Name of the Teacher:\_\_**Ruchi Sharma** \_\_\_\_ Class:\_\_**B.C.A Sem-V**\_\_\_\_ Subject: :\_\_**Operating System**\_\_

**Lesson Plan**

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| **S No** | **Period** | **Topics to be Covered** | **Academic Activity to be Organized** |
|  | **17-31 July 2017** | **Operating System: Definition, Characteristics, Components, Functions, Examples; Types of Operating System: Single User/Multi User** | **Group Discussion** |
|  | **01-31 Aug 2017** | **Classification of Operating System: Batch, Multiprogrammed, Timesharing, Multiprocessing, Parallel, Distributed, Real Time; System Calls and System Programs:Process Control, File Manipulation, Device Manipulation, Information Maintenance, Communications** | **On Board Presentations and**  **Class level Quiz** |
|  | **01-30 Sept 2017** | **Process Management: Process concept, Process states and Process Control Block; Process Scheduling:Scheduling Queues, Schedulers, Context Switch, Operation on Processes: Process Creation, Process Termination; Cooperating Processes, Introduction to Threads** | **Power Point Presentations** |
|  | **01-31 Oct 2017** | **Deadlocks: System Model, Deadlock Characterization, Methods of Handling Deadlocks, Deadlock Prevention, Deadlock Avoidance, Deadlock Detection and Recovery Memory Management: Introduction, Swapping, Contiguous Allocation: Single-Partition/Multiple Partition Allocation, External/Internal Fragmentation; Paging: Basic Method, Hardware,Implementation of Page table; Segmentation: Basic Method, Hardware, Implementation of SegmentTable, Advantages/Disadvantages of Paging/Segmentation** | **On Board Presentations** |
|  | **01-13 Nov 2017** | **Virtual Memory: Introduction, Demand Paging, Page Replacement, Page Replacement Algorithms:FIFO, Optimal, LRU, Counting; Thrashing and its cause; File Management: File Concepts, File Attributes, File Operations, File Types, File Access/Allocation Methods, File Protection, File Recovery** | **Power Point Presentations** |

**Topics of Assignments/ Class Tests to be given to the Students:**

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| **Assignment 1** | **CPU Scheduling** |
| **Assignment 2** | **Virtual Memory** |
| **Class Test** | **Unit -I and Unit -II** |

Name of the Teacher:\_\_\_ **Ruchi Sharma** \_\_\_\_ Class:\_\_\_ **B.C.A Sem-III** \_\_\_

Subject: :\_\_**Data Base Management System**\_\_

**Lesson Plan**

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| **S No** | **Period** | **Topics to be Covered** | **Academic Activity to be Organized** |
|  | **17-31 July 2017** | **Basic Concepts – Data, Information, Records and files. Traditional file –based Systems-File Based Approach-Limitations of File Based**  **Approach, Database Approach-Characteristics of Database Approach** | **Group Discussion and Class level quiz** |
|  | **01-31 Aug 2017** | **Database Management System (DBMS), Components of DBMS Environment, DBMS Functions and Components, Advantages and Disadvantages of DBMS,** **Roles in the Database Environment - Data and Database Administrator, Database Designers, Applications Developers and Users.** | **Power Point Presentations** |
|  | **01-30 Sept 2017** | **Database System Architecture – Three Levels of Architecture, External, Conceptual and Internal Levels, Schemas, Mappings and Instances, Data Independence – Logical and Physical Data Independence, Classification of Database Management System, Centralized and Client Server architecture to DBMS.** | **On Board Presentations and**  **Class level Quiz** |
|  | **01-31 Oct 2017** | **Data Models: Records- based Data Models, Object-based Data Models, Physical Data Models and Conceptual Modeling, Entity-Relationship Model – Entity Types, Entity Sets, Attributes Relationship Types, Relationship Instances and ER Diagrams** | **Power Point Presentations and**  **On Board Presentations** |
|  | **01-13 Nov 2017** | **Relational Data Model:-Brief History, Terminology in Relational Data Structure, Relations, Properties of Relations, Keys, Domains, Integrity Constraints over Relations, Base Tables and Views.** | **Practical Explanation of topics** |

**Topics of Assignments/ Class Tests to be given to the Students:**

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| **Assignment 1** | **Data Models** |
| **Assignment 2** | **Database System Architecture** |
| **Class Test** | **Unit –I and Half Unit-II** |

Name of the Teacher:\_\_ **Ruchi Sharma** \_\_\_ Class:\_\_ **M.Com-IT Sem-III**\_\_\_\_ Subject: :\_\_**Visual basics and SQL**\_\_

**Lesson Plan**

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| **S No** | **Period** | **Topics to be Covered** | **Academic Activity to be Organized** |
|  | **17-31 July 2017** | **Introduction to Visual Basic: Event Driven Programming** |  |
|  | **01-31 Aug 2017** | **Various Controls in VB:Text box, Label, Combo box,list box, picture box, image box, message box, input box, The VB environment: Menu bar, Toolbar, Project explorer, Toolbox, Properties window, Form designer,**  **Form layout, Immediate window.** | **Practical Explanation of topics** |
|  | **01-30 Sept 2017** | **Decisions and conditions: If statement, If-then-else, Select-case, Looping statements: Do-loops, For-next, While-wend, Exit statement. Nested control structures. Arrays: Declaring and using arrays, , one-dimensional and multi -dimensional arrays, Procedures: Subroutines, Functions, Data Base connectivity with ADODB and ADODC, Working with multiple forms, MDI form.** | **Power Point Presentations and**  **Practical Explanation of topics** |
|  | **01-31 Oct 2017** | **SQL:Data Types,Create , Insert, Delete and Update Statements , Specifying Constraints in SQL, Joins,Views , Procedures & Functions.** | **On Board Presentations** |
|  | **01-13 Nov 2017** | **PL/SQL:Introduction, Advantages of PL/SQL, PL/SQL Execution Environment PL/SQL Character set and Data Types, Control Structure in PL/SQL, Triggers and Cursor** | **On Board Presentations** |

**Topics of Assignments/ Class Tests to be given to the Students:**

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| **Assignment 1** | **Decisions and conditions of VB** |
| **Assignment 2** | **PL/SQL** |
| **Class Test** | **Unit-II** |