

PES INSTITUTE OF TECHNOLOGY
BANGALORE SOUTH CAMPUS,
HOSUR ROAD, ELECTRONIC CITY, BANGALORE – 560100
LESSON - PLAN

Object Oriented Programming Using C++

Subject Code : 17EC562

IA Marks : 20

Hours/Week : 03

Exam. Hours : 03

Total Hours : 40

Exam. Marks : 80

Faculty : Bivas Bhattacharya

Class	Module No /Chapter names	Topic to be Covered	% of portions covered	
			Ref.	Cum
1.	Module -1 Beginning with C++ and its features	What is C++?	20%	20%
2.		Applications and structure of C++ program		
3.		Different Data types		
4.		Variables		
5.		Different Operators		
6.		Expressions		
7.		Operator overloading		
8.		Control structures		
9.	Module-2 Functions, classes and Objects	Functions, Inline function	20%	40%
10.		Function overloading,		
11.		Friend and virtual functions		
12.		Specifying a class		
13.		C++ program with a class		
14.		Arrays within a class		
15.		Memory allocation to objects, array of objects		
16.		Members, pointers to members and member functions		
17.	Module -3 Constructors, Destructors and Operator overloading	Constructors	20%	60%
18.		Multiple constructors in a class		
19.		Copy constructor		
20.		Dynamic constructor		
21.		Destructors		
22.		Defining operator overloading		
23.		Overloading Unary and binary operators		
24.		Manipulation of strings using operators		
25.	Module -4 Inheritance, Pointers, Virtual Functions, Polymorphism	Derived Classes	20%	80%
26.		Single inheritance		
27.		Multilevel inheritance		
28.		Multiple inheritance		
29.		Pointers to objects and derived classes		
30.		this pointer		
31.		Virtual and pure virtual functions		
32.		Virtual and pure virtual functions		
33.	Module -5	C++ streams and stream classes		

34.	Streams and Working with files	C++ streams and stream classes	20%	100%
35.		formatted and unformatted I/O operations		
36.		formatted and unformatted I/O operations		
37.		Output with manipulators		
38.		Classes for file stream operations		
39.		Classes for file stream operations		
40.		Opening and closing a file, EOF		

Text Books:

	Title & Author
Text	Object Oriented Programming with C++, E.Balaguruswamy, TMH, 6th Edition, 2013
Reference	Object Oriented Programming using C++, Robert Lafore, Galgotia publication 2010