

## Teaching Plan

Name of Teacher: - Prof. Pawar N H.

Year: - 2019-20

Term: -I

Sub: - Introduction to Operating System    Paper: - CA-303    Class: -  
SYBBA(CA)    Division:- -

Prat-I Teaching Plan					Part-II Execution Plan				
Sr. No	Month	Week	No.Of Working Days	No.Of period available	Topic to be taught	No.Of period engaged	Topics Taught	Deviation in period	Remark
1	Aug.	1st	4	4Hrs	<b>Introduction to Operating System</b> 1.1 What is operating system 1.2 Computer system architecture 1.3 Services provided by OS 1.4 Types of OS	4Hrs	<b>Introduction to Operating System</b> 1.1 What is operating system 1.2 Computer system architecture 1.3 Services provided by OS 1.4 Types of OS	-	Completed
2.	Aug.	2 <sup>nd</sup>	4	4Hrs	<b>System Structure</b> 2.1 User operating system Interface 2.2 System Calls 2.3 Process or job control 2.4 Device Management 2.5 File Management 2.6 System Program 2.7 Operating System Structure	4Hrs	<b>System Structure</b> 2.1 User operating system Interface 2.2 System Calls 2.3 Process or job control 2.4 Device Management 2.5 File Management 2.6 System Program 2.7 Operating System Structure	-	Completed

3.	Aug.	3 <sup>rd</sup>	4	4Hrs	<b>Process Management</b> 3.1 What is Process 3.2 Process State 3.3 Process Control Block 3.4 Context Switch 3.5 Operation on Process Process Creation Process Termination	4Hrs	<b>Process Management</b> 3.1 What is Process 3.2 Process State 3.3 Process Control Block 3.4 Context Switch 3.5 Operation on Process Process Creation Process Termination	-	Completed
4.	Aug.	2 <sup>nd</sup>	4	4Hrs	<b>CPU Scheduling</b> 4.1 What is scheduling 4.2 Scheduling Concepts 4.2.1 CPU- I/O Burst Cycle  4.2.2 CPU Scheduler 4.2.3 Preemptive and Non-preemptive scheduling 4.2.4 Dispatcher 4.3 Scheduling criteria (Terminologies used in scheduling) 4.4 Scheduling Algorithms 4.4.1 FCFS 4.4.2 SJF ( Preemptive & non- preemptive) 4.4.3 Priority Scheduling (Preemptive & Nonpreemptive) ,	4Hrs	<b>CPU Scheduling</b> 4.1 What is scheduling 4.2 Scheduling Concepts 4.2.1 CPU- I/O Burst Cycle  4.2.2 CPU Scheduler 4.2.3 Preemptive and Non-preemptive scheduling 4.2.4 Dispatcher 4.3 Scheduling criteria (Terminologies used in scheduling) 4.4 Scheduling Algorithms 4.4.1 FCFS 4.4.2 SJF ( Preemptive & non-preemptive) 4.4.3 Priority Scheduling (Preemptive & Nonpreemptive) ,	-	Completed

5.	Aug.	3 <sup>rd</sup>	4	4Hrs	<b>Process Synchronization</b> 5.1 Introduction 5.2 Critical section problem 5.3 Semaphores 5.3.1 Concept 5.3.2 Implementation 5.3.3 Deadlock & Starvation 5.3.4 Binary Semaphores 5.4 Critical Sections 5.5 Classical Problems of synchronization 5.6 Bounded buffer problem 5.7 Readers & writers problem 5.8 Dining Philosophers problem	4Hrs	<b>Process Synchronization</b> 5.1 Introduction 5.2 Critical section problem 5.3 Semaphores 5.3.1 Concept 5.3.2 Implementation 5.3.3 Deadlock & Starvation 5.3.4 Binary Semaphores 5.4 Critical Sections 5.5 Classical Problems of synchronization 5.6 Bounded buffer problem 5.7 Readers & writers problem 5.8 Dining Philosophers problem	..	Completed
6.	Aug	4 <sup>th</sup>	4	4Hrs	<b>Deadlock</b> 6.1 Introduction 6.2 Deadlock Characterization 6.3 Necessary Condition 6.4 Resource allocation graph 6.5 Deadlock Prevention	4Hrs	<b>Deadlock</b> 6.1 Introduction 6.2 Deadlock Characterization 6.3 Necessary Condition 6.4 Resource allocation graph 6.5 Deadlock Prevention		Completed
7.	Sep.	1 <sup>st</sup>	4	4Hrs	6.6 Deadlock Avoidance Safe State Resource allocation graph algorithm Bankers algorithm 6.7 Deadlock Detection 6.8 Recovery from deadlock Process Termination Resource Preemption	4Hrs	6.6 Deadlock Avoidance Safe State Resource allocation graph algorithm Bankers algorithm 6.7 Deadlock Detection 6.8 Recovery from deadlock Process Termination Resource Preemption	-	Completed

8.	Sep	2 <sup>nd</sup>	4	4Hrs	<b>Memory Management</b> 7.1 Introduction to memory management 7.2 Address Binding 7.3 Dynamic Loading 7.4 Dynamic Linking 7.5 Overlays 7.6 Logical vs. physical addresses 7.7 Swapping 7.8 Contiguous memory allocation 7.8.1 Single Partition Allocation 7.8.2 Multiple Partition Allocation 7.8.3 External and Internal Fragmentation	4Hrs	<b>Memory Management</b> 7.1 Introduction to memory management 7.2 Address Binding 7.3 Dynamic Loading 7.4 Dynamic Linking 7.5 Overlays 7.6 Logical vs. physical addresses 7.7 Swapping 7.8 Contiguous memory allocation 7.8.1 Single Partition Allocation 7.8.2 Multiple Partition Allocation 7.8.3 External and Internal Fragmentation	-	Completed
9.	Sep	3 <sup>rd</sup>	4	4Hrs	7.9 Paging 7.10 Segmentation 7.11 Segmentation with paging 7.12 Virtual memory 7.13 Demand paging 7.14 Page replacement algorithms FIFO MRU 08 Book 2 LRU LRU approximation using reference bit MFU LFU Second Chance algorithm Optimal replacement	4Hrs	7.9 Paging 7.10 Segmentation 7.11 Segmentation with paging 7.12 Virtual memory 7.13 Demand paging 7.14 Page replacement algorithms FIFO MRU 08 Book 2 LRU LRU approximation using reference bit MFU LFU Second Chance algorithm Optimal replacement	-	Completed



10.	Sep	4 <sup>th</sup>	4	4Hrs	<b>File System</b> 8.1 Introduction & File concepts (file attributes, Operations on files) 8.2 Access methods Sequential access Direct access	4Hrs	<b>File System</b> 8.1 Introduction & File concepts (file attributes, Operations on files) 8.2 Access methods Sequential access Direct access	-	Completed
11.	oct	1 <sup>st</sup>	4	4Hrs	8.3 File structure Allocation methods Contiguous allocation Linked Allocation Indexed Allocation 8.4 Free Space Management Bit Vector Linked List Grouping Counting	4Hrs	8.3 File structure Allocation methods Contiguous allocation Linked Allocation Indexed Allocation 8.4 Free Space Management Bit Vector Linked List Grouping Counting	-	Completed
12.	oct.	2 <sup>nd</sup>	4	4Hrs	<b>I/O System</b> 9.1 Introduction 9.2 I/O Hardware 9.3 Application of I/O Interface 9.4 Kernel I/O Subsystem 9.5 Disk Scheduling FCFS Shortest Seek time first SCAN C-SCAN C- Look	4Hrs	<b>I/O System</b> 9.1 Introduction 9.2 I/O Hardware 9.3 Application of I/O Interface 9.4 Kernel I/O Subsystem 9.5 Disk Scheduling FCFS Shortest Seek time first SCAN C-SCAN C- Look	-	Completed

  
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## Teaching Plan

Name of Teacher: - Prof. Kapale U.V.

Year: - 2019-20

Term: -I

Sub: -Data Structure Using C      Paper: - CA-302      Class: - SYBBA(CA)

Division:- -

Prat-I Teaching Plan					Part-II Execution Plan				
Sr. No	Month	Week	No.Of Working Days	No.Of Period Available	Topic To Be Taught	No.Of Period Engaged	Topics Taught	Deviation In Period	Remark
1	Aug.	1st	4	4Hrs	<b>Basic Concept and Introduction to Data Structure</b> 1.1 Pointers and dynamic memory allocation 1.2 Algorithm- Definition and characteristics 1.3 Algorithm Analysis -Space Complexity -Time Complexity - Asymptotic Notation	4Hrs	<b>Basic Concept and Introduction to Data Structure</b> 1.1 Pointers and dynamic memory allocation 1.2 Algorithm- Definition and characteristics 1.3 Algorithm Analysis -Space Complexity -Time Complexity - Asymptotic Notation	-	Completed
2.	Aug.	2 <sup>nd</sup>	4	4Hrs	Introduction to Data structure 1.5 Types of Data structure 1.6 Abstract Data Types (ADT) Introduction to Arrays and Structure 1.7 Types of array and Representation of array 1.8 Polynomial - Polynomial Representation - Evaluation of Polynomial - Addition of Polynomial 1.9 Self Referential	4Hrs	Introduction to Data structure 1.5 Types of Data structure 1.6 Abstract Data Types (ADT) Introduction to Arrays and Structure 1.7 Types of array and Representation of array 1.8 Polynomial - Polynomial Representation - Evaluation of Polynomial - Addition of Polynomial	-	Completed

					Structure		1.9 Self Referential Structure		
3.	Aug.	3 <sup>rd</sup>	4	4Hrs	<b>Searching and Sorting Techniques</b> 2.1 Linear Search 2.2 Binary Search (Recursive , Non-Recursive) 2.3 Bubble Sort	4Hrs	<b>Searching and Sorting Techniques</b> 2.1 Linear Search 2.2 Binary Search (Recursive , Non-Recursive) 2.3 Bubble Sort	-	Completed
4.	Aug.	2 <sup>nd</sup>	4	4Hrs	2.4 Insertion Sort 2.5 Selection Sort 2.6 Quick Sort 2.7 Heap Sort (No Implementation) 2.8 Merge Sort 2.9 Analysis of all Sorting Techniques	4Hrs	2.4 Insertion Sort 2.5 Selection Sort 2.6 Quick Sort 2.7 Heap Sort (No Implementation) 2.8 Merge Sort 2.9 Analysis of all Sorting Techniques	-	Completed
5.	Aug.	3 <sup>rd</sup>	4	4Hrs	<b>Linked List</b> 3.1 Introduction 3.2 Static & Dynamic Representation 3.3 Types of Linked List - Singly Linked list (All type of operation)	4Hrs	<b>Linked List</b> 3.1 Introduction 3.2 Static & Dynamic Representation 3.3 Types of linked List - Singly Linked list (All type of operation)	-	Completed
6.	Aug	4 <sup>th</sup>	4	4Hrs	- Doubly Linked list (Create , Display) - Circularly Singly Linked list (Create, Display) 3.4 Circularly Doubly Linked list (Create, Display)	4Hrs	- Doubly Linked list (Create , Display) - Circularly Singly Linked list (Create, Display) 3.4 Circularly Doubly Linked list (Create, Display)		Completed
7.	Sep.	1 <sup>st</sup>	4	4Hrs	<b>Stack and Queue</b> 4.1 Introduction stack 4.2 Static and Dynamic Representation 4.3 Primitive Operations on stack	4Hrs	<b>Stack and Queue</b> 4.1 Introduction stack 4.2 Static and Dynamic Representation 4.3 Primitive Operations on stack		Completed

8.	Sep	2 <sup>nd</sup>	4	4Hrs	4.4 Application of Stack 4.5 Evaluation of postfix and prefix expression 4.6 Conversion of expressions- Infix to prefix & Infix to postfix	4Hrs	4.4 Application of Stack 4.5 Evaluation of postfix and prefix expression 4.6 Conversion of expressions- Infix to prefix & Infix to postfix		Completed
9.	Sep	3 <sup>rd</sup>	4	4Hrs	<b>Queue</b> 4.7 Introduction queue 4.8 Static and Dynamic Representation 4.9 Primitive Operations on Queue	4Hrs	<b>Queue</b> 4.7 Introduction queue 4.8 Static and Dynamic Representation 4.9 Primitive Operations on Queue		Completed
10	Sep	4 <sup>th</sup>	4	4Hrs	4.10 Application of Queue 4.11 Type of Queue Circular Queue De Queue Priority Queue	4Hrs	4.10 Application of Queue 4.11 Type of Queue Circular Queue De Queue Priority Queue		Completed
11	oct	1 <sup>st</sup>	4	4Hrs	<b>Trees</b> 5.1 Introduction & Definitions 5.2 Terminology 5.3 Static and Dynamic Representation 5.4 Types of tree 5.5 Operations on Binary Tree & Binary Search Tree 5.6 Tree Traversal	4Hrs	<b>Trees</b> 5.1 Introduction & Definitions 5.2 Terminology 5.3 Static and Dynamic Representation 5.4 Types of tree 5.5 Operations on Binary Tree & Binary Search Tree 5.6 Tree Traversal	-	Completed
12	oct.	2 <sup>nd</sup>	4	4Hrs	<b>Graphs</b> 6.1 Representation - Adjacency Matrix - List 6.2 In degree , out degree of graph 6.3 Graph operation DFS , BFS 6.4 Spanning Tree	4Hrs	<b>Graphs</b> 6.1 Representation -Adjacency Matrix -List 6.2 In degree , out degree of graph 6.3 Graph	-	Completed

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## Teaching Plan

Name of Teacher: - Prof. Prof. Kapale U.V.

Year: - 2019-20

Term: -I

Sub: -Business Mathematics    Paper: - CA-304    Class: - SYBBA(CA)

Division:- -

Prat-I Teaching Plan					Part-II Execution Plan				
Sr. No	Month	Week	No.Of Working Days	No.Of period available	Topic to be taught	No.Of period engaged	Topics Taught	Deviation in period	Remark
1	Aug.	1 <sup>st</sup>	4	4Hrs	<b>Ratio, Proportion and Percentage</b> Ratio- Definition, Continued Ratio, Inverse Ratio, Proportion, Continued Proportion, Direct Proportion	4Hrs	<b>Ratio, Proportion and Percentage</b> Ratio- Definition, Continued Ratio, Inverse Ratio, Proportion, Continued Proportion, Direct Proportion	-	Completed
2.	Aug.	2 <sup>nd</sup>	4	4Hrs	Proportion, Continued Proportion, Direct Proportion, Inverse Proportion, Variation, Inverse Variation, Joint Variation, Percentage- Meaning and Computations of Percentages.	4Hrs	Proportion, Continued Proportion, Direct Proportion, Inverse Proportion, Variation, Inverse Variation, Joint Variation, Percentage- Meaning and Computations of Percentages.	-	Completed
3.	Aug.	3 <sup>rd</sup>	4	4Hrs	<b>Profit And Loss</b> Terms and Formulae, Trade discount, Cash discount, Problems involving cost price, Selling Price	4Hrs	<b>Profit And Loss</b> Terms and Formulae, Trade discount, Cash discount, Problems involving cost price, Selling Price	-	Completed



4.	Aug.	2 <sup>nd</sup>	4	4Hrs	Trade discount and Cash Discount. Introduction to Commission and brokerage, Problems on Commission and brokerage.	4Hrs	Trade discount and Cash Discount. Introduction to Commission and brokerage, Problems on Commission and brokerage.	-	Completed
5.	Aug.	3 <sup>rd</sup>	4	4Hrs	<b>Interest Simple</b> Interest, Compound interest ( reducing balance & Flat Interest rate of interest), Equated Monthly Installments(EMI), Problems	4Hrs	<b>Interest Simple</b> Interest, Compound interest ( reducing balance & Flat Interest rate of interest), Equated Monthly Installments(EMI), Problems	-	Completed
6.	Aug	4 <sup>th</sup>	4	4Hrs	<b>Matrices And Determinants (upto order 3 only )</b> Multivariable data, Definition of a Matrix, Types of Matrices, Algebra of Matrices, Determinants, Ad joint of a Matrix, Inverse of a Matrix via ad joint Matrix	4Hrs	<b>Matrices And Determinants (upto order 3 only )</b> Multivariable data, Definition of a Matrix, Types of Matrices, Algebra of Matrices, Determinants, Ad joint of a Matrix, Inverse of a Matrix via ad joint Matrix		Completed
7.	Sep.	1 <sup>st</sup>	4	4Hrs	Homogeneous System of Linear equations, Condition for Uniqueness for the homogeneous system, Solution of Nonhomogeneous System of Linear equations (not more than three variables).	4Hrs	Homogeneous System of Linear equations, Condition for Uniqueness for the homogeneous system, Solution of Nonhomogeneous System of Linear equations (not more than three variables).		Completed

8.	Sep	2 <sup>nd</sup>	4	4Hrs	Condition for existence and uniqueness of solution, Solution using inverse of the coefficient matrix, Problems.	4Hrs	Condition for existence and uniqueness of solution, Solution using inverse of the coefficient matrix, Problems.		Completed
9.	Sep	3 <sup>rd</sup>	4	4Hrs	<b>Linear Programming problem (L.P.P.)</b> Meaning of LPP, Formulation of LPP, and solution by graphical methods.	4Hrs	<b>Linear Programming problem (L.P.P.)</b> Meaning of LPP, Formulation of LPP, and solution by graphical methods		Completed
10	Sep	4 <sup>th</sup>	4	4Hrs	<b>Transportation problem (T.P.)</b> Statement and meaning of T.P. methods of finding initial basic feasible solution by North West corner Rule	4Hrs	<b>Transportation problem (T.P.)</b> Statement and meaning of T.P. methods of finding initial basic feasible solution by North West corner Rule		Completed
11	oct	1 <sup>st</sup>	4	4Hrs	Matrix Minimum method and Vogel's approximation method.	4Hrs	Matrix Minimum method and Vogel's approximation method.	-	Completed
12	oct.	2 <sup>nd</sup>	4	4Hrs	Simple numerical problems (concept of degeneracy is not expected).	4Hrs	Simple numerical problems (concept of degeneracy is not expected).	-	Completed

  
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## Teaching Plan

Name of Teacher: - Prof. Deshmane S. P.

Year: - 2019-20

Term: -I

Sub: - Relational Database Management Systems      Paper: - CA-301

Class: -

SYBBA(CA) Division:- -

### Prat-I Teaching Plan

### Part-II Execution Plan


Sr. No	Month	Week	No.Of Working Days	No.Of period available	Topic to be taught	No.Of period engaged	Topics Taught	Deviation in period	Remark
1	Aug.	1 <sup>st</sup>	4	4Hrs	<b>Introduction to System Concepts</b> 1.1 Definition , Elements of System 1.2 Characteristics of System	4Hrs	<b>Introduction to System Concepts</b> 1.1 Definition , Elements of System 1.2 Characteristics of System	-	Completed
2.	Aug.	2 <sup>nd</sup>	4	4Hrs	1.3 Types of System 1.4 System Concepts	4Hrs	1.3 Types of System 1.4 System Concepts	-	Completed
3.	Aug.	3 <sup>rd</sup>	4	4Hrs	<b>Requirement Analysis</b> 2.1 Definition of System Analysis 2.2 Requirement Anticipation 2.3 Knowledge and Qualities of System Analyst	4Hrs	<b>Requirement Analysis</b> 2.1 Definition of System Analysis 2.2 Requirement Anticipation 2.3 Knowledge and Qualities of System Analyst	-	Completed
4.	Aug.	2 <sup>nd</sup>	4	4Hrs	2.4 Role of a System Analyst 2.5 Feasibility Study And It's Types 2.6 Fact Gathering Techniques 2.7 SRS(System Requirement Specification)	4Hrs	2.4 Role of a System Analyst 2.5 Feasibility Study And It's Types 2.6 Fact Gathering Techniques 2.7 SRS(System Requirement Specification)	-	Completed



5.	Aug.	3 <sup>rd</sup>	4	4Hrs	2.6 Cursor 2.6.1 Definition 2.6.2 Types of cursor-implicit, explicit (attributes) 2.6.3 Parameterized cursor 2.7 Trigger 2.8 Package	4Hrs	2.6 Cursor 2.6.1 Definition 2.6.2 Types of cursor-implicit, explicit (attributes) 2.6.3 Parameterized cursor 2.7 Trigger 2.8 Package	-	Completed
6.	Aug	4 <sup>th</sup>	4	4Hrs	<b>Transaction Management</b> 3.1 Transaction Concept 3.2 Transaction Properties 3.3 Transaction States	4Hrs	<b>Transaction Management</b> 3.1 Transaction Concept 3.2 Transaction Properties 3.3 Transaction States	-	Completed
7.	Sep.	1 <sup>st</sup>	4	4Hrs	3.4 Concurrent Execution 3.5 Serializability 3.5.1 Conflict Serializability 3.5.2 View Serializability	4Hrs	3.4 Concurrent Execution 3.5 Serializability 3.5.1 Conflict Serializability 3.5.2 View Serializability		Completed
8.	Sep	2 <sup>nd</sup>	4	4Hrs	3.6 Recoverability 10 3.6.1 Recoverable Schedule 3.6.2 Cascadless Schedule	4Hrs	3.6 Recoverability 10 3.6.1 Recoverable Schedule 3.6.2 Cascadless Schedule		Completed
9.	Sep	3 <sup>rd</sup>	4	4Hrs	<b>Concurrency Control</b> 4.1 Lock Based Protocol 4.1.1 Locks 4.1.2 Granting of Locks 4.1.3 Two Phase Locking Protocol 4.2 Timestamp Based Protocol 4.2.1 Timestamp 4.2.2 Timestamp ordering protocol 4.2.3 Thomas's Write Rule	4Hrs	<b>Concurrency Control</b> 4.1 Lock Based Protocol 4.1.1 Locks 4.1.2 Granting of Locks 4.1.3 Two Phase Locking Protocol 4.2 Timestamp Based Protocol 4.2.1 Timestamp 4.2.2 Timestamp ordering protocol 4.2.3 Thomas's Write Rule		Completed

10	Sep	4 <sup>th</sup>	4	4Hrs	4.3 Validation Based Protocol 4.4 Deadlock Handling 4.4.1 Deadlock Prevention 4.4.2 Deadlock Detection 4.4.3 Deadlock Recovery	4Hrs	4.3 Validation Based Protocol 4.4 Deadlock Handling 4.4.1 Deadlock Prevention 4.4.2 Deadlock Detection 4.4.3 Deadlock Recovery		Completed
11	oct	1 <sup>st</sup>	4	4Hrs	<b>Recovery System</b> 5.1 Failure Classification 5.1.1 Transaction Failure 5.1.2 System Crash 5.1.3 Disk Failure 5.2 Storage Structures 5.2.1 Storage Types 5.2.2 Data Access	4Hrs	<b>Recovery System</b> 5.1 Failure Classification 5.1.1 Transaction Failure 5.1.2 System Crash 5.1.3 Disk Failure 5.2 Storage Structures 5.2.1 Storage Types 5.2.2 Data Access	-	Completed
12	oct.	2 <sup>nd</sup>	4	4Hrs	5.3 Recovery & Atomicity 5.3.1 Log based Recovery 5.3.2 Deferred Database Modification 5.3.3 Immediate Database Modification 5.3.4 Checkpoints 5.4 Recovery with Concurrent Transaction 5.4.1 Transaction Rollback 5.4.2 Restart Recovery 5.5 Remote Backup System	4Hrs	5.3 Recovery & Atomicity 5.3.1 Log based Recovery 5.3.2 Deferred Database Modification 5.3.3 Immediate Database Modification 5.3.4 Checkpoints 5.4 Recovery with Concurrent Transaction 5.4.1 Transaction Rollback 5.4.2 Restart Recovery 5.5 Remote Backup System	-	Completed

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## Teaching Plan

Name of Teacher: - Prof. Deshmane S.P.

Year: - 2019-20

Term: -I

Sub: - Software Engineering Paper: - CA-305

Class: - SYBBA(CA)

Division:- -

### Prat-I Teaching Plan

### Part-II Execution Plan

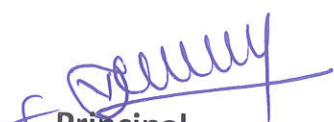
Sr. No	Month	Week	No.Of Working Days	No.Of period available	Topic to be taught	No.Of period engaged	Topics Taught	Deviation in period	Remark
1	Aug.	1 <sup>st</sup>	4	4Hrs	<b>Introduction to System Concepts</b> 1.1 Definition , Elements of System 1.2 Characteristics of System 1.3 Types of System 1.4 System Concepts	4Hrs	<b>Introduction to System Concepts</b> 1.1 Definition , Elements of System 1.2 Characteristics of System 1.3 Types of System 1.4 System Concepts	-	Completed
2.	Aug.	2 <sup>nd</sup>	4	4Hrs	<b>Requirement Analysis</b> 2.1 Definition of System Analysis 2.2 Requirement Anticipation 2.3 Knowledge and Qualities of System Analyst	4Hrs	<b>Requirement Analysis</b> 2.1 Definition of System Analysis 2.2 Requirement Anticipation 2.3 Knowledge and Qualities of System Analyst	-	Completed
3.	Aug.	3 <sup>rd</sup>	4	4Hrs	2.4 Role of a System Analyst 2.5 Feasibility Study And It's Types 2.6 Fact Gathering Techniques 2.7 SRS(System Requirement Specification)	4Hrs	2.4 Role of a System Analyst 2.5 Feasibility Study And It's Types 2.6 Fact Gathering Techniques 2.7 SRS(System Requirement Specification)	-	Completed

4.	Aug.	2 <sup>nd</sup>	4	4Hrs	<b>Introduction to Software Engineering</b> 3.1 Definition Need for software Engineering 3.2 Software Characteristics 3.3 Software Qualities ( McCall's Quality Factors	4Hrs	<b>Introduction to Software Engineering</b> 3.1 Definition Need for software Engineering 3.2 Software Characteristics 3.3 Software Qualities ( McCall's Quality Factors	-	Completed
5.	Aug.	3 <sup>rd</sup>	4	4Hrs	<b>Software Development Methodologies</b> 4.1 SDLC (System Development Life Cycle) 4.2 Waterfall Model 4.3 Spiral Model	4Hrs	<b>Software Development Methodologies</b> 4.1 SDLC (System Development Life Cycle) 4.2 Waterfall Model 4.3 Spiral Model	-	Completed
6.	Aug	4 <sup>th</sup>	4	4Hrs	4.4 Prototyping Model 4.5 RAD MODEL	4Hrs	4.4 Prototyping Model 4.5 RAD MODEL		Completed
7.	Sep.	1 <sup>st</sup>	4	4Hrs	<b>Analysis and Design Tools</b> 5.1 Entity-Relationship Diagrams 5.2 Decision Tree and Decision Table 5.3 Data Flow Diagrams (DFD) 5.4 Data Dictionary	4Hrs	<b>Analysis and Design Tools</b> 5.1 Entity-Relationship Diagrams 5.2 Decision Tree and Decision Table 5.3 Data Flow Diagrams (DFD) 5.4 Data Dictionary		Completed
8.	Sep	2 <sup>nd</sup>	4	4Hrs	5.4.1 Elements of DD 5.4.2 Advantage of DD 5.5 Pseudo code 5.6 Input And Output Design 5.7 CASE STUDIES (Based on Above Topic)	4Hrs	5.4.1 Elements of DD 5.4.2 Advantage of DD 5.5 Pseudo code 5.6 Input And Output Design 5.7 CASE STUDIES (Based on Above Topic)		Completed

9.	Sep	3 <sup>rd</sup>	4	4Hrs	<b>Structured System Design</b> 6.1 Modules Concepts and Types of Modules 6.2 Structured Chart 6.3 Qualities of Good Design	4Hrs	<b>Structured System Design</b> 6.1 Modules Concepts and Types of Modules 6.2 Structured Chart 6.3 Qualities of Good Design		Completed
10	Sep	4 <sup>th</sup>	4	4Hrs	6.3.1 Coupling, Types of Coupling 6.3.2 Cohesion, Types of Cohesion	4Hrs	6.3.1 Coupling, Types of Coupling 6.3.2 Cohesion, Types of Cohesion		Completed
11	oct	1 <sup>st</sup>	4	4Hrs	<b>Software Testing</b> 7.1 Definition, Test characteristics 7.2 Types of testing 7.2.1 Black-Box Testing 7.2.2 White-Box Testing	4Hrs	<b>Software Testing</b> 7.1 Definition, Test characteristics 7.2 Types of testing 7.2.1 Black-Box Testing 7.2.2 White-Box Testing	-	Completed
12	oct.	2 <sup>nd</sup>	4	4Hrs	7.2.3 Unit testing 7.2.4 Integration testing 7.3 Validation 7.4 Verification	4Hrs	7.2.3 Unit testing 7.2.4 Integration testing 7.3 Validation 7.4 Verification	-	Completed

  
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## Teaching Plan

Name of Teacher: - Prof. Pawar N.H

Year: - 2019-20      Term: -II      Sub: - - Programming in Visual Basic

Paper: - CA-402      Class: - SYBBA(CA))


Prat-I Teaching Plan					Part-II Execution Plan				
Sr. No	Month	Week	No.Of Working Days	No.Of period available	Topic to be taught	No.Of period engaged	Topics Taught	Deviation in period	Remark
1.	Dec	4 <sup>th</sup>	6	4 Hrs	Getting started with V. B. 1.1 Object Oriented Concept 1.2 Event Driven Programming Language 1.3 Working with properties 1.3.1 Studying the Events of a Form 1.3.2 Working code for events 1.3.3 Planning the Design	4 Hrs	Getting started with V. B. 1.1 Object Oriented Concept 1.2 Event Driven Programming Language 1.3 Working with properties 1.3.1 Studying the Events of a Form 1.3.2 Working code for events 1.3.3 Planning the Design	-	Completed
2.	Dec	5 <sup>th</sup>	6	4 Hrs	Constants, Variables , Operators, Control Structure, Looping & Array 2.1Constant 2.2 Data Types 2.2.1 Number , long ,Boolean ,doubles ,variant, String 2.2.2 User defined data types	4 Hrs	Constants, Variables , Operators, Control Structure, Looping & Array 2.1Constant 2.2 Data Types 2.2.1 Number , long ,Boolean ,doubles ,variant, String 2.2.2 User defined data types	-	Completed
3.	Jan	1 <sup>st</sup>	6	4 Hrs	2.3Variables 2.4 Operators 2.5Control Structures 2.5.1 If 2.5.2 If....Else 2.5.3 Nested If....Else 2.5.4 Select Case	4 Hrs	2.3Variables 2.4 Operators 2.5Control Structures 2.5.1 If 2.5.2 If....Else 2.5.3 Nested If....Else 2.5.4 Select Case	-	completed
4	Jan	2 <sup>nd</sup>	6	4 Hrs	2.6 Looping 2.6.1 Do Loop 2.6.2 While Loop 2.6.3 Until Loop 2.6.4 For Loop 2.6.5 With Statement	4 Hrs	2.6 Looping 2.6.1 Do Loop 2.6.2 While Loop 2.6.3 Until Loop 2.6.4 For Loop 2.6.5 With Statement	-	Completed
5	Jan	3 <sup>rd</sup>	6	4 Hrs	2.7 Array 2.7.1 Single Dimensional Array 2.7.2 Multidimensional Array 2.7.3 Control Array 2.8	4 Hrs	2.7 Array 2.7.1 Single Dimensional Array 2.7.2 Multidimensional Array 2.7.3 Control Array 2.8	-	Completed



					Functions(Built in and user defined		Functions(Built in and user defined		
6	Jan	4 <sup>th</sup>	6	4 Hrs.	<b>Working with Controls</b> 4.1 Adding controls on form 4.2 Working with Properties and Methods of each Controls 4.3 Creating an application 4.4 Creating MDI application	4 Hrs	<b>Working with Controls</b> 4.1 Adding controls on form 4.2 Working with Properties and Methods of each Controls 4.3 Creating an application 4.4 Creating MDI application	-	Completed
7.	Feb	1 <sup>st</sup>	6	4 Hrs	4.4.3 Setting the Startup form 4.4.4 Creating forms in Code 4.4.5 Using the MDI 4.4.6 Arranging MDI Child Window 4.4.7 Opening new MDI child window 4.4.8 Creating Properties in a form 4.4.9 Creating a method in a form	4 Hrs	4.4.3 Setting the Startup form 4.4.4 Creating forms in Code 4.4.5 Using the MDI 4.4.6 Arranging MDI Child Window 4.4.7 Opening new MDI child window 4.4.8 Creating Properties in a form 4.4.9 Creating a method in a form	-	Completed
8.	Feb	2 <sup>nd</sup>	6	4 Hrs	<b>Working with ActiveX Controls &amp; Menus</b> 4.1 Creating Status Bar For your program 4.2 Working with Progress Bar 4.3 Working with Toolbar 4.4 Setting up the Image List Controls 4.4.1 Adding and Deleting Images with code 4.4.2 Study of Different Dialog Boxes	4 Hrs	<b>Working with ActiveX Controls &amp; Menus</b> 4.1 Creating Status Bar For your program 4.2 Working with Progress Bar 4.3 Working with Toolbar 4.4 Setting up the Image List Controls 4.4.1 Adding and Deleting Images with code 4.4.2 Study of Different Dialog Boxes	-	Completed
9.	Feb	3 <sup>rd</sup>	6	4 Hrs	4.5 Menus 4.5.1 Creating new Menu Item 4.5.2 Modifying & Deleting Menu Item 4.5.3 Adding Access Characters 4.5.4 Adding Shortcut Keys 4.5.5 Creating Sub Menus 4.6 Pop-up	4 Hrs	4.5 Menus 4.5.1 Creating new Menu Item 4.5.2 Modifying & Deleting Menu Item 4.5.3 Adding Access Characters 4.5.4 Adding Shortcut Keys 4.5.5 Creating Sub Menus 4.6 Pop-	-	Completed

					Menus 4.6.1 Creating pop-up menu 4.6.2 Displaying pop-up menu 4.7 Adding & Deleting Menus At Run-time 4.8 Adding Menu Items for MDI Child Form		up Menus 4.6.1 Creating pop-up menu 4.6.2 Displaying pop-up menu 4.7 Adding & Deleting Menus At Run-time 4.8 Adding Menu Items for MDI Child Form		
10.	Feb	4 <sup>th</sup>	6	4 Hrs	<b>Working With Database</b> 5.1 Data Control 5.1.1 Studying the Properties and methods of Data Control 5.1.2 Connectivity with MS-Access 5.1.3 Operations of database through coding	4 Hrs	<b>Working With Database</b> 5.1 Data Control 5.1.1 Studying the Properties and methods of Data Control 5.1.2 Connectivity with MS-Access 5.1.3 Operations of database through coding	-	Completed
11.	Mar	1 <sup>st</sup>	6	4 Hrs	5.2 ADO Data Control 5.2.1 Advantages of ADODC over DC 5.2.2 Studying the properties and Methods of ADODC 5.2.3 Connectivity with MS-Access 5.2.4 Connectivity with Oracle 5.2.5 Report Generatio	4 Hrs	5.2 ADO Data Control 5.2.1 Advantages of ADODC over DC 5.2.2 Studying the properties and Methods of ADODC 5.2.3 Connectivity with MS-Access 5.2.4 Connectivity with Oracle 5.2.5 Report Generatio	-	Completed
12.	Mar	2 <sup>nd</sup>	4	4 Hrs	5.3 Developing ADO application through ADODC and coding 5.4 Report Generation	4 Hrs	5.3 Developing ADO application through ADODC and coding 5.4 Report Generation	-	Completed

  
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## Teaching Plan

Name of Teacher: - Prof. Deshmane S.P  
Year: - 2019-20 Term: -II

Sub: - - Object Oriented Programming Using C++  
Class: - SYBBA(CA)

Paper: - CA-401

Prat-I Teaching Plan					Part-II Execution Plan				
Sr. No	Month	Week	No.Of Working Days	No.Of period available	Topic to be taught	No.Of period engaged	Topics Taught	Deviation in period	Remark
1.	Dec	4 <sup>th</sup>	6	4 Hrs	<b>Introduction to C++</b> 1.1 Basic concepts of OOP, benefits, applications of OOP 1.2 A simple C++ program 1.3 Structure of C++ program 1.4 Creating a source file, compiling and Linking	4 Hrs	<b>Introduction to C++</b> 1.1 Basic concepts of OOP, benefits, applications of OOP 1.2 A simple C++ program 1.3 Structure of C++ program 1.4 Creating a source file, compiling and Linking	-	Completed
2.	Dec	5 <sup>th</sup>	6	4 Hrs	<b>Tokens, Expressions and Control structures</b> 2.1 Introduction 2.2 Tokens, keywords, Identifiers and constants 2.3 Data types - Basic, User defined and Derived 2.4 Symbolic constant 2.5 Type Compatibility 2.6 Variables - Declaration and Dynamic initialization 2.7 Reference variable	4 Hrs	<b>Tokens, Expressions and Control structures</b> 2.1 Introduction 2.2 Tokens, keywords, Identifiers and constants 2.3 Data types - Basic, User defined and Derived 2.4 Symbolic constant 2.5 Type Compatibility 2.6 Variables - Declaration and Dynamic initialization 2.7 Reference variable	-	Completed
3.	Jan	1 <sup>st</sup>	6	4 Hrs	2.8 Operators in C++ 2.8.1 Scope resolution operator 2.8.2.Member Referencing operators 2.8.3Memory management operators 2.8.4 Manipulators 2.8.5 Type cast	4 Hrs	2.8 Operators in C++ 2.8.1 Scope resolution operator 2.8.2.Member Referencing operators 2.8.3Memory management	-	completed

					operators 2.9 Expression and their types 2.10 Special Assignment Expressions 2.11 Implicit conversions 2.12 Operator overloading introduction 2.13 Operator precedence 2.14 Control structures – if-else, do-while, for , switch		operators 2.8.4 Manipulators 2.8.5 Type cast operators 2.9 Expression and their types 2.10 Special Assignment Expressions 2.11 Implicit conversions 2.12 Operator overloading introduction 2.13 Operator precedence 2.14 Control structures – if-else, do-while, for , switch		
4	Jan	2 <sup>nd</sup>	6	4 Hrs	<b>Functions in C++</b> 3.1 Introduction 3.2 The main function 3.3 Function prototyping 3.4 Call by reference 3.5 Return by reference 3.6 Inline function – Making an outside function Inline 3.7 Arguments - default, constant 3.8 Math library functions	4 Hrs	<b>Functions in C++</b> 3.1 Introduction 3.2 The main function 3.3 Function prototyping 3.4 Call by reference 3.5 Return by reference 3.6 Inline function – Making an outside function Inline 3.7 Arguments - default, constant 3.8 Math library functions	-	Completed
5	Jan	3 <sup>rd</sup>	6	4 Hrs	<b>Classes and Objects</b> 4.1 Introduction 4.2 Creating a class and objects 4.3 Defining member functions inside and outside class definition 4.4 Nesting of member functions 4.5 Private member functions 4.6 Arrays within a class 4.7 Memory allocation of objects 4.8 Static data members and static member functions	4 Hrs	<b>Classes and Objects</b> 4.1 Introduction 4.2 Creating a class and objects 4.3 Defining member functions inside and outside class definition 4.4 Nesting of member functions 4.5 Private member functions 4.6 Arrays within a class 4.7 Memory allocation of objects 4.8 Static data members and static member functions	-	Completed
6	Jan	4 <sup>th</sup>	6	4 Hrs.	4.9 Array of objects 4.10 Objects as function arguments 4.11 Friend functions		4.9 Array of objects 4.10 Objects as function arguments 4.11 Friend functions	-	Completed

					4.12 Returning objects 4.13 Constructors 4.14 Types of constructor 4.15 Destructors		4.12 Returning objects 4.13 Constructors 4.14 Types of constructor 4.15 Destructors		
7.	Feb	1 <sup>st</sup>	6	4 Hrs	<b>Inheritance</b> 5.1 Introduction 5.2 Base class and derived class examples 5.3 Types of Inheritance 5.4 Virtual base class 5.5 Abstract class 5.6 Constructors in derived class	4 Hrs	<b>Inheritance</b> 5.1 Introduction 5.2 Base class and derived class examples 5.3 Types of Inheritance 5.4 Virtual base class 5.5 Abstract class 5.6 Constructors in derived class	-	Completed
8.	Feb	2 <sup>nd</sup>	6	4 Hrs	<b>Polymorphism</b> 6.1 Compile Time Polymorphism 6.1.1 Function overloading 6.1.2 Operator Overloading Introduction 6.1.3 Overloading unary and binary operator 6.1.4 Overloading using friend function 6.1.5 Overloading insertion and extraction operators 6.1.6 String manipulation using operator overloading	4 Hrs	<b>Polymorphism</b> 6.1 Compile Time Polymorphism 6.1.1 Function overloading 6.1.2 Operator Overloading Introduction 6.1.3 Overloading unary and binary operator 6.1.4 Overloading using friend function 6.1.5 Overloading insertion and extraction operators 6.1.6 String manipulation using operator overloading	-	Completed
9.	Feb	3 <sup>rd</sup>	6	4 Hrs	6.2 Runtime Polymorphism 6.2.1 this Pointer, pointers to objects, pointer to derived classes 6.2.2 Virtual functions and pure virtual functions		6.2 Runtime Polymorphism 6.2.1 this Pointer, pointers to objects, pointer to derived classes 6.2.2 Virtual functions and pure virtual functions	-	Completed
10.	Feb	4 <sup>th</sup>	6	4 Hrs	<b>Managing console I/O operations</b> 7.1 Introduction 7.2 C++ streams and C++ stream classes 7.3 Unformatted I/O operations 7.4 Formatted console I/O operations 7.5	4 Hrs	<b>Managing console I/O operations</b> 7.1 Introduction 7.2 C++ streams and C++ stream classes 7.3 Unformatted I/O operations 7.4 Formatted console I/O operations 7.5	-	Completed

					Managing output with manipulators		Managing output with manipulators		
11.	Mar	1 <sup>st</sup>	6	4 Hrs	<b>Working with Files</b> 8.1 Classes for File Stream operations 8.2 File operations - Opening, Closing and updating 8.3 Error handling during File operations 8.4 Command Line arguments	4 Hrs	<b>Working with Files</b> 8.1 Classes for File Stream operations 8.2 File operations - Opening, Closing and updating 8.3 Error handling during File operations 8.4 Command Line arguments	-	Completed
12.	Mar	2 <sup>nd</sup>	4	4 Hrs	<b>Templates</b> 9.1 Introduction 9.2 Class Templates	4 Hrs	<b>Templates</b> 9.1 Introduction 9.2 Class Templates	-	Completed

  
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## Teaching Plan

Name of Teacher: - Prof. Deshmane S.P

Year: - 2019-20

Term: -II Sub: - - Human Resource Management

Paper: - CA-405 Class: - SYBBA(CA)


Prat-I Teaching Plan					Part-II Execution Plan				
Sr. No	Month	Week	No.Of Working Days	No.Of period available	Topic to be taught	No.Of period engaged	Topics Taught	Deviation in period	Remark
1.	Dec	4 <sup>th</sup>	6	4 Hrs	<b>Introduction To HRM</b> Definition and Concept of HRM and Personnel Management, Difference between PM and HRM, Importance of HRM, activities and functions of HRM	4 Hrs	<b>Introduction To HRM</b> Definition and Concept of HRM and Personnel Management, Difference between PM and HRM, Importance of HRM, activities and functions of HRM,	-	Completed
2.	Dec	5 <sup>th</sup>	6	4 Hrs	, Challenges before HRM,HRD,HRP, Concept of recruitment – sources of recruitment. Concept of Selection – selection Procedure, Induction and placement	4 Hrs	, Challenges before HRM,HRD,HRP, Concept of recruitment –sources of recruitment. Concept of Selection – selection Procedure, Induction and placement	-	Completed
3.	Jan	1 <sup>st</sup>	6	4 Hrs	<b>Performance Appraisal, Training and development</b> Meaning and Definition-need-objective –importance of training, training method –evaluation of training program,	4 Hrs	<b>Performance Appraisal, Training and development</b>  Meaning and Definition-need-objective – importance of training, training method –evaluation of training program,	-	completed
4	Jan	2 <sup>nd</sup>	6	4 Hrs	Concept and Objective Performance Appraisal-Process of performance appraisal method –uses and limitation of performance appraisal, Promotion and demotion policy, Transfer Policy.	4 Hrs	Concept and Objective Performance Appraisal-Process of performance appraisal method – uses and limitation of performance appraisal, Promotion and demotion policy, Transfer Policy.	-	Completed



5	Jan	3 <sup>rd</sup>	6	4 Hrs	<b>Wages and Salary Administration</b> Method of wage payment –Employee Remuneration factors	4 Hrs	<b>Wages and Salary Administration</b> Method of wage payment –Employee Remuneration factors	-	Completed
6	Jan	4 <sup>th</sup>	6	4 Hrs.	determining the level of remuneration-profit sharing –fringe benefit and employee services.	4 Hrs.	determining the level of remuneration-profit sharing –fringe benefit and employee services.	-	Completed
7.	Feb	1 <sup>st</sup>	6	4 Hrs	<b>Grievance and discipline</b> Meaning, Definition and nature of Grievance .Grievance procedure-Grievance Machinery.	4 Hrs	<b>Grievance and discipline</b> Meaning, Definition and nature of Grievance .Grievance procedure-Grievance Machinery.	-	Completed
8.	Feb	2 <sup>nd</sup>	6	4 Hrs	Definition of Discipline-aim and objective of discipline Principle of discipline.	4 Hrs	Definition of Discipline-aim and objective of discipline Principle of discipline.	-	Completed
9.	Feb	3 <sup>rd</sup>	6	4 Hrs	<b>The E-HR Nature of E-HRM,</b> E-HR activity, E-Recruitment , E-Selection	4 Hrs	<b>The E-HR Nature of E-HRM</b> E-HR activity, E-Recruitment , E-Selection,	-	Completed
10.	Feb	4 <sup>th</sup>	6	4 Hrs	, E-learning ,E-Compensation	4 Hrs	, E-learning ,E-Compensation	-	Completed
11.	Mar	1 <sup>st</sup>	6	4 Hrs	<b>The E-HR Nature of E-HRM,</b> E-HR activity, E-Recruitment , E-Selection	4 Hrs	<b>The E-HR Nature of E-HRM</b> E-HR activity, E-Recruitment , E-Selection,	-	Completed
12	Mar	2 <sup>nd</sup>	4	4 Hrs	, E-learning ,E-Compensation	4 Hrs	, E-learning ,E-Compensation	-	Completed

  
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**Teaching Plan**

  
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Name of Teacher: - Prof. Deshmane S.P.

Year: - 2019-20

Term: -II

Sub: - : Enterprise Resource Planning and Management.

Paper: - CA-404

Class: - SYBBA(CA)

Prat-I Teaching Plan					Part-II Execution Plan				
Sr. No	Month	Week	No.Of Working Days	No.Of period available	Topic to be taught	No.Of period engaged	Topics Taught	Deviation in period	Remark
1.	Dec	4 <sup>th</sup>	6	4 Hrs	<b>ERP : An Overview</b> 1.1. What is ERP. 1.2. Reasons for Growth Of ERP 1.3. Problem areas in ERP implementations. 1.4. The future of ERP 1.5. Characteristics and features of ERP 1.6. Benefits of ERP.	4 Hrs	<b>ERP : An Overview</b> 1.1. What is ERP. 1.2. Reasons for Growth Of ERP 1.3. Problem areas in ERP implementations. 1.4. The future of ERP 1.5. Characteristics and features of ERP 1.6. Benefits of ERP.	-	Completed
2.	Dec	5 <sup>th</sup>	6	4 Hrs	<b>Enterprise Modeling and Integration for ERP</b> 2.1.Enterprise-An overview 2.2.What is enterprise 2.3.Integrated Management Information 2.4.The role of enterprise 2.5.Business modeling 2.6.Integrated Data Model 2.7.Role of Common/Shared Enterprise Database	4 Hrs	<b>Enterprise Modeling and Integration for ERP</b> 2.1.Enterprise-An overview 2.2.What is enterprise 2.3.Integrated Management Information 2.4.The role of enterprise 2.5.Business modeling 2.6.Integrated Data Model 2.7.Role of Common/Shared Enterprise Database	-	Completed
3.	Jan	1 <sup>st</sup>	6	4 Hrs	2.8.Linkages of the Enterprise 2.8.1.Establishing Customer-Enterprise Link 2.8.2.Establishing Vendor-Enterprise Link 2.8.3.Establishing Links within the Enterprise 2.8.4.Establishing	4 Hrs	2.8.Linkages of the Enterprise 2.8.1.Establishing Customer-Enterprise Link 2.8.2.Establishing Vendor-Enterprise Link 2.8.3.Establishing Links within the Enterprise 2.8.4.Establishing	-	completed

					Links with Environment 2.9. Scope of Enterprise system 2.10.Generic Model of ERP System 2.11.Client/Server Architecture and Enterprise – wide Computing 2.11.1. Characteristics of client/Server Architecture 2.11.2. Different Components of ERP Client/Server Architecture		Links with Environment 2.9. Scope of Enterprise system 2.10.Generic Model of ERP System 2.11.Client/Server Architecture and Enterprise – wide Computing 2.11.1. Characteristics of client/Server Architecture 2.11.2. Different Components of ERP Client/Server Architecture		
4	Jan	2 <sup>nd</sup>	6	4 Hrs	<b>ERP And related Technologies</b> 3.1.BPR(Business Process reengineering) 3.1.1.Definition 3.2.BPR –The different phases 3.3.Enterprise Redesign Principles 3.4.BPR and IT 3.5.Data Warehousing 3.6.Data Warehouse Components	4 Hrs	<b>ERP And related Technologies</b> 3.1.BPR(Business Process reengineering) 3.1.1.Definition 3.2.BPR –The different phases 3.3.Enterprise Redesign Principles 3.4.BPR and IT 3.5.Data Warehousing 3.6.Data Warehouse Components	-	Completed
5	Jan	3 <sup>rd</sup>	6	4 Hrs	3.7.Structure and Uses of Data Warehouse 3.8.Data Mining 3.9.What Is Data Mining 3.10.Data Mining Process 3.11.Advantages and Technologies Used In Data Mining 3.12.OLAP 3.13.Supply Chain Management 3.13.1.Definition 3.13.2.Stevan's Model 3.13.3.Benefits 3.13.4.ERP Vs SCM 3.14.CRM	4 Hrs	3.7.Structure and Uses of Data Warehouse 3.8.Data Mining 3.9.What Is Data Mining 3.10.Data Mining Process 3.11.Advantages and Technologies Used In Data Mining 3.12.OLAP 3.13.Supply Chain Management 3.13.1.Definition 3.13.2.Stevan's Model 3.13.3.Benefits	-	Completed



							3.13.4.ERP Vs SCM 3.14.CRM		
6	Jan	4 <sup>th</sup>	6	4 Hrs.	<b>ERP Implementation</b> 4.1.Evolution 4.2.Evolution of ERP. 4.3.Evolution of Packaged Software Solutions. 4.4.The Obstacles in ERP implementation. 4.5.ERP Implementation Lifecycle (Different Phases).	4 Hrs	<b>ERP Implementation</b> 4.1.Evolution 4.2.Evolution of ERP. 4.3.Evolution of Packaged Software Solutions. 4.4.The Obstacles in ERP implementation. 4.5.ERP Implementation Lifecycle (Different Phases).	-	Completed
7.	Feb	1 <sup>st</sup>	6	4 Hrs	4.6.Implementation Methodology. 4.7.ERP Implementation-The Hidden Costs. 4.8.In- house Implementation-Pros and Cons 4.9.Vendors and role of vendors for ERP 4.10.Consultants and role of consultants for ERP.	4 Hrs	4.6.Implementation Methodology. 4.7.ERP Implementation-The Hidden Costs. 4.8.In- house Implementation-Pros and Cons 4.9.Vendors and role of vendors for ERP 4.10.Consultants and role of consultants for ERP.	-	Completed
8.	Feb	2 <sup>nd</sup>	6	4 Hrs	<b>Technologies In ERP System</b> 5.1.Introduction 5.2.Electronic Data Interchange(EDI) 5.2.1.Use of EDI 5.2.2.Evolution of EDI 5.2.3.Benefits of the EDI 5.2.4.EDI Standards 5.2.5.EDI Services 5.2.6.EDI Components 5.2.7.EDI Administration	4 Hrs	<b>Technologies In ERP System</b> 5.1.Introduction 5.2.Electronic Data Interchange(EDI) 5.2.1.Use of EDI 5.2.2.Evolution of EDI 5.2.3.Benefits of the EDI 5.2.4.EDI Standards 5.2.5.EDI Services 5.2.6.EDI Components 5.2.7.EDI Administration	-	Completed
9.	Feb	3 <sup>rd</sup>	6	4 Hrs	5.3.IDoc Application 5.4.EDI Integration 5.5.ALE Integration 5.6.Internet Integration 5.7 OCR Integration	4 Hrs	5.3.IDoc Application 5.4.EDI Integration 5.5.ALE Integration 5.6.Internet Integration 5.7 OCR Integration	-	Completed

10.	Feb	4 <sup>th</sup>	6	4 Hrs	<b>Technologies In ERP System</b> 5.1.Introduction 5.2.Electronic Data Interchange(EDI) 5.2.1.Use of EDI 5.2.2.Evolution of EDI 5.2.3.Benefits of the EDI 5.2.4.EDI Standards 5.2.5.EDI Services 5.2.6.EDI Components 5.2.7.EDI Administration 5.3.IDoc Application 5.4.EDI Integration 5.5.ALE Integration 5.6.Internet Integration 5.7 OCR Integration	4 Hrs	<b>Technologies In ERP System</b> 5.1.Introduction 5.2.Electronic Data Interchange(EDI) 5.2.1.Use of EDI 5.2.2.Evolution of EDI 5.2.3.Benefits of the EDI 5.2.4.EDI Standards 5.2.5.EDI Services 5.2.6.EDI Components 5.2.7.EDI Administration 5.3.IDoc Application 5.4.EDI Integration 5.5.ALE Integration 5.6.Internet Integration 5.7 OCR Integration	-	Completed
11.	Mar	1 <sup>st</sup>	6	4 Hrs	<b>The ERP Domain</b> 6.1.Vendors in the ERP Market. 6.2.SAP's Markets 6.2.1.SAP Architecture And Integration 6.2.2.Scalability of SAP 6.2.3.SAP Business Structure 6.2.4.Common SAP Installation 6.2.5.SAP R/3 System 6.2.6.SAP Tools 6.3.Pepole Soft. 6.4.Jd Edwards 6.5.Oracle	4 Hrs	<b>The ERP Domain</b> 6.1.Vendors in the ERP Market. 6.2.SAP's Markets 6.2.1.SAP Architecture And Integration 6.2.2.Scalability of SAP 6.2.3.SAP Business Structure 6.2.4.Common SAP Installation 6.2.5.SAP R/3 System 6.2.6.SAP Tools 6.3.Pepole Soft. 6.4.Jd Edwards 6.5.Oracle	-	Completed
12.	Mar	2 <sup>nd</sup>	4	4 Hrs	<b>ERP Present and Future</b> 7.1. Limitations of ERP 7.2. EIA(Enterprise Integration Application) 7.3. EIA Products 7.4. Two Flavors of EIA and Messaging 7.5. ERP And E-Commerce 7.6.	4 Hrs	<b>ERP Present and Future</b> 7.1. Limitations of ERP 7.2. EIA(Enterprise Integration Application) 7.3. EIA Products 7.4. Two Flavors of EIA and Messaging 7.5. ERP And E-Commerce	-	Completed

				ERP and Internet. 7.7. Future Directions in ERP.		7.6. ERP and Internet. 7.7. Future Directions in ERP.		
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Teaching Plan

Name of Teacher: - Prof. Pawar N.H  
Year: - 2019-20 Term: -II

Sub: - Computer Networking Paper: - CA-403 Class: -  
SYBBA(CA)

Prat-I Teaching Plan

Part-II Execution Plan

Sr. No	Month	Week	No.Of Working Days	No.Of period available	Topic to be taught	No.Of period engaged	Topics Taught	Deviation in period	Remark
1.	Dec	4 <sup>th</sup>	6	4 Hrs	<b>Basics of Computer Networks</b> 1.1 Computer Network 1.1.1 Definition 1.1.2 Goals 1.1.3 Applications 1.1.4 Structure 1.1.5 Components 1.2 Topology 1.2.1 Bus 1.2.2 Star 1.2.3 Ring 1.2.4 Mesh 1.3 Types of Networks 1.3.1 LAN, MAN, WAN, Internet 1.3.2 Broadcast & Point-To-Point Networks	4 Hrs	<b>Basics of Computer Networks</b> 1.1 Computer Network 1.1.1 Definition 1.1.2 Goals 1.1.3 Applications 1.1.4 Structure 1.1.5 Components 1.2 Topology 1.2.1 Bus 1.2.2 Star 1.2.3 Ring 1.2.4 Mesh 1.3 Types of Networks 1.3.1 LAN, MAN, WAN, Internet 1.3.2 Broadcast & Point-To-Point Networks	-	Completed
2.	Dec	5 <sup>th</sup>	6	4 Hrs	1.4 Communication Types 1.4.1 Serial 1.4.2 Parallel 1.5 Modes of Communication : 1.5.1 Simplex 1.5.2 Half Duplex 1.5.3 Full Duplex 1.6 Server Based LANs & Peer-to-Peer LANs 1.6.1 Comparison of both 1.7 Protocols and Standards	4 Hrs	1.4 Communication Types 1.4.1 Serial 1.4.2 Parallel 1.5 Modes of Communication : 1.5.1 Simplex 1.5.2 Half Duplex 1.5.3 Full Duplex 1.6 Server Based LANs & Peer-to-Peer LANs 1.6.1 Comparison of both 1.7 Protocols and Standards	-	Completed
3.	Jan	1 <sup>st</sup>	6	4 Hrs	<b>Network Models</b> 2.1 Design issues of the layer 2.2 Protocol Hierarchy 2.3 ISO-OSI Reference Model : 2.3.1 Layers in the OSI Model 2.3.2 Functions of each layer 2.4 Terminology 2.4.1 SAP 2.4.2	4 Hrs	<b>Network Models</b> 2.1 Design issues of the layer 2.2 Protocol Hierarchy 2.3 ISO-OSI Reference Model : 2.3.1 Layers in the OSI Model 2.3.2 Functions of each layer 2.4 Terminology 2.4.1	-	completed


					Connection Oriented services 2.4.3 connectionless services .4.4 Peer Entities		SAP 2.4.2 Connection Oriented services 2.4.3 connectionless services .4.4 Peer Entities		
4	Jan	2 <sup>nd</sup>	6	4 Hrs	2.5 Internet Model (TCP/IP) 2.6 Comparison of ISO-OSI & TCP/IP Model 2.7 Addressing 2.7.1 Physical Addresses 2.7.2 Logical Addresses 2.7.3 Port Addresses 2.8 IP Addressing 2.8.1 Classful addressing 2.8.2 Classless addressing	4 Hrs	2.5 Internet Model (TCP/IP) 2.6 Comparison of ISO-OSI & TCP/IP Model 2.7 Addressing 2.7.1 Physical Addresses 2.7.2 Logical Addresses 2.7.3 Port Addresses 2.8 IP Addressing 2.8.1 Classful addressing 2.8.2 Classless addressing	-	Completed
5	Jan	3 <sup>rd</sup>	6	4 Hrs	<b>Transmission Media</b> 3.1 Guided Media(Wired) : 3.1.1 Coaxial Cable:- Physical Structure, Standards, BNC Connector, Applications 3.1.2 Twisted Pair :- Physical Structure, UTP vs STP, Connectors, Applications 3.1.3 Fiber Optics Cable :- Physical Structure, Propagation Modes (Single Mode & Multimode ), Connectors, Applications	4 Hrs	<b>Transmission Media</b> 3.1 Guided Media(Wired) : 3.1.1 Coaxial Cable:- Physical Structure, Standards, BNC Connector, Applications 3.1.2 Twisted Pair :- Physical Structure, UTP vs STP, Connectors, Applications 3.1.3 Fiber Optics Cable :- Physical Structure, Propagation Modes (Single Mode & Multimode ), Connectors, Applications	-	Completed
6	Jan	4 <sup>th</sup>	6	4 Hrs.	3.2 Unguided Media(Wireless) 3.2.1 Electromagnetic Spectrum For Wireless Communication 3.2.2 Propagation Methods 3.2.2.1 Ground, 3.2.2.2 Sky, 3.2.2.3 Line-Of-Sight 3.3.3	4 Hrs	3.2 Unguided Media(Wireless) 3.2.1 Electromagnetic Spectrum For Wireless Communication 3.2.2 Propagation Methods 3.2.2.1 Ground, 3.2.2.2 Sky, 3.2.2.3	-	Completed

					Wireless Transmission 3.3.3.1 Radio Waves 3.3.3.2 Infra-Red, 3.3.3.3 Micro-Wave		Line-Of-Sight 3.3.3 Wireless Transmission 3.3.3.1 Radio Waves 3.3.3.2 Infra-Red, 3.3.3.3 Micro-Wave		
7.	Feb	1 <sup>st</sup>	6	4 Hrs	<b>Wired and Wirless</b> LANs 4.1 IEEE Standards 4.2 Standard Ethernet 4.2.1 MAC Sublayer 4.2.2 Physical layer 4.3 Fast Ethernet 4.3.1 MAC Sublayer 4.3.2 Physical layer 4.4 Gigabit Ethernet 4.4.1 MAC Sublayer 4.4.2 Physical layer	4 Hrs	Wired and Wirless LANs 4.1 IEEE Standards 4.2 Standard Ethernet 4.2.1 MAC Sublayer 4.2.2 Physical layer 4.3 Fast Ethernet 4.3.1 MAC Sublayer 4.3.2 Physical layer 4.4 Gigabit Ethernet 4.4.1 MAC Sublayer 4.4.2 Physical layer	-	Completed
8.	Feb	2 <sup>nd</sup>	6	4 Hrs	4.4 Gigabit Ethernet 4.4.1 MAC Sublayer 4.4.2 Physical layer 4.5 Network Interface Cards(NIC) 4.5.1 Components of NIC 4.5.2 Functions of NIC 4.5.3 Types of NIC 4.6 Wireless LAN 4.6.1 IEEE802.11 Architecture 4.6.2 MAC Sub layer 4.6.3 Frame Format 4.6.4 Frame Types 4.6.5 Addressing Mechanism 4.6.6 Bluetooth (Architecture, Piconet and Scatternet, Applications)	4 Hrs	4.4 Gigabit Ethernet 4.4.1 MAC Sublayer 4.4.2 Physical layer 4.5 Network Interface Cards(NIC) 4.5.1 Components of NIC 4.5.2 Functions of NIC 4.5.3 Types of NIC 4.6 Wireless LAN 4.6.1 IEEE802.11 Architecture 4.6.2 MAC Sub layer 4.6.3 Frame Format 4.6.4 Frame Types 4.6.5 Addressing Mechanism 4.6.6 Bluetooth (Architecture, Piconet and Scatternet, Applications)	-	Completed
9.	Feb	3 <sup>rd</sup>	6	4 Hrs	<b>Network Connectivity Devices</b> 5.1 Categories of Connectivity Devices 5.1.1 Passive & Active Hubs 5.1.2 Repeaters 5.1.3 Bridges 5.1.3.1 Transparent Bridges(Loop Problem,	4 Hrs	<b>Network Connectivity Devices</b> 5.1 Categories of Connectivity Devices 5.1.1 Passive & Active Hubs 5.1.2 Repeaters 5.1.3 Bridges 5.1.3.1 Transparent Bridges(Loop	-	Completed



					Spanning Tree) 5.1.3.2 Source Routing Bridges		Problem, Spanning Tree) 5.1.3.2 Source Routing Bridges		
10.	Feb	4 <sup>th</sup>	6	4 Hrs	5.1.4 Switches 5.1.5 Router 5.1.6 Gateways 5.2 Network Security Devices 5.2.1 Firewalls 5.2.1.1 Packet-Filter firewall 5.2.1.2 Proxy firewall	4 Hrs	5.1.4 Switches 5.1.5 Router 5.1.6 Gateways 5.2 Network Security Devices 5.2.1 Firewalls 5.2.1.1 Packet-Filter firewall 5.2.1.2 Proxy firewall	-	Completed
11.	Mar	1 <sup>st</sup>	6	4 Hrs	<b>Internet Basics</b> 6.1 Concept of Intranet & Extranet 6.2 Internet Information Server(IIS) 6.3 Web Server 6.4 World Wide Web( WWW ) 6.4.1 Architecture, 6.4.2 Web Documents :- static, dynamic and active documents	4 Hrs	<b>Internet Basics</b> 6.1 Concept of Intranet & Extranet 6.2 Internet Information Server(IIS) 6.3 Web Server 6.4 World Wide Web( WWW ) 6.4.1 Architecture, 6.4.2 Web Documents :- static, dynamic and active documents	-	Completed
12.	Mar	2 <sup>nd</sup>	4	4 Hrs	6.5 Search Engines 6.6 Internet Service Providers(ISP) 6.7 HTTP 6.7.1 HTTP Transaction 6.7.2 Persistent and non persistent connection	4 Hrs	6.5 Search Engines 6.6 Internet Service Providers(ISP) 6.7 HTTP 6.7.1 HTTP Transaction 6.7.2 Persistent and non persistent connection	-	Completed

  
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## Teaching Plan