person Problem	Finding optimal tour minimum cost	PPT	2	30	4/6/21	Covered
V	Back Tracking: Introduction	Basics of back tracking method	PPT	1	31		
V	n- Queens problem	Solving queens problem	PPT	1	32		
V	Sum of subsets	Finding the different subsets which gives the resultant value	BB	1	33		
V	Hamiltonian cycle	Finding the Hamiltonian cycle of a graph	PPT	1	34		
V	Branch and Bound: Introduction	Basics of branch & bound method	PPT	1	35		
V	Assignment Problem	Finding minimum cost	PPT	1	36		

		assignment					
V	Traveling Sales Person Problem	Finding minimum tour cost using B&B method	BB	1	37		
V	Introduction to complexity classes	Basics of Complex problem analysis	BB	1	38		
V	P and NP problems	Types of P and NP problems	PPT	1	39		
V	NP – Complete Problems	What is NP-Completeness	PPT	2	41	26/6/21	

41 Syl Completed

Legend: Teaching Mode
BB: Black Board / **PPT**: Power Point Presentation

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LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : **2020 -2021**
Year & Semester : **II B.Tech , II Semester, Section I**
Branch : **Information Technology**
Subject Code & Name : **19IT3451, Design and Analysis of Algorithms Lab**
Name of Faculty : **Ch.Praneeth**

S.No	Experiment Name	Hours Required	Total number of hours required	Expected date of completion (for each unit) by HOD	Review / Remarks (by HOD)
1	Develop and implement an algorithm using Divide and Conquer strategy for a given set of problems.	2	2	30/3/21	
2	Make use of Greedy method to implement a solution for a given problem.	2	4	6/4/21	
3	Develop and implement an efficient solution using Dynamic Programming.	4	8	20/4/21	
4	Use Backtracking design technique to implement a solution for a given problem.	4	12	4/5/21	Completed
5	Develop and implement an algorithm using Branch and Bound technique for solving a given problem.	2	14	11/6/21	
6	Case Study-1: Apply the most appropriate design technique to develop and implement efficient solution for a given problem.	2	16	18/6/21	
7	Case Study-2: Develop and implement an optimal solution for a given problem by applying a suitable design technique.	2	18	25/6/21	
8	Internal Assessment	2	20	31/6/21	Completed

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LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : **2020 -2021**
Year & Semester : **II B.Tech, II Semester, Section - II**
Branch : **Information Technology**
Subject Code & Name : **19IT3404, DESIGN AND ANALYSIS OF ALGORITHMS**
Name of Faculty : **Dr. Y.Padma**

Unit No	Topics of Syllabus to be covered	Learning outcomes	Teaching Mode	Hours Required (L)	Total Hours (Cumulative)	Expected date of completion (for each Unit) by HOD	Review /Remarks (by HOD)
I	INTRODUCTION: Notion of Algorithm	Understanding basic features of algorithms	PPT	2	2		
I	Analysis framework	Analyzes the efficiency of the algorithm	PPT	1	3		
I	Asymptotic Notations	Various asymptotic notations to analyze complexity	PPT	2	5		
I	Basic Efficiency Classes	Standard notations to express complexity factor	PPT	1	6		
I	Introduction to Brute force Technique	Understanding brute force approach	PPT	2	8		
I	Exhaustive Search	Understanding Exhaustive search Method	PPT	2	10	3/4/21	
II	Divide and Conquer: Introduction	Understanding divide and conquer	PPT	1	11		
II	Merge sort	how to perform merge sort	BB	1	12		
II	Quick sort	how to perform quick sort	BB	1	13		
II	Strassen's Matrix Multiplication.	Multiplying two matrices	PPT	1	14	14/4/21	
III	GREEDY TECHNIQUE: Introduction	Basics of greedy method	PPT	1	15		
III	Huffman Trees and codes	Huffman trees construction and	BB	1	16		

		obtaining Huffman codes					
III	Minimum Coin change problem	To find the min no .of coins required for given amount	PPT	1	17		
III	knapsack problem	To find the valuable subset of items in a knapsack	PPT	2	19		
III	Job sequencing with deadlines	to find job sequences gives maximum profit	BB	1	20		
III	Minimum Cost Spanning Trees	To find a minimal spanning tree	BB	1	21		
III	Single source shortest path	Single source shortest path problem	BB	1	22	13/5/21	
IV	Dynamic Programming: Introduction	Understand the basic method of DP	PPT	1	23		
IV	0/1 knapsack problem	To find the optimal subset of items in a knapsack	PPT	2	25		
IV	All Pairs Shortest Paths	Finding all pairs shortest paths	BB	1	26		
IV	Optimal Binary Search Trees	Finding the optimal binary tree using dynamic programming	PPT	2	28		
IV	Travelling Sales Person Problem	Finding optimal tour minimum cost	PPT	2	30	4/6/21	
V	Back Tracking: Introduction	Basics of back tracking method	PPT	1	31		
V	n- Queens problem	Solving queens problem	PPT	1	32		
V	Sum of subsets	Finding the different subsets which gives the resultant value	BB	1	33		
V	Hamiltonian cycle	Finding the Hamiltonian cycle of a graph	PPT	1	34		
V	Branch and Bound: Introduction	Basics of branch & bound method	PPT	1	35		
V	Assignment Problem	Finding minimum cost	PPT	1	36		

		assignment					
V	Traveling Sales Person Problem	Finding minimum tour cost using B&B method	BB	1	37		
V	Introduction to complexity classes	Basics of Complex problem analysis	BB	1	38		
V	P and NP problems	Types of P and NP problems	PPT	1	39		
V	NP – Complete Problems	What is NP-Completeness	PPT	2	41	26/5/21	

41 completed

Legend: Teaching Mode

BB: Black Board / **PPT**: Power Point Presentation

19/3/21

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LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : **2020 -2021**
Year & Semester : **II B.Tech , II Semester, Section II**
Branch : **Information Technology**
Subject Code & Name : **19IT3451, Design and Analysis of Algorithms Lab**
Name of Faculty : **Dr.Y.Padma**

S.No	Experiment Name	Hours Required	Total number of hours required	Expected date of completion (for each unit) by HOD	Review / Remarks (by HOD)
1	Develop and implement an algorithm using Divide and Conquer strategy for a given set of problems.	2	2	30/3/21	
2	Make use of Greedy method to implement a solution for a given problem.	2	4	6/4/21	
3	Develop and implement an efficient solution using Dynamic Programming.	4	8	20/4/21	S/I covered
4	Use Backtracking design technique to implement a solution for a given problem.	4	12	4/5/21	
5	Develop and implement an algorithm using Branch and Bound technique for solving a given problem.	2	14	11/6/21	
6	Case Study-1: Apply the most appropriate design technique to develop and implement efficient solution for a given problem.	2	16	18/6/21	
7	Case Study-2: Develop and implement an optimal solution for a given problem by applying a suitable design technique.	2	18	25/6/21	Covered
8	Internal Assessment	2	20	31/6/21	

24 (28)

S/I Completed

Y. Padma 19/3/21
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LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : 2020-2021
Year & Semester : II B. Tech II Semester
Branch : Information Technology – Section I
Subject Code & Name : 19IT3405 & Programming with JAVA
Name of Faculty : Dr. Y Suresh

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode BB/ LCD/ OHP.	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review / Remarks (By HOD)
				L	T			
I	**Java Evolution & Environment:** History and Evaluation of Java, Overview of Java language,	Need of JAVA	LCD	1		1		
I	Java's magic code: Byte code, Java Buzzwords, Three OOP principles, simple program.	Understanding the importance of Java	LCD	2		3		
I	**Java programming environment**: Data types, variables and Arrays	Understanding the basics in JAVA	LCD	1		4		
I	Operators	Understanding the basics in JAVA	LCD	1		5		
I	Arrays	Understanding the basics in JAVA	LCD	1		6		
I	Control statements	Understanding the programming concepts in JAVA	Flipped Class room	1		7		
I	**Classes, Objects and Methods:** Introduction, defining a class, declaring objects returning a value	Overview on class and object creation	LCD	2		9		
I	assigning object reference variables, introducing methods, accessing class members	Understanding the importance of Access Control	LCD	1		10		
I	returning a value, constructors, parameterized constructors	Importance of constructors in JAVA	LCD	1		11		
I	this keyword, garbage collection, overloading constructors and methods, recursion	Compile time binding	LCD	1		12		
I	Understanding static, introducing final, Using command line arguments.	Use of static	LCD	1		13	10/4/21	

II	**Strings:** String, StringBuffer and StringTokenizer classes.	Use of String classes	LCD	1		14		
II	**Basic I/O:** DataInputStream, DataOutputStream, BufferedReader, InputStreamReader, Scanner classes.	Overview of stream classes , scanner class	LCD	2		16		
II	**Inheritance:** Basics, Using super, creating multilevel hierarchy, order of constructor execution	Understanding the basics of Inheritance	Flipped Class room	1		17		
II	Dynamic method dispatch, applying method overriding, Abstract classes, Using final with inheritance, The Object class.	Understand the concepts dynamic method dispatch, abstract classes, final keyword and the object class	LCD	3		20		
II	**Interfaces:** method overriding, dynamic method dispatch, applying method overridden	Overview on interfaces and their implementation	LCD	2		22		
II	**Interfaces:** Introduction, defining an interface, implementing interfaces. Accessing interfaces through interface references	Understanding the need of interfaces in JAVA	LCD	2		24		
II	Nested interfaces, variables in interfaces, interfaces can be extended.	Understanding the need of interfaces in JAVA	LCD	2		26	30/4/21	
III	**Package:** Defining a package, CLASSPATH, Packages and member access, importing packages.	Understanding creating and importing packages	LCD	2		28		
III	**Exception Handling:** Fundamentals, types, uncaught exceptions, using try and catch, multiple catch clauses	Overview on Exception Handling Mechanism	LCD	1		29		
III	Usage of try, catch, throw, throws and finally	Overview on implementing Exceptions	LCD	1		30		
III	Built-in exceptions, creating your own exception subclasses.	Creating customized exceptions	LCD	1		31		
III	**Multi Threaded programming:** Thread model, Creating a Thread: implementing runnable, extending Thread	Need of threads	LCD	1		32		

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III	Creating multiple threads, using isAlive() and join()	Creation of multithreading	LCD	1		33		
III	Thread Priorities, synchronization	Need of synchronization	LCD	1		34	20/5	
IV	**Event handling:** Event handling mechanisms, delegation event model, Event classes	Overview on Events handling mechanism and processing of mouse and keyboard events	LCD	2		36		
IV	sources of events, event listener interfaces		LCD	1		37		
IV	Handling mouse and keyboard events		LCD	1		38		
IV	Adapter classes, inner class		LCD	1		39		
IV	**Graphics Programming with AWT**: Introduction, abstract window toolkit classes, Window fundamentals.	Creation of GUIs using AWT	LCD	1		40		
IV	**AWT controls:** AWT Control fundamentals - labels, buttons, check boxes, choice lists, lists, scroll bars, text field, text area, layout managers	Creation of GUIs using AWT controls	LCD	2		42	8/6/21	
V	**Swing:** Origins, key features, MVC connection, Components and Containers	Knowledge on Swings	LCD	2		44		
V	**Exploring Swing-** JLabel, JTextField, JButton, JCheckBox, JRadioButton, JList, JComboBox.	Creation of GUIs using Swing controls	LCD	2		46		
V	**Applets:** Two types of Applets, The Applet Class, Applet Architecture, An Applet Skelton, Swing Applets.	Getting knowledge on Applets	LCD	2		48	26/6/21	

Legend: Teaching Mode
BB: Black Board / LCD: Power Point Presentation / OHP: Over Head Projector

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LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : 2020-2021
Year & Semester : II B. Tech II Semester Section - I
Branch : Information Technology
Subject Code & Name : 19IT3454, Programming with JAVA Lab
Name of Faculty : Dr Y Suresh

S.No	Experiment Name	Hours Required	Total number of hours required	Expected date of completion (for each unit) By HOD	Review / Remarks (By HOD)
1	Practicing Simple Programs, Installing and Understanding the use of CLASSPATH, Setting environment variables.	3	3	1/4/21	
2	**Exercise 1** a. Java Program to print largest of three numbers b. Java program to calculate sum of all the numbers divisible by 3 from 1 to n. Print the sum. c. Write a Java program to calculate the sum of first "n" even integer numbers and "n" odd integer numbers excluding 0; d. Write a Java program to read the size of an array from keyboard. You have to initialize the integer array and insert the elements into it. You have to find the minimum number in that array and print the same. e. Write a Java program to find the average of all odd numbers present in the array and print the same.	3	6	15/4/21	
3	**Exercise 2** Implement the programs by using the concepts of a. returning value from a method b. constructors c. overloading methods d. overloading constructors e. passing objects as a parameters.	3	9	21/4/21	

4	**Exercise 3** Develop applications using the concepts of a. String class and its methods b. String Buffer and its methods c. StringTokenizer and its methods	3	12	29/4/21	
5	**Exercise 4** Implement the programs by using the concepts of a. Method overriding b. dynamic method dispatch c. Abstract class d. Using final in inheritance	3	15	6/5/21	
6	**Exercise 5** Implement the programs by using the concepts of a. Implementing interfaces b. Nested interfaces c. Interface references d. Extending interfaces	3	18	13/5/21	
7	**Exercise 6** A. Create a user defined package and demonstrate different ways of importing packages. B. Implement the programs by using the concepts of a. multiple catch clauses b. finally c. Creating user defined exceptions	3	21	20/5/21	
8	**Exercise 7** Implement the programs using a. Creating threads (two –ways) b. Creation of multiple threads c. Thread synchronization	3	24	27/6/21	
9	**Exercise 8** Develop applications that demonstrate by using a. Key board event handling b. Mouse event handling	3	27	3/6/21	
10	**Exercise 9** Develop applications by using AWT controls a. Buttons b. TextField and TextArea c. GridLayoutManager	3	30	10/6/21	

11	**Exercise 10** Develop applications by using Swing components a. JLabel b. JTextField c. JButton d. JComboBox	3	33	12/6/21	
12	Internal Exam	3	36	24/6/21	

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LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : 2020-2021
Year & Semester : II B. Tech II Semester
Branch : Information Technology – Section II
Subject Code & Name : 19IT3405 & Programming with JAVA
Name of Faculty : **Mrs.J.Sirisha**

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode BB/ LCD/ OHP.	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review / Remarks (By HOD)
				L	T			
I	**Java Evolution & Environment:** History and Evaluation of Java, Overview of Java language,	Need of JAVA	LCD	1		1		
I	Java's magic code: Byte code, Java Buzzwords, Three OOP principles, simple program.	Understanding the importance of Java	LCD	2		3		
I	**Java programming environment**: Data types, variables and Arrays	Understanding the basics in JAVA	LCD	1		4		
I	Operators	Understanding the basics in JAVA	LCD	1		5		
I	Arrays	Understanding the basics in JAVA	LCD	1		6		
I	Control statements	Understanding the programming concepts in JAVA	Flipped Class room	1		7		
I	**Classes, Objects and Methods:** Introduction, defining a class, declaring objects returning a value	Overview on class and object creation	LCD	2		9		
I	assigning object reference variables, introducing methods, accessing class members	Understanding the importance of Access Control	LCD	1		10		
I	returning a value, constructors, parameterized constructors	Importance of constructors in JAVA	LCD	1		11		
I	this keyword, garbage collection, overloading constructors and methods, recursion	Compile time binding	LCD	1		12		
I	Understanding static, introducing final, Using command line arguments.	Use of static	LCD	1		13	10/4/21	

	Strings: String, StringBuffer and StringTokenizer classes.	Use of String classes	LCD	1		14		
II	**Basic I/O:** DataInputStream, DataOutputStream, BufferedReader, InputStreamReader, Scanner classes.	Overview of stream classes , scanner class	LCD	2		15 16		
II	**Inheritance:** Basics, Using super, creating multilevel hierarchy, order of constructor execution	Understanding the basics of Inheritance	Flipped Class room	1		17		
II	Dynamic method dispatch, applying method overriding, Abstract classes, Using final with inheritance, The Object class.	Understand the concepts dynamic method dispatch, abstract classes, final keyword and the object class	LCD	3		20		
II	**Interfaces:** method overriding, dynamic method dispatch, applying method overridden	Overview on interfaces and their implementation	LCD	2		22		
II	**Interfaces:** Introduction, defining an interface, implementing interfaces. Accessing interfaces through interface references	Understanding the need of interfaces in JAVA	LCD	2		24		
II	Nested interfaces, variables in interfaces, interfaces can be extended.	Understanding the need of interfaces in JAVA	LCD	2		26	30/4/21	
III	**Package:** Defining a package, CLASSPATH, Packages and member access, importing packages.	Understanding creating and importing packages	LCD	2		28		
III	**Exception Handling:** Fundamentals, types, uncaught exceptions, using try and catch, multiple catch clauses	Overview on Exception Handling Mechanism	LCD	1		29		
III	Usage of try, catch, throw, throws and finally	Overview on implementing Exceptions	LCD	1		30		
III	Built-in exceptions, creating your own exception subclasses.	Creating customized exceptions	LCD	1		31		
III	**Multi Threaded programming:** Thread model, Creating a Thread: implementing runnable, extending Thread	Need of threads	LCD	1		32		

	Creating multiple threads, using isAlive() and join()	Creation of multithreading	LCD	1		33		
III	Thread Priorities, synchronization	Need of synchronization	LCD	1		34		
IV	**Event handling:** Event handling mechanisms, delegation event model, Event classes	Overview on Events handling mechanism and processing of mouse and keyboard events	LCD	2		36		
IV	sources of events, event listener interfaces		LCD	1		37		
IV	Handling mouse and keyboard events		LCD	1		38		
IV	Adapter classes, inner class		LCD	1		39		
IV	**Graphics Programming with AWT**: Introduction, abstract window toolkit classes, Window fundamentals.	Creation of GUIs using AWT	LCD	1		40		
IV	**AWT controls:** AWT Control fundamentals - labels, buttons, check boxes, choice lists, lists, scroll bars, text field, text area, layout managers	Creation of GUIs using AWT controls	LCD	2		42	8/6/21	
V	**Swing:** Origins, key features, MVC connection, Components and Containers	Knowledge on Swings	LCD	2		44		
V	**Exploring Swing-** JLabel, JTextField, JButton, JCheckBox, JRadioButton, JList, JComboBox.	Creation of GUIs using Swing controls	LCD	2		46		
V	**Applets:** Two types of Applets, The Applet Class, Applet Architecture, An Applet Skelton, Swing Applets.	Getting knowledge on Applets	LCD	2		48	26/6/21	

Legend: Teaching Mode
BB: Black Board / LCD: Power Point Presentation / OHP: Over Head Projector

55 S4/completed

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LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : 2020-2021
Year & Semester : II B. Tech II Semester Section - II
Branch : Information Technology
Subject Code & Name : 19IT3454, Programming with JAVA Lab
Name of Faculty : Mrs J Sirisha

S.No	Experiment Name	Hours Required	Total number of hours required	Expected date of completion (for each unit) By HOD	Review / Remarks (By HOD)
1	Practicing Simple Programs, Installing and Understanding the use of CLASSPATH, Setting environment variables.	3	3	3/3/21	
2	**Exercise 1** a. Java Program to print largest of three numbers b. Java program to calculate sum of all the numbers divisible by 3 from 1 to n. Print the sum. c. Write a Java program to calculate the sum of first "n" even integer numbers and "n" odd integer numbers excluding 0; d. Write a Java program to read the size of an array from keyboard. You have to initialize the integer array and insert the elements into it. You have to find the minimum number in that array and print the same. e. Write a Java program to find the average of all odd numbers present in the array and print the same.	3	6	7/4/21	
3	**Exercise 2** Implement the programs by using the concepts of a. returning value from a method b. constructors c. overloading methods d. overloading constructors e. passing objects as a parameters.	3	9	29/4/21	

4	**Exercise 3** Develop applications using the concepts of a. String class and its methods b. String Buffer and its methods c. StringTokenizer and its methods	3	12	6/5/21	Covered
5	**Exercise 4** Implement the programs by using the concepts of a. Method overriding b. dynamic method dispatch c. Abstract class d. Using final in inheritance	3	15	13/5/21	
6	**Exercise 5** Implement the programs by using the concepts of a. Implementing interfaces b. Nested interfaces c. Interface references d. Extending interfaces	3	18	13/5/21	
7	**Exercise 6** A. Create a user defined package and demonstrate different ways of importing packages. B. Implement the programs by using the concepts of a. multiple catch clauses b. finally c. Creating user defined exceptions	3	21	20/5/21	
8	**Exercise 7** Implement the programs using a. Creating threads (two –ways) b. Creation of multiple threads c. Thread synchronization	3	24	27/6/21	Covered
9	**Exercise 8** Develop applications that demonstrate by using a. Key board event handling b. Mouse event handling	3	27	3/6/21	
10	**Exercise 9** Develop applications by using AWT controls a. Buttons b. TextField and TextArea c. GridLayoutManager	3	30	10/6/21	

11	**Exercise 10** Develop applications by using Swing components a. JLabel b. JTextField c. JButton d. JComboBox	3	33	17/6/21	
12	Internal Exam	3	36	24/6/21 completed	

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LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : **2020 – 21**
Year & Semester : **2/1I B.Tech. fourth SEMESTER section_I**
Branch : **ECE/IT/EEE**
Subject Code & Name : **19MC1401/ ENVIRONMENTAL SCIENCES**
Name of Faculty : **S.Lakshmi Tulasi**

Unit no	Topic of the syllabus To be covered	Learning outcomes	Teaching mode	Hours Required		Total No of Hours (cumulative)	Expected Date of completion	Review remarks By HOD
				L	T			
1	A) Introduction to environment: Definition scope importance need for public awareness Natural Resources :Renewable and non-renewable resources – Natural resources and associated problems – Forest resources – Use and over – exploitation, deforestation, case studies – Timber extraction – Mining, dams and other effects on forest and tribal people .	Student able to know about the importance of environment Renewable and non-renewable resources – Natural resources and associated problems – Forest resources.		2		2		
	Water resources - Use and over utilization of surface and ground water – Floods, drought, conflicts over water, dams – benefits and problems.	Learning about Water resources		1		3		

	Mineral resources: Use and exploitation problems, environmental effects of extracting and using mineral resources, case studies.	Student able to Analyze Mineral resources		1		4		
	Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies	Understanding Food resources		1		5		
	Energy resources: Growing energy needs, renewable and non-renewable energy sources use of alternate energy sources. Case studies.	To know about Energy resources		2		7	9/4/2021	
2	A)ECOSYSTEMS :the Scope and importance, Concept of an ecosystem. - Structure and function of an ecosystem. - Producers, consumers and decomposers. -	Student able to know about Concept of an ecosystem Structure and function of an ecosystem		1		8		
	Energy flow in the ecosystem - Ecological succession. - Food chains, food webs and ecological succession	To understand Energy flow in the ecosystem -		2		10		
	Biogeochemical cycle: Nitrogen, carbon, Phosphorus cycle.	Student able to know about Concept of Biogeochemical cycle		1		11		
	Biodiversity and its conservation : genetic, species and ecosystem diversity. Bio-geographical classification of India, India as a mega-diversity nation, Hot-sports of biodiversity	Student able to Analyze Biodiversity and its conservation		1		12		
	Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic, option values and ecosystem service values	To learning about the Value of biodiversity		1		13		

	Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts. Endangered and endemic species of India	To understand the Threats to biodiversity- Endangered and endemic species of India		1		14		
	Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.	To know Conservation of biodiversity		1		15	30/4/202	
3	**Environmental Pollution** : the Cause, effects and control measures of: Air pollution	Student able to analyze the Cause, effects and control measures of different pollutions		1		21		
	Water pollution			1				
	Soil pollution			1				
	Marine pollution			1				
	Noise pollution			1				
	. Thermal pollution Nuclear hazards			1				
	Solid waste Management :Solid waste Management classification and characters of solid waste, factors affecting waste generation, collection and disposal of solid waste.	To understanding the different Solid waste Management plans		2		24		
	E-waste and management, pollution case studies			1			19/5/202	
4	Social issues and global environment problems and efforts From Unsustainable to Sustainable development. Urban problems related to energy.,			3		27		

	Water conservation, rain water harvesting, watershed management, Remote sensing and GIS methods.	To know the environment management plans and Global Environmental problems and Global efforts		2		31		
	Environmental ethics: Issues and possible solutions. Green building concept			1				
	Environmental Impact Assessment Environmental Management Plan, Climate change: global warming, acid rain, ozone layer depletion.			1			18/6/2021	
5	Human population and environment legislation:Population growth,. Environment and human health.	To know about Sustainable development, Population and its explosion, Role of IT in Environment and human health. Value Education Environmental ethics		2		33		
	HIV/AIDS,. Value Education. Women and Child Welfare.			1		34		
	Role of Information Technology in Environment and human health.			1		35		
	Environment Legislation. Air (Prevention and Control of Pollution) Act. Water (Prevention and Control of Pollution) Act.	To learn about Environmental Laws		2		37		
	Wildlife Protection Act. Forest Conservation Act. Environmental Protection Act.	To understanding the different acts		1		38	30/6/2021	

Legend: Teaching Mode
BB: Black Board / **LCD**: Power Point Presentation / **OHP**: Over Head Projector / Online

Signature of the Faculty

Date:

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HEAD
Information Technology Department
PRASAD V.POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007.

PVP SIDDHARTHA INSTITUTE OF TECHNOLOGY

PROCESS RECORD FOR ACADEMICS

LESSON PLAN

Engineering Mathematics IV
(Number Theory and Cryptography)

Academic Year : 2020-2021
Year & Semester : II B.TECH & II SEM S1&S2
Branch : INFORMATION TECHNOLOGY
Subject Code & Name : 19BS1403 & Engineering Mathematics IV (Number Theory and Cryptography)
Name of Faculty : Mr.P.RAVI PRAKASH

Unit No	Topic of Syllabus to be covered	Learning outcomes	Teaching mode	Hours Required	Total no. of Hours (Cumulative)	Expected date of completion (for each unit) By HOD	Review / Remarks(By HOD)
I	Introduction to Number Theory	Know the Importance of Number Theory	BB	1	1		
I	Divisibility and the Division Algorithm	Understand the Concept of Divisibility and the Division Algorithm	BB	1	2		
I	The Euclidean Algorithm	Understand the Concept of The Euclidean Algorithm	BB	1	3		
I	Modular arithmetic	Understand the Concept of Modular arithmetic	BB	1	4		
I	Prime numbers	Understand the Concept of Prime numbers	BB	1	5	31/3/24	
	Fermat's Theorem and Euler's Theorems	Understand the Concepts of Fermat's Theorem and Euler's Theorems	BB	2	7		
I	Testing for Primality	Understand the Concept of Testing for Primality	BB	1	8		
I	The Chinese Remainder Theorem	Understand the Concept of the Chinese Remainder Theorem	BB	1	9		
I	Discrete Logarithms	Understand the Concept of Discrete Logarithms	BB	1	10		
II	Introduction to Cryptography	Get the Knowledge on Cryptography	LCD	1	11		
II	Symmetric Cipher Model	Get the Knowledge on Symmetric Cipher Model	LCD	1	12		

II	Substitution Techniques-Caesar Cipher	Get the Knowledge on Caesar Cipher	LCD	1	13		
II	Monoalphabetic Cipher: Playfair	Get the Knowledge on Playfair	LCD	1	14		
II	Hill Ciphers	Get the Knowledge on Hill Ciphers	LCD	1	15		
II	Polyalphabetic Ciphers	Get the Knowledge on Polyalphabetic Ciphers	LCD	1	16	30/4/14	
II	Onetime Pad	Get the Knowledge on Onetime Pad	LCD	1	17		
II	Transposition Techniques	Get the Knowledge on Transposition Techniques	LCD	1	18		
III	Block Ciphers	Get the Knowledge on Block Ciphers	LCD	1	19		
III	Traditional Block Cipher Structure	Get the Knowledge on Traditional Block Cipher Structure	LCD	2	21		
III	The Data Encryption Standard	Get the Knowledge on The Data Encryption Standard	LCD/VL	2	23		
III	Advanced Encryption Standard	Get the Knowledge on Advanced Encryption Standard	LCD	2	25		
III	Block Cipher modes of operations	Get the Knowledge on Block Cipher modes of operations	LCD	1	26		
IV	Public Key Cryptography	Learn the Principles of Public Key Cryptography	LCD	1	27		
IV	Principles of Public-Key Cryptosystems	Learn the Principles of Public Key Cryptography	LCD	2	29		
IV	The RSA Algorithm	Learn the Principles of Public Key Cryptography	LCD	1	30		
IV	Diffie-Hellman Key Exchange- The Algorithm,	Learn the Principles of Public Key Cryptography	LCD/VL	1	31	31/5/14	
IV	Key Exchange Protocols	Learn the Principles of Public Key Cryptography	LCD	1	32		
IV	Man-in-the-Middle Attack	Learn the Principles of Public Key Cryptography	LCD	1	33		
V	Cryptographic Hash Functions	Make Use of Cryptographic Hash Functions	LCD	1	34		
V	Applications of Cryptographic Hash Functions	Make Use of Cryptographic Hash Functions	LCD	1	35		
V	Two Simple Hash Functions	Make Use of Hash Functions	LCD	1	36		

LESSON PLAN

Academic Year : 2020-2021 PVP19
Year & Semester : I1 B.Tech Sem : II Sec:I
Branch : Information Technology
Subject Code & Name : Computer Organization and Architecture (19IT3401)
Name of Faculty : Dr P.V.S.Lakshmi

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode BB/ LCD/ OHP	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				L	T			
UNIT I	REGISTER TRANSFER AND MICRO-OPERATIONS: Register Transfer Language	Introduction to Register Transfer Language	LCD	1		1		
	Bus and memory Transfers	Knowledge on Bus and memory Transfers	LCD	1		2		
	Arithmetic Micro-operations	Knowledge on Arithmetic Micro-operations	LCD	1		3		
	Logic Micro-operations	Knowledge on Logic Micro-operations	LCD	1		4		
	Shift Micro-operations, Arithmetic Logic Shift Unit.	Knowledge on Shift Micro-operations,Arithmetic Logic Shift Unit.	LCD	1		5		
	Flip Class I				1	6		
UNIT II	Basic Computer Organization And Design: Instruction codes,computer registerss	Knowledge on Instruction codes, Computer Registers	LCD	1		7		
	Computer Instructions	Knowledge on Computer Instructions	LCD	1		8		
	Timing and Control ,Instruction cycle	Knowledge on Timing and Control ,Instruction cycle	LCD	2		10		
	Memory-Reference Instructions	Knowledge on Memory-						

		Reference Instructions	LCD	2		12		
	Input-Output and Interrupt	Input-Output and Knowledge on interrupt	LCD	1		13		
UNIT -III	General register Organization	Knowledge on General register Organization	LCD	1		14		
	Stack Organization, Instruction Formats	Knowledge on Stack Organization, Instruction Formats	LCD	1		15		
	Addressing Modes	Knowledge on Addressing Modes	LCD	2		17		
	Data Transfer and Manipulation, Program Control	Knowledge on Data Transfer and Manipulation,, Program Control,	LCD	2		19		
UNIT -IV	Addition,Subtraction Algorithms	Knowledge on Addition , Subtraction Algorithms	LCD	2		21		
	Multiplication algorithms	Knowledge on booth multiplicationMultiplication	LCD	3		24		
	MEMORY ORGANIZATION: Memory Hierarchy	Knowledge on Memory Hierarchy	LCD	1		25		
	Main Memory, Auxiliary memory	Knowledge on Main Memory, Auxiliary memory	LCD	1		26		
	Associative Memory, Cache Memory	Knowledge on Associative Memory, Cache Memory	LCD	1		27		
	Virtual Memory	Knowledge on Virtual Memory	LCD	1		28		
Unit V	INPUT-OUTPUT ORGANIZATION: Peripheral Devices, Input-output Interface	Knowledge on Peripheral Devices, Input-output Interface	LCD	1		29		
	Asynchronous Data Transfer, priority interrupt	Knowledge on Asynchronous Data Transfer, Modes of Transfer	LCD	1		30		
	Direct Memory Access	Knowledge on						

	(DMA)	Direct Memory Access (DMA)	LCD	1		31		
	Input-Output Processor,.	Knowledge on Input-Output Processor,	LCD	1		32		
	PIPELINE AND VECTOR PROCESSING: Parallel processing	Knowledge on Parallel processing	LCD	1		33		
	Pipelining, Arithmetic pipeline	Knowledge on Pipelining, Arithmetic pipeline	LCD	1		34		
	Instruction pipeline,	Knowledge on Instruction pipeline,	LCD	1		35		
	REVIEW				2	37		
***	Content beyond syllabus		LCD	3		40		

LCD: Power Point Presentation

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Date: 20/3/2021

LESSON PLAN

Academic Year : 2020-2021 PVP19
Year & Semester : I1 B.Tech Sem : II Sec:I1
Branch : Information Technology
Subject Code & Name : Computer Organization and Architecture (19IT3401)
Name of Faculty : Dr P.V.S.Lakshmi

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode BB/ LCD/ OHP	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				L	T			
UNIT I	REGISTER TRANSFER AND MICRO-OPERATIONS: Register Transfer Language	Introduction to Register Transfer Language	LCD	1		1		
	Bus and memory Transfers	Knowledge on Bus and memory Transfers	LCD	1		2		
	Arithmetic Micro-operations	Knowledge on Arithmetic Micro-operations	LCD	1		3		
	Logic Micro-operations	Knowledge on Logic Micro-operations	LCD	1		4		
	Shift Micro-operations, Arithmetic Logic Shift Unit.	Knowledge on Shift Micro-operations,Arithmetic Logic Shift Unit.	LCD	1		5		
	Flip Class I				1	6		
UNIT II	Basic Computer Organization And Design: Instruction codes,computer registerss	Knowledge on Instruction codes, Computer Registers	LCD	1		7		
	Computer Instructions	Knowledge on Computer Instructions	LCD	1		8		
	Timing and Control ,Instruction cycle	Knowledge on Timing and Control ,Instruction cycle	LCD	2		10		
	Memory-Reference Instructions	Knowledge on Memory-						

		Reference Instructions	LCD	2		12		
	Input-Output and Interrupt	Input-Output and Knowledge on interrupt	LCD	1		13		
UNIT -III	General register Organization	Knowledge on General register Organization	LCD	1		14		
	Stack Organization, Instruction Formats	Knowledge on Stack Organization, Instruction Formats	LCD	1		15		
	Addressing Modes	Knowledge on Addressing Modes	LCD	2		17		
	Data Transfer and Manipulation, Program Control	Knowledge on Data Transfer and Manipulation,, Program Control,	LCD	2		19		
UNIT -IV	Addition,Subtraction Algorithms	Knowledge on Addition , Subtraction Algorithms	LCD	2		21		
	Multiplication algorithms	Knowledge on booth multiplicationMultiplication	LCD	3		24		
	MEMORY ORGANIZATION: Memory Hierarchy	Knowledge on Memory Hierarchy	LCD	1		25		
	Main Memory, Auxiliary memory	Knowledge on Main Memory, Auxiliary memory	LCD	1		26		
	Associative Memory, Cache Memory	Knowledge on Associative Memory, Cache Memory	LCD	1		27		
	Virtual Memory	Knowledge on Virtual Memory	LCD	1		28		
Unit V	INPUT-OUTPUT ORGANIZATION: Peripheral Devices, Input-output Interface	Knowledge on Peripheral Devices, Input-output Interface	LCD	1		29		
	Asynchronous Data Transfer, priority interrupt	Knowledge on Asynchronous Data Transfer, Modes of Transfer	LCD	1		30		
	Direct Memory Access	Knowledge on						

	(DMA)	Direct Memory Access (DMA)	LCD	1		31		
	Input-Output Processor,.	Knowledge on Input-Output Processor,	LCD	1		32		
	PIPELINE AND VECTOR PROCESSING: Parallel processing	Knowledge on Parallel processing	LCD	1		33		
	Pipelining, Arithmetic pipeline	Knowledge on Pipelining, Arithmetic pipeline	LCD	1		34		
	Instruction pipeline,	Knowledge on Instruction pipeline,	LCD	1		35		
	REVIEW				2	37		
***	Content beyond syllabus		LCD	3		40		

40 Syl complete

LCD: Power Point Presentation

Signature of the Faculty 19/3/24

Signature of the HOD

Date: 20/3/2024

LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : 2020-2021 (PVP19)
Year & Semester : II B.Tech / II SEM
Branch : Information Technology –S1 & S2
Subject Code & Name : 19CS3402-OPERATING SYSTEMS
Name of Faculty : Dr. R Vijaya Kumar Reddy

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode BB/ PPT	Hours Required	Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				L			
I	OS overview	Introduction to Operating systems,	BB	1	1		
I	Computer System Organization	Knowledge on computer system operation	BB	1	2		
I	Computer System Architecture	Knowledge on Storage structure and clustered systems	PPT	1	3		
I	Operating System structure	Knowledge on simple structure of the OS, layered approach, Micro kernels and modules, evaluation of OSs	BB	1	4		
	Operating System Operations	Knowledge on realtime embedded systems,multimedia systems and handheld systems	PPT	2	6		
I	Operating System services	Knowledge on OS services useful to the user and the system	BB	1	7		
I	User and Operating System Interface, System calls, Types of System calls	Knowledge on System Calls and types of system calls	BB	2	9	3/4/2021	
II	Process Management: Process concepts	Knowledge on Process Concept and various states of a concept	BB	1	10		

II	Process scheduling	Knowledge on scheduling queues, Schedulers and context switch	BB	1	11		
II	Operations on processes	Knowledge on process creation and termination	BB	1	12		
II	Interprocess Communication	Knowledge on communicationmodels (sharedmemory systems, message passing systems)	PPT	2	14	14/4/21	
II	Threads	Knowledge on multi threaded models.	PPT	1	15		
II	CPU Scheduling	Knowledge on Basic Concepts	BB	1	16		
II	Scheduling Criteria	Knowledge on various scheduling criteria	PPT	1	17		
II	Scheduling Algorithms	Knowledge on Scheduling Algorithms (First come first served,SJF,Priority,RR)	PPT	1	18		
III	Process Synchronization	Knowledge on Critical Section Problem	BB	1	19		
III	Perterson's problem , Semaphores	Knowledge on semaphores usage and implementation	PPT	1	20		
III	Classic problems of synchronization	Knowledge on Classic problems of synchronization	BB	1	21		
III	Monitors	Knowledge on monitors usage and implementation	BB	1	22		
III	Deadlocks	Introduction to deadlocks	PPT	1	23		
III	System Model	Knowledge on deadlock's necessary conditions	PPT	1	24		
III	Deadlock Characterization	Knowledge on RAgraph	PPT	1	25	13/5/21	
III	Deadlock Avoidance	Knowledge on Deadlock Avoidance	BB	1	26		
III	Deadlock Prevention	Knowledge on Mutual exclusion, hold and wait, circular wait and no preemption	BB	1	27		
III	Deadlock Detection	Knowledge on instances of a resource, detection algorithm	PPT	1	28		

III	Recovery from deadlock	Knowledge on process termination and process preemption	PPT	1	29		
IV	Memory Management	Introduction to memory management	BB	1	30		
IV	Logical vs. physical address space	Knowledge on basic hardware, Logical vs. physical address space, Introduction to swapping	PPT	1	31	4/6/21	
IV	Contiguous Memory Allocation	Knowledge on memory mapping, protection , memory allocation, memory fragmentation	PPT	1	32		
IV	Paging	Knowledge on basic method, hardware support, protection and shared pages	PPT	2	34		
IV	Segmentation and Structure of page table	Knowledge on basic method, hardware support and Structure of page table	BB	1	35		
IV	Virtual Memory Management: Demand Paging	Introduction and knowledge on Demand Paging	PPT	2	37		
IV	Page Replacement Algorithms	FIFO, LRU Optimal	BB	2	39		
IV	Thrashing	Knowledge on Cause , working set model of thrashing	BB	1	40		
V	Storage Management File System	Knowledge on Mass-Storage structure	PPT	2	42		
V	Disk Scheduling	Knowledge on Disk Scheduling Concepts	PPT	2	44		
V	Files System Interface :	Knowledge on File Concept, Access Methods, Directory & Disk Structure,	PPT	2	46		
V	File System Implementation	Knowledge on File System Structure, Allocation Methods, Free Space Management	PPT	2	48	26/6/21	

Legend: Teaching Mode

BB: Black Board / PPT: Power Point Presentation /

R. Vijay Kumar

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LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : 2020-2021 (PVP19)
Year & Semester : II B.Tech / II SEM
Branch : Information Technology –S1 & S2
Subject Code & Name : 19CS3402-OPERATING SYSTEMS
Name of Faculty : Dr. R Vijaya Kumar Reddy

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode BB/ PPT	Hours Required	Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				L			
I	OS overview	Introduction to Operating systems,	BB	1	1		
I	Computer System Organization	Knowledge on computer system operation	BB	1	2		
I	Computer System Architecture	Knowledge on Storage structure and clustered systems	PPT	1	3		
I	Operating System structure	Knowledge on simple structure of the OS, layered approach, Micro kernels and modules, evaluation of OSs	BB	1	4		
	Operating System Operations	Knowledge on realtime embedded systems,multimedia systems and handheld systems	PPT	2	6		
I	Operating System services	Knowledge on OS services useful to the user and the system	BB	1	7		
I	User and Operating System Interface, System calls, Types of System calls	Knowledge on System Calls and types of system calls	BB	2	9	3/4/21	
II	Process Management: Process concepts	Knowledge on Process Concept and various states of a concept	BB	1	10		

II	Process scheduling	Knowledge on scheduling queues, Schedulers and context switch	BB	1	11		
II	Operations on processes	Knowledge on process creation and termination	BB	1	12		
II	Interprocess Communication	Knowledge on communicationmodels (sharedmemory systems, message passing systems)	PPT	2	14	14/4/21	
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II	CPU Scheduling	Knowledge on Basic Concepts	BB	1	16		
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II	Scheduling Algorithms	Knowledge on Scheduling Algorithms (First come first served,SJF,Priority,RR)	PPT	1	18		
III	Process Synchronization	Knowledge on Critical Section Problem	BB	1	19		
III	Perterson's problem , Semaphores	Knowledge on semaphores usage and implementation	PPT	1	20		
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III	System Model	Knowledge on deadlock's necessary conditions	PPT	1	24		
III	Deadlock Characterization	Knowledge on RAgraph	PPT	1	25	13/5/21	
III	Deadlock Avoidance	Knowledge on Deadlock Avoidance	BB	1	26		
III	Deadlock Prevention	Knowledge on Mutual exclusion, hold and wait, circular wait and no preemption	BB	1	27		
III	Deadlock Detection	Knowledge on instances of a resource, detection algorithm	PPT	1	28		

III	Recovery from deadlock	Knowledge on process termination and process preemption	PPT	1	29		
IV	Memory Management	Introduction to memory management	BB	1	30		
IV	Logical vs. physical address space	Knowledge on basic hardware, Logical vs. physical address space, Introduction to swapping	PPT	1	31	4/6/21	
IV	Contiguous Memory Allocation	Knowledge on memory mapping, protection , memory allocation, memory fragmentation	PPT	1	32		
IV	Paging	Knowledge on basic method, hardware support, protection and shared pages	PPT	2	34		
IV	Segmentation and Structure of page table	Knowledge on basic method, hardware support and Structure of page table	BB	1	35		
IV	Virtual Memory Management: Demand Paging	Introduction and knowledge on Demand Paging	PPT	2	37		
IV	Page Replacement Algorithms	FIFO, LRU Optimal	BB	2	39		
IV	Thrashing	Knowledge on Cause , working set model of thrashing	BB	1	40		
V	Storage Management File System	Knowledge on Mass-Storage structure	PPT	2	42		
V	Disk Scheduling	Knowledge on Disk Scheduling Concepts	PPT	2	44		
V	Files System Interface :	Knowledge on File Concept, Access Methods, Directory & Disk Structure,	PPT	2	46		
V	File System Implementation	Knowledge on File System Structure, Allocation Methods, Free Space Management	PPT	2	48	26/6/21	

Legend: Teaching Mode
BB: Black Board / PPT: Power Point Presentation /

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LESSON PLAN

(PVPSIT/ACD /01)

Academic Year :2020-21
Year & Semester : IIB. TechI Semester
Branch&Section : Information Technology (IT-S1)
Lab Name& Code : Design Thinking 19ES1352
Name of Faculty : CK LAKSHMIKANTH/CH VIDYA
Name of the Lab : DESIGN THINKING LAB

Expt. No	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode	Lab slots Required	Total no. of slots (Cumulative)	Expected date of Completion (for each Unit)By HOD	Review/ Remarks (By HOD)
1	Design a mind map of design thinking	Students will develop mind maps for design thinking process	Demonstration and practical	2	2	17|10|20	
2	Thirty circle Exercise --- ideation	Students can construct mock-up models through ideation and innovation techniques	Demonstration and practical	2	4	3|10|20	
3	Prepare a toothpick bridge (mock-up model)	Students will generate various thought processes and construct mock-up models	Demonstration and practical	2	6	29|8|20	
4	Prepare a marble maze (mock up model)	Students will generate various thought processes and construct mock-up models	Demonstration and practical	2	8	5|9|20	
5	Build a wind power car (mock up model)	Students will generate various thought processes and construct mock-up models	Demonstration and practical	2	10	19|9|20	
6	Make a hydraulic elevator (mock up models)	Students will generate various thought processes and construct mock-up models	Demonstration and practical	2	12	26|9|20	
7	Construct empathy maps for a given case study-1	Students can prepare empathy maps and journey maps for problems	Demonstration and practical	2	14	5|12|20	
8	Develop customer journey map for a given case-1	Students can prepare empathy maps and journey maps for problems	Demonstration and practical	2	16	19|12|20	
9	Construct empathy maps for a given case study-2	Students can prepare empathy maps and journey maps for problems	Demonstration and practical	2	18	26|12|20	

10	Develop customer journey map for a given case -2	Students can prepare empathy maps and journey maps for problems	Demonstration and practical	2	20	21/1/21	
11	Make a paper prototype for user testing (mock-up model)	Students can prepare paper prototype through mock models	Demonstration and practical	2	22	21/1/21	
12	Design and development of cell phone wallet (mock-up model)	Students will develop mind maps, Empathy Maps, ideas, and prototypes	Demonstration and practical	2	24	22/1/21	

Legend: Teaching Mode **D**: Demonstration / **P**: Practical

Ch. L. Kanta
Signature of the Faculty
Date: 17/8/2020

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LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : 2020-21
Year & Semester : II B. TECH I Semester
Branch : INFORMATION TECHNOLOGY, Section-I
Subject Code & Name : DESIGN THINKING, 19ES1302
Name of Faculty : CH LAKSHMI KANTH

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode BB/ LCD/ OHP.	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				Lecture	Tutorial			
I	Introduction to design thinking	Know about the idea of design thinking	Online	1		1		
	An insight into Design, origin of Design thinking	To provide knowledge on design and origin of design thinking	Online	1		2		
	Design thinking Vs Engineering thinking	To understand the difference between design thinking and engineering design	Online	1		3		
	importance of Design thinking, Design Vs Design thinking,	Understand the importance of Design thinking and how it is different form traditional design	Online	1		4		
	Design thinking and its process models	understand Design thinking and its process models	Online	1		5		
	Application of Design thinking	Give various applications of design thinking	Online	1		6	8/9/20	
II	Human-Centered Design (HCD) process	role of Human-Centered Design (HCD) process in Design Thinking	Online	2		8		
	Role of Empathy in design thinking	Understand the role of empathy	Online	1		9		
	methods and tools of empathy, understanding empathy tools	understand the empathy tools and their usage to various problems	Online	1		10		
	define phase	Learns how to define the problem	Online	1		11		
	state user needs and problems using empathy methods	Formulate user needs and problems using empathy techniques	Online	1		12	9/10/20	

III	Ideation methods	To understand various ideation methods	Online	2		14		
	brain storming, advantages of brain storming	Generate and discuss various ideas for a given problem	Online	1		15		
	prototyping and methods of prototyping	Develop knowledge on various prototyping techniques and their advantages	Online	1		16		
	user testing methods	Knowledge on various user testing methods	Online	1		17		
	user Testing/ Validation	Advantages and disadvantages of user Testing/ Validation	Online	1		18	2/11/20	
IV	Product innovation	Introduction to product innovation	Online	1		19		
	Design thinking for strategic innovation	Use of design thinking approach in innovation	Online	1		20		
	Definition of innovation, art of innovation	define and understand innovation	Online	1		21		
	materials and innovation in materials	Selection of suitable materials	Online	1		22		
	definition of product and its classification	Define a product and classify the products based on application	Online	1		23		
	Innovation towards product design	Case studies on developing innovative products using design thinking approach	Online	1		24		
V	Design Thinking applied in Business & Strategic Innovation	Application of design thinking principles in Business and strategic innovation	Online	2		26	28/12/20	
	Business challenges:	understand the role of Growth, Predictability, Change, Maintaining Relevance, Extreme competition, Standardization in Business	Online	2		28		
	Design thinking to meet corporate needs.	Explain the use of design thinking in corporate sector	Online	2		30	8/2/21	

Legend: Teaching Mode

BB: Black Board / **LCD**: Power Point Presentation / **OHP**: Over Head Projector

Ch. Lakshmikanth

Signature of the Faculty

17/8/202-

Signature of the HOD

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Information Technology Department
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KANURU, VIJAYAWADA-520 007

Date:

LESSON PLAN

(PVPSIT/ACD /01)

Academic Year :2020-21
Year & Semester : IIB. TechI Semester
Branch&Section : Information Technology(IT-S2)
Lab Name& Code : Design Thinking 19ES1352
Name of Faculty : CK LAKSHMIKANTH/CH VIDYA
Name of the Lab : DESIGN THINKING LAB

Expt. No	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode	Lab slots Required	Total no. of slots (Cumulative)	Expected date of Completion (for each Unit)By HOD	Review/ Remarks (By HOD)
1	Design a mind map of design thinking	Students will develop mind maps for design thinking process	Demonstration and practical	2	2	17/10/20	
2	Thirty circle Exercise --- ideation	Students can construct mock-up models through ideation and innovation techniques	Demonstration and practical	2	4	3/10/20	
3	Prepare a toothpick bridge (mock-up model)	Students will generate various thought processes and construct mock-up models	Demonstration and practical	2	6	29/8/20	
4	Prepare a marble maze (mock up model)	Students will generate various thought processes and construct mock-up models	Demonstration and practical	2	8	5/9/20	
5	Build a wind power car (mock up model)	Students will generate various thought processes and construct mock-up models	Demonstration and practical	2	10	19/9/20	
6	Make a hydraulic elevator (mock up models)	Students will generate various thought processes and construct mock-up models	Demonstration and practical	2	12	26/9/20	
7	Construct empathy maps for a given case study-1	Students can prepare empathy maps and journey maps for problems	Demonstration and practical	2	14	5/12/20	
8	Develop customer journey map for a given case-1	Students can prepare empathy maps and journey maps for problems	Demonstration and practical	2	16	19/12/20	
9	Construct empathy maps for a given case study-2	Students can prepare empathy maps and journey maps for problems	Demonstration and practical	2	18	26/12/20	

10	Develop customer journey map for a given case -2	Students can prepare empathy maps and journey maps for problems	Demonstration and practical	2	20	21/1/21	
11	Make a paper prototype for user testing (mock-up model)	Students can prepare paper prototype through mock models	Demonstration and practical	2	22	29/1/21	
12	Design and development of cell phone wallet (mock-up model)	Students will develop mind maps, Empathy Maps, ideas, and prototypes	Demonstration and practical	2	24	30/1/21	

Legend: Teaching Mode **D**: Demonstration / **P**: Practical

Ch. L. Kavitha
Signature of the Faculty
Date: 27/8/20

Signature of the HOD

HEAD
Information Technology Department
PRASAD V.POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007

LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : 2020-21
Year & Semester : II B. TECH I Semester
Branch : INFORMATION TECHNOLOGY, Section-II
Subject Code & Name : DESIGN THINKING, 19ES1302
Name of Faculty : CH LAKSHMI KANTH

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode BB/ LCD/ OHP.	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				Lecture	Tutorial			
I	Introduction to design thinking	Know about the idea of design thinking	Online	1		1		
	An insight into Design, origin of Design thinking	To provide knowledge on design and origin of design thinking	Online	1		2		
	Design thinking Vs Engineering thinking	To understand the difference between design thinking and engineering design	Online	1		3		
	importance of Design thinking, Design Vs Design thinking,	Understand the importance of Design thinking and how it is different form traditional design	Online	1		4		
	Design thinking and its process models	understand Design thinking and its process models	Online	1		5		
	Application of Design thinking	Give various applications of design thinking	Online	1		6	8/9/20	
II	Human-Centered Design (HCD) process	role of Human-Centered Design (HCD) process in Design Thinking	Online	2		8		
	Role of Empathy in design thinking	Understand the role of empathy	Online	1		9		
	methods and tools of empathy, understanding empathy tools	understand the empathy tools and their usage to various problems	Online	1		10		
	define phase	Learns how to define the problem	Online	1		11		
	state user needs and problems using empathy methods	Formulate user needs and problems using empathy techniques	Online	1		12	12/10/20	

III	Ideation methods	To understand various ideation methods	Online	2		14		
	brain storming, advantages of brain storming	Generate and discuss various ideas for a given problem	Online	1		15		
	prototyping and methods of prototyping	Develop knowledge on various prototyping techniques and their advantages	Online	1		16		
	user testing methods	Knowledge on various user testing methods	Online	1		17		
	user Testing/ Validation	Advantages and disadvantages of user Testing/ Validation	Online	1		18	5/11/20	
IV	Product innovation	Introduction to product innovation	Online	1		19		
	Design thinking for strategic innovation	Use of design thinking approach in innovation	Online	1		20		
	Definition of innovation, art of innovation	define and understand innovation	Online	1		21		
	materials and innovation in materials	Selection of suitable materials	Online	1		22		
	definition of product and its classification	Define a product and classify the products based on application	Online	1		23		
	Innovation towards product design	Case studies on developing innovative products using design thinking approach	Online	1		24	29/12/20	
V	Design Thinking applied in Business & Strategic Innovation	Application of design thinking principles in Business and strategic innovation	Online	2		26		
	Business challenges:	understand the role of Growth, Predictability, Change, Maintaining Relevance, Extreme competition, Standardization in Business	Online	2		28		
	Design thinking to meet corporate needs.	Explain the use of design thinking in corporate sector	Online	2		30	9/2/21	

Legend: Teaching Mode

BB: Black Board / **LCD**: Power Point Presentation / **OHP**: Over Head Projector

Ch. Lakshmi Kavya

Signature of the Faculty

19/8/2020

Signature of the HOD

HEAD
Information Technology Department
PRASAD V.POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007.

Date:

PRASAD V.POTLURI

SIDDHARTHA INSTITUTE OF TECHNOLOGY, KANURU, VIJAYAWADA

DEPARTMENT OF INFORMATION TECHNOLOGY

ACADEMIC YEAR: 2020-2021

III B.TECH – SEMESTER – II

SECTION – S1

S.NO	SUBJECT CODE	SUBJECT NAME	NAME OF THE FACULTY
1	IT6T1	Software Engineering	Ms. K. SRI VIJAYA
2	IT6T2.	Computer Graphics and Algorithms	Dr. K.PAVAN KUMAR
3	IT6T3	Object Oriented Analysis and Design	Dr D KAVITHA
4	IT6T4	Data Mining and Data Warehousing	Mrs. D. LEELA DHARANI
5	EE6T6FE1 ME6T6FE4	Free Elective 1. MATLAB PROGRAMMING & APPLICATIONS 2. INDUSTRIAL ENGINEERING & ENTERPRENUERSHIP	1.Mr. T. NARASIMHA PRASAD 2.Mrs.K.I.V.VANDANA
6	IT6L1	OOAD Lab	Dr D KAVITHA
7	IT6L2	DMDW Lab	Mrs. D. LEELA DHARANI
8	IT6L3.	Computer Graphics and Algorithms Lab	Dr. K. PAVAN KUMAR
9	IT6L4	Personality Development Course	Dr M SYAM SUNDAR / Mrs. A. S. PHANI KUMARI

(Dr. B.V.S.L.D. Subba Rao)
HOD
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SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007.

PRASAD V.POTLURI

SIDDHARTHA INSTITUTE OF TECHNOLOGY, KANURU, VIJAYAWADA

DEPARTMENT OF INFORMATION TECHNOLOGY

ACADEMIC YEAR: 2020-2021

III B.TECH – SEMESTER – II SECTION – S2

S.NO	SUBJECT CODE	SUBJECT NAME	NAME OF THE FACULTY
1	IT6T1	Software Engineering	Ms. K. SRIVIJAYA
2	IT6T2	Computer Graphics and Algorithms	Mrs. K. SWARUPARANI
3	IT6T3	Object Oriented Analysis and Design	Mr. I. M. V KRISHNA
4	IT6T4	Data Mining and Data Warehousing	Dr A HARITHA
5	EE6T6FE1 ME6T6FE4	Free Elective 1. MATLAB PROGRAMMING & APPLICATIONS 2. INDUSTRIAL ENGINEERING & ENTERPRENUERSHIP	1.Ms. G MADHAVI 2.Mrs.K.I.V.VANDANA
6	IT6L1	OOAD Lab	Mr. I. M. V KRISHNA
7	IT6L2	DMDW Lab	Dr A HARITHA
8	IT6L3	Computer Graphics and Algorithms Lab	Mrs. K. SWARUPARANI
9	IT6L4	Personality Development Course	Ms P LAKSHMI LAVANYA/ Mrs. A.S.PHANI KUMARI

(Dr. B. V. Subba Rao)
HEAD
Information Technology Department
PRASAD V.POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007.

PROCESS RECORD FOR ACADEMICS

LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : 2020-2021
Year & Semester : III B. Tech / II-SEM
Branch : IT – S1
Subject Code & Name : IT6T1 & SOFTWARE ENGINEERING (PVP-14)
Name of Faculty : Ms. K. Sri Vijaya

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode BB/ LCD/ OHP.	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				L	T			
-	Introduction to Software Engineering	Knowledge about Software Engineering	BB/LCD	1		1		
I	The evolving role of software	Knowledge about the evolving role of software	BB/LCD	1		2		
I	Changing Nature of Software	Understanding Changing Nature of Software	BB/LCD	1		3		
I	Software myths	Understanding Software myths	BB/LCD	1		4		
I	The software problem	Understanding The software problem	BB/LCD	1	1	6		
I	Software Cost	Understanding Software Cost	BB	1		7		
I	Control statements, Type conversion and simple program	Understanding Control statements, Type conversion and simple program	BB/LCD	1		8		
I	Software schedule and quality	Understanding Software schedule and quality	FLIP CLASS	1		9		
I	Software Scaling and change	Understanding Software Scaling and change		2	1	12		
II	Software Process, Process and project	Understanding Software Process, Process and project	BB/LCD	1		13		
II	component software process	Knowledge about component software process		1		14		
II	Software development process models	Knowledge about Software development process models	BB/LCD	1		15		
II	Waterfall model	Knowledge about Waterfall model	BB/LCD	1		16		
II	Prototyping	Knowledge about Prototyping	BB/LCD	1		17		
II	Iterative development	Knowledge about Iterative development	BB/LCD	1	1	19		
II	Relational unified process	Knowledge about Relational unified process	BB/LCD	1		20		

I	Time boxing model	Knowledge about Time boxing model	BB	1		21		
II	Extreme programming and agile process	Knowledge about Extreme programming and agile process	BB	1		22		
II	Using process models in a project	Knowledge about Using process models in a project	FLIP CLASS	1		23		
II	Project management process.	Understanding Project management process.	BB	1		24		
III	Software requirement analysis and specification	Understanding Software requirement analysis and specification	BB	1		25		
III	Value of good SRS	Understanding Value of good SRS		1		26		
III	requirement process, requirement specification	Understanding requirement process, requirement specification	BB/LCD	1		27		
III	functional specifications with use-cases	Understanding functional specifications with use-cases	BB/LCD	1		28		
III	other approaches for analysis, validation	Understanding other approaches for analysis, validation	BB/LCD	1	1	30		
III	Software Architecture: Role of software architecture	Understanding Software Architecture: Role of software architecture	BB	1		31		
III	architecture views	Understanding architecture views	BB	1		32		
III	components and connector view	Understanding components and connector view	BB	1		33		
III	architecture styles for C & C view	Knowledge about architecture styles for C & C view	BB	1		34		
III	documenting architecture design	Knowledge about documenting architecture design		1		35		
III	evaluating architectures	Knowledge about evaluating architectures		1		36		
IV	Planning a software project	Knowledge about Planning a software project	FLIP CLASS	1		37		
IV	Effort estimation, project schedule and staffing	Knowledge about Effort estimation, project schedule and staffing		1	1	39		
IV	quality planning, risk management planning	Knowledge about quality planning, risk management planning		1		40		
IV	project monitoring plan	Knowledge about project monitoring plan		1		41		
IV	detailed scheduling	Knowledge about detailed scheduling		1		42		
IV	Design: Design concepts	Understanding Design concepts		2		44		
	design							

		design						
IV	object oriented design	Understanding object oriented design		1		46		
IV	detailed design, verification and metrics	Understanding detailed design, verification and metrics		1	1	48		
V	Coding and Unit Testing	Understanding Coding and Unit Testing	FLIP CLASS	1		49		
V	Programming principles and guidelines	Understanding Programming principles and guidelines	FLIP CLASS	2		51		
V	incrementally developing code	Understanding incrementally developing code	FLIP CLASS	1	1	53		
V	managing evolving code	Knowledge about managing evolving code		1		54		
V	unit testing, code inspection, metrics	Knowledge about unit testing, code inspection, metrics		2		56		
V	Testing: Testing concepts, testing process	Knowledge about Testing: Testing concepts, testing process		1	1	58		
V	black-box testing, white-box testing, and metrics	Knowledge about black-box testing, white-box testing, and metrics		2		60		

Legend: Teaching Mode
BB: Black Board / LCD: Power Point Presentation / OHP: Over Head Projector

Signature of the Faculty

Signature of the HOD
Date:

PROCESS RECORD FOR ACADEMICS

LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : 2020-2021
Year & Semester : III B. Tech / II-SEM
Branch : IT – S2
Subject Code & Name : IT6T1 & SOFTWARE ENGINEERING (PVP-14)
Name of Faculty : Ms. K. Sri Vijaya

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode BB/ LCD/ OHP.	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				L	T			
I	Introduction to Software Engineering	Knowledge about Software Engineering	BB/LCD	1		1		
I	The evolving role of software	Knowledge about the evolving role of software	BB/LCD	1		2		
I	Changing Nature of Software	Understanding Changing Nature of Software	BB/LCD	1		3		
I	Software myths	Understanding Software myths	BB/LCD	1		4		
I	The software problem	Understanding The software problem	BB/LCD	1	1	6		
I	Software Cost	Understanding Software Cost	BB	1		7		
I	Control statements, Type conversion and simple program	Understanding Control statements, Type conversion and simple program	BB/LCD	1		8		
I	Software schedule and quality	Understanding Software schedule and quality	FLIP CLASS	1		9		
I	Software Scaling and change	Understanding Software Scaling and change		2	1	12		
II	Software Process, Process and project	Understanding Software Process, Process and project	BB/LCD	1		13		
II	component software process	Knowledge about component software process		1		14		
II	Software development process models	Knowledge about Software development process models	BB/LCD	1		15		
II	Waterfall model	Knowledge about Waterfall model	BB/LCD	1		16		
II	Prototyping	Knowledge about Prototyping	BB/LCD	1		17		
II	Iterative development	Knowledge about Iterative development	BB/LCD	1	1	19		
II	Relational unified process	Knowledge about Relational unified process	BB/LCD	1		20		

Covered

II	Time boxing model	Knowledge about Time boxing model	BB	1		21		
II	Extreme programming and agile process	Knowledge about Extreme programming and agile process	BB	1		22		
II	Using process models in a project	Knowledge about Using process models in a project	FLIP CLASS	1		23		
II	Project management process.	Understanding Project management process.	BB	1		24		
III	Software requirement analysis and specification	Understanding Software requirement analysis and specification	BB	1		25		
III	Value of good SRS	Understanding Value of good SRS		1		26		
III	requirement process, requirement specification	Understanding requirement process, requirement specification	BB/LCD	1		27		
III	functional specifications with use-cases	Understanding functional specifications with use-cases	BB/LCD	1		28		
III	other approaches for analysis, validation	Understanding other approaches for analysis, validation	BB/LCD	1	1	30		
III	Software Architecture: Role of software architecture	Understanding Software Architecture: Role of software architecture	BB	1		31		
III	architecture views	Understanding architecture views	BB	1		32		
III	components and connector view	Understanding components and connector view	BB	1		33		
III	architecture styles for C & C view	Knowledge about architecture styles for C & C view	BB	1		34		
III	documenting architecture design	Knowledge about documenting architecture design		1		35		
III	evaluating architectures	Knowledge about evaluating architectures		1		36		
IV	Planning a software project	Knowledge about Planning a software project	FLIP CLASS	1		37		
IV	Effort estimation, project schedule and staffing	Knowledge about Effort estimation, project schedule and staffing		1	1	39		
IV	quality planning, risk management planning	Knowledge about quality planning, risk management planning		1		40		
IV	project monitoring plan	Knowledge about project monitoring plan		1		41		
IV	detailed scheduling	Knowledge about detailed scheduling		1		42		
IV	Design: Design concepts	Understanding Design concepts		2		44		
IV	function-oriented design	Understanding function-oriented		1		45		

Covered

Covered

		design						
IV	object oriented design	Understanding object oriented design		1		46		
IV	detailed design, verification and metrics	Understanding detailed design, verification and metrics		1	1	48		
V	Coding and Unit Testing	Understanding Coding and Unit Testing	FLIP CLASS	1		49		
V	Programming principles and guidelines	Understanding Programming principles and guidelines	FLIP CLASS	2		51		
V	incrementally developing code	Understanding incrementally developing code	FLIP CLASS	1	1	53		
V	managing evolving code	Knowledge about managing evolving code		1		54		
V	unit testing, code inspection, metrics	Knowledge about unit testing, code inspection, metrics		2		56		
V	Testing: Testing concepts, testing process	Knowledge about Testing: Testing concepts, testing process		1	1	58		
V	black-box testing, white-box testing, and metrics	Knowledge about black-box testing, white-box testing, and metrics		2		60		

56

Syllabus completed

Legend: Teaching Mode
BB: Black Board / LCD: Power Point Presentation / OHP: Over Head Projector

Signature of the Faculty

Signature of the HOD
Date:

LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : 2020-2021
Year & Semester : III B.Tech II SEMESTER
Branch & Section : INFORMATION TECHNOLOGY S1 and S2
Subject Name & Code : INDUSTRIAL ENGINEERING & ENTREPRENEURSHIP (ME6T6FE4)
Name of Faculty : K.I.V.VANDANA

Unit No	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode	Hours Required		Total No. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				L	T			
I	Definition and developments and role of Industrial Engineering	Definition and developments and role of Industrial Engineering	BB	2		2		
I	Definition and levels of Management	Definition and levels of Management	BB	1		3		
I	Functions of Management	Knowledge of forecasting and POSDCORB	BB	1		4		
I	Difference between policies , goals and objectives	Identifying differences between policies , goals and objectives	BB	2		6		
I	Taylors Principles of Management and Fayol's principle management	Concepts of Taylor's principles of management and turning towards humanistic approach	BB	2		8		
II	Organizational Structures : Basic concepts related to Organisation	Knowledge of Hierarchical structure of Organisation	BB	2		10		
II	Departmentation and Decentralization, Flat and Tall organizations	Organisation splitting into Departmentation and decentralization and benefits	BB	2		12		
II	Organizational chart	Knowledge of Organizational chart		2		14		
II	Line organization, Line and staff organization	Knowledge of Line organization, Line and staff organizational structures,	LCD	2		16		
II	functional organization	Knowledge of functional organization,	BB	2		18		
II	Leadership	Concepts of leadership	BB	1		19		

II	Types of leadership basing on authority	Different Types of leadership basing on authority	BB	1		20		
II	Area of applicability	Knowledge of area of application of leadership	LCD	1		21		
II	Advantages and limitations	Knowledge of application areas and limitations	LCD	1		22		
II	Traits approach to leadership (Extra Topic)	Knowledge about Traits of leadership	BB	1		23		
III	Statistical Quality Control-Introduction, variables and attributes, chance and assignable causes	Introduction on statistical quality control	BB	1		24		
III	Control charts : X and R charts	Knowledge of variable charts	BB	1		25		
III	problems	Practicing problems	BB	2		27		
III	Control charts: p charts and c charts and problems	Knowledge of attributes control charts	BB	1		28		
III	problems	Practicing problems	BB	2		30		
III	Accepatance sampling	Knowledge of Accepatance sampling	BB	2		32		
III	Introduction to TQM	Knowledge of total quality management	BB	1		33		
III	Quality circles	Knowledge of quality circles to improve quality	BB	2		35		
IV	Introduction to PERT / CPM and differences between PERT and CPM	Knowledge of project management and network modeling and applications	BB	1		36		
IV	Various types of activity times estimation- Programme Evaluation & Review technique	Evaluation through PERT	BB	1		37		
IV	Deterministic model, critical path method (CPM)-critical path calculation	Project management by CPM by finding critical path or the shortest route	BB	2		39		
IV	Crashing of simple of networks and smoothing	Practical problems solving by Crashing technique	BB	2		41		
IV	problems	problems	BB	2		43		
V	Entrepreneurship Introduction, concept and profile of enterpreneur	Knowledge of Entrepreneurship	BB	1		44		
V	Entrepreneurial philosophy, functions	Knowledge of functions and qualities of	BB	1		45		

	and qualities of entrepreneur	entrepreneur						
V	Entrepreneurial development and failure	Factors leading to development and failure of Entrepreneur	BB	1		46		
V	Introduction , role, scope and concept of small scale industries	knowledge of small scale industries	BB	1		47		
V	Startup of small scale industries	knowledge of small scale industries	BB	1		48		
V	Registration procedure of small scale industries	knowledge of registration procedure of small scale industries	BB	1		49		
V	Financial and other assistance provided to small scale industries	knowledge of Financial and other assistance provided to small scale industries	BB	1		50		

Legend: Teaching Mode
BB: Black Board / **LCD**: Power Point Presentation / **OHP**: Over Head Projector

K. I. Vi

Signature of the Faculty

Date: 19/3/21

Signature of the HOD

LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : 2020 – 2021 (PVP14)
Year & Semester : III B. Tech & II Semester S2
Branch : Information Technology
Subject Code & Name : IT6T2 & Computer Graphics and Algorithms
Name of Faculty : K.Swarupa Rani

Unit No	Topics of Syllabus to be covered	Learning outcomes	Teaching Mode	Hours Required		Total No. of Hours (Cumulative)	Expected date of completion (for each Unit) by HOD	Review/ Remarks (by HOD)
				L	T			
1	Applications of Graphics	Knowledge about Applications of Graphics	BB/LCD	1		1	22/3/21	
1	Graphic system	Understanding of Graphic system	BB /LCD	1		2		
1	Programmers interface	Understanding of Programmers interface	BB /LCD	1		3		
1	Tutorial	Tutorial			1	4		
1	Graphics architecture	Understanding of Graphics architecture	BB /LCD	1		5		
1	Programmable Pipelines, Performance characteristics	Knowledge about Pipelines, Performance characteristics	LCD	1		6		
1	The OpenGl API	Knowledge about The OpenGl API	BB /LCD	1		7		
1	Tutorial	Tutorial			1	8		
1	Primitives & Attributes	Knowledge about Primitives & Attributes	BB	1		9		
1	colors	Knowledge about colors	BB /LCD	1		10		
1	Viewing	Knowledge about Viewing		1		11		

1	Tutorial	Tutorial			1	12		
1	Control function	Understanding of Control function	BB /LCD	1		13		
1	Polygons & Recursion	Understanding of Polygons & Recursion	BB /LCD	1		14	17/4/21	
2	Input devices	Understanding of Input devices	LCD	1		15		
2	Tutorial	Tutorial			1	16		
2	Display lists	Understanding of Display lists	BB /LCD	1		17		
2	Display lists and modeling	Understanding of Display lists and modeling	BB /LCD	1		18		
2	Programming event driven input	Knowledge about Programming event driven input	LCD	1		19		
2	Tutorial	Tutorial			1	20		
2	Menus & Picking	Knowledge about Menus & Picking	LCD	1		21		
2	Building interactive models	Understanding of Building interactive models	BB	1		22		
2	Animating Interactive Programs	Knowledge about Animating Interactive Programs	BB /LCD	1		23		
2	Tutorial	Tutorial			1	24		
2	Design of Interactive programmes	Knowledge about Design of Interactive programmes	BB /LCD	1		25	8/5/21	
2	Logical operations	Understanding of Logical operations	BB /LCD	1		26		
3	Scalars, points, Vectors	Knowledge about Scalars, points, Vectors	BB /LCD	1		27		
3	Tutorial	Tutorial	BB /LCD		1	28		
3	Three dimensional primitives	Understanding of Three dimensional primitives	BB /LCD	1		29		
3	Coordinate systems & frames	Knowledge about Coordinate systems & frames	BB /LCD	1		30		

3	Affine transformation	Understanding of Affine transformation	BB	1		31		
3	Tutorial	Tutorial			1	32		
3	Translation, Rotation, Scaling	Understanding of Translation, Rotation, Scaling	BB	1		33		
3	Transformation in Homogeneous	Understanding of Transformation in Homogeneous	LCD	1		34		
3	Concatnation of Transformations	Knowledge about Concatnation of Transformations	BB	1		35		
3	Tutorial	Tutorial			1	36		
3	Opengl transformation matrices	Understanding of Opengl transformation matrices	BB /LCD	1		37		
3	Interface to 3D Applications	Understanding of Interface to 3D Applications	BB /LCD	1		38	5/6/21	
4	Classical & computer viewing	Knowledge about Classical & computer viewing	BB /LCD	1		39		
4	Tutorial	Tutorial			1	40		
4	Positioning of Camera	Understanding of Positioning of Camera	BB /LCD	1		41		
4	Simple Projections	Knowledge about Simple Projections	BB /LCD	1		42		
4	Projection in Opengl	Understanding of Projection in Opengl	BB /LCD	1		43		
4	Tutorial	Tutorial			1	44		
4	Hidden surface removal	Understanding of Hidden surface removal	BB /LCD	1		45		
4	Mesh displays	Knowledge about Mesh displays	BB /LCD	1		46		
4	Parallel Projection Mattrices	Knowledge about Parallel Projection Mattrices	BB /LCD	1		47		
4	Tutorial	Tutorial			1	48		
4	Perspective Projection matrices	Understanding of Perspective Projection matrices	BB /LCD	1		49		

4	Projections & shadows	Understanding of Projections & shadows	BB /LCD	1		50	19/6/21	
5	Basic implementation strategies	Understanding of Basic implementation strategies	BB /LCD	1		51		
5	Tutorial	Tutorial			1	52		
5	Clipping, Line segment clipping	Knowledge about Clipping, Line segment clipping	BB /LCD	1		53		
5	Cohen suther land Clipping	Understanding of Cohen suther land Clipping	BB /LCD	1		54	54 Sut corrected	
5	Polygon clipping Clipping 3D	Knowledge about Polygon clipping	BB /LCD	1		55		
5	Tutorial	Tutorial	BB		1	56		
5	Bresenhams Algorithm	Understanding of Bresenhams Algorithm	BB /LCD	2		58		
5	Polygon rasterization	Understanding of Polygon rasterization	BB /LCD	2		60	30/6/21	

Legend: Teaching Mode
BB: Black Board / **LCD**: Power Point Presentation / **OHP**: Over Head Projector

K. Swarupa rani
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Information Technology Department
PRASAD V.POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007.

LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : 2020 -2021 (PVP14)
Year & Semester : III B.Tech & II Semester S2
Branch : Information Technology
Subject Code & Name : IT6L3 & Computer Graphics and Algorithms Lab
Name of Faculty : K.Swarupa Rani

Unit No	Topics of Syllabus to be covered	Learning outcomes	Teaching Mode	Hours Required		Total No. of Hours (Cumulative)	Expected date of completion (for each Unit) by HOD	Review/ Remarks (by HOD)
				L	T			
1	Execute a program to draw points on a plane in OpenGL.	Execute a program to draw points on a plane in OpenGL.	BB/LCD	3		3	27/3/21	
2	Execute program to draw a line on plane in OpenGL	Execute program to draw a line on plane in OpenGL	BB/LCD	6		9	10/4/21	
3	program to draw circle on plane in OpenGL	program to draw circle on plane in OpenGL	BB/LCD	3		12	17/4/21	
4	Write a program draw a white rectangle on a black background in OpenGL.	Write a program draw a white rectangle on a black background in OpenGL.	BB/LCD	3		15	24/4/21	
5	Write program to draw a color cube and spin it using open GL transformation matrices in OpenGL	Write program to draw a color cube and spin it using open GL transformation matrices in OpenGL	BB/LCD	3		18	1/5/21	
6	Write program to create a house like figure and rotate it about a given fixed point	Write program to create a house like figure and rotate it about a given fixed point	BB/LCD	6		24	15/5/21	Syl Covered

7	Write program to implement the Cohen-Sutherland line clipping algorithm	Write program to implement the Cohen-Sutherland line clipping algorithm		6		30	29/5/21	
8	Write a program to fill any given polygon using scan line area filling algorithm in OpenGL.	Write a program to fill any given polygon using scan line area filling algorithm in OpenGL.	LCD	6		36	12/6/21	Sy/ completed
9	Write Program to display a set of values {fij} as a rectangular mesh.	Write Program to display a set of values {fij} as a rectangular mesh.	LCD	6		39 42	26/6/21	

Legend: Teaching Mode
BB: Black Board / **LCD**: Power Point Presentation / **OHP**: Over Head Projector

K. Swaruparani
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LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : 2020 – 2021 (PVP14)
Year & Semester : III B. Tech & II Semester S1
Branch : Information Technology
Subject Code & Name : IT6T2 & Computer Graphics and Algorithms
Name of Faculty : **Dr.**K.Pavan Kumar

Unit No	Topics of Syllabus to be covered	Learning outcomes	Teaching Mode	Hours Required		Total No. of Hours (Cumulative)	Expected date of completion (for each Unit) by HOD	Review/ Remarks (by HOD)
				L	T			
1	Applications of Graphics	Knowledge about Applications of Graphics	BB/LCD	1		1		
1	Graphic system	Understanding of Graphic system	BB /LCD	1		2		
1	Programmers interface	Understanding of Programmers interface	BB /LCD	1		3		
1	Tutorial	Tutorial			1	4		
1	Graphics architecture	Understanding of Graphics architecture	BB /LCD	1		5		
1	Programmable Pipelines, Performance characteristics	Knowledge about Pipelines, Performance characteristics	LCD	1		6		
1	The OpenGl API	Knowledge about The OpenGl API	BB /LCD	1		7		
1	Tutorial	Tutorial			1	8		
1	Primitives & Attributes	Knowledge about Primitives & Attributes	BB	1		9		
1	colors	Knowledge about colors	BB /LCD	1		10		
1	Viewing	Knowledge about Viewing		1		11		

1	Tutorial	Tutorial			1	12		
1	Control function	Understanding of Control function	BB /LCD	1		13		
1	Polygons & Recursion	Understanding of Polygons & Recursion	BB /LCD	1		14	12/4/21	
2	Input devices	Understanding of ~~Input devices~~	LCD	1		15		
2	Tutorial	Tutorial			1	16		
2	Display lists	Understanding of Display lists	BB /LCD	1		17		
2	Display lists and modeling	Understanding of Display lists and modeling	BB /LCD	1		18		
2	Programming event driven input	Knowledge about Programming event driven input	LCD	1		19		
2	Tutorial	Tutorial			1	20		
2	Menus & Picking	Knowledge about Menus & Picking	LCD	1		21		
2	~~Building~~ interactive models	~~Understanding of~~ Building interactive models	~~BB~~	1		22		
2	Animating Interactive Programs	Knowledge about Animating Interactive Programs	BB /LCD	1		23		
2	Tutorial	Tutorial			1	24		
2	Design of Interactive programmes	Knowledge about Design of Interactive programmes	BB /LCD	1		25		
2	~~Logical~~ operations	~~Understanding of~~ Logical operations	~~BB /LCD~~	1		26	8/5/21	
3	Scalars, points, Vectors	Knowledge about Scalars, points, Vectors	BB /LCD	1		27		
~~3~~	~~Tutorial~~	~~Tutorial~~	~~BB /LCD~~		~~1~~	~~28~~		
3	Three dimensional primitives	Understanding of Three dimensional primitives	BB /LCD	1		29		
3	Coordinate ~~systems &~~ frames	Knowledge about ~~Coordinate systems~~ & frames	BB /LCD	1		30		

3	Affine transformation	Understanding of Affine transformation	BB	1		31		
3	Tutorial	Tutorial			1	32		
3	Translation, Rotation, Scaling	Understanding of Translation, Rotation, Scaling	BB	1		33		
3	Transformation in Homogeneous	Understanding of Transformation in Homogeneous	LCD	1		34		
3	Concatnation of Transformations	Knowledge about Concatnation of Transformations	BB	1		35		
3	Tutorial	Tutorial			1	36		
3	Opengl transformation matrices	Understanding of Opengl transformation matrices	BB /LCD	1		37		
3	Interface to 3D Applications	Understanding of Interface to 3D Applications	BB /LCD	1		38		
4	Classical & computer viewing	Knowledge about Classical & computer viewing	BB /LCD	1		39		
4	Tutorial	Tutorial			1	40	5/6/21	
4	Positioning of Camera	Understanding of Positioning of Camera	BB /LCD	1		41		
4	Simple Projections	Knowledge about Simple Projections	BB /LCD	1		42		
4	Projection in Opengl	Understanding of Projection in Opengl	BB /LCD	1		43		
4	Tutorial	Tutorial			1	44		
4	Hidden surface removal	Understanding of Hidden surface removal	BB /LCD	1		45	S/I covered	
4	Mesh displays	Knowledge about Mesh displays	BB /LCD	1		46		
4	Parallel Projection Mattrices	Knowledge about Parallel Projection Mattrices	BB /LCD	1		47		
4	Tutorial	Tutorial			1	48		
4	Perspective Projection matrices	Understanding of Perspective Projection matrices	BB /LCD	1		49	S/I covered	

4	Projections & shadows	Understanding of Projections & shadows	BB /LCD	1		50		
5	Basic implementation strategies	Understanding of Basic implementation strategies	BB /LCD	1		51		
5	Tutorial	Tutorial			1	52	19/6/21	
5	Clipping, Line segment clipping	Knowledge about Clipping, Line segment clipping	BB /LCD	1		53		
5	Cohen suther land Clipping	Understanding of Cohen suther land Clipping	BB /LCD	1		54		
5	Polygon clipping Clipping 3D	Knowledge about Polygon clipping	BB /LCD	1		55		
5	Tutorial	Tutorial	BB		1	56		
5	Bresenhams Algorithm	Understanding of Bresenhams Algorithm	BB /LCD	2		58		
5	Polygon rasterization	Understanding of Polygon rasterization	BB /LCD	2		60	30/6/21	

Legend: Teaching Mode
BB: Black Board / **LCD**: Power Point Presentation / **OHP**: Over Head Projector

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PVP SIDDHARTHA INSTITUTE OF TECHNOLOGY

PROCESS RECORD FOR ACADEMICS

LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : 2020 -2021 (PVP14)
Year & Semester : III B.Tech & II Semester S1
Branch : Information Technology
Subject Code & Name : IT6L3 & Computer Graphics and Algorithms Lab
Name of Faculty : Dr.K.Pavan Kumar

Unit No	Topics of Syllabus to be covered	Learning outcomes	Teaching Mode	Hours Required		Total No. of Hours (Cumulative)	Expected date of completion (for each Unit) by HOD	Review/ Remarks (by HOD)
				L	T			
1	Execute a program to draw points on a plane in OpenGL.	Execute a program to draw points on a plane in OpenGL.	BB/LCD	3		3	29/3/21	
2	Execute program to draw a line on plane in OpenGL	Execute program to draw a line on plane in OpenGL	BB/LCD	6		9	10/4/21	
3	program to draw circle on plane in OpenGL	program to draw circle on plane in OpenGL	BB/LCD	3		12	17/4/21	
4	Write a program draw a white rectangle on a black background in OpenGL.	Write a program draw a white rectangle on a black background in OpenGL.	BB/LCD	3		15	24/4/21	
5	Write program to draw a color cube and spin it using open GL transformation matrices in OpenGL	Write program to draw a color cube and spin it using open GL transformation matrices in OpenGL	BB/LCD	3		18	1/5/21	
6	Write program to create a house like figure and rotate it about a given fixed point	Write program to create a house like figure and rotate it about a given fixed point	BB/LCD	6		24	15/5/21	

7	Write program to implement the Cohen-Sutherland line clipping algorithm	Write program to implement the Cohen-Sutherland line clipping algorithm		6		30	29/5/21	
8	Write a program to fill any given polygon using scan line area filling algorithm in OpenGL.	Write a program to fill any given polygon using scan line area filling algorithm in OpenGL.	LCD	6		36 (39)	12/6/21 S4/ completed	
9	Write Program to display a set of values {fij} as a rectangular mesh.	Write Program to display a set of values {fij} as a rectangular mesh.	LCD	6		42	26/6/21	

Legend: Teaching Mode
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LESSON PLAN

Academic Year : 2020-2021
Year & Semester : III B.TECH & II SEM SEC I
Branch : INFORMATION TECHNOLOGY
Subject Code & Name : IT6T3 OBJECT ORIENTED ANALYSIS AND DESIGN
Name of Faculty : Dr. D. Kavitha

Unit No	Topic of Syllabus to be covered	Learning outcomes	Teaching mode	Hours Required		Total no. of Hours (Cumulative)	Expected date of completion (for each unit) By HOD	Review Remarks (By HOD)
				L	T			
I	Introduction to UML	Knowledge on OOAD, Background for UML	BB	1		1		
I	Importance of Modeling	Knowledge on Modeling, Purpose of Modeling	BB	1		2		
I	Principles of Modeling	Understanding Modeling concepts	BB	1		3		
	Tutorial				1	4		
I	Object Oriented Modeling	Knowledge on Object Oriented Features, Object, Class	BB	1		5		
I	Conceptual model of the UML	Knowledge on UML	BB	2		7		
	Tutorial				1	8		
I	Architecture	Knowledge on different views and the architecture	BB	1		9		
I	Software Development Life Cycle	Knowledge on any of the SDLC like waterfall model	BB	1		10		
I	Basic Structural Modeling	Knowledge on the structural view in modeling	BB	1		11		
	Tutorial				1	12		

I	Classes, Relationships, Common Mechanism	Knowledge on Classes, Relationships, Common Mechanism	BB	2		14		
I	Diagrams	Able to represent the various diagrams	LCD	1		15	17/4/21	Done
	Tutorial		BB		1	16		
II	Advanced Classes	Knowledge on Advanced Classes	BB	1		17		
II	Advanced Relationships	Knowledge on Advanced Relationships		2		19		
	Tutorial				1	23		
II	Interfaces	Knowledge on Interfaces	BB	1		21		
II	Types and Roles	Knowledge on Types and Roles	BB	1		22		
II	Packages	Knowledge on packages	BB	1		23		
	Tutorial				1	24		
II	Class and Object Diagrams	Knowledge on different terms used for class and object diagrams	BB	1		25		
II	Concepts	Knowledge on various class and object concepts	BB	1		26		
II	Modeling techniques	Knowledge on various modeling techniques	BB	2		27		
	Tutorials				1	28	8/5/21	Done
III	Interactions	Knowledge on Interaction	BB	2		30		
III	Interaction diagrams	Knowledge on sequence diagram, Communication Diagrams	BB	2		32		
	Tutorial				1	33		
III	Use Cases	Knowledge on Use Cases, use case generalization	BB	2		35		
	Tutorial				1	36		
III	Use Case diagrams	Understanding and drawing the use case diagrams	BB	2		38		

III	Activity Diagrams	Knowledge on activity diagram	LCD	1		39		
	Tutorial				1	40	5/6/21	
IV	Events and Signals	Knowledge on Events and Signals	BB	1		41		
IV	State Machines	Knowledge on State Machines	BB	1		42		
IV	Processes and Threads	Knowledge on processes and Threads		1		43		
	Tutorial				1	44		
IV	time and space	Knowledge on time and space	BB	1		45		
IV	state chart diagrams	Knowledge on state chart diagrams	BB	3		48		
V	Components	Knowledge on Components	BB	1		49		
	Tutorials				1	50	16/6/21	
V	Deployment	Understanding of the term deployment	BB	2		52		
V	Component diagrams	Knowledge on components, interface, realization	BB	1		53		
	Tutorials				1	54		
V	Deployment diagrams	Knowledge on deployment diagrams	BB	1		55		
V	Case Study: Implementing a Web Based Auction System using UML and Component-Based Programming	Applying the views to the Implementing a Web Based Auction System	BB	3		58	30/6/21	

Legend: Teaching mode
BB: Black Board LCD: Power Point Presentation OHP: Over Head Projector L: Lecture Hours
T: Tutorial Hours

D. Kavi
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LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : 2020 -2021
Year & Semester : III B.Tech & II Sem Sec I
Branch : INFORMATION TECHNOLOGY
Subject Code & Name : OOAD Lab & IT6L1
Name of Faculty : Dr. D.Kavitha

S.No	Experiment Name	Hours Required	Total number of hours required	Expected date of completion (for each unit) by HOD	Review / Remarks (by HOD)
1	Introduction	3	3	27/3/21	
2	Requirement Elicitation, System Requirement Specification.	3	6	10/4/21	
3	Modeling Banking Application, Web Based Auction System using Use case view	6	12	24/4/21	
4	Modeling Banking Application, Web Based Auction System using Activity Diagram	6	18	15/5/21	Completed
5	Identification of Analysis Classes, Construction of UML static class diagram	6	24	29/5/21	
6	Construction of Sequence diagram/ Construction of Collaboration diagram/State chart diagram	6	30 (33)	12/6/21	Completed
7	Model the component and deployment diagrams	6	36		
8	Performing Analysis and modeling all the views along with Design and Deployment for any Business Application	3	39	26/6/21	
9	Internal Assessment	3	42	26/6/21	Completed

(33)

D. Kavitha
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LESSON PLAN

Academic Year : 2020-2021
Year & Semester : III B.TECH & II SEM SEC II
Branch : INFORMATION TECHNOLOGY
Subject Code & Name : IT6T3 OBJECT ORIENTED ANALYSIS AND DESIGN
Name of Faculty : I.M.V.Krishna

Unit No	Topic of Syllabus to be covered	Learning outcomes	Teaching mode	Hours Required		Total no. of Hours (Cumulative)	Expected date of completion (for each unit) By HOD	Review Remarks (By HOD)
				L	T			
I	Introduction to UML	Knowledge on OOAD, Background for UML	BB	1		1		
I	Importance of Modeling	Knowledge on Modeling, Purpose of Modeling	BB	1		2		
I	Principles of Modeling	Understanding Modeling concepts	BB	1		3		
	Tutorial				1	4		
I	Object Oriented Modeling	Knowledge on Object Oriented Features, Object, Class	BB	1		5		
I	Conceptual model of the UML	Knowledge on UML	BB	2		7		
	Tutorial				1	8		
I	Architecture	Knowledge on different views and the architecture	BB	1		9		
I	Software Development Life Cycle	Knowledge on any of the SDLC like waterfall model	BB	1		10		
I	Basic Structural Modeling	Knowledge on the structural view in modeling	BB	1		11		
	Tutorial				1	12		

I	Classes, Relationships, Common Mechanism	Knowledge on Classes, Relationships, Common Mechanism	BB	2		14		
I	Diagrams	Able to represent the various diagrams	LCD	1		15	18/4/24	
	Tutorial		BB		1	16		
II	Advanced Classes	Knowledge on Advanced Classes	BB	1		17		
II	Advanced Relationships	Knowledge on Advanced Relationships		2		19		
	Tutorial				1	23		
II	Interfaces	Knowledge on Interfaces	BB	1		21		
II	Types and Roles	Knowledge on Types and Roles	BB	1		22		
II	Packages	Knowledge on packages	BB	1		23		
	Tutorial				1	24		
II	Class and Object Diagrams	Knowledge on different terms used for class and object diagrams	BB	1		25		
II	Concepts	Knowledge on various class and object concepts	BB	1		26		
II	Modeling techniques	Knowledge on various modeling techniques	BB	2		27		
	Tutorials				1	28	3/5/24	Covered
III	Interactions	Knowledge on Interaction	BB	2		30		
III	Interaction diagrams	Knowledge on sequence diagram, Communication Diagrams	BB	2		32		
	Tutorial				1	33		
III	Use Cases	Knowledge on Use Cases, use case generalization	BB	2		35		
	Tutorial				1	36		
III	Use Case diagrams	Understanding and drawing the use case diagrams	BB	2		38		

III	Activity Diagrams	Knowledge on activity diagram	LCD	1		39		
	Tutorial				1	40	5/6/21	
IV	Events and Signals	Knowledge on Events and Signals	BB	1		41		
IV	State Machines	Knowledge on State Machines	BB	1		42		
IV	Processes and Threads	Knowledge on processes and Threads		1		43		
	Tutorial				1	44		Covered
IV	time and space	Knowledge on time and space	BB	1		45		
IV	state chart diagrams	Knowledge on state chart diagrams	BB	3		48		
V	Components	Knowledge on Components	BB	1		49		
	Tutorials				1	50	18/6/21	
V	Deployment	Understanding of the term deployment	BB	2		52		
V	Component diagrams	Knowledge on components, interface, realization	BB	1		53		
	Tutorials				1	54		
V	Deployment diagrams	Knowledge on deployment diagrams	BB	1		55		55 Sy/Covered
V	Case Study: Implementing a Web Based Auction System using UML and Component-Based Programming	Applying the views to the Implementing a Web Based Auction System	BB	3		58	30/6/21	

Legend: Teaching mode
BB: Black Board LCD: Power Point Presentation OHP: Over Head Projector L: Lecture Hours
T: Tutorial Hours

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LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : 2020 -2021
Year & Semester : III B.Tech & II Sem Sec II
Branch : INFORMATION TECHNOLOGY
Subject Code & Name : OOAD Lab & IT6L1
Name of Faculty : I.M.V.Krishna

S.No	Experiment Name	Hours Required	Total number of hours required	Expected date of completion (for each unit) by HOD	Review / Remarks (by HOD)
1	Introduction	3	3	27/3/21	
2	Requirement Elicitation, System Requirement Specification.	3	6	10/4/21	
3	Modeling Banking Application, Web Based Auction System using Use case view	6	12	24/4/21	
4	Modeling Banking Application, Web Based Auction System using Activity Diagram	6	18	15/5/21	Covered
5	Identification of Analysis Classes, Construction of UML static class diagram	6	24	29/5/21	
6	Construction of Sequence diagram/ Construction of Collaboration diagram/State chart diagram	6	30	12/6/21	
7	Model the component and deployment diagrams	6	36	26/6/21	
8	Performing Analysis and modeling all the views along with Design and Deployment for any Business Application	3	39	26/6/21	
9	Internal Assessment	3	42	26/6/21	Completed

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LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : 2020-2021
Year & Semester : III B. TECH II Sem - S1
Branch : INFORMATION TECHNOLOGY
Subject Code & Name : IT6T4, DATA WAREHOUSING & DATA MINING
Name of Faculty : Mrs. D. Leela Dharani

Unit No	Topic of Syllabus to be covered	Learning outcomes	Teaching mode	Hours Required		Total no. of Hours (Cumulative)	Expected date of completion (for each unit) By HOD	Review / Remarks (By HOD)
				L	T			
I	Introduction: fundamentals of data mining	Introduction: fundamentals of data mining	BB	1		1	23/3/21	
I	Data Mining Functionalities	Knowledge on Data Mining Functionalities	PPT	1		2		
I	Classification of data mining	Classification of data mining	PPT	2		4		
I	Tutorial		BB		1	5		
I	Major issues in Data Mining	Knowledge on Major issues in Data Mining	BB	1		6		
I	Data preprocessing:Needs Preprocessing the Data, Data Cleaning, Data integration	Knowledge on Data preprocessing Techniques	PPT	2		8		
I	Data Reduction,Data Transformation and discretization	Knowledge on Data Reduction, Data Transformation and discretization	PPT	2		10	9/4/21	
I	Tutorial		BB		1	11		
II	Datawarehousing and Online Analytical processing:basic Conecpts	Knowledge on Datawarehousing and Online Analytical processing	PPT	2		13		
II	Datawarehouse Modeling:DataCube and OLAP	Knowledge on Datawarehouse Modeling:DataCube and OLAP	PPT	3		16		

II	Tutorial		BB		1	17		
II	Data Objects and Attribute Types	Knowledge on Data Objects and Attribute Types	BB	2		19		
II	Basic Statistical Description of Data	Knowledge on Basic Statistical Description of Data	BB	2		21		
II	Measuring Data Similarity and Dissimilarity	Knowledge on Data Similarity and Dissimilarity	PPT	2		23		
II	Tutorial		BB		1	24	29/4/21	
III	Mining Frequent Patterns, Associations and correlations: basic concepts, Frequent Item set Mining Methods	Knowledge on Mining Frequent Patterns,Associations and correlations: basic concepts,Frequent Itemset Mining Methods	PPT	3		27		
III	Pattern Evaluation Methods and pattern mining in multilevel,multidimensional space	Knowledge on Pattern Evaluation Methods and pattern	PPT	3		30		
III	Tutorial		BB	1		31		
IV	Classification:Baisc concepts,Decision Tree Inductionj	Knowledge on Classification:Basic concepts,Decision Tree Induction	PPT	2		33		
IV	Bayes classification methods, Rule-based classification	Knowledge on Bayes classification methods, Rule-based classification	PPT	3		36		
	Tutorial		BB		1	37		
IV	Model Evaluation and Selection	Knowledge on Model Evaluation and Selection	PPT	2		39	12/5/21	
IV	Techniques to improve classification accuracy	Knowledge on Techniques to improve classification accuracy	PPT	3		42		
			BB					

		improve classification accuracy				42		
IV	Tutorial		BB		1	43		
V	Cluster Analysis: Basic concepts and methods, cluster analysis	Knowledge on Cluster Analysis	PPT	2		45		
V	Partitioning methods, Hierarchical methods	Knowledge on Partitioning methods, Hierarchical methods	PPT	2		47		
	Tutorial		PPT		1	48		
V	Cluster analysis: density-based methods,Grid-based methods	Knowledge on Cluster analysis: density-based methods, Grid-based methods	PPT	2		50		
V	Evaluation of clustering. Outlier Detection: outliers and outlier analysis, outlier detection methods	Knowledge on Evaluation of clustering	PPT	1		51		
V	Introduction to text mining	Knowledge on text mining	FLIP	1		52		

54 Syl completed

Legend: Teaching mode

BB: Black Board LCD: Power Point Presentation OHP: Over Head Projector

L: Lecture Hours T: Tutorial Hours

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LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : **2020-2021**
Year & Semester : **III B.TECH & II SEM- S1**
Branch : **INFORMATION TECHNOLOGY**
Subject Code & Name : **IT6L2 & DM LAB**
Name of Faculty : **Mrs. D. Leela Dharani**

S.No	Experiment Name	Hours Required	Total number of hours required	Expected date of completion (for each unit) By HOD	Review / Remarks (By HOD)
1	Introduction to DM lab	3	3		
2	week1: Perform data preprocessing using data mining tool.	3	6		
3	week2: Perform discretization of data using data mining tool.	3	9 (12)		
4	week3: Apply association rule process on a sample data set using Apriori algorithm.	6	15		
5	Week 4: Apply association rule process on a sample data set using FP Growth algorithm.	3	18		
6	Week5: Apply the classification tool process on data set using any decision tree algorithm. a) Naive Bayes b) Linear Regression	3	21		
7	Week:6 Apply the classification tool process on data set using any decision tree algorithm a) JRip b) ZeroR	3	24		
8	Week 7: Apply the classification tool process on data set using any decision tree algorithm a) id3 b) J48	3	27		
9	Week 8: Apply Clustering process to a sample data set using k-means.	3	30		
10	Week 9: Apply Clustering process to a sample data set using k-medoids.	3	33		
11	Week 10: A small case study involving all stages of KDD. (Datasets are available online like UCI Repository etc.)	3	36 (38)		

D. Leela Dharani
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LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : 2020- 2021
Year & Semester : III B. TECH II Sem – S2
Branch : INFORMATION TECHNOLOGY
Subject Code & Name :IT6T4,DATA MINING AND DATA WAREHOUSING
Name of Faculty : Dr. A.Haritha

Unit No	Topic of Syllabus to be covered	Learning outcomes	Teaching mode	Hours Required		Total no. of Hours (Cumulative)	Expected date of completion (for each unit) By HOD	Review / Remarks (By HOD)
				L	T			
I	Introduction: fundamentals of data mining	Introduction: fundamentals of data mining	BB	1		1		
I	Data Mining Functionalities	Knowledge on Data Mining Functionalities	PPT	1		2		
I	Classification of data mining	Classification of data mining	PPT	2		4		
I	Tutorial		BB		1	5		
I	Major issues in Data Mining	Knowledge on Major issues in Data Mining	BB	1		6		
I	Data preprocessing:Needs Preprocessing the Data, Data Cleaning, Data integration	Knowledge on Data preprocessing Techniques	PPT	2		8		
I	Data Reduction, Data Transformation and discretization	Knowledge on Data Reduction, Data Transformation and discretization	PPT	2		10		
I	Tutorial		BB		1	11		
II	Data warehousing and Online Analytical processing: basic Concepts	Knowledge on Data warehousing and Online Analytical processing	PPT	2		13		
II	Data warehouse Modelling:DataCube	Knowledge on Datawarehouse	PPT	3		16		

	and OLAP	Modeling:DataCube and OLAP						
II	Tutorial		BB		1	17		
II	Data Objects and Attribute Types	Knowledge on Data Objects and Attribute Types	PPT	2		19		
II	Basic Statistical Description of Data	Knowledge on Basic Statistical Description of Data	BB	2		21		
II	Measuring Data Similarity and Dissimilarity	Knowledge on Data Similarity and Dissimilarity	PPT	2		23		
II	Tutorial		BB		1	24		
III	Mining Frequent Patterns, Associations and correlations: basic concepts, Frequent Item set Mining Methods	Knowledge on Mining Frequent Patterns, Associations and correlations: basic concepts, Frequent Item set Mining Methods	FLIP	3		27		
III	Pattern Evaluation Methods and pattern mining in multilevel, multidimensional space	Knowledge on Pattern Evaluation Methods and pattern	PPT	3		30		
III	Tutorial		BB	1		31		
IV	Classification:Baisc concepts,Decision Tree Induction	Knowledge on Classification:Basic concepts, Decision Tree Induction	PPT	2		33		
IV	Bayes classification methods, Rule-based classification	Knowledge on Bayes classification methods, Rule-based classification	PPT	3		36		
	Tutorial		BB		1	37		
IV	Model Evaluation and Selection	Knowledge on Model Evaluation and Selection	PPT	2		39		
IV	Techniques to improve classification accuracy	Knowledge on Techniques to	PPT	3				

		improve classification accuracy				42		
IV	Tutorial		BB		1	43		
V	Cluster Analysis: Basic concepts and methods, cluster analysis	Knowledge on Cluster Analysis	PPT	2		45		
V	Partitioning methods, Hierarchical methods	Knowledge on Partitioning methods, Hierarchical methods	PPT	2		47		
	Tutorial		PPT		1	48		
V	Cluster analysis: density-based methods,Grid-based methods	Knowledge on Cluster analysis: density-based methods, Grid-based methods	PPT	2		50		
V	Evaluation of clustering. Outlier Detection: outliers and outlier analysis, outlier detection methods	Knowledge on Evaluation of clustering	PPT	1		51		
V	Introduction to text mining	Knowledge on text mining	FLIP	1		52		

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Legend: Teaching mode

BB: Black Board LCD: Power Point Presentation OHP: Over Head Projector

L: Lecture Hours T: Tutorial Hours

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KANURU, VIJAYAWADA-520 007.

LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : **2020-2021**
Year & Semester : **III B.TECH & II SEM- S2**
Branch : **INFORMATION TECHNOLOGY**
Subject Code & Name : **IT6L2 & DM LAB**
Name of Faculty : **Dr.A.Haritha**

S.No	Experiment Name	Hours Required	Total number of hours required	Expected date of completion (for each unit) By HOD	Review / Remarks (By HOD)
1	Introduction to DM lab	3	3		
2	week1: Perform data preprocessing using data mining tool.	3	6		
3	week2: Perform discretization of data using data mining tool.	3	9		
4	week3: Apply association rule process on a sample data set using Apriori algorithm.	6	15		
5	Week 4: Apply association rule process on a sample data set using FP Growth algorithm.	3	18		
6	Week5: Apply the classification tool process on data set using any decision tree algorithm. a) Naive Bayes b) Linear Regression	3	21		
7	Week:6 Apply the classification tool process on data set using any decision tree algorithm a) JRip b) ZeroR	3	24		
8	Week 7: Apply the classification tool process on data set using any decision tree algorithm a) id3 b) J48	3	27		
9	Week 8: Apply Clustering process to a sample data set using k-means.	3	30		
10	Week 9: Apply Clustering process to a sample data set using k-medoids.	3	33		
11	Week 10: A small case study involving all stages of KDD. (Datasets are available online like UCI Repository etc.)	3	36		

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LESSON PLAN
(PVPSIT/ACD /01)

mic Year : 2020-21
Semester : III year II-semester
: IT
t Code & Name : MATLAB PROGRAMMING AND APPLICATIONS (Free Elective)
of Faculty : T.Narasimha Prasad

Topic of syllabus to be covered	Learning Outcomes	Teaching Mode BB/ LCD/ OHP.	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit)	Review Remark (By HOD
			Lecture	Tutorial			
Introduction to MATLAB	Learn the importance of MATLAB	BB	1		1		
Basics of MATLAB	Understands the basics of MATLAB	BB	1	1	3		
Windows	Understand the different types of windows exists in the MATLAB	BB	1		4		
Input-Output	Understands about data types,Dimensioning,output display etc.	BB	1	1	6		
File Types	Know about different types of files used in MATLAB	BB	1		7		
Platform Dependence commands and General commands in MATLAB	Understands the platform dependence commands and general commands of MATLAB.	BB&LCD	1	1	9		
Special variables operators	Learn about Special variables operators	BB	1		10		
Simple Arithmetic calculations	Learn about solving of simple arithmetic calculations in MATLAB	BB	1	1	12		
Arrays of numbers	Learn about creating and working with arrays of numbers.	BB	1	1	14		
Printing Simple Plots	Learn about creating and printing of simple plots.	BB	1	1	16		
Creating, saving and executing script files	Learn about creating, saving and executing of a Script file.	BB	1	1	18		
Function files	Learn about creating, saving and executing of a Function file.	BB&LCD	1	1	20		
Matrices and vectors	Learn about working with matrices and vectors and simple calculations.	BB	1		21		

2	Matrix and Array operations - Arithmetic operations	Learn about arithmetic operations in MATLAB	BB	1		22		
2	Relational Operations	Learn about Relational operations in MATLAB	BB	1		23		
2	Logical Operations	Learn about Logical operations in MATLAB	BB	1		24		
2	Matrix Functions	Learn about matrix functions	BB&LCD	1	1	26		
2	Specialized matrices	Learns syntax for the specialized matrices	BB	1		27		
2	Character string functions	Learn about Character string functions	BB	1		28		
3	Built-in functions	Learn about some of the built in functions used in MATLAB.	BB	2		30		
3	Saving and loading data	Learn about Saving and loading data	BB	1		31		
3	Plotting simple graphs	Understands about plotting of simple graphs.	BB&LCD	1	1	33		
3	Script files	Learn how to use script files in MATLAB	BB	1		34		
3	Function files	Learn how to Write and execute function files in MATLAB	BB	2		36		
3	Language specific features	Learn about different control flow statements such as if,if-else,for,while etc.	BB	2	1	39		
3	Advanced data objects	Learn about advanced data objects such as cells and structures.	BB&LCD	1	1	41		
4	Solving problems in linear algebra	Understands about solving of linear algebra in MATLAB.	BB	1		42		
4	Curve fitting and interpolation	Learn about polynomial curve fittings and interpolation.	BB	1	1	44		
4	Data analysis and statistics	Learn how to perform simple data analysis in MATLAB	BB	1		45		
4	Integration	Learn how to simplify integral equations.	BB	1		46		
4	Ordinary Differential Equations	Learn how to simplify Differential equations.	BB&LCD	1		47		
5	Graphics-2-D plots, subplots	Learn how to draw and edit 2-D plots, and Commonly used functions for 2-D plotting.	BB	1		48		
5	3D plots, mesh and surface plots	Learn how to draw and edit 3-D, mesh, surface plots and Commonly used functions for 3-D plotting.	BB	1	1	50		
5	Handling graphics	Learn how to handle graphics.	BB&LCD	1	1	52		

BB: Black Board / **LCD**: Power Point Presentation / **OHP**: Over Head Projector

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LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : 2020-21
Year & Semester : III year II-semester
Branch : IT
Subject Code & Name : MATLAB PROGRAMMING AND APPLICATIONS (Free Elective)
Name of Faculty : G.Madhavi

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode BB/ LCD/ OHP.	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit)	Review/ Remarks (By HOD)
				Lecture	Tutorial			
1	Introduction to MATLAB	Learn the importance of MATLAB	BB	1		1	22-03-21	
1	Basics of MATLAB	Understands the basics of MATLAB	BB	1	1	3		
1	Windows	Understand the different types of windows exists in the MATLAB	BB	1		4		
1	Input-Output	Understands about data types,Dimensioning,output display etc.	BB	1	1	6		
1	File Types	Know about different types of files used in MATLAB	BB	1		7		
1	Platform Dependence commands and General commands in MATLAB	Understands the platform dependence commands and general commands of MATLAB.	BB&LCD	1	1	9		
1	Special variables operators	Learn about Special variables operators	BB	1		10		
1	Simple Arithmetic calculations	Learn about solving of simple arithmetic calculations in MATLAB	BB	1	1	12		
1	Arrays of numbers	Learn about creating and working with arrays of numbers.	BB	1	1	14		
1	Printing Simple Plots	Learn about creating and printing of simple plots.	BB	1	1	16		
1	Creating, saving and executing script files	Learn about creating, saving and executing of a Script file.	BB	1	1	18		
1	Function files	Learn about creating, saving and executing of a Function file.	BB&LCD	1	1	20	23/4/21	
2	Matrices and vectors	Learn about working with matrices and vectors and simple calculations.	BB	1		21		

2	Matrix and Array operations - Arithmetic operations	Learn about arithmetic operations in MATLAB	BB	1		22		
2	Relational Operations	Learn about Relational operations in MATLAB	BB	1		23		
2	Logical Operations	Learn about Logical operations in MATLAB	BB	1		24		
2	Matrix Functions	Learn about matrix functions	BB&LCD	1	1	26		
2	Specialized matrices	Learns syntax for the specialized matrices	BB	1		27		
2	Character string functions	Learn about Character string functions	BB	1		28	8-5-21	
3	Built-in functions	Learn about some of the built in functions used in MATLAB.	BB	2		30		
3	Saving and loading data	Learn about Saving and loading data	BB	1		31		
3	Plotting simple graphs	Understands about plotting of simple graphs.	BB&LCD	1	1	33		
3	Script files	Learn how to use script files in MATLAB	BB	1		34		
3	Function files	Learn how to Write and execute function files in MATLAB	BB	2		36		
3	Language specific features	Learn about different control flow statements such as if,if-else,for,while etc.	BB	2	1	39		
3	Advanced data objects	Learn about advanced data objects such as cells and structures.	BB&LCD	1	1	41	5-6-21	
4	Solving problems in linear algebra	Understands about solving of linear algebra in MATLAB.	BB	1		42		
4	Curve fitting and interpolation	Learn about polynomial curve fittings and interpolation.	BB	1	1	44		
4	Data analysis and statistics	Learn how to perform simple data analysis in MATLAB	BB	1		45		
4	Integration	Learn how to simplify integral equations.	BB	1		46		
4	Ordinary Differential Equations	Learn how to simplify Differential equations.	BB&LCD	1		47		
5	Graphics-2-D plots, subplots	Learn how to draw and edit 2-D plots, and Commonly used functions for 2-D plotting.	BB	1		48		
5	3D plots, mesh and surface plots	Learn how to draw and edit 3-D, mesh, surface plots and Commonly used functions for 3-D plotting.	BB	1	1	50		
5	Handling graphics	Learn how to handle graphics.	BB&LCD	1	1	52	30-06-21	

BB: Black Board / LCD: Power Point Presentation / OHP: Over Head Projector

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SIDDHARTHA INSTITUTE OF TECHNOLOGY, KANURU, VIJAYAWADA

DEPARTMENT OF INFORMATION TECHNOLOGY

ACADEMIC YEAR: 2020-2021

IV B.TECH – SEMESTER – II

SECTION – S1

S.NO	SUBJECT CODE	SUBJECT NAME	NAME OF THE FACULTY
1	IT8T1	BIOMETRICS	Dr. B.V.SUBBA RAO
2	IT8T2B (Elective -III)	BIG DATA ANALYTICS	Mrs. G. RESHMA
3	IT8T3A (Elective -IV)	ARTIFICIAL INTELLIGENCE	Dr. S.SAI KUMAR

(Dr. B.V.Subba Rao)
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SIDDHARTHA INSTITUTE OF TECHNOLOGY, KANURU, VIJAYAWADA

DEPARTMENT OF INFORMATION TECHNOLOGY

ACADEMIC YEAR: 2020-2021

IV B.TECH – SEMESTER – II

SECTION – S2

S.NO	SUBJECT CODE	SUBJECT NAME	NAME OF THE FACULTY
1	IT8T1	BIOMETRICS	Dr. J. RAJENDRA PRASAD
2	IT8T2B (Elective -III)	BIG DATA ANALYTICS	Ms. G. RESHMA
3	IT8T3A (Elective -IV)	ARTIFICIAL INTELLIGENCE	Dr. G. LAKSHMI

(Dr. B.V.Subba Rao)
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LESSON PLAN
(PVPSIT/ACD/01)

Academic Year	:	**2020-2021**
Year & Semester	:	**IV B.Tech-II Sem, Section-I**
Branch	:	**Information Technology**
Subject Code & Name	:	**IT8T1 & Biometrics**
Faculty Name	:	**Dr. B. V. Subba Rao**

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode	Hours Required		Total Number of hours (Cumulative)	Expected date of completion (for each unit by HOD)	Review/ Remarks by HOD
				L	T			
I	Introduction – Benefits of biometric security	Benefits of biometric security	LCD	1		1		
I	Verification and identification	Verification and identification	LCD	1		2		
I	Basic working of biometric matching – Accuracy	Basic working of biometric matching – Accuracy	LCD	1		3		
I	False match rate – False non-match rate	False match rate – False non-match rate	LCD	1		4		
I	Failure to enroll rate	Failure to enroll rate	LCD	2	1	7		
I	Derived metrics – Layered biometric solutions.	Derived metrics – Layered biometric solutions.	LCD	1		8		
I	Finger scan – Features – Components	Finger scan – Features – Components	LCD	1		9		
I	Operation (Steps) – Competing finger Scan technologies	Operation (Steps) – Competing finger Scan technologies	LCD	1		10		
I	Strength and weakness	Strength and weakness	LCD	1		11		
I	Types of algorithms used for interpretation	Types of algorithms used for interpretation	LCD	2		13		

II	Facial Scan - Features	Facial Scan - Features	LCD	2		15		
II	Components – Operation (Steps)	Components – Operation (Steps)	LCD	2	1	18		
II	Competing facial Scan technologies	Competing facial Scan technologies	LCD	3		21		
II	Strength and weakness.	Strength and weakness.	LCD	3		24		
II	Iris Scan - Features	Iris Scan - Features	LCD	2	1	27		
II	Components – Operation (Steps)	Components – Operation (Steps)	LCD	2		29		
II	Competing iris Scan technologies – Strength and weakness.	Competing iris Scan technologies – Strength and weakness.	LCD	2		31		
III	Voice Scan - Features	Voice Scan - Features	LCD	1		32		
III	Components – Operation (Steps)	Components – Operation (Steps)	LCD	1	1	34		
III	Competing voice Scan (facial) technologies – Strength and weakness.	Competing voice Scan (facial) technologies – Strength and weakness.	LCD	1		35		
III	Other physiological biometrics – Hand scan – Retina scan	Other physiological biometrics – Hand scan – Retina scan	LCD	2		37		
III	DNA Scan	DNA Scan	LCD	1		38		
III	AFIS (Automatic Finger Print Identification Systems) – Behavioral Biometrics	AFIS (Automatic Finger Print Identification Systems) – Behavioral Biometrics	LCD	1	1	40		

III	Signature scan-keystroke scan.	Signature scan-keystroke scan.	LCD	1		41		
IV	Biometrics Application – Biometric Solution Matrix	Biometrics Application – Biometric Solution Matrix	LCD	1		42		
IV	BioAPI , BAPI – Biometric middleware	BioAPI , BAPI – Biometric middleware	LCD	1	1	44		
V	Biometrics for Network Security	Biometrics for Network Security	LCD	1		45		
V	Biometrics for Spoofing	Biometrics for Spoofing	LCD	1		46		
V	Biometrics for Spoofing	Biometrics for Spoofing	LCD	1		47		

BB: Black Board LCD: Power Point Presentation OHP: Over Head Projector
L: Lecture Hours T: Tutorial Hours

Signature of the Faculty
Date: 20/3/2021

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LESSON PLAN
(PVPSIT/ACD/01)

Academic Year : 2020-2021
Year & Semester : IV B.Tech-II Sem, Section-II
Branch : Information Technology
Subject Code & Name : IT8T1 & Biometrics
Faculty Name : Dr. J Rajendra Prasad

Unit No.	Topic of syllabus to be covered	Learning Outcomes	Teaching Mode	Hours Required		Total Number of hours (Cumulative)	Expected date of completion (for each unit by HOD)	Review/ Remarks by HOD
				L	T			
I	Introduction – Benefits of biometric security	Benefits of biometric security	LCD	1		1		
I	Verification and identification	Verification and identification	LCD	1		2		
I	Basic working of biometric matching – Accuracy	Basic working of biometric matching – Accuracy	LCD	1		3		
I	False match rate – False non-match rate	False match rate – False non-match rate	LCD	1		4		
I	Failure to enroll rate	Failure to enroll rate	LCD	2	1	7		
I	Derived metrics – Layered biometric solutions.	Derived metrics – Layered biometric solutions.	LCD	1		8		
I	Finger scan – Features – Components	Finger scan – Features – Components	LCD	1		9		
I	Operation (Steps) – Competing finger Scan technologies	Operation (Steps) – Competing finger Scan technologies	LCD	1		10		
I	Strength and weakness	Strength and weakness	LCD	1		11		
I	Types of algorithms used for interpretation	Types of algorithms used for interpretation	LCD	2		13		

II	Facial Scan - Features	Facial Scan - Features	LCD	2		15		Covered Dues
II	Components – Operation (Steps)	Components – Operation (Steps)	LCD	2	1	18		
II	Competing facial Scan technologies	Competing facial Scan technologies	LCD	3		21		
II	Strength and weakness.	Strength and weakness.	LCD	3		24		
II	Iris Scan - Features	Iris Scan - Features	LCD	2	1	27		
II	Components – Operation (Steps)	Components – Operation (Steps)	LCD	2		29		
II	Competing iris Scan technologies – Strength and weakness.	Competing iris Scan technologies – Strength and weakness.	LCD	2		30 31		Covered Dues
III	Voice Scan - Features	Voice Scan - Features	LCD	1		32		
III	Components – Operation (Steps)	Components – Operation (Steps)	LCD	1	1	34		
III	Competing voice Scan (facial) technologies – Strength and weakness.	Competing voice Scan (facial) technologies – Strength and weakness.	LCD	1		35		
III	Other physiological biometrics – Hand scan – Retina scan	Other physiological biometrics – Hand scan – Retina scan	LCD	2		37		
III	DNA Scan	DNA Scan	LCD	1		38		
III	AFIS (Automatic Finger Print Identification Systems) – Behavioral Biometrics	AFIS (Automatic Finger Print Identification Systems) – Behavioral Biometrics	LCD	1	1	40		

III	Signature scan-keystroke scan.	Signature scan-keystroke scan.	LCD	1		41		
IV	Biometrics Application – Biometric Solution Matrix	Biometrics Application – Biometric Solution Matrix	LCD	1		42		
IV	BioAPI , BAPI – Biometric middleware	BioAPI , BAPI – Biometric middleware	LCD	1	1	44		
V	Biometrics for Network Security	Biometrics for Network Security	LCD	1		45		
V	Biometrics for Spoofing	Biometrics for Spoofing	LCD	1		46		
V	Biometrics for Spoofing	Biometrics for Spoofing	LCD	1		47		

45

Sy/completed

BB: Black Board LCD: Power Point Presentation OHP: Over Head Projector
L: Lecture Hours T: Tutorial Hours

Signature of the Faculty 20/3/21
Date:

Signature of the Head 20/3/2021

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LESSON PLAN
BIG DATA ANALYTICS

Academic Year : 2020-2021
Year & Semester : IV B.TECH & II SEM **S1**
Branch : INFORMATION TECHNOLOGY
Subject Code & Name : IT8T2D
Name of Faculty : Dr.G.Reshma

Unit No	Topic of Syllabus to be covered	Learning outcomes	Teaching mode	Hours Required		Total no. of Hours (Cumulative)	Expected date of completion (for each unit) By HOD	Review / Remarks(By HOD)
				L	T			
I	Introduction to Big Data.	Understand the fundamentals of Big cloud and data architectures.	BB	1		1		
I	Importance of Big Data. Map Reduce and example pseudo codes for some problems.	Understand the fundamentals of Big cloud and data architectures.	BB	1		2		
I	A brief history of Hadoop. Apache hadoop and the Hadoop EcoSystem.	Understand the fundamentals of Big cloud and data architectures.	BB	1		3		
I	VMWare Installation of Hadoop.	Understand the fundamentals of Big cloud and data architectures.	LCD	1		4		
I	TUTORIAL				1	5		
II	The design of HDFS. HDFS concepts.	Learn the concepts of HDFS file systems and interfaces and able to keep HDFScluster balanced	LCD	1		6		
II	Command line interface to HDFS. Hadoop File systems.	Learn the concepts of HDFS file systems and interfaces and able to keep HDFS cluster balanced	LCD	2		8		
II	Interfaces. Java Interface to Hadoop. Anatomy of a file read. Anatomy of a file write.	Learn the concepts of HDFS file systems and interfaces and able to keep HDFS cluster balanced	LCD	2		10		
II	TUTORIAL	Learn the concepts of HDFS file systems and interfaces and able to keep HDFS cluster balanced			1	11		

	eplicaplacement and Coherency Model.	Learn the concepts of HDFS file systems and interfaces and able to keep HDFS cluster balanced	BB	1		12		
II	Parallel copying with distcp, Keeping an HDFS clusterbalanced.	Learn the concepts of HDFS file systems and interfaces and able to keep HDFS cluster balanced	BB	2		14		
III	Introduction. Map reduce: introduction, Analyzing data with unix tools.	Familiarize with map reduce classes, combiner functions and can run map reduce job.	LCD	2		16		
III	Analyzing data with hadoop.Java MapReduce classes (new API). Data flow, combiner functions, Running a distributed MapReduce Job.	Familiarize with map reduce classes, combiner functions and can run map reduce job.	LCD	4		20		
III	TUTORIAL				1	21		
III	Configuration API. Setting up the development environment. Managingconfiguratio n.	Familiarize with map reduce classes, combiner functions and can run map reduce job.	LCD	4		25		
III	Writing a unit test with MRUnit. Running a job in local job runner. Running on aCluster.Launching a job. The MapReduce WebUI.	Familiarize with map reduce classes, combiner functions and can run map reduce job.	BB	4		29		
V	Classic Mapreduce. Job submission. Job Initialization. Task Assignment. Task execution.	Aware of classic map reduce and able to apply shuffle and sort on map reducer side.	BB	4		33		
	TUTORIAL				1	34		
IV	Progress and status updates. Job Completion. Shuffle and sort on Map and reducer side.	Aware of classic map reduce and able to apply shuffle and sort on map reducer side.	BB	4		38		
IV	Configuration tuning. Map Reduce Types. Input formats. Output formats.	Aware of classic map reduce and able to apply shuffle and sort on map reducer side.	BB	3		41		
IV	Sorting. Map side and Reduce side joins.	Aware of classic map reduce and able to apply shuffle and	LCD	2		43		

		sort on map reducer side.						
	The Hive Shell. Hive services. Hive clients.	Understand The Hive Shell.	LCD	2		45		
	The meta store. Comparison with traditionaldatabases. Hive Ql. Hbasics.	Understand The Hive Shell.	LCD	4		49		
	TUTORIAL	Understand The Hive Shell.			1	50		
V	Concepts. Implementation. Java and Map reduce clients. Loading data, web queries.	Understand The Hive Shell.	LCD	5		55		

Legend: Teaching mode
: Black Board LCD: Power Point Presentation OHP: Over Head Projector
L: Lecture Hours T: Tutorial Hours

Signature of Faculty

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PROCESS RECORD FOR ACADEMICS

LESSON PLAN

BIG DATA ANALYTICS

Academic Year : 2020-2021
Year & Semester : IV B.TECH & II SEM S2
Branch : INFORMATION TECHNOLOGY
Subject Code & Name : IT8T2D
Name of Faculty : Dr.G.Reshma

Unit No	Topic of Syllabus to be covered	Learning outcomes	Teaching mode	Hours Required		Total no. of Hours (Cumulative)	Expected date of completion (for each unit) By HOD	Review / Remarks(By HOD)
				L	T			
I	Introduction to Big Data.	Understand the fundamentals of Big cloud and data architectures.	BB	1		1		
I	Importance of Big Data. Map Reduce and example pseudo codes for some problems.	Understand the fundamentals of Big cloud and data architectures.	BB	1		2		
I	A brief history of Hadoop. Apache hadoop and the Hadoop EcoSystem.	Understand the fundamentals of Big cloud and data architectures.	BB	1		3		
I	VMWare Installation of Hadoop.	Understand the fundamentals of Big cloud and data architectures.	LCD	1		4		
I	TUTORIAL				1	5		
II	The design of HDFS. HDFS concepts.	Learn the concepts of HDFS file systems and interfaces and able to keep HDFScluster balanced	LCD	1		6		
II	Command line interface to HDFS. Hadoop File systems.	Learn the concepts of HDFS file systems and interfaces and able to keep HDFS cluster balanced	LCD	2		8		
II	Interfaces. Java Interface to Hadoop. Anatomy of a file read. Anatomy of a file write.	Learn the concepts of HDFS file systems and interfaces and able to keep HDFS cluster balanced	LCD	2		10		
II	TUTORIAL	Learn the concepts of HDFS file systems and interfaces and able to keep HDFS cluster balanced			1	11		

	Replicaplacement and Coherency Model.	Learn the concepts of HDFS file systems and interfaces and able to keep HDFS cluster balanced	BB	1		12		
II	Parallel copying with distcp, Keeping an HDFS clusterbalanced.	Learn the concepts of HDFS file systems and interfaces and able to keep HDFS cluster balanced	BB	2		14		
III	Introduction. Map reduce: introduction, Analyzing data with unix tools.	Familiarize with map reduce classes, combiner functions and can run map reduce job.	LCD	2		16		
III	Analyzing data with hadoop.Java MapReduce classes (new API). Data flow, combiner functions, Running a distributed MapReduce Job.	Familiarize with map reduce classes, combiner functions and can run map reduce job.	LCD	4		20		
III	TUTORIAL				1	21		
III	Configuration API. Setting up the development environment. Managingconfiguratio n.	Familiarize with map reduce classes, combiner functions and can run map reduce job.	LCD	4		25		
III	Writing a unit test with MRUnit. Running a job in local job runner. Running on aCluster.Launching a job. The MapReduce WebUI.	Familiarize with map reduce classes, combiner functions and can run map reduce job.	BB	4		29		
'V	Classic Mapreduce. Job submission. Job Initialization. Task Assignment. Task execution.	Aware of classic map reduce and able to apply shuffle and sort on map reducer side.	BB	4		33		
	TUTORIAL				1	34		
IV	Progress and status updates. Job Completion. Shuffle and sort on Map and reducer side.	Aware of classic map reduce and able to apply shuffle and sort on map reducer side.	BB	4		38		
IV	Configuration tuning. Map Reduce Types. Input formats. Output formats.	Aware of classic map reduce and able to apply shuffle and sort on map reducer side.	BB	3		41		
IV	Sorting. Map side and Reduce side joins.	Aware of classic map reduce and able to apply shuffle and	LCD	2		43		

		sort on map reducer side.						
V	The Hive Shell. Hive services. Hive clients.	Understand The Hive Shell.	LCD	2		45		
	The meta store. Comparison with traditionaldatabases. Hive Ql. Hbasics.	Understand The Hive Shell.	LCD	4		49		
	TUTORIAL	Understand The Hive Shell.			1	50		
V	Concepts. Implementation. Java and Map reduce clients. Loading data, web queries.	Understand The Hive Shell.	LCD	5		55		

Legend: Teaching mode
: Black Board LCD: Power Point Presentation OHP: Over Head Projector
L: Lecture Hours T: Tutorial Hours

Signature of Faculty

Signature of HOD

HEAD
Information Technology Department
PRASAD V.POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007.

LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : **2020-2021**

Year & Semester : **IV B.Tech / II Sem-Section: S1**

Branch : **Information Technology**

Subject Code & Name : **(IT8T3A) ARTIFICIAL INTELLIGENCE**

Name of Faculty : **Dr. S. SAI KUMAR**

Unit No.	Topic of syllabus to be covered	Learning out comes	Teaching Mode BB/ LCD/ OHP.	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				Lecture	Tutorial			
I	The AI Problems	Problems and solutions	BB/PPT	1		1		
I	What is an AI Techniques	AI Techniques	BB/PPT	1		2		
I	Criteria for Successes	Successes story	BB/PPT	2		4		
I	Problem as a state space search	Problems and solutions	BB/PPT	1		5		
I	Production systems	Knowledge on Production systems	BB/PPT	1		6		
I	Problem Characteristics	Knowledge on Problem Characteristics	BB/PPT	1		7		
I	Production system characteristics	system characteristics	BB/PPT	1		8		
II	Generate and test	Methods of apply on Generate and test	BB/PPT	1		9		
II	Hill climbing	Understanding of Hill climbing	BB/PPT	1		10		
II	Best First search	BFS Algorithm	BB/PPT	1		11		
II	Problem reduction	A* and AO*	BB/PPT	1		12		
II	Constraint satisfaction	Knowledge on Constraint satisfaction	BB/PPT	1		13		
II	Means ends analysis	Knowledge on Means ends analysis	BB/PPT	1		14		
III	Representations and mappings	Knowledge on Representations and	BB/PPT	1		15		

		mappings						
III	Representations and mappings	mappings	BB/PPT	1		16		
III	Representations and mappings	mappings	BB/PPT	1		17		
III	Representing simple facts in logic	mappings	BB/PPT	1		18		
III	Representing simple facts in logic	simple facts in logic	BB/PPT	1		19		
III	Resolution	Knowledge on Resolution	BB/PPT	1		20		
III	Resolution	Knowledge on Resolution	BB/PPT	1		21		
III	Procedural knowledge Vs Declarative knowledge	Knowledge on Procedural knowledge	BB/PPT	1		22		
III	Procedural knowledge Vs Declarative knowledge	Knowledge on Procedural knowledge	BB/PPT	1		23		
III	Procedural knowledge Vs Declarative knowledge	Knowledge on Declarative knowledge	BB/PPT	1		24		
III	Forward Vs Backward reasoning	Knowledge on reasoning	BB/PPT	1		25		
III	Matching	Knowledge on Matching	BB/PPT	1		26		
III	Matching	Procedure of Matching	BB/PPT	1		27		
IV	Introduction to Nonmonotonic reasoning	Nonmonotonic reasoning	BB/PPT	1		28		
IV	Nonmonotonic reasonin	Nonmonotonic reasoning	BB/PPT	1		29		
IV	Implementation in DFS	Implementation in DFS	BB/PPT	1		30		
IV	BFS	BFS	BB/PPT	1		31		
IV	Semantic nets	Structure of Semantic nets	BB/PPT	1		32		
IV	Semantic nets	Structure of Semantic nets	BB/PPT	1		33		
IV	Frames	Structure of Frames	BB/PPT	1		34		
IV	Frames	Structure of Frames	BB/PPT			35		
IV	Conceptual dependency	Models on Conceptual dependency	BB/PPT	1		36		
IV	Conceptual	Models on	BB/PPT	1		37		

	dependency	Conceptual dependency						
IV	Scripts	Model Scripts	BB/PPT	1		38		
V	The minimax search procedure	minimax search procedure	BB/PPT	1		39		
V	The minimax search procedure	Structure of minimax search procedure	BB/PPT	1		40		
V	adding alpha beta cut offs	alpha beta cut offs	BB/PPT	1		41		
V	adding alpha beta cut offs	Structure of adding alpha beta cut offs	BB/PPT	1		42		
V	Goal stack planning	Structure of adding alpha beta cut offs	BB/PPT	1		43		
V	Hierarchical planning	Knowledge on Hierarchical planning	BB/PPT	1		44		
V	Expert system shells	Knowledge on Expert system shells	BB/PPT	1		45		
V	Knowledge acquisition	Knowledge acquisition	BB/PPT	1		46		
V	Perception	Knowledge on Perception	BB/PPT	1		47		
V	action Robot architecture	Knowledge on action	BB/PPT	1		48		

Teaching Mode :
BB: Black Board / **PPT**: Power Point Presentation

S. Srilakshmi 20/3/2024

Signature of the Faculty
Date:

Signature of the HOD:

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Information Technology Department
PRASAD V.POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
KANURU, VIJAYAWADA-520 007.

PROCESS RECORD FOR ACADEMICS

LESSON PLAN
(PVPSIT/ACD /01)

Academic Year : **2020-2021**

Year & Semester : **IV B.Tech / II Sem-Section: S2**

Branch : **Information Technology**

Subject Code & Name : **(IT8T3A) ARTIFICIAL INTELLIGENCE**

Name of Faculty : **Dr. G. Lakshmi**

Unit No.	Topic of syllabus to be covered	Learning out comes	Teaching Mode BB/ LCD/ OHP.	Hours Required		Total no. of Hours (Cumulative)	Expected date of Completion (for each Unit) By HOD	Review/ Remarks (By HOD)
				Lecture	Tutorial			
I	The AI Problems	Problems and solutions	BB/PPT	1		1		
I	What is an AI Techniques	AI Techniques	BB/PPT	1		2		
I	Criteria for Successes	Successes story	BB/PPT	2		4		
I	Problem as a state space search	Problems and solutions	BB/PPT	1		5		
I	Production systems	Knowledge on Production systems	BB/PPT	1		6		
I	Problem Characteristics	Knowledge on Problem Characteristics	BB/PPT	1		7		
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II	Generate and test	Methods of apply on Generate and test	BB/PPT	1		9		
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II	Problem reduction	A* and AO*	BB/PPT	1		12		
II	Constraint satisfaction	Knowledge on Constraint satisfaction	BB/PPT	1		13		
II	Means ends analysis	Knowledge on Means ends analysis	BB/PPT	1		14		
III	Representations and mappings	Knowledge on Representations and	BB/PPT	1		15		

		mappings						
III	Representations and mappings	mappings	BB/PPT	1		16		
III	Representations and mappings	mappings	BB/PPT	1		17		
III	Representing simple facts in logic	mappings	BB/PPT	1		18		
III	Representing simple facts in logic	simple facts in logic	BB/PPT	1		19		
III	Resolution	Knowledge on Resolution	BB/PPT	1		20		
III	Resolution	Knowledge on Resolution	BB/PPT	1		21		
III	Procedural knowledge Vs Declarative knowledge	Knowledge on Procedural knowledge	BB/PPT	1		22		
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IV	Frames	Structure of Frames	BB/PPT			35		
IV	Conceptual dependency	Models on Conceptual dependency	BB/PPT	1		36		
IV	Conceptual	Models on	BB/PPT	1		37		

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V	adding alpha beta cut offs	Structure of adding alpha beta cut offs	BB/PPT	1		42		
V	Goal stack planning	Structure of adding alpha beta cut offs	BB/PPT	1		43		
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V	Knowledge acquisition	Knowledge acquisition	BB/PPT	1		46		
V	Perception	Knowledge on Perception	BB/PPT	1		47		
V	action Robot architecture	Knowledge on action	BB/PPT	1		48		

Teaching Mode :
BB: Black Board / **PPT**: Power Point Presentation

Signature of the Faculty
Date:

Signature of the HOD: