

Lesson Plan
Class BCA-4th Sem

Paper BCA – 242 Advanced PROGRAMMING USING C++

4th Week Jan,2024

Dynamic Polymorphism, Function Overriding

1st Week Feb,2024

Virtual Function and its Need, Pure Virtual Function, Abstract Class

2nd Week Feb,2024

Virtual Derivation, Virtual Destructor,

3rd Week Feb,2024

Basic Type Conversion, Conversion between objects and basic types

4th Week Feb,2024

Conversion between objects of different classes

1st Week March,2024

Class templates in C++

2nd Week March,2024

Inheritance: Rules of Derivations – Private, Protected and Public Derivations.

3rd Week March,2024

Single, Multiple, Multilevel Inheritance, Hierarchical and Multipath Inheritance

4th Week March,2024

Holi Vacations

1st Week April, 2024

Roles of Constructors and Destructors in Inheritance

2nd Week April, 2024

Genericity in C++: Templates in C++, Function templates

3rd Week April, 2024

Exception Handling in C++

4th Week April, 2024

Files I/O in C++: Class Hierarchy for Files I/O

1st Week May,2024

Opening and Closing Files, File Pointers, Operation on files.

2nd Week May,2024

Revision

Dr Sushil Kumar(Computer Science)

. Lesson Plan

Class BCA-6th Sem

Paper BCA-366: Programming in Core Java

4th Week Jan,2024

Basic Principles of Object Oriented Programming

1st Week Feb,2024

Introduction to Java, History and Features of Java

2nd Week Feb, 2024

Java Virtual Machine (JVM), Java's Magic Bytecode; The Java Runtime Environment

3rd Week Feb, 2024

Basic Language Elements: Lexical Tokens, Identifiers, Keywords

4th Week Feb, 2024

Literals, Comments, Primitive Data types, Operators, Assignments; Input/output in Java: Basics, I/O Classes, Reading Console Input

1st Week March,2024

Control Structures in Java: Decision and Loop Control Statements, Defining Class in Java, Creating Objects of a Class

2nd Week March,2024

Constructors, Nested Class, Inner Class , Defining Methods, Argument Passing Mechanism, Using Class and Objects, Abstract Class, Dealing with Static Members

3rd Week March,2024

Array & String in Java: Defining an Array, Initializing & Accessing Array, Multi –Dimensional Array, Defining String, Operation on Array and String, Creating Strings using String Class, Creating Strings using String Buffer Class

4th Week March,2024

Holi Vacations

1st Week April, 2024

Polymorphism in Java: Basic Concept, Types, Overriding vs. Overloading, Implementation , Benefits of Inheritance, Types of Inheritance in Java, Access Attributes, Inheriting Data Members and Methods, Role of Constructors in Inheritance,

2nd Week April, 2024

Use of “super”; Packages & Interfaces: Basic Concepts of Package and Interface, Organizing Classes and Interfaces in Packages, Defining Package, Adding Classes from a Package to Your Program, CLASSPATH Setting for Packages, Import Package, Naming Convention For Packages , Access Protection in Packages, Standard Packages

3rd Week April, 2024

Exception Handling in Java: The Idea behind Exception, Types of Exception, Use of try, catch, finally, throw, throws in Exception Handling, In-built and User Defined Exceptions, Checked and Un-Checked Exceptions

4th Week April, 2024

Applet in Java: Applet Basics, Applet Architecture, Applet Life Cycle, Applet Tag, Parameters to Applet, Embedding Applets in Web page, Creating Simple Applets

1st Week May,2024

Designing Graphical User Interfaces in Java, Components and Containers, Using Containers, Layout Managers, AWT Components, AWT Classes, AWT Controls,

2nd Week May,2024

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