

Lesson Plan

Name of Faculty : Ms.Bharti Sethi, Assistant Professor ,CSE
 Discipline : Computer Science and Engineering
 Semester : 3rd sem(odd)
 Subject : Object Oriented Programming using C++ (IT-202E)
 Lesson Plan Duration : 15 weeks (from August2022 to Dec-2022)
 Work Load (Lectures) per week (in hours): Lectures-03 hours

| Week | Theory | | Topic Covered, Date and Remarks | | |
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| | Lecture- Day | Topic (Including Assignment/Test) | Date | HOD | Director-Principal |
| 1 st | 1. | Introduction to C++,C++ Standard Library, Basics of a Typical C++ Environment | | | |
| | 2 | Pre-processors Directives, Illustrative Simple C++ Programs | | | |
| | 3 | Header Files and Namespaces, library files. | | | |
| 2 nd | 4 | Introduction to Objects and Object Oriented Programming, | | | |
| | 5 | Access Modifiers: Controlling access to a class method | | | |
| | 6 | variable (public, protected, private, package) | | | |
| 3 rd | 7 | Polymorphism: Overloading, | | | |
| | 8 | Encapsulation (Information Hiding) | | | |
| | 9 | Inheritance, and their types | | | |
| 4 th | 10 | Overriding Methods | | | |
| | 11 | Abstract Classes, Reusability, Class's Behaviour | | | |
| | 12 | Classes and Data Abstraction: Introduction, Structure Definitions, Accessing Members of Structures | | | |
| 5 th | 13 | Class Scope and Accessing Class Members | | | |
| | 14 | Controlling Access Function And Utility Functions | | | |
| | 15 | Class Objects: Constructors, Using Default Arguments With Constructors | | | |
| 6 th | 16 | Using Destructors, Classes : Const(Constant) Object And Const Member Functions | | | |
| | 17 | Initializing Object as Member of Classes, Friend Function and Friend Classes | | | |
| | 18 | Using This Pointer, Separating Interface from Implementation | | | |
| 7 th |1 st Minor Test..... | | | | |
| 8 th | 19 | Container Classes And Integrators | | | |
| | 20 | Proxy Classes, Function overloading. | | | |
| | 21 | Operator Overloading: Introduction, Fundamentals of Operator Overloading, Restrictions On Operators Overloading | | | |
| 9 th | 22 | Operator Functions as Class Members vs. as Friend Functions, Overloading | | | |
| | 23 | <<, >> Overloading Unary Operators, Overloading Binary Operators | | | |
| | 24 | Inheritance: Introduction, Inheritance: Base Classes And Derived Classes | | | |
| 10 th | 25 | Protected Members, Public, Protected and Private Inheritance | | | |
| | 26 | Casting Base- Class Pointers to Derived- Class Pointers | | | |
| | 27 | Using Member Functions, Overriding Base –Class Members in a Derived Class | | | |
| 11 th | 28 | Using Constructors and Destructors in derived Classes | | | |
| | 29 | Implicit Derived –Class Object To Base- Class Object Conversion | | | |
| | 30 | Virtual Functions and Polymorphism: Introduction to Virtual Functions, Polymorphism | | | |
| 12 th | 31 | Abstract Base Classes And Concrete Classes, Dynamic Binding | | | |
| | 32 | New Classes And Virtual Destructors | | | |
| | 33 | Files and I/O Streams: Files and Streams, Creating a Sequential Access Creating A Random Access File | | | |
| 13 th | 34 | Unformatted I/O (with read and write) | | | |
| | 35 | Reading Data Sequentially from a Random Access File. | | | |
| | 36 | File Reading Data From A Sequential Access File, Updating Sequential Access Files, Random Access Files | | | |
| 14 th |2 nd Minor Test..... | | | | |
| 15 th | 37 | Templates & Exception Handling: Function Templates | | | |
| | 38 | Overloading Template Functions | | | |
| | 39 | Throwing an Exception, Catching an Exception Rethrowing an Exception | | | |

| Sr. | Comments | HOD | Director- Principal |
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