SARASWATI MAHILA MAHAVIDYALAYA

SESSION:**2021-22**   SEM: EVEN
(MARCH-JUNE)

LESSON PLAN

Name of facult : MS. SONIYA RANI
Designation   : Assistant Professor in CS
Subject   : Object Technologies & Programming using Java
Class   : BCA 3RD   year

Sr no	Topics/Chapters	Time Period	Academic Activities	Topics of Assignments /Test
1	**Object Oriented Methodology**-1: Paradigms of Programming Languages, Evolution of OO Methodology, Basic Concepts of OO Approach, Comparison of Object Oriented and Procedure Oriented Approaches, Benefits of OOPs, Introduction to Common OO Language, Applications of OOPs . **Object Oriented Methodology-2:** Classes and Objects, Abstraction and Encapsulation, Inheritance, Method Overriding and Polymorphism.	21 MAR-15 APR	Presentation on object oriented concepts.	Assignment on object oriented concepts No. Of test-1
2	**Java Language Basics:** Introduction To Java, Basic Features, Java Virtual Machine Concepts, Primitive Data Type And Variables, Java Operators, Expressions, Statements and Arrays. Object Oriented **Concepts:** Class and Objects-- Class Fundamentals, Creating objects , Assigning object reference variables; Introducing Methods, Static methods, Constructors , Overloading constructors; This Keyword; Using Objects as Parameters, Argument passing, Returning objects , Method overloading, Garbage Collection, The Finalize ( ) Method. **Inheritance and Polymorphism:** Inheritance Basics, Access Control, Multilevel Inheritance, Method Overriding, Abstract Classes, Polymorphism, Final Keyword.	16APR-30APR	Group discussion	Assignment on inheritance and polymorphism No of test-1 (constructor ,Inheritance and polymorphism)
3	**Packages :** Defining Package, CLASSPATH, Package naming, Accessibility of Packages , using Package Members. **Interfaces:** Implementing Interfaces, Interface and Abstract Classes, Extends and Implements together . Exceptions Handling : Exception , Handling of Exception, Using try-catch , Catching Multiple Exceptions , Using finally clause , Types of Exceptions, Throwing Exceptions, Writing Exception Subclasses.	01May-20 MAY	Presentation on interfaces	Assignment on packages No of test-1 (exception handling)
4	**Multithreading :** Introduction , The Main Thread, Java Thread Model, Thread Priorities, Synchronization in Java, Inter thread CommunicationStreams and Stream Classes ,The Predefined Streams, Reading from, and Writing to, Reading and Writing Files , The Transient and Volatile Modifiers , Using Instance of Native Methods.**Strings and Characters :** Fundamentals of Characters and Strings,String Class , String Operations , Data Conversion using Value Of ( ) Methods , String Buffer Class and Methods.	20MAY – 15 JUNE	Presentation on string operations.	No of test-1 (Multithreading)