TENTATIVE PLAN: R1621051

Course Title: STATISTICS WITH R PROGRAMMING(R1621051)		
Section : IT	**Date :** 11-06-2019	**AY:2019-20**
Revision No : 00	**Prepared By : G D K KISHORE**	**Approved By : HOD**

Tools : Black board, PPTs, Moodle

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT –I	**Introduction**		
CO1: List motivation for learning R programming language **TB :** The Art of R Programming, Norman Matloff, Cengage Learning			
1,2	How to run R	11/6/19, 12/6/19	Lecture interspersed with discussions
3	R Sessions and Functions	14/6/19	
4	Basic Math	14/6/19	
5	Variables	15/6/19	
6	Data Types	16/6/19	
7	Vectors, Conclusion	19/6/19	
8	Advanced Data Structures	20/6/19	
9	Data Frames	21/6/19	
10	Lists, Matrices	22/6/19	
11	Tutorial	23/6/19	
12	Arrays	23/6/19	
13,14	Classes	26/6/19, 26/6/19	

TENTATIVE PLAN: R1621051

Course Title: STATISTICS WITH R PROGRAMMING(R1621051)		
Section : IT	**Date :**	**AY:2019-20**
Revision No : 00	**Prepared By : G D K KISHORE**	**Approved By : HOD**

Tools : Black board, PPTs

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT -II: **R Programming Structures**			
CO2: Access online resources for R and import new function packages into the R workspace and manipulating data. **TB** : The Art of R Programming, Norman Matloff, Cengage Learning			
15,16	Control Statements	28/6/19, 29/6/19	Lecture interspersed with discussions
17,18	Loops, Looping Over Nonvector Sets	2/7/19, 3/7/19	
19,20	If-Else, Arithmetic and Boolean Operators and values	5/7/19, 6/7/19	
21	Default Values for Argument Return Values	9/7/19	
22,23	Deciding Whether to explicitly call return-Returning Complex Objects, Functions are Objective	10/7/19, 12/7/19	
24	No Pointers in R	13/7/19	
25	Recursion	16/7/19	
26,27	A Quicksort Implementation	17/7/19, 17/7/19	
28,29	Extended Extended Example: A Binary Search Tree.	18/7/19, 18/7/19	

UNIT -III: Doing Math and Simulation in R

CO3: Import, review, manipulate and summarize data-sets in R

TB : The Art of R Programming, Norman Matloff, Cengage Learning

30	Math Function	19/7/19	Lecture interspersed with discussions
31	Extended Example Calculating Probability- Cumulative Sums and Products-Minima and Maxima- Calculus	20/7/19	
32	Functions For Statistical Distribution	21/7/19	
33	Sorting	23/7/19	
34	Linear Algebra Operation on Vectors and Matrices	24/7/19	
35	Extended Example: Vector cross Product	26/7/19	
36	Extended Example: Finding Stationary Distribution of Markov Chains	27/7/19	
37	Set Operation	28/7/19	
38	Input /out put	30/7/19	
39,40	Accessing the Keyboard and Monitor, Reading and writer Files	2/8/19, 3/8/19	

TENTATIVE PLAN: R1621051

Course Title: STATISTICS WITH R PROGRAMMING(R1621051)		
Section : IT	**Date :**	**AY:2019-20**
Revision No : 00	**Prepared By : G D K KISHORE**	**Approved By : HOD**

Tools : Black board, PPTs

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT -IV: **Graphics** **CO4:** Perform appropriate statistical tests using R Create and edit visualizations with R functions **TB :** R for Everyone, Lander, Pearson			
41	Creating Graphs, The Workhorse of R Base Graphics	30/8/19	Lecture interspersed with discussions
42	Tutorial	31/8/19	
43	the plot() Function	1/9/19	
44	Tutorial	4/9/19,	
45,46	Customizing Graphs	6/9/19, 6/9/19	
47,48	Saving Graphs to Files	7/9/19, 7/9/19	
UNIT -V: **Probability Distributions** **CO5:** Explore data-sets to create testable hypotheses and identify appropriate statistical tests. **TB :** R for Everyone, Lander, Pearson			
49,50	Normal Distribution	10/9/19,	Lecture interspersed

		11/9/19,	with discussions
51	Binomial Distribution	12/9/19, 14/9/19	
52	Poisson Distributions	15/9/19	
53	Other Distribution	17/9/19	
54	Basic Statistics	18/9/19	
55	Correlation and Covariance	19/9/19	
56,57	ANOVA, T-Tests	20/9/19, 22/9/19	
UNIT -VI: **Linear Models** **CO6:** To Explore advanced techniques in manipulating data sets. **TB :** R for Everyone, Lander, Pearson			
58	Simple Linear Regression	24/9/19	Lecture interspersed with discussions
59	Multiple Regression Generalized Linear Models	25/9/19	
60	Tutorial	26/9/19	
61	Logistic Regression	27/9/19	
62	Poisson Regression	28/9/19	
63	other Generalized Linear Models	29/9/19	
64	Survival Analysis	1/10/19	
65	Nonlinear Models	1/10/19	
66	Splines	3/10/19	
67,68	Decision- Random Forests	3/10/19,4/10/19	

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Signature of the HOD 5/6/19

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TANTATIVE LESSON PLAN: R1621052

Course Title: Mathematical Foundation for Computer Science			
Section: IT	**Date : 10-06-2019**		**Page No :00**
Revision No :00	**Prepared By: G.Koteswaramma**		**Approved By : HOD**
Tools: Black board			
CO1: Student will be able to demonstrate skills in solving mathematical problems.			
No. of Periods	**TOPIC**	**DATE**	**Mode of Delivery**
	UNIT – I Mathematical Logic		Lecture interspersed with discussions
1.	Statements, Notations, Connectives, Well defined Formulas	14/6/19	
2.	Truth tables, Tautologies	17/6/19	
3.	Equivalence of formulas	18/6/19	
4.	Duality law, Tautological Implications	19/6/19	
5.	Normal forms	20/6/19	
6.	Tutorial class	24/6/19(2)	
7.	Theory of inference for statement calculus	26/6/19	
8.	Consistency of premises	28/6/19(2)	
9.	Indirect method of proof	29/6/19	
10.	Predicative Logic, statement functions	1/7/19(2)	
11.	Tutorial class	3/7/19	
12.	Variables and Quantifiers, free & bound variables	5/7/19	
13.	Inference theory of predicate calculus	5/7/19	
14.	Formulas	6/7/19	
	UNIT-II:SET THEORY		
CO2: Student will be able to demonstrate knowledge of mathematical modeling and proficiency in using mathematical software.			
15.	Introduction to sets, operations on Binary sets	8/7/19(2)	
16.	Principle of Inclusion and Exclusion	10/7/19	
17.	Relations, Properties of binary relations	12/7/19	
18.	Relation matrix and Digraph	13/7/19	Lecture interspersed with discussions
19.	Partition and covering, transitive closure	16/7/19	
20.	Tutorial class	17/7/19(2)	
21.	Equivalence relations, compatibility relations,	19/7/19(2)	
22.	Partial ordering relations, Hasse diagram	20/7/19	
23.	Bijective Functions and composition of functions	20/7/19	
	Inverse functions, recursive functions, permutation functions	22/7/19	
24.	Equivalence relations, compatibility relations,	23/7/19	
25.	Equivalence relations, compatibility relations,	24/7/19	
26.	Bijective Functions and composition of functions	26/7/19	
27.	Inverse functions, recursive functions, permutation functions	26/7/19	
	UNIT-3: Algebraic Structures and Number Theory		

CO3: Student will be able to manipulate and analyze data numerically using Appropriate software.			
28.	Algebraic structures: algebraic systems, examples and properties	29/7/19	Lecture interspersed with discussions
29.	Semi groups and monoids, group definitions, examples.	31/7/19	
30.	Homomorphism, Isomorphism	2/8/19	
31.	groups, sub group definitions, examples	2/8/19	
32.	Group, Subgroup, Abelian Group, Homomorphism, Isomorphism	3/8/19	
	Tutorial class	5/8/19	
33.	Properties of integers, division theorem	5/8/19	
34.	GCD, Euclidean algorithm	7/8/19	
35.	LCM, Testing for prime numbers	8/8/19	
36.	The fundamental theorem of Arithmetic	8/8/19	
37.	Modular Arithmetic, Euler and Fermat's theorems	9/8/19	
38.	Tutorial class		Lecture interspersed with discussions
39.	Revision		
	UNIT-4: Combinatorics		
CO4: Student will be able to communicate effectively mathematical ideas results verbally or in Wrting.			
40.	Basics of counting, permutations	25/9/19	
41.	Permutations with Repetitions		
42.	Circular Permutations, Restricted Permutations	26/9/19	
43.	Combinations, Restricted Combinations		
44.	Tutorial Class	27/9/19	
45.	Generating functions of permutations and combinations	27/9/19	Lecture interspersed with discussions
46.	Binomial and multinomial coefficients	27/9/19	
47.	Binomial and multinomial theorems	28/9/19	
48.	Coloring and chromatic numbers	30/9/19	
49.	Pigeonhole Principle and its allpications	1/10/19	
50.	Revision		
	UNIT-5: Recurrence Relations		
CO5: Student will be able to manipulate and analyze data generatically and recurrencingly.			
51.	Generating Functions	9/8/19	
52.	Function of Sequences	9/8/19	
53.	Partial Fractions	10/8/19	
54.	Coefficient of generating functions	12/8/19	
55.	Recurrence relations	16/8/19	
56.	Formulation as recurrence relations	17/8/19	
57.	Recurrence relations by substitution	19/8/19	
58.	Recurrence relations by Generating functions	22/819(2)	
59.	Tutorial class	23/8/19	Lecture interspersed with discussions
60.	Recurrence relations by method of characteristics roots	26/8/19	
61.	Inhomogeneous Recurrence relations	27/8/19 29/8/19	
62.	Recurrence relations by Generating functions	30/9/19 4/9/19,3/9/19	
	UNIT-6: Graph Theory		

CO6: Student will be able to manipulate and analyze data graphically using Appropriate software.			
63.	Basic concepts of graphs, sub graphs	7/9/19	
64.	Representation of graphs: Adjacency, Incidence matrices	9/9/19(2)	
65.	Isomorphic graphs	11/9/19	
66.	Paths.circuits, Elerian and Hamiltonian graphs	13/9/19(2)	
67.	Multi graphs, Problems	16/9/19(2)	
68.	Tutorial class	18/9/19,21/9/19	
69.	Planar graphs, Euler's formula	23/9/19,24/9/19	
70.	Chromatic numbers	25/9/19,25/9/19	
71.	Spanning trees, Algorithms for spanning trees.	26/9/19(2)	

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Tentative Plan : R1621053

Course Title: DIGITAL LOGIC DESIGN		
Section : IT Year/Sem: II/I	Date : 11-06-2019	A.Y:2019-2020
Revision No :	Prepared By : P Rani	Approved By : HOD

Tools : Black board, PPTs, Moodle

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT-I: Digital Systems and Binary Numbers CO-1:To introduce the basic tools for design with combinational and sequential digital logic and state machines CO-2:To learn simple digital circuits in preparation for computer engineering TB:. Digital Design, 5/e, M.Morris Mano, Michael D Ciletti, PEA.			
		11.6.2019	
1	Digital Systems	12.6.2019	Lecture interspersed with discussions
2	Binary Numbers	12.6.2019	
3	Binary Numbers	14.6.2019	
4	Octal and Hexadecimal Numbers	15.6.2019	
5	Complements of Numbers,	17.6.2019	
6	Complements of Number	17.6.2019	
7	Signed Binary Numbers	18.6.2019	
8	Signed Binary Numbers	19.6.2019	
9	Arithmetic addition and subtraction	20.6.2019	
10	Arithmetic addition and subtraction	22.6.2019	
11	Arithmeticaddition and subtraction	24.6.2019	
12	Revision	25.6.2019	
UNIT-II: Concept of Boolean algebra CO-1:To introduce the basic tools for design with combinational and sequential digital logic and state machines CO-2:To learn simple digital circuits in preparation for computer engineering TB:. Digital Design, 5/e, M.Morris Mano, Michael D Ciletti, PEA.			
13	Basic Theorems and Properties of Boolean algebra	26.6.2019	
14	Basic Theorems and Properties of Boolean algebra	27.6.2019	
15	Basic Theorems and Properties of Boolean algebra	28.6.2019	

16	Boolean Functions	29.6.2019	Lecture interspersed with discussions
17	Boolean Functions	01.7.2019	
18	Canonical and StandardForms	1.7.2019	
19	Canonical and StandardForms	3.7.2019	
20	Canonical and StandardForms	4.7.2019	
21	Minterms and Maxterms	4.7.2019	
22	Minterms and Maxterms	5.7.2019	
23	Revision	6.7.2019	
24	Tutorial	8.7.2019	
S. No	**Unit / Topic**	**Taught on (Date)**	
UNIT- III: Gate level Minimization **CO-1:**To introduce the basic tools for design with combinational and sequential digital logic and state machines **CO-2:**To learn simple digital circuits in preparation for computer engineering **TB**:. Digital Design, 5/e, M.Morris Mano, Michael D Ciletti, PEA.			
25	Map Method,	9.7.2019	Lecture interspersed with discussions
26	Two-Variable K-Map	10.7.2019	
27	Three-Variable K-Map	11.7.2019	
28	Four Variable K-Maps	12.7.2019	
29	Products of Sum Simplification	16.7.2019	
30	Products of Sum Simplification	17.7.2019	
31	Products of Sum Simplification	19.7.2019	
32	Sum of Products Simplification	22.7.2019	
33	Sum of Products Simplification	23.7.2019	
34	Don't – Care Conditions	24.7.2019	
35	Don't – Care Conditions	5.8.2019	
36	NAND and NOR Implementation	6.8.2019	
37	Exclusive-OR Function	7.8.2019	
38	Revision	8.8.2019	
UNIT- IV:Combinational Logic **CO-1:**To introduce the basic tools for design with combinational and sequential digital logic and state machines **CO-2:**To learn simple digital circuits in preparation for computer engineering **TB**:. Digital Design, 5/e, M.Morris Mano, Michael D Ciletti, PEA..			

39	Introduction, Analysis Procedure	9.8.2019	Lecture interspersed with discussions
40	Analysis Procedure	10.8.2019	
41	Analysis Procedure	13.8.2019	
42	Design Procedure,	14.8.2019	
43	Design Procedure,	16.8.2019	
44	Binary Adder–Subtractor	16.8.2019	
45	Binary Adder–Subtractor	17.8.2019	
46	Decimal Adder	26.8.2019	
47	Binary Multiplier	27.8.2019	
48	Binary Multiplier	28.8.2019	
49	Decoders, Encoders	5.9.2019	
50	Multiplexers,	6.9.2019	
51	HDL Models of Combinational Circuits	7.9.2019	
S. No	**Unit / Topic**	**Taught on (Date)**	
UNIT- V: Synchronous Sequential Logic **CO-1:**To introduce the basic tools for design with combinational and sequential digital logic and state machines **CO-2:**To learn simple digital circuits in preparation for computer engineering **TB**:. Digital Design, 5/e, M.Morris Mano, Michael D Ciletti, PEA.			
52	Introduction to Sequential Circuits	11.9.2019	Lecture interspersed with discussions
53	Storage Elements: Latches	12.9.2019	
54	Storage Elements: Flip-Flops	13.9.2019	
55	Storage Elements: Flip-Flops	13.9.2019	
56	Analysis of Clocked **Sequential** Circuits	16.9.2019	
57	Analysis of Clocked **Sequential** Circuits	17.9.2019	
58	Mealy and Moore Models of Finite State Machines	17.9.2019	
59	Mealy and Moore Models of Finite State Machines	18.9.2019	
60	Revision	19.9.2019	
61	Revision	20.9.2019	
S. No	**Unit / Topic**	**Taught on (Date)**	
UNIT -VI: Registers and Counters **CO-1:**To introduce the basic tools for design with combinational and sequential digital logic			

and state machines **CO-2:** To learn simple digital circuits in preparation for computer engineering **TB**:. Digital Design, 5/e, M.Morris Mano, Michael D Ciletti, PEA.			
62	Registers	21.9.2019	Lecture interspersed with discussions
63	Shift Registers	23.9.2019	
64	Ripple Counters	24.9.2019	
65	Synchronous Counters	25.9.2019	
66	Ring Counter	26.9.2019	
67	Johnson Counter	26.9.2019	
68	Ripple Counter	27.9.2019	

Faculty/ Date 11/6/2019

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HOD/Date 11/6/19

TENTATIVE PLAN: R1621054

Course Title: Python Programming (R1621054)		
Section : IT	**Date :** 11-06-2019	**AY:2019-20**
Revision No : 00	**Prepared By : J.N.PAVAN KUMAR**	**Approved By : HOD**

Tools : Black board, PPTs, Moodle

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT –I	**Introduction**		
CO1: Making Software easily right out of the box.			
TB : Python Programming: A Modern Approach, Vamsi Kurama, Pearson			
1,2	History of Python	11/6/19, 12/6/19	Lecture interspersed with discussions
3	Need of Python Programming	14/6/19	
4	Applications Basics of Python Programming Using the REPL(Shell)	14/6/19	
5	Running Python Scripts	15/6/19	
6	Variables	16/6/19	
7	Assignment	19/6/19	
8	Keywords	20/6/19	
9	Input-Output	21/6/19	
10	Indentation.	22/6/19, 23/6/19	
11	Tutorial	26/6/19,	

TENTATIVE PLAN: R1621054

Course Title: Python Programming (R1621054)		
Section : IT	**Date :**	**AY:2019-20**
Revision No : 00	**Prepared By : J.N.PAVAN KUMAR**	**Approved By : HOD**

Tools : Black board, PPTs

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT -II: **Types, Operators and Expressions**			
CO2: Experience with an interpreted Language			
TB : Python Programming: A Modern Approach, Vamsi Kurama, Pearson			
15,16	Types – Integers, Strings, Booleans;	28/6/19, 29/6/19	Lecture interspersed with discussions
17,18	Operators- Arithmetic Operators,	2/7/19, 3/7/19	
19,20	Comparison (Relational) Operators	5/7/19, 6/7/19	
21	Assignment Operators,	9/7/19	
22,23	Logical Operators, Bitwise Operators, Membership Operators, Identity Operators	10/7/19, 12/7/19	
24	Expressions and order of evaluations Control Flow	13/7/19	
25	if, if-elif-else,	16/7/19	
26,27	for, while	17/7/19, 17/7/19	
28,	break, continue, pass	18/7/19,	
29	Tutorial	18/7/19	
UNIT -III: Data Structures			
CO3: To build software for real needs.			

TB : Learning Python, Mark Lutz, Orielly

30	**Data Structures** Lists	19/7/19	Lecture interspersed with discussions
31	Operations	20/7/19	
32	Slicing	21/7/19	
33	Methods	23/7/19	
34	Tuples	24/7/19	
35	Sets,	26/7/19	
36	Dictionaries	27/7/19	
37	Sequences.	28/7/19, 30/7/19	
38	Input /out put	2/8/19,	
39	Tutorial	3/8/19	

Course Title: Python Programming (R1621054)		
Section : IT	**Date :**	**AY:2019-20**
Revision No : 00	**Prepared By : J.N.PAVAN KUMAR**	**Approved By : HOD**

Tools : Black board, PPTs

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT -IV: **Functions**			
CO4: To build software for real needs.			
TB : Learning Python, Mark Lutz, Orielly			
40	Defining Functions, Calling Functions, Passing Arguments	30/8/19	Lecture interspersed with discussions
41	Keyword Arguments, Default Arguments	31/8/19	
42	Variable-length arguments, Anonymous Functions	1/9/19	
43	Fruitful Functions(Function Returning Values),	4/9/19,	
44,45	Scope of the Variables in a Function	6/9/19, 6/9/19	
46	Global and Local Variables.	7/9/19,	
47	Tutorial	7/9/19	
UNIT -V: **Object Oriented Programming OOP in Python,Error and Exceptions:**			
CO5: Prior Introduction to testing software			
TB : Learning Python, Mark Lutz, Orielly			
48	Classes, 'self variable', Methods	10/9/19,	Lecture interspersed with discussions
49	Constructor Method, Inheritance	11/9/19,	
50	Overriding Methods, Data hiding,	12/9/19, 14/9/19	
51	Difference between an error and Exception	15/9/19	
52	Handling Exception	17/9/19	
53	Try except block	18/9/19	
54	Raising Exceptions	19/9/19	
55	User Defined Exceptions	20/9/19,	
56	Tutorial	22/9/19	
UNIT -VI: **Brief Tour of the Standard Library**			

CO6: Prior Introduction to testing software

TB : Learning Python, Mark Lutz, Orielly

57	Operating System Interface - String Pattern Matching,	24/9/19	Lecture interspersed with discussions
58	Mathematics, Internet Access	25/9/19	
59	Dates and Times, Data Compression	26/9/19	
60	Multithreading, GUI Programming,	27/9/19	
61	Turtle Graphics	28/9/19	
62	**Testing:** Why testing is required?	29/9/19	
63	Basic concepts of testing	1/10/19	
64	Unit testing in Python	1/10/19	
65	Writing Test cases	3/10/19	
66	Running Tests.	3/10/19,	
67	Tutorial	4/10/19	

5/6/19

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5/6/19

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Tentative Plan : R1621055

Course Title: DATA STRUCTURES THROUGH C++		
Section : IT Year/Sem: II/I	Date : 10-6-2019	A.Y:2019-2020
Revision No :	Prepared By : M RAMBHUPAL	Approved By : HOD

Tools : Black board, PPTs, Moodle

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT-I: ARRAYS **CO-1:**To be familiar with basic techniques of object oriented principles and exception handling using C++ . **TB**:. Data structures, Algorithms and Applications in C++, S.Sahni, University Press (India) Pvt.Ltd, 2nd edition, Universities Press, Pvt. Ltd.			
1	Abstract Data Types and the C++ Class,	10.6.2019 11.6.2019	Lecture interspersed with discussions
2	An Introduction to C++ Class- Data Abstraction and Encapsulation in C++-	12.6.2019	
3	Declaring Class Objects and Invoking Member Functions	13.6.2019	
4	Special Class Operations- Miscellaneous Topics-	13.6.2019	
5	ADTs and C++Classes	14.6.2019	
6	The Array as an Abstract Data Type	14.6.2019	
7	The Polynomial Abstract Data type-	15.6.2019	
8	Polynomial Representation- Polynomial Addition	15.6.2019	
9	Spares Matrices,Introduction-	17.6.2019	
10	Sparse Matrix Representation-	18.6.2019 20.6.2019	
11	Transposing a Matrix	21.6.2019	
12	Matrix Multiplication, Representation of Arrays.	21.6.2019	
UNIT-II: STACKS AND QUEUES **CO-2:** To be familiar with the concepts like Inheritance, Polymorphism **TB**:. Data structures, Algorithms and Applications in C++, S.Sahni, University Press (India) Pvt.Ltd, 2nd edition, Universities Press, Pvt. Ltd.			
13	Templates in C++,	22.6.2019	

		26.7.2019	
35	Circular List Representation of Polynomials, Equivalence Classes, Sparse Matrices	27.7.2019	
36	Sparse Matrix Representation- Sparse Matrix Input- Deleting a Sparse Matrix, Doubly Linked Lists	5.8.2019 6.8.2019	
37	Lists, Representation of Generalized Lists	7.8.2019	
38	Recursive Algorithms for Lists- Reference Counts, Shared and Recursive Lists	8.8.2019	
UNIT-IV: TREES **CO4:** Be familiar with advanced data structures such as balanced search trees, AVLTrees, and B Trees. **TB**:. Data structures, Algorithms and Applications in C++, S.Sahni, University Press (India) Pvt.Ltd, 2nd edition, Universities Press, Pvt. Ltd.			
39	Introduction, Terminology, Representation of Trees,	8.8.2019	Lecture interspersed with discussions
40	Binary Trees, The Abstract Data Type	9.8.2019	
41	Properties of Binary Tress, Binary Tree Representations	13.8.2019	
42	Binary Tree Traversal and Tree Iterators, Introduction,	14.8.2019	
43	Inorder Traversal Preorder Traversal, Postorder Traversal	14.8.2019	
44	Thread Binary Trees, Threads, Inorder Traversal of a Threaded Binary Tree	16.8.2019	
45	Inserting a Node into a Threaded Binary Tree,	17.8.2019	
46	Heaps, Priority Queues	26.8.2019	
47	Definition of a Max Heap, Insertion into a Max Heap,	28.8.2019	
48	Deletion from a Max Heap, Binary Search Trees, Definition,	28.8.2019	
49	Searching a Binary Search Tree,	30.8.2019	
50	Insertion into a Binary Search Tree, Deletion from a Binary Search Tree	5.9.2019	
51	Height of Binary Search Tree.	7.9.2019	
S. No	**Unit / Topic**	**Taught on (Date)**	
UNIT-V: GRAPHS **CO4:** Be familiar with advanced data structures such as balanced search trees, AVLTrees, and B Trees. **TB**:. Data structures, Algorithms and Applications in C++, S.Sahni, University Press (India) Pvt.Ltd, 2nd edition, Universities Press, Pvt. Ltd.			
52	The Graph Abstract Data Type, Introduction	9.9.2019	

TENTATIVE LESSON PLAN: R1621121

Course Title: SOFTWARE ENGINEERING		
Section : II/I Year /Sem : II/I	Date : 10-06-2019	AY: 2019-20
Revision No :	Prepared By : S.PRANEETHA Assistant Professor	Approved By : HOD

Tools: Black Board , PPT , Video Lectures

UNIT-I: Software and Software Engineering, Process Models

CO1: Define and develop a software project from requirement gathering to implementation.

TB: Fundamentals of Software Engineering, Rajib Mall, Third Edition, PHI.

No.of Periods	Topic	Date	Mode of delivry
1	The Nature of Software	10/6/19	Lecture with discussions
2	The Unique Nature of	11/6/19	
3	Software Engineering	12/6/19	
4	Software Process	13/6/19	
5	Software Engineering Practice	15/6/19	
6	Software	18/6/19	
7	A Generic Process Model	20/6/19	
8	Process Assessment and Improvement	22/6/19	
9	Prescriptive	24/6/19	
10	Specialized Process Models	1/7/19	
11	The Unified Process	2/7/19	
12	Personal and Team Process	3/7/19	
13	Process Terminology	4/7/19	
14	Product and Process	5/7/19	
15	Tutorial	5/7/19	

UNIT-II: Requirements Analysis And Specification, Software Design

CO2: Obtain knowledge about principles and practices of software engineering.

TB: Fundamentals of Software Engineering, Rajib Mall, Third Edition, PHI.

16,17	Requirements Gathering and Analysis	6/7/19	Lecture with discussions
18	Software	8/7/19	
19	Formal System Specification	10/7/19	
20	Overview of the Design Process	12/7/19	
21	How to Characterise of a Design?	15/7/19	
22	Cohesion	17/7/19	
23,24	Layered Arrangement of Modules	18/7/19	
25	Approaches to Software Design	19/7/19	
26	Tutorial	19/7/19	

UNIT-III: Function-Oriented Software Design, User Interface Design

CO3: Obtain knowledge about principles and practices of software engineering.

TB: . Fundamentals of Software Engineering, Rajib Mall, Third Edition, PHI.

27	Overview of SA/SD Methodology	22/7/19	Lecture with discussions
28,29	Structured Analysis	23/7/19	
30	Developing the DFD Model of a System	24/7/19	
31	Structured Design	25/7/19	
32	Detailed Design	26/7/19	

33	Design Review	27/7/19	
34	over view of Object Oriented design	29/7/19	
35	Characteristics of Good User Interface	30/7/19	
36	Basic Concepts	12/08/19	
37	Types of User	14/8/19	
38,39	Fundamentals of Component-based GUI	16/8/19	
40	Tutorial	16/8/19	

UNIT-IV:Coding And Testing:
CO4: Focus on the fundamentals of modeling a software project
TB: Fundamentals of Software Engineering, Rajib Mall, Third Edition, PHI.

41	Coding	17/8/19	Lecture with discussions
42	Code Review	19/8/19	
43	Software Documentation	21/8/19	
44	Testing	23/8/19	
45	Unit Testing	26/8/19	
46	Black-Box Testing	29/8/19	
47	White-Box Testing	30/8/19	
48	Debugging	31/8/19	
49	Program Analysis Tool	2/9/19	
50	Integration Testing	4/9/19	
51	Testing Object-Oriented Programs	6/9/19	
52	System Testing	10/9/19	
53	Some General Issues Associated with	12/9/19	
54	Tutorial	12/9/19	

UNIT-V: Software Reliability And Quality Management, Computer Aided Software Engineering
CO5:. Obtain knowledge about estimation and maintenance of software systems
TB:. Fundamentals of Software Engineering, Rajib Mall, Third Edition, PHI.

55	Software Reliability	13/9/19	Lecture with discussions
56	Statistical Testing	16/9/19	
57	Software Quality	16/9/19	
58	Software Quality Management System	17/9/19	
59	ISO 9000.	18/9/19	
60	SEI Capability Maturity Model	18/9/19	
61	Case and its Scope	19/9/19	
62	Case Environment	20/9/19	
63	Case Support in Software Life Cycle	21/9/19	
64	Other Characteristics of Case Tools	23/9/19	
65	Towards Second Generation CASE Tool	23/9/19	
66	Architecture of a Case Environment	24/9/19	
67	Tutorial	24/9/19	

UNIT-VI: **Software Maintenance, Software Reuse**
CO6: Obtain knowledge about estimation and maintenance of software systems
TB: Fundamentals of Software Engineering, Rajib Mall, Third Edition, PHI.

68	Software maintenance	26/9/19	Lecture with discussions
69	Maintenance Cost	28/9/19	
70	Software Configuration Management	30/9/19	

71	what can be Reused?	30/9/19	
72	Why almost No Reuse So Far?	1/10/19	
73	Basic Issues in Reuse Approach	3/10/19	
74	Reuse at Organization Level	4/10/19	
75	Tutorial	5/10/19	

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TENTATIVE PLAN: R1631121 AY:2019-20

Course Title: HUMAN COMPUTER INTERACTION (R1631121))		
Section : IT	Date : 10-6-2019	Page No : 01 of 03
Revision No : 00	Prepared By : A.Veda Sri	Approved By : HOD

Tools : Black board, PPTs, Moodle

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT –I The User Interface			
CO1: Students are assessed on their ability to communicate and apply UCD methods in the capstone project course. Assessment includes examination of team reports and how HCI students can discuss challenges and solutions for adapting UCD methods to fit the practical needs of an actual project			
TB : Wilbert O. Galitz, "The Essential Guide to User Interface Design", Wiley India Edition			
1	Introduction to HCI	10/6/19	Lecture interspersed with discussions
2	Importance of the User Interface	11/6/19	
3	Importance and benefits of Good Design	12/6/19	
4	History of Human Computer Interface	13/6/19	
5	Characteristics of Graphical and Web User Interface, Graphical User Interface	14/6/19 15/6/19	
6	popularity of graphics, concepts of Direct Manipulation	17/6/19 18/6/19	
7	Graphical System advantage and disadvantage	19/6/19	
8	Characteristics of GUI, Web User Interface	20/6/19 21/6/19	
9	popularity of web	22/6/19	
10	Characteristics of Web Interface	24/6/19 25/6/19	
11	Merging of Graphical Business systems& the Web	26/6/19 27/6/19	
12	Principles of User Interface Design	28/6/19 29/6/19	

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT –II The User Interface Design Process			
CO2:. Students are assessed on their ability to communicate and apply UCD methods in the capstone project course. Assessment includes examination of team reports and how HCI students can discuss challenges and solutions for adapting UCD methods to fit the practical needs of an actual project			
TB : Wilbert O. Galitz, "The Essential Guide to User Interface Design", Wiley India Edition			
13	The User Interface Design Process Introduction	1/7/19	Lecture interspersed with discussions
14	Obstacles and Pitfall in the development Process	2/7/19 3/7/19	

15	Usability, The Design Team	4/7/19 5/7/19	
16	Human Interaction with Computers	6/7/19 8/7/19	
17	Important Human Characteristics in Design	9/7/19	
18	Human Consideration in Design	10/7/19 11/7/19	
19	Human Interaction Speeds	12/7/19 15/7/19	
20	Performance versus Preference	16/7/19	
21	Methods for Gaining and Understanding of Users	17/7/19 18/7/19	

UNIT –III Understanding Business Functions

CO3: Students are assessed on their ability to communicate and apply UCD methods in the capstone project course. Assessment includes examination of team reports and how HCI students can discuss challenges and solutions for adapting UCD methods to fit the practical needs of an actual project

TB: O. Galitz, "The Essential Guide to User Interface Design", Wiley India Edition

22	Understanding Business Functions Introduction	19/7/19 20/7/19	Lecture interspersed with discussions
23	Business Definitions & Requirement analysis	22/7/19 23/7/19	
24	Determining Business Functions	24/7/19 25/7/19	
25	Design standards or Style Guides	26/7/19 27/7/19	
26	System Training and Documentation	29/7/19 30/7/19	

TENTATIVE PLAN: R1631121 AY:2019-20

UNIT - IV Principles of Good Screen Design

CO4 :. Students are assessed on their ability to communicate and apply UCD methods in the capstone project course. Assessment includes examination of team reports and how HCI students can discuss challenges and solutions for adapting UCD methods to fit the practical needs of an actual project

TB : Alan Cooper, Robert Riemann, David Cronin, "Essentials of Interaction Design", Wiley

27	Principles of Good Screen Design Introduction	12/08/19	Lecture interspersed with discussions
28	Human considerations in screen Design	13/8/19	
29	interface design goals, Test for a good design	14/8/19 15/8/19	
30	screen meaning and purpose	16/8/19 17/8/19	
31	Technological considerations in Interface, Interface Design System Menus	19/8/19 20/8/19	
32	Navigation Schemes, Structure of schemes	21/8/19 22/8/19	
33	Functions of navigation schemes	23/8/19 24/8/19	
34	Context of schemes	26/8/19	
35	Formatting schemes	27/8/19	

36	Phrasing and Selecting schemes, Navigating of Menus	28/8/19 29/8/19	
37	Kinds of Graphical Menus Windows Interface	30/8/19 31/8/19	
38	Windows characteristic	2/9/19 3/9/19	
39	Components of Window	4/9/19 5/9/19	
40	Windows Presentation Styles	6/9/19 7/9/19	
41	Types of Windows	9/9/19 10/9/19	
42	Window Management	11/9/19 12/9/19	
43	Web systems	13/9/19	

UNIT – V Device and Screen-Based Control

CO5. Students are assessed on their ability to communicate and apply UCD methods in the capstone project course. Assessment includes examination of team reports and how HCI students can discuss challenges and solutions for adapting UCD methods to fit the practical needs of an actual project

TB : Alan Cooper, Robert Riemann, David Cronin, "Essentials of Interaction Design", Wiley

44	Device and Screen-Based Control Introduction, Device based controls	16/9/19	Lecture interspersed with discussions
45	Operable Controls	17/9/19	
46	Text entry, read-Only Controls	18/9/19	
47	Section Controls	19/9/19	
48	Combining Entry Controls/ Selection Controls	20/9/19	
49	Other Operable Controls and Presentation Controls	21/9/19	
50	Selecting proper controls	23/9/19	

UNIT - VI Effective Feedback Guidance and Assistance

CO6 : Students are assessed on their ability to communicate and apply UCD methods in the capstone project course. Assessment includes examination of team reports and how HCI students can discuss challenges and solutions for adapting UCD methods to fit the practical needs of an actual project

TB:Ben Shneidermann,"Designing the user interfaces". 3rd Edition, Pearson Education Asia..

51	Effective Feedback Guidance and Assistance Introduction: Providing the Proper Feedback	24/9/19 25/9/19	Lecture interspersed with discussions
52	Effective Internationalization Accessibility	26/9/19 27/9/19	
53	International consideration	28/9/19	
54	Accessibility	30/9/19	
55	Create meaningful Graphics	1/10/19	
56	Icons and Images	2/10/19	
57	Colors-uses	3/10/19	
58	possible problems with colors	4/10/19	
59	choosing colors	5/10/19	

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TENTATIVELESSON PLAN:R163052

Course Title: UNIX AND SHELL PROGRAMMING		
Year /Sem : III/I	Date : 10-6-2019	AY:2019-20
Revision No :	Prepared By : G.SRILAKSHMI Assistant Professor	Approved By : HOD

Tools: Black Board , PPT , Video Lectures

UNIT-IIntroduction to unix
CO1: Identify the basic Unix general purpose commands.
TB: The Unix programming Environment by Brain W. Kernighan & Rob Pike, Pearson.

No.of Periods	Topic	Date	Mode of delivry
1	Introduction to unix-Brief History	10/6/19	Lecture with discussions
2	What is Unix	11/6/19	
3	Unix Components	12/6/19	
4	Using Unix	13/6/19	
5	Commands in Unix	14/6/19	
6,7	Basic commands	15/6/19,18/6/19	
8,9	Command Substitution	20/6/19,21/6/19	
10	Giving Multiple Commands	22/6/19	
11	Tutorial	24/6/19	

UNIT-II:The File system
CO2:Apply and change the ownership and file permissions using advance Unix commands
TB: The Unix programming Environment by Brain W. Kernighan & Rob Pike, Pearson.

12	The File System-The Basics of Files	1/7/19	Lecture with discussions
13	What's in a File	2/7/19	
14	Directories and File Names	3/7/19	
15	Permissions	4/7/19	
16	INodes	5/7/19	
17	The Directory Hierarchy	6/7/19	
18,19	File Attributes and Permissions	8/7/19,9/7/19	
20	The File Command knowing the File Type	10/7/19	
21	The Chmod Command Changing File	12/7/19	
22	The Chown Command Changing the Owner of a	15/7/19	
23	The Chgrp Command Changing the Group of a	16/7/19	
24	Tutorial	16/7/19	

UNIT-III: Shell-Command Line Structure
CO3: Use the awk, grep, perl scripts.
TB: The Unix programming Environment by Brain W. Kernighan & Rob Pike, Pearson.

25	Using the Shell-Command Line Structure	17/7/19	Lecture with discussions
26,27	MetaCharacters	18/7/19, 19/7/19	
28	Creating New Commands	22/7/19	
29	Command Arguments and Parameters	23/7/19	
30,31	Program Output as Arguments	24/7/19,25/7/19	
32	Shell Variables	26/7/19	
33	More on I/O Redirection	27/7/19	
34	Looping in Shell Programs	29/7/19	
35	Tutorial	30/7/19	

UNIT-IV:.Filters **CO4:**Implement shell scripts and sed **TB:** The Unix programming Environment by Brain W. Kernighan & Rob Pike, Pearson.			
36,37	Filters-The Grep Family	12/08/19,13/08/19	Lecture with discussions
38	Other Filters	14/8/19	
39	The Stream Editor Sed	16/8/19	
40	The AWK Pattern Scanning and processing Language	17/8/19	
41	Good Files and Good Filters	19/8/19	
42	Tutorial	21/8/19	
UNIT-V: Shell Programming **CO5:**Apply basic of administrative task. **TB:**. The Unix programming Environment by Brain W. Kernighan & Rob Pike, Pearson.			
43	Shell Prgramming-Shell Variables	23/8/19	Lecture with discussions
44	The Export Command	26/8/19	
45	The Profile File a Script Run During Starting	29/8/19	
46	The First Shell Script, The read Command	30/8/19	
47	Positional parameters	31/8/19	
48	The $? Variable knowing the exit status	2/9/19	
49	More about the Set Command, The Exit	4/9/19	
50	Branching Control Structures & Loop Control	6/9/19	
51	The Continue and Break Statement	10/9/19	
52	The Expr Command:Performing Integer	12/9/19	
53	Real Arithmetic in Shell Programs	13/9/19	
54	The here Document(<<)Sleep Command	16/9/19	
55	Debugging Scripts	17/9/19	
56	The Script, Eval, Exec Command	18/9/19	
57	Tutorial	19/9/19	
UNIT-VI:The Process **CO6:**Apply networking Unix commands **TB:** The Unix programming Environment by Brain W. Kernighan & Rob Pike, Pearson.			
58	The Process-The Meaning	20/9/19	Lecture with discussions
59	Parent and Child Processes	21/9/19	
60	Types of Processes	23/9/19	
61	More about Foreground and Background	24/9/19	
62	Internal and External Commands	26/9/19	
63	Process Creation	28/9/19	
64	The Trap Command	30/9/19	
65	The Stty Command	1/10/19	
66	The Kill Command	3/10/19	
67	Job Control	4/10/19	
68	Tutorial	5/10/19	

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TENTATIVE PLAN: R1631054 AY:19-20

Course Title: Data Base Management System (R1631054)		
Section : IT	**Date :** 10-06-2019	**Page No :** 01 of 03
Revision No : 00	**Prepared By** : S.Praneetha	**Approved By : HOD**

Tools : Black board, PPTs, Moodle

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT –I	**An Overview of Database Management**		
CO1: Describe a relational database and object-oriented database.			
TB : Introduction to Database Systems, CJ Date, Pearson			
1.	Introduction- What is Database System	10/6/19	Lecture interspersed with discussions
2.	What is Database	11/6/19	
3.	Why Database	12/6/19	
4.	Data Independence	13/6/19	
5.	Relation Systems and Others	14/6/19	
6.	The Three Levels of Architecture- The External Level, the Conceptual Level, the Internal Level	15/6/19	
7.	Mapping, Database Administrator	17/6/19 18/6/19	
8.	The Database Management Systems-Client/Server Architecture	19/6/19	

TENTATIVE PLAN: R1631054

Course Title: Data Base Management System (R1631054)		
Section : IT	**Date :**	**Page No :** 01 of 03
Revision No : 00	**Prepared By** : S.Praneetha	**Approved By : HOD**

Tools : Black board, PPTs

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT –II	**The E/R Models**		
CO2: Describe ER model and normalization for database design.			
TB : Introduction to Database Systems, CJ Date, Pearson			
9.	Introduction to Database Design	20/6/19	Lecture interspersed with discussions
10.	Database Design and Er Diagrams	21/6/19	
11.	Entities Attributes	22/6/19	
12.	Entity Sets-Relationship	24/6/19	
13	Relationship Sets,	25/6/19	
14	Conceptual Design With the Er Models	26/6/19	
15	Key Constraints,	27/6/19	
16	Foreign Key Constraints,GeneralConstr	28/6/19 29/6/19	
17	Selection and Projection	1/7/19	
18	Set Operation	2/7/19	
19	Renaming,Joint	3/7/19	
20	Division	4/7/19	
21	More Examples of Queries	5/7/19	
22	Tuple RelationalCalculus, Domain Relational Calculus	6/7/19	

UNIT –III Queries, Constraints, Triggers CO3: Create, maintain and manipulate a relational database using SQL TB : . Data base Management Systems, Raghurama Krishnan, Johannes Gehrke, TATA McGraw Hill 3rd Edition			
23	The Form of Basic SQL Query	8/7/19	Lecture interspersed with discussions
24	Union	9/7/19	
25	Intersect, Except	10/7/19	
26	Nested Queries,	11/7/19	
27	Aggregate Operators	12/7/19	
28	Null Values,	15/7/19	
29	Complex Integrity Constraints in SQL	16/7/19	
30	Constraint	17/7/19	
31	Triggers and Active Database	18/7/19	

TENTATIVE PLAN: R1631054 AY:19-20

Course Title: Data Base Management System (R1631054)		
Section : IT	**Date :**	**Page No :** 01 of 03
Revision No : 00	**Prepared By** : S.Praneetha	**Approved By : HOD**

Tools : Black board, PPTs

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT –IV	**Schema Refinement (Normalization)** **CO4: Describe ER model and normalization for database design.** **TB : Introduction to Database Systems, CJ Date, Pearson**		
32	Introduction to Normalization or schema refinement	19/7/19	Lecture interspersed with discussions
33	Purpose of Normalization	20/7/19	
34	functional dependency	22/7/19	
35	First normal form,	23/7/19	
36	Second normal form	24/7/19	
37	Third normal form	25/7/19	
38	Concept of surrogate key	26/7/19	
39	Boyce-codd normal form(BCNF)	27/7/19	
40	Lossless join	29/7/19 30/7/19	
41	dependency preserving decomposition	12/08/19	
42	Fourth normal form(4NF)	13/8/19	

UNIT –V Transaction Management and Concurrency Control:

CO5: Understand the role and issues in management of data such as efficiency, privacy, security, ethical responsibility, and strategic advantage

TB : Introduction to Database Systems, CJ Date, Pearson

43	Introduction to Transaction	14/8/19	Lecture interspersed with discussions
44	Properties of transactions	15/8/19	
45	Transaction log	16/8/19	
46	Transaction management with SQL using commit rollback and savepoint.	17/8/19 19/8/19	
47	Concurrency control for lost updates, uncommitted data, inconsistent retrievals and the Scheduler.	20/8/19 21/8/19	
48	Concurrency control with locking methods : lock granularity, lock types	22/8/19	
49	two phase locking for ensuring serializability	23/8/19	
50	Deadlocks	24/8/19	
51	Concurrency control with time stamp ordering : Wait/Die and	27/8/19	
52	Wound/Wait Schemes	28/8/19	
53	Database Recovery management : Transaction recovery.	29/8/19	

UNIT –VI Overview of Storages and Indexing

CO6: Examine issues in data storage and query processing and can formulate appropriate solutions.

TB : Introduction to Database Systems, CJ Date, Pearson

54	Overview of Storages and Indexing	30/8/19	Lecture interspersed with discussions
55	Data on External Storage	31/8/19	
56	File Organization and Indexing	2/9/19 3/9/19	
57	Clustered Indexing	4/9/19 5/9/19	
58	Primary and Secondary Indexes	6/9/19 7/9/19	
59	Index Data Structures	9/9/19 10/9/19	
60	Hash-Based Indexing	11/9/19	
61	Tree-Based Indexing	12/9/19	
62	Comparison of File Organization	13/9/19	

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TENTATIVE LESSON PLAN: R1631055

Course Title: Operating Systems (R1631055)		
Year /Sem : III/I	Date : 10-06-2019	AY: 2019-20
Revision No :	Prepared By : J.N.PAVAN Assistant Professor	Approved By : HOD

Tools: Black Board , PPT , Video Lectures

UNIT –I Introduction to Operating System Concept:

CO1: Design various Scheduling algorithms.
TB : Operating System Concepts,Abraham Silberschatz, Peter Baer Galvin and Greg Gagne9th

No.of Periods	Topic	Date	Mode of delivry
1	**Introduction to Operating System Concept:**	10/6/19,11/6/19	Lecture with discussions
2	Types of operating systems	12/6/19,13/6/19	
3	operating systems concepts,	15/6/19,18/6/19	
4	operating systems services	20/6/19	
5	Introduction to System call, System call types.	22/6/19	
6,7	Tutorial	24/6/19	

UNIT –II Process Management
CO2: Apply the principles of concurrency.
TB : Operating System Concepts,Abraham Silberschatz, Peter Baer Galvin and Greg Gagne9th

12	**Process Management** – Process concept, The	1/7/19	Lecture with discussions
13	Process State Diagram, Process controlblock,	2/7/19	
14	Process Scheduling,	3/7/19	
15	Scheduling Queues	4/7/19	
16	SchedulersInterprocess	5/7/19	
17	, Operations on Processes,	6/7/19	
18,19	Communication,	8/7/19	
20	Threading Issues,	10/7/19	
21	Scheduling-Basic Concepts	12/7/19	
22	Scheduling Criteria,	15/7/19	
23	Scheduling Algorithms	17/7/19	
24	Tutorial	18/7/19	

UNIT – III Memory Management:
CO3: Compare and contrast various memory management schemes.
TB : . Operating System Concepts,Abraham Silberschatz, Peter Baer Galvin and Greg Gagne9th

25	Swapping,	19/7/19	Lecture with discussions
26,27	Contiguous Memory Allocation	22/7/19	
28	Paging,	23/7/19	
29	structure of thePage Table	24/7/19	
30	Segmentation	25/7/19	
31	Virtual Memory,	26/7/19	
32	Demand Paging	27/7/19	
33	Page-Replacement Algorithms	29/7/19	
34	Thrashing	30/7/19	
35	Tutorial	30/7/19	

UNIT –IV 1. **Concurrency:** **2. Principles of deadlock** **CO4: Apply the principles of concurrency.** **Co3 Design deadlock, prevention and avoidance algorithms.** **TB : Operating Systems – Internals and Design Principles, William Stallings, 7th Edition, Prentice Hall, 2011.CO4: Apply the principles of concurrency.**			
36,37	Process Synchronization, The Critical- Section Problem	12/08/19	Lecture with discussions
38	Synchronization Hardware, Semaphores, Classic Problems of Synchronization,	14/8/19	
39	Monitors, Synchronization examples, **Principles of deadlock** – System Model,	16/8/19	
40	Deadlock Characterization, Detection and Avoidance	17/8/19	
41	Recovery form Deadlock	19/8/19	
42	Tutorial	21/8/19	
UNIT –V File system Interface-, File System implementation, Mass-storage structure **CO5: Design and Implement a prototype file systems.** **TB : Operating Systems-S Halder, Alex A Aravind Pearson Education Second Edition 2016 .**			
43	**File system Interface-**	23/8/19	Lecture with discussions
44	the concept of a file,	26/8/19	
45	Access Methods,	29/8/19	
46	Directory structure	30/8/19	
47	File system mounting,	31/8/19	
48	file sharing, protection.	2/9/19	
49	**File System implementation**	4/9/19	
50	File system structure,	6/9/19	
51	allocation methods	10/9/19	
52	free-space management	12/9/19	
53	**Mass-storage structure** storage structure,	13/9/19	
54	overview of Mass-	16/9/19	
55	Disk scheduling,	17/9/19	
56	Device drivers,	18/9/19	
57	Tutorial	19/9/19	
UNIT –VI Linux System- Android Software Platform: **CO6: Perform administrative tasks on Linux Servers, Introduction to Android Operating System Internals.** **TB : Operating Systems-S Halder, Alex A Aravind Pearson Education Second Edition 2016 .**			
58	**Linux System**: Components of LINUX,	20/9/19	Lecture with discussions
59	Interprocess Communication, Synchronization	21/9/19	
60	Interrupt, Exception and System Call.	23/9/19	
61	**Android Software Platform**:	24/9/19	
62	Android Architecture	26/9/19	
63	Operating System Services	28/9/19	
64	Android Runtime Application Development,	30/9/19	
65	Application Structure,	1/10/19	
66	Application Process management	3/10/19	
67	Tutorial	4/10/19	

Faculty/ Date 25/6/19

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HOD/Date 26/6/19

TENTATIVE LESSON PLAN: R1631122

Course Title: Advanced Java Programming (R1631122)		
Section : 1	**Date :** 11-06-2019	**A.Y:2019-20**
Revision No : 00	**Prepared By : P.RANI, Asst.Professor**	**Approved By : HOD**

Tools : Black board, PPTs, Moodle

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT –I Recapitulation of XTML **CO1:** Getting the student to be well trained in Advanced Java Programming skills for an easy entry in the IT Industry. **TB:** Internet and World wide web- How to program , Dietel and Nieto , Pearson.			
1	XTML ,XTML5	11/6/19	Lecture interspersed with discussions
2	Java Swing package	12/6/19	
3.	use of System class – Applet Context	13/6/19	
4.	signed applet – object serialization	14/6/19	
5.	shallow and deep copying	17/6/19	
6.	Java collections –Iterators	19/6/19	
7.	Array Lists ,sets –hashset	20/6/19	
8.	hash table- queue, priority queue class	22/6/19	
9.	Vector class- Comparable interface.	24/6/19	

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT –II Java Beans Introduction **CO2:**Getting the student to be well trained in Advanced Java Programming skills for an easy entry in the IT Industry. **TB:** Internet and World wide web- How to program, Dietel and Nieto, Pearson.			
10	Java Beans	3/7/19	Lecture interspersed with discussions
11	Advantages of Java Beans	4/7/19	
12	BDK Introspection,	6/7/19	
13	Using Bound properties,	9/7/19	
14	Bean Info Interface,	10/7/19	
15	Constrained properties Persistence,	12/7/19	
16	Customizers,	15/7/19	
17	Java Beans API	16/7/19	
UNIT –III Introduction to Servelets **CO3:** Getting the student to be well trained in Advanced Java Programming skills for an easy entry in the IT Industry. **TB:** Internet and World wide web- How to program, Dietel and Nieto, Pearson.			
18	Lifecycle of a Serverlet,	18/7/19	Lecture interspersed with discussions
19	JSDK The Servelet API,	17/7/19	
20	The javax.servelet Package,	23/7/19	
21	Reading Servelet parameters,	24/7/19	
22	Reading Initialization parameters. The javax.servelet HTTP package,	26/7/19	
23	Handling Http Request & Responses	14/8/19	
24	Using Cookies-Session Tracking	15/8/19	

25	Servlet chaining-Security Issues	16/8/19	

UNIT - IV Introduction to JSP The Problem with Servelet			
CO4:. Getting the student to be well trained in Advanced Java Programming skills for an easy entry in the IT Industry.			
TB: Internet and World wide web- How to program, Dietel and Nieto, Pearson.			
26	The Anatomy of a JSP Page,	21/8/19	Lecture interspersed with discussions
27.	JSP Processing	22/8/19	
28.	JSP Application Design	22/8/19	
29.	MVC Setting Up	23/8/19	
30.	JSP Environment:	23/8/19	
31	Installing the Java Software Development Kit	30/8/19	
32	Tomcat Server & Testing Tomcat	31/8/19	
33	Context of schemes	02/9/19	
34	Formatting schemes	3/9/19	
35	Kinds of Graphical Menus Windows Interface	6/9/19	
36	Windows characteristic	7/9/19	
37	Components of Window	7/9/19	
38	Windows Presentation Styles	11/9/19	
39	Types of Windows	12/9/19	
40	Types of Windows	12/9/19	
41	Window Management, Web systems	13/9/19	
UNIT – V JSP Application Development			
CO5. Getting the student to be well trained in Advanced Java Programming skills for an easy entry in the IT Industry.			
TB: The Complete Reference, Java 2 , 3ed, Patrik Naughton, Herbert Schildt, TMH.			
43	Generating Dynamic Content,	3/10/19	Lecture interspersed with discussions
44	Using Scripting Elements Implicit JSP Objects,	3/10/19	
45	Conditional Processing	4/10/19	
46	Displaying Values Using an Expression to Set an Attribute	21/9/19	
47	Declaring Variables and Methods Error Handling and Debugging Sharing Data Between JSP pages	23/9/19	
48	Requests	28/9/19	
49	Users Passing Control and Date between Pages	30/9/19	
50	Sharing Session and Application Data	1/10/19	
51	Memory Usage Considerations	02-10-16	
52	Memory Usage Considerations	03-10-19	

UNIT - VI Database Access Database Programming using JDBC

CO6 : Getting the student to be well trained in Advanced Java Programming skills for an easy entry in the IT Industry.Ben Shneidermann,"Designing the user interfaces". 3rd Edition, Pearson Education Asia..

TB: The Complete Reference, Java 2 , 3ed, Patrik Naughton, Herbert Schildt, TMH.

53	Studying Javax.sql. package.	04-10-19	Lecture interspersed with discussions
54	Accessing MySql database	05-10-19	
55	Accessing MS Access database	06-10-19 07-10-19 08-10-19	
56	Accessing a Database from a JSP Page Application		
57	Specific Database Actions Deploying JAVA Beans in a JSP Page.		
58	Accessing a Database from a JSP Page Application	09-10-19	
59	Introduction to struts framework.	10-10-19	
60	possible problems with colors	11-10-19	
61	choosing colors	12-10-19	

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TENTATIVE LESSON PLAN: R1641051

Course Title: CRYPTOGRAPHY NETWORKS SECURITY		
Section : IV-I	Date : 10-06-2019	A.Y:2019-20
Revision No : 00	Prepared By : G.SRILAKSHMI	Approved By : HOD

Tools : Black board, PPTs, Moodle

No. of Periods	TOPIC	Date 10/6/2019	Mode of Delivery
UNIT-I Basic Principles **CO1:** **Classify various Security attacks ,Services, Mechanisms and Mathematics of Cryptography** **TEXT BOOK:** Cryptography and Network Security, Behrouz A Forouzan, Debdeep Mukhopadhyay,(3e) Mc Graw Hill.			
1	**UNIT:I** Introduction	10/6/19	Lecture interspersed with discussions
2	Security Goals	11/6/19	
3	Cryptographic Attacks	11/6/19	
4	Security Services	12/6/19	
5	Security Mechanisms	14/6/19	
6	Techniques	15/6/19	
7	Integer Arithmetic	16/6/19	
8,9,10	Modular Arithmetic congruence Operation on Z_N	17/6/19 18/6/19 21/6/19	
11,12	Matrices	25/6/19 26/6/19	
13,14	Linear congruence	28/6/19 29/6/19	
15	Tutorial class	30/6/19	
UNIT-II Symmetric Encryption **CO2:** Relate Mathematics of Symmetric Key Cryptography and Apply the Symmetric key Cryptography like DES, AES. **TEXT BOOK:** Cryptography and Network Security, Behrouz A Forouzan, Debdeep Mukhopadhyay,(3e) Mc Graw Hill.			
15	**UNIT:II** Mathematics of Symmetric Key Cryptography	01/07/19	Lecture interspersed with discussions
16	Algebraic Structure	02/07/19	
17	Gf Fields	03/07/19	
18	Introduction to Modern Symmetric Key Ciphers	04/07/19	
19	Modern Block Ciphers	05/07/19	
20	Modern Stream Ciphers	06/07/19	

21	Introduction Data Encryption Standard	06/07/19	
22	DES Structure	08/07/19	
23	DES Analysis	09/07/19	
24	Multiple DES, Security of DES	10/07/19	
25	Advanced Encryption Standard	11/07/19	
26	Transformations	12/07/19	
27	Key Expansion	13/07/19	
28	Ciphers, Examples, Analysis of AES	15/07/19	
29	Tutorial	15/07/19	

UNIT-III: Asymmetric Encryption

CO3:

Relate Mathematics of Asymmetric Key Cryptography and Apply the Asymmetric key cryptography

TEXT BOOK:

Cryptography and Network Security, Behrouz A Forouzan, Debdeep Mukhopadhyay,(3e) Mc Graw Hill.

30,31	**UNIT-III** Asymmetric Encryption	16/07/19 17/7/19	
33,34,35	Mathematics of Asymmetric Key Cryptography:**PRIMES**	18/7/19 19/7/19 20/07/19	
36,37	Primality Testing	22/7/19 23/07/19	Lecture interspersed with discussions
38,39	Factorization	24/07/19 25/07/19	
40	Chinese Remainder Theorm	26/7/19	
41,42	Quadratic Congruence	27/7/19 29/7/19	
43,44	Asymmetric Key Cryptography	30/07/19 03/8/19	
45	Tutorial	03/8/19	

UNIT-IV Data Integrity, Digital Signature Schemes & Key Management

CO4:

Make use of Data Integrity, Digital Signature Schemes & Key Management for verifying the authenticity of digital messages

TEXT BOOK:

Cryptography and Network Security, Behrouz A Forouzan, Debdeep Mukhopadhyay,(3e) Mc Graw

46,47	**UNIT:IV** Message Integrity and Message Authentication	13/8/19 14/8/19	
48,49	Cryptographic Hash Functions	15/8/19 16/8/19	
50,5152	Digital Signature	17/8/19 19/8/19 20/8/19 24/8/19	Lecture interspersed with discussions
53,54,55	Key Management	25/8/19 26/8/19 27/8/19	
56	Tutorial		

UNIT-V Network Security-I

CO 5:

Select protocols like PGP,S/MIME in Application layer and SSL,TLS in Transport layer to Secure the Network during data transmission

TEXT BOOK:

Cryptography and Network Security, Behrouz A Forouzan, Debdeep Mukhopadhyay,(3e) Mc Graw Hill.

57	**UNIT-V:** Network Security-I	31/8/19 29/8/19	Lecture interspersed with discussions
58	Security at application layer	02/9/19	
59,60	PGP	04/9/19 05/9/19	
61,62	S/MIME	7/9/19 09/9/19	
63,64	Security at the Transport Layer	12/9/19 13/9/19	
65,66	SSL	16/9/19 17/9/19	
67,68	TLS	19/9/19 21/9/19	
69	Tutorial	23/9/19	

UNIT-VI Network Security-II

CO6:

Select protocols like PGP,S/MIME in Application layer and SSL,TLS in Transport layer to Secure the Network during data transmission

TEXT BOOK:

Cryptography and Network Security, Behrouz A Forouzan, Debdeep Mukhopadhyay,(3e) Mc Graw Hill.

69,70	**UNIT- VI**: Network Security-II	24/9/19 25/9/19	Lecture interspersed with discussions
71,72	Security at the Network Layer	26/9/19 27/9/19	
73,74	IPSec	30/9/19 1/10/19	
75,76	System Security	3/10/19 4/10/19	
77	Tutorial	5/10/19	

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Tentative Plan:R164105C

Course Title: MOBILE COMPUTING		
Section : IT Year/Sem: IV/I	Date :10-06-2019	A.Y:2019-2020
Revision No :	Prepared By : M RAMBHUPAL	Approved By : HOD

Tools : Black board, PPTs, Moodle

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT-I: Introduction: Mobile Communications, & GSM **CO-1:**To make the student understand the concept of mobile computing paradigm, its novel applications and limitations. **TB**:. Jochen Schiller, "Mobile Communications", Addison-Wesley, Second Edition, 2009			
1	**Introduction:** Mobile Communications	10.6.2019 11.6.2019	Lecture interspersed with discussions
2	Mobile Computing – Paradigm,	12.6.2019	
3	Promises/Novel Applications	13.6.2019	
4	Impediments and Architecture	13.6.2019	
5	Mobile and Handheld Devices	14.6.2019	
6	Limitations of Mobile and Handheld Devices.	14.6.2019	
7	GSM – Services, System Architecture	15.6.2019	
8	Radio Interfaces	15.6.2019	
9	Protocols, Localization	17.6.2019	
10	Calling, Handover,	18.6.2019 20.6.2019	
11	Security,	21.6.2019	
12	New Data Services, GPRS	22.6.2019	
UNIT –II **(Wireless) Medium Access Control (MAC)** **CO-2:** To understand the typical mobile networking infrastructure through a popular GSM protocol **TB**:. Jochen Schiller, "Mobile Communications", Addison-Wesley, Second Edition, 2009			
13	Motivation for a specialized MAC	**11/12/19**	
14	Hidden and exposed terminals	**11/12/19**	

15	Near and far terminals	24.6.2019	Lecture interspersed with discussions
16	SDMA	24.6.2019	
17	FDMA	25.6.2019 26.6.2019	
18	TDMA1	27.6.2019 28.6.2019	
19	TDMA2	29.6.2019	
20	TDMA3	1.7.2019	
21	TDMA4	3.7.2019	
22	CDMA1	4.7.2019	
23	CDMA2	4.7.2019	
24	Wireless LAN/(IEEE 802.11)1	5.7.2019	
S. No	**Unit / Topic**	**Taught on (Date)**	
UNIT-III: Mobile Network Layer: **CO-3:** To understand the issues and solutions of various layers of mobile networks, namely MAC layer, Network Layer & Transport Layer **TB**:. Jochen Schiller, "Mobile Communications", Addison-Wesley, Second Edition, 2009			
25	IP and Mobile IP Network Layers,	9.7.2019	Lecture interspersed with discussions
26	IP and Mobile IP Network Layers	10.7.2019	
27	IP and Mobile IP Network Layers	11.7.2019	
28	Packet Delivery	12.7.2019	
29	Handover Management	16.7.2019	
30	Location Management	18.7.2019	
31	Registration,	19.7.2019	
32	Tunneling and Encapsulation1	22.7.2019	
33	Tunneling and Encapsulation2	23.7.2019	
34	Route Optimization,	26.7.2019	
35	Route Optimization,	27.7.2019	
36	Route Optimization,	5.8.2019	
37	DHCP	6.8.2019	
38	Tutorial	7.8.2019	

UNIT-IV: Mobile Transport Layer & Database Issues CO4 : To understand the database issues in mobile environments & data delivery models. TB:. Jochen Schiller, "Mobile Communications", Addison-Wesley, Second Edition, 2009			
39	**Mobile Transport Layer :**	8.8.2019	Lecture interspersed with discussions
40	Conventional TCP/IP Protocols	9.8.2019	
41	Conventional TCP/IP Protocols	13.8.2019	
42	Conventional TCP/IP Protocols	14.8.2019	
43	Indirect TCP	14.8.2019	
44	Indirect TCP	16.8.2019	
45	Snooping TCP	17.8.2019	
46	Snooping TCP	26.8.2019	
47	Snooping TCP	28.8.2019	
48	Mobile TCP,	28.8.2019	
49	Other Transport Layer Protocols for Mobile Networks	30.8.2019	
50	Other Transport Layer Protocols for Mobile Networks	5.9.2019	
51	Tutorial	7.9.2019	
S. No	**Unit / Topic**	**Taught on (Date)**	
UNIT-VI: Mobile Ad hoc Networks (MANETs) : CO5: To understand the ad hoc networks and related concepts.. CO6: To understand the platforms and protocols used in mobile environment TB:. Jochen Schiller, "Mobile Communications", Addison-Wesley, Second Edition, 2009			
52	**UNIT V** **Mobile Ad hoc Networks (MANETs) :** Introduction,	9.9.2019	Lecture interspersed with discussions
53	Applications & Challenges of a MANET	11.9.2019	
54	DSR,	12.9.2019	
55	AODV,	13.9.2019	
56	DSDV	16.9.2019	
57	Mobile Agents, Service Discovery.	16.9.2019	
58	**Protocols and Platforms for Mobile Computing :** WAP,	17.9.2019	
59	Bluetooth, XML, J2ME, JavaCard, PalmOS	17.9.2019	
60	Windows CE, SymbianOS,	18.9.2019	

61	Linux for Mobile Devices,Android	19.9.2019	
S. No	**Unit / Topic**	**Taught on (Date)**	
UNIT-V: Data Dissemination and Synchronization **CO4:** To understand the database issues in mobile environments & data delivery models **TB**:. Jochen Schiller, "Mobile Communications", Addison-Wesley, Second Edition, 2009			
62	**Data Dissemination and Synchronization :** Communications Asymmetry	21.9.2019	Lecture interspersed with discussions
63	Classification of Data Delivery Mechanisms, Data dissemination,	23.9.2019	
64	Broadcast Models, Selective Tuning and Indexing Methods,	23.9.2019	
65	Data Synchronization – Introduction, Software, and Protocols.	24.9.2019	
66	**Database Issues :** Database Hoarding & Caching Techniques,	25.9.2019	
67	Client-Server Computing & Adaptation,	26.9.2019	
68	Transactional Models, Query processing, Data Recovery Process & QoS Issues.	27.9.2019	

10/6/19

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10/6/19

HOD/Date

TENTATIVE PLAN: R1641127

Course Title: DATAWAREHOUSING AND BUSINESS INTELLIGENCE (R1641127)		
Section : IT	Date : 10-06-2019	AY:2019-20
Revision No : 00	Prepared By : G D K Kishore	Approved By : HOD

Tools : Black board, PPTs, Moodle

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT –I Introduction to Datamining			
CO1: Describe the scope and application of business intelligence and decision support;			
TB : Han, Kamber, "Data Mining Concepts and Techniques", Morgan Kaufmann 2 nd Edition			
1.	**UNIT-I Introduction to Data Mining**	10/6/19	Lecture interspersed with discussions
2.	**About** Data Mining	11/6/19	
3.	Motivation for Data Mining, Data Mining-Definition & Functionalities	12/6/19	
4.	Classification of DM systems	13/6/19 14/6/19	
5.	DM task primitives	15/6/19	
6.	Integration of a Data Mining system with a Database or a Data Warehouse	17/6/19 18/6/19	
7.	Major issues in Data Mining	19/6/19 20/6/19	
8.	**Data Warehousing:** Overview of concepts like star schema	21/6/19	
9.	fact and dimension tables, OLAP operations	22/6/19	

TENTATIVE PLAN: R1641127

Course Title: DATAWAREHOUSING AND BUSINESS INTELLIGENCE(R1641127)		
Section : IT	Date :	AY:2019-20
Revision No : 00	Prepared By : G D K Kishore	Approved By : HOD

Tools : Black board, PPTs

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT –II Data Preprocessing			
CO2: Design systems for sourcing and structuring data to provide an integrated, non-volatile collection of data for decision support using data warehouses			
TB : Han, Kamber, "Data Mining Concepts and Techniques", Morgan Kaufmann 2 nd Edition			
9	**UNIT-II** Data Preprocessing: Why? Descriptive Data Summarization	24/6/19	Lecture interspersed with discussions
10	Data Cleaning: Missing Values, Noisy Data, Data Integration and Transformation	25/6/19 26/6/19	
11	Data Reduction:-Data Cube Aggregation, Dimensionality reduction	27/6/19 28/6/19	
12	, Data Compression, Numerosity Reduction ,Data Discretization	29/6/19 1/7/19	
	Concept hierarchy generation for numerical and categorical data	24/6/19	
UNIT –III Mining Frequent Patterns			
CO3: Design multidimensional data models and implement them using star schemas and relational databases			
TB : Han, Kamber, "Data Mining Concepts and Techniques", Morgan Kaufmann 2 nd Edition			
13	Associations, and Correlations, Market Basket Analysis	3/7/19	Lecture interspersed
14	Frequent items,Closed Itemsets, and Association Rules	4/7/19 5/7/19	

15	Frequent Pattern Mining	6/7/19 8/7/19	with discussions
16	Efficient and Scalable Frequent Itemset Mining Methods	9/7/19 10/7/19	
17	The Apriori Algorithm for finding Frequent Itemsets Using Candidate Generation	11/7/19 12/7/19	
18	Generating Association Rules from Frequent Itemsets, Improving the Efficiency of Apriori	15/7/19 16/7/19	
19	Itemsets without Candidate Generation using FP Tree, Mining Multilevel Association Rules, Mining Multidimensional Association Rules	17/7/19	
20	From Association Mining to Correlation Analysis, Constraint-Based Association Mining	18/7/19	

Course Title: DATAWAREHOUSING AND BUSINESS INTELLIGENCE (R1641127)		
Section : IT	**Date :**	**AY:2019-20**
Revision No : 00	**Prepared By : G D K kishore**	**Approved By : HOD**

Tools : Black board, PPTs

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT –IV	**Classification & Prediction**		
CO4: Communicate and foster realistic expectations of the role of OLAP technology and business intelligence systems in management and decision support CO5: Explain the need for evolutionary development approaches to developing business intelligence and data warehouse systems **TB**. Han, Kamber, "Data Mining Concepts and Techniques", Morgan Kaufmann 2 nd Edition			
21	Issues regarding Classification and prediction	22/7/19	Lecture interspersed with discussions
22	**Classification methods**: Decision tree	23/7/19 24/7/19	
23	Bayesian Classification	25/7/19 26/7/19	
24	Rule based Prediction	27/7/19 29/7/19	
25	Linear and non linear regression	30/7/19 31/7/19	
26	Accuracy and Error measures	1/8/19	
27	Evaluating the accuracy of a Classifier or Predictor	2/8/19	
UNIT –V	**Mining Stream and Sequence Data**		
CO6: Develop a simple business intelligence system using an OLAP tool CO7: Apply theories and principles of data visualization to encourage high quality analysis of business information to inform decision making **TB :** Han, Kamber, "Data Mining Concepts and Techniques", Morgan Kaufmann 2 nd Edition			
28	Classification, Clustering Association Mining in stream data	12/8/19	Lecture interspersed with discussions
29	Mining Sequence Patterns in Transactional Databases, **Spatial Data and Text Mining:** Spatial Data Cube Construction	13/819 14/8/19	
30	Spatial OLAP, Mining Spatial Association and Co-location Patterns	15/8/19 16/8/19	
31	Spatial Clustering Methods, Spatial Classification and Spatial Trend Analysis	17/8/19	
32	Text Mining Text Data Analysis and Information Retrieval, Text Mining Approaches	19/8/19	

UNIT –VI Web Mining

CO1: **CO8:** Design governance mechanisms for the development and management of business intelligence and data warehouse systems in an organization

TB : Han, Kamber, "Data Mining Concepts and Techniques", Morgan Kaufmann 2 nd Edition

33	Web Content Mining,	20/8/19	Lecture interspersed with discussions
34	Web Structure Mining	21/8/19 22/8/19	
35	Web Usage mining,	24/8/19 25/8/19	
36	Automatic Classification of web Documents	26/8/19 27/8/19	
37	**Data Mining for Business Intelligence Applications:** Data mining for business Applications like Balanced Scorecard	28/8/19 29/8/19	
38	Fraud Detection, Click stream Mining	2/9/19 3/9/19	
39	Market Segmentation, retail industry	4/9/19 5/9/19	
40	telecommunications industry,	6/9/19	
41	banking & finance and CRM etc1	7/9/19	

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TENTATIVE LESSON PLAN: R1621026
MANAGERIAL ECONOMICS & FINANCIAL ANALYSIS

Course Title: MANAGERIAL ECONOMICS & FINANCIAL ANALYSIS(R1621026)		
Section: IT	**Date:** 14-06-2019	**Page No:** 01 of 03
Revision No: 00	**Prepared By**: SRINIVAS.V	**Approved By: HOD**

Tools: Black board, PPTs,

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT –I	**INTRODUCTION TO MANAGERIAL ECONOMICS**		
CO1: To acquaint the student with basic knowledge of managerial economics, managerial decision areas, basic economics tools, concept of demand, law of demand, elasticity of demand, types of elasticity measurements of elasticity and demand forecasting.			
TB: A.R. Arya Sri, "Managerial Economics & Financial Analysis", 2005, TMH.			
1.	Introduction to Managerial Economics, Definitions, Characteristics of ME	14-06-2019	Lecture interspersed with discussions
2.	Nature and Scope of Managerial Economics	18-06-2019	
3.	Managerial Economics related to Other Areas	18-06-2019	
4.	Basic Economic Tools in ME	19-06-2019	
5.	Introduction to Demand – Meaning & Definition, Features of Demand	19-06-2019	
6.	Determinants of Demand	20-06-2019	
7.	Law of Demand & Its exceptions, Demand Function	21-06-2019	
8.	Introduction to Elasticity of Demand	24-06-2019	
9.	Types of Elasticity of Demand	25-06-2019	
10.	Types of price Elasticity of Demand	26-06-2019	
11.	Measurement of Price Elasticity of Demand	27-06-2019	
12.	Introduction: Demand Forecasting	30-06-2019	
13.	Importance of Demand Forecasting	01-07-2019	
14.	Demand Forecasting Methods	03-07-2019	
UNIT –II	**PRODUCTION & COST ANALYSIS**		
CO2: TO acquaint the student with basic knowledge of production, factors of production, various production functions, least cost combinations of inputs, cost concepts, breakeven analysis to avoid losses.			
TB: A.R. Arya Sri, "Managerial Economics & Financial Analysis", 2005, TMH.			
15.	Introduction to Production: Meaning & Definition, Production Function	04-07-2019	Lecture interspersed with discussions
16.	Factors of production, production function with one variable factor	06-07-2019	
17.	Law of Variable Proportions	06-07-2019	
18.	Factors of production, production function with two variable factors	07-07-2019	
19.	Concept of Iso-costs, Isoquants	10-07-2019	
20.	MRTS, Least Cost Combination	09-07-2019	

No. of Periods	TOPIC	DATE	Mode of Delivery
21.	Cobb-Douglas Production Function	14-07-2019	Lecture interspersed with discussions
22.	Economies of Scale& diseconomies of scale	14-07-2019	
23.	Returns to Scale & returns to factors	15-07-2019	
24.	Concept of cost & Various Cost Concepts	16-07-2019	
25.	Introduction to Break Even Analysis	18-07-2019	
26.	Determination of Break Even Point with Graph	18-07-2019	
27.	Calculation of Break-Even Point (BEP) algebraic method	30-07-2019	
UNIT - III INTRODUCTION TO MARKETS, THEORIES OF THE FIRM AND PRICING POLICIES **CO3: Gain knowledge about market, types of markets, competition, price determination under different market conditions, And various pricing methods.** **TB: A.R. Arya Sri, "Managerial Economics & Financial Analysis", 2005, TMH.**			
28.	Introduction to Markets: Meaning & Definition, Features	01-08-2019	Lecture interspersed with discussions
29.	Types of markets, market structure	02-08-2019	
30.	Price Determination under perfect competition	03-08-2019	
31.	Equilibrium-point of firm and industry	05-08-2019	
32.	Price Determination under Monopoly	07-08-2019	
33.	Equilibrium-point of firm and industry in monopoly	12-08-2019	
34.	Price Determination under Monopolistic Competition	12-08-2019	
35.	Price Determination under Oligopoly	13-08-2019	
36.	Managerial Theories of the Firm	13-08-2019	
37.	Marries and Williamson theory of firm	14-08-2019	
38.	Pricing, pricing objectives.	14-08-2019	
39.	Various Methods of Pricing	16-08-2019	
UNIT – IV FORMS OF BUSINESS ORGANIZATIONS AND BUSINESS CYCLE **CO4: TO understand about business, types of business-like sole trader ship, partnership, joint stock companies, business cycle.** **TB: A.R. Arya Sri, "Managerial Economics & Financial Analysis", 2005, TMH.**			
40.	Introduction to Business: Definition, Features	16-08-2019	Lecture interspersed with discussions
41.	Sole Proprietorship: Features, Merits, Demerits	17-08-2019	
42.	Partnership: Features, Merits, Demerits, kinds of partners	17-08-2019	
43.	Joint Stock Company: Features, Merits, Demerits	19-08-2019	
44.	Public limited and private limited companies, features	19-08-2019	
45.	Public Enterprises: Features, Merits, Demerits	20-08-2019	
46.	Phases of Business Cycles	21-08-2019	

No. of Periods	TOPIC	DATE	Mode of Delivery
UNIT – V	**INTRODUCTION TO FINANCIAL ACCOUNTING**		
CO5: TO know and understand about accounting process, types of accounts, principles of accounting, preparation of journal, ledger, trail balance and final accounts with			
47.	Introduction to Accounting: Meaning & Definition, Classification of Accounts	25-08-2019	Lecture interspersed with discussions
48.	Accounting Process	30-08-2019	
49.	Principles of accounting (GAAP)	03-09-2019	
50.	Accounting cycle	03-09-2019	
51.	Preparation of Journal: Problems	04-09-2019	
52.	Preparation of Ledger: Problems	05-09-2019	
53.	Preparation of Trail Balance: Problems	05-09-2019	
54.	Final Accounts (Trading, profit & loss A/C, Balance Sheet)	06-09-2019	
55.	Final Accounts with Adjustments	09-09-2019	
56.	Treatment of adjustments in preparation of final accounts.	10-09-2019	
57.	Introduction to Financial Statement Analysis: Importance, Objectives.	12-09-2019	Lecture interspersed with discussions
58.	Classification of Ratios: Liquidity Ratios	12-09-2019	
59.	Classification of Ratios: Activity Ratios	12-09-2019	
60.	Classification of Ratios: Solvency Ratios	13-09-2019	
61.	Classification of Ratios: Profitability Ratios	13-09-2019	
62.	Preparation of Changes in Working Capital	13-09-2019	
63.	Preparation of Funds Flow Statement	14-09-2019	
64.	Preparation of Cash Flow Statement	14-09-2019	
UNIT – VI	**CAPITAL, CAPITAL BUDGETING DECISIONS**		
CO6: TO understand about Capital, types of capital, capital budgeting decisions, process of capital budgeting methods or techniques of capital budgeting.			
TB: A.R. Arya Sri, "Managerial Economics & Financial Analysis", 2005, TMH			
No. of Periods	**TOPIC**	**DATE**	**Mode of Delivery**
65.	Introduction to Capital Budgeting: Meaning, Definition, Need.	13-10-2019	Lecture interspersed with discussions
66.	Methods of Capital Budgeting: Pay Back Period (PBP),	13-10-2019	
67.	Calculation of Accounting Rate of Return (ARR)	14-10-2019	
68.	Calculation of Net Present Value (NPV)	15-10-2019	
69.	Calculation of Internal Rate of Return (IRR)	16-10-2019	
70.	Calculation of Profitability Index	19-10-2019	
71.	Merits and Demerits of Capital Budgeting Techniques.	23-10-2019	

Srinivas

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TENTATIVE PLAN: R164105B AY:2019-20

Course Title: INFORMATION RETRIEVAL SYSTEM(R164105B)		
Section : IT	Date : 10-06-2019	Page No : 01 of 03
Revision No : 00	Prepared By : A.Veda Sri	Approved By : HOD

Tools : Black board, PPTs, Moodle

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT –I	**Introduction to Information Storage and Retrieval System**		
CO1: Identify basic theories in information retrieval systems			
TB : Frakes, W.B., Ricardo Baeza-Yates: Information Retrieval Data Structures and Algorithms, Prentice Hall, 1992.			
1.	**Introduction to Information Storage and Retrieval System**	10/6/19	Lecture interspersed with discussions
2.	Domain Analysis of IRSYSTEMS	11/6/19	
3.	other types of Information Systems	12/6/19	
4.	IR System Evaluation	13/6/19 14/6/19	
5.	**Introduction to Data Structures and**	15/6/19	
6.	Algorithms related to Information Retrieval	17/6/19 18/6/19	
7.	Data structures	19/6/19 20/6/19	
8.	Algorithms	21/6/19 22/6/19	

TENTATIVE PLAN: R164105B AY:2019-20

Course Title: INFORMATION RETRIEVAL SYSTEM(R164105B)		
Section : IT	Date :	Page No : 01 of 03
Revision No : 00	Prepared By : A.Veda Sri	Approved By : HOD

Tools : Black board, PPTs

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT –II	**Inverted files**		
CO2: Identify the analysis tools as they apply to information retrieval systems			
TB : Frakes, W.B., Ricardo Baeza-Yates: Information Retrieval Data Structures and Algorithms, Prentice Hall, 1992.			
9	**Introduction to Inverted files**	24/6/19	Lecture interspersed with discussions
10	Structures used in Inverted Files	25/6/19 26/6/19	
11	Building Inverted file using a sorted array	27/6/19 28/6/19	
12	Modifications to Basic Techniques	29/6/19 1/7/19	
UNIT –III	**Signature Files**		
CO3: Understands the problems solved in current IR systems			
TB : Software testing techniques – Boris Beizer, Dreamtech, second edition.			
13	**Introduction Signature Files**	3/7/19	Lecture interspersed with discussions
14	Concepts of Signature Files	4/7/19 5/7/19	
15	Compression, Vertical Partitioning	6/7/19 8/7/19	

16	Vertical partition with compression	9/7/19 10/7/19	
17	Compressed bit slice	11/7/19 12/7/19	
18	Double compressed bit slice	15/7/19 16/7/19	
19	Horizontal Partitioning	17/7/19 18/7/19	

TENTATIVE PLAN: R164105B AY:2019-20

Course Title: INFORMATION RETRIEVAL SYSTEM(R164105B)		
Section : IT	**Date :**	**Page No :** 01 of 03
Revision No : 00	**Prepared By : A.Veda Sri**	**Approved By : HOD**

Tools : Black board, PPTs

No. of Periods	TOPIC	Date	Mode of Delivery
UNIT –IV	**New Indices for Text**		
CO4: Describes the advantages of current IR systems			
TB : Frakes, W.B., Ricardo Baeza-Yates: Information Retrieval Data Structures and Algorithms, Prentice Hall, 1992.			
No. of Periods	**TOPIC**	**Date**	**Mode of Delivery**
20	**New Indices for Text**	22/7/19	Lecture interspersed with discussions
21	Introduction to PAT Trees & PAT Arrays	23/7/19 24/7/19	
22	PAT Tree structure	25/7/19 26/7/19	
23	Algorithms on the PAT Trees	27/7/19 29/7/19	
24	Building PAT trees as PATRICA Trees	30/7/19 31/7/19	
25	PAT representation as arrays	1/8/19 2/8/19	
UNIT –V	**Stemming Algorithms**		
CO5: Understand the difficulty of representing and retrieving documents.			
TB : Frakes, W.B., Ricardo Baeza-Yates: Information Retrieval Data Structures and Algorithms, Prentice Hall, 1992.			
26	**Introduction to Stemming Algorithms**	12/8/19	Lecture interspersed with discussions
27	Stemming Algorithm Introduction	13/819 14/8/19	
28	Types of Stemming Algorithms	15/8/19 16/8/19	
29	Experimental Evaluations of Stemming to Compress Inverted Files	17/8/19 19/8/19	
UNIT –VI	**Thesaurus Construction**		
CO6: Understand the latest technologies for linking, describing and searching the web			
TB : Frakes, W.B., Ricardo Baeza-Yates: Information Retrieval Data Structures and Algorithms, Prentice Hall, 1992.			
30	**Thesaurus Construction**	20/8/19	Lecture interspersed with discussions
31	Introduction to Thesaurus Construction	21/8/19 22/8/19	
32	Features of Thesauri	24/8/19	

		25/8/19	
33	Thesaurus Construction	26/8/19 27/8/19	
34	Manual thesaurus Construction	28/8/19 29/8/19	
35	Automatic thesaurus Construction	2/9/19 3/9/19	
36	Thesaurus construction from Texts	4/9/19 5/9/19	
37	Merging existing Thesauri	6/9/19 7/9/19	

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TENTAIVE PLAN: R164105E

Course Title: SOFTWARE PROJECT MANAGEMENT (R164105E)		
Section : IT Year /Sem : IV/I	Date : 10-06-2019	AY: 2019-20
Revision No :	Prepared By : M.SURESH BABU , Assistant Professor	Approved By : HOD

Tools: Black Board, PPT , Video Lectures

UNIT-I: Introduction Project.

CO1: To study how to plan and manage projects at each stage of the software development life cycle (SDLC).

TB: Software Project Management, Bob Hughes & Mike Cotterell, TATA Mcgraw-Hill.

No.of Periods	Topic	Date	Mode of delivry
1,2	Project, Management,	10/6/19, 11/6/19	Lecture with discussions
3,4	Software Project Management activities	11/6/19, 12/6/19	
5,6	Challenges in software projects,	14/6/19, 15/6/19	
7,8	Stakeholders, Objectives & goals	25/6/19, 26/6/19	
9	Project Planning: Step-wise planning,	27/6/19	
10	Project Scope, Project Products & deliverables,	28/6/19	
11,12	Project activities, Effort estimation, Infrastructure	29/6/19	

UNIT-II: Project Approach

CO2: To train software project managers and other individuals involved in software project Planning and tracking and oversight in the implementation of the software project management process.

TB: "Neural Networks: A comprehensive foundation", Second Edition, Pearson Education Asia.

12,13	Lifecycle models,	01/07/19, 02/07/19	Lecture with discussions
14,15	Choosing Technology,	03/07/19, 04/07/19	
16	Prototyping	05/07/19, 10/07/19	
17,18	Iterative & incremental Process Framework:	11/07/19, 13/07/19	
19	Lifecycle phases,	15/07/19	
20	Process Artefacts	15/07/19	
21	Process workflows	16/07/19	

UNIT-III: Effort Estimation & Activity Planning

CO1: To train software project managers and other individuals involved in software project Planning and tracking and oversight in the implementation of the software project Management process.

TB: Software Project Management, Bob Hughes & Mike Cotterell, TATA Mcgraw-Hill.

22	**Effort estimation & activity Planning**	20/07/19	Lecture with discussions
23,24	Estimation techniques,	23/07/19	
25	Function Point analysis, SLOC, COCOMO	24/07/19	
26,27	Use case-based estimation, Activity Identification Approaches	25/07/19	
28,29	Network planning models	30/07/19	
30	Critical path analysis	03/8/19	

UNIT-IV: Risk Management

CO1: To study how to plan and manage projects at each stage of the software development life cycle (SDLC)

TB: Satish Kumar, "Neural Networks: A classroom approach", Tata McGraw Hill, 2004.

31	Risk categories,	13/8/19	Lecture with discussions
32	Identification, Assessment	16/8/19	
33	Planning and management,	21/8/19	
34,35	PERT technique,	26/8/19	
36,37	Functional approximation with back propagation	31/8/19	
38,39	Monte Carlo approach.	02/9/19	

UNIT-V: Project Monitoring & Control, Resource Allocation

CO5: To understand successful software projects that support organization's strategic goals.

TB: Software Project Management, Bob Hughes & Mike Cotterell, TATA Mcgraw-Hill

40,41	Creating a framework for monitoring & control	04/9/19	Lecture with discussions
42,43	Progress monitoring, Cost monitoring, Earned	05/9/19	
44,45	value Analysis, Defects Tracking	09/9/19	
46,47	Issues Tracking, Status reports,	12/9/19	
48,49	Types of Resources	17/9/19	
50,51	Identifying resource requirements, Resource scheduling	20/9/19	

UNIT-VI: Software Quality			
CO6: To understand successful software projects that support organization's strategic goals.			
TB: Software Project Management in practice, Pankaj Jalote, Pearson.			
52,53	Planning Quality, Defining Quality	21/9/19	Lecture with discussions
54,55	ISO 9016, Quality Measures	25/9/19	
56,57	Quantitative Quality Management Planning	27/9/19	
58,59	Product Quality & Process Quality Metrics	30/9/19	
60	Statistical Process Control Capability Maturity Model	30/9/19	
61,62	Enhancing software Quality.	05/10/19	

Faculty/Date

HOD/Date 5/6/19

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