

**INFORMATIVE TRAINING COMPUTER CENTRE**

**OPP- Maa Laxmi Plaza, Sahu complex**

**1<sup>st</sup> Floor, No-03, Harmu**

**Sahjanand Chowk, Ranchi-02**

**Jharkhand**

Tel.No.9431326614

# **Software Development**

## **AND**

# **Training Centre**



## SYLLABUS OF 'C++' LANGUAGE

Introduction to OOP (Object Oriented Programming), distinctions From structured programming approach, Using Objects & Classes, Access Specifiers, Array of objects, Pointer to object, Passing and returning objects from functions, Usage of static class data & Functions, this keyword usage.

Constructors, Implicit and Explicit, Using Constructor Overloading, Function Overloading, New And Delete Operators, Using Destructors, Copy Constructors. Conversions - Automatic & Non-Automatic, basic type to class object, object to basic types.

Inheritance, Private And Public Inheritance, When To Use Protected Access Specifier, Behaviour Of Constructors Without Arguments And With Arguments in Inheritance, Overriding Functions, Multilevel Inheritance, Multiple Inheritance, Containership.

Operator Overloading, operator keyword, overloading binary operators(+, -, >, <, >= etc...), advantages of operator overloading, concept of nameless objects, overloading unary operators(both with prefix and suffix notations), multiple overloading, Friend functions and using them to resolve overloading problems, Assignment operator overloading, Overloading of [ ] operator. Doing Away With Temporary objects, Overloading of Insertion & extraction Operator.

Friend classes & interclass communication, Array of Pointers to built-in Data types & objects, Binding - Late Binding Vs. Early Binding, Using Virtual Functions, Abstract Classes & pure virtual Functions, Virtual Destructors

Templates, function templates & class templates, Function Templates with multiple arguments, Using more than one template arguments, The Standard Template Library (STL), Exceptions & their handling, multiple exceptions, Exceptions with arguments.

File Handling in C++, Streams, Using ofstream, ifstream, fstream classes, text Files Vs. Binary Files, Writing Variables, Arrays, Objects, multiple objects, Arrays Of Objects on a disk file, Using Overloaded versions of insertion & extraction operators, write(), read() functions to write & read Binary files, Using seekg(), ios::beg, ios::end, ios::cur to place file pointers on particular locations, logic explanation for appending, deletion, modification of records Using Formatting flags (left, right, dec, oct, hex, showbase, showpoint, showpos, scientific, fixed), Manipulators(setw(), setfill(), setprecision(), setiosflags()).

### CERTIFICATION

Certificates will be provided to each successful participant at the end of the training.

In case of any clarification please feel free to get in touch with us.

Thanks and Regards

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\*Conditions Apply