NSCB Memorial Govt. Degree College Hamirpur
District Hamirpur (H.P.)

Tel No.: 01972-222227, FAX: 01972-222227, e-Mail: gchamirpur-hp@nic.in

Lesson Plan
Session (2024-2025)

Class: B.C.A 3rd SEM   **Name of the Teacher: Prof. Madhuri Gupta**

Subject: Programming in C++   **Course: BCA-0304**

     Room No.- 261

S. No	Dates	Topics to be covered
Admissions of B.C.A	20-05-2024 to 10-06-2024	**Admissions**
Week1	18-07-2024 to 20-07-2024	Orientation programme.
Week 2	22-07-2024 to 27-07-2024	Object oriented programming: Need for OOP, object oriented approach, characteristics of OOP language- objects, classes, Inheritance, Reusability, Polymorphism, overloading advantage of OOP, relationship between C and C++.
Week 3	29-07-2024 to 03-08-2024	Type bool, setw Manipulator, type float, type conversion, arithmetic operators, relational operators, logical operators.
Week 4	05-08-2024 to 10-09-2024	Loops and decision control statements: loop- for, while, do, decision-if, if-else, switch, conditional operator, other control statements- break, continue, goto.
Week 6	12-09-2024 to 17-09-2024	Structures and functions: structures, Accessing structure members, structure within a structure, Enumerated Data type, simple functions, passing arguments to functions.
Week 7	19-09-2024to 24-09-2024	Returning values from functions, reference arguments, overloaded functions, storage classes, scope resolution operator.
Week 8	26-09-2024 to 31-09-2024	Objects and classes: A simple class, classes and objects, specifying a class, using a class, C++ objects as physical objects, C++ objects as data types.
Week 9	02-09-2024 to 07-09-2024	Arrays: Array fundamental0defining array, array elements, Accessing array elements, Initializing arrays, Constructors
Week 10	09-09-2024 to	Multidimensional arrays, passing arrays to functions, array of objects.

	14-09-2024	
Week 11	16-09-2024 to 21-09-2024	Strings-string variables, Avoiding Buffer overflow, string constants, array of strings string as class members, Standard C++ string Class.
Week 12	22-09-2024 to 25-09-2024	Operator overloading: Overloading unary operators- the operator keyword, operator arguments, operator return values nameless temporary objects.
Week 13	26-09-2024 to 27-09-2024	Inheritance: Derived class and base class, specifying the derived class, accessing base class, members, derived class constructors
Week 14	30-09-2024 to 05-10-2024	**Minor Test**
Week 15	7-10-2024 to 12-10-2024	Limitation of increment operators, overloading Binary operators, data conversion, Pitfalls of operator overloading and conversion.
Week 16	14-10-2024 to 19-10-2024	Overriding member functions, class hierarchies, public and private Inheritance
Week 17	21-10-2024 to 25-10-2024	Levels of inheritance, multiple inheritance, Ambiguity in Multiple Inheritance, Aggregation- Classes Within Classes.
Week 18	29-10-2024 to 03-11-2024	**Diwali Break**
Week 19		Final Exam and Practicals