

RayatShikshanSanstha's
Sadguru Gadage Maharaj College, Karad
(Autonomous College)

Department of Mathematics

**SYLLABUS FOR
DIPLOMA COURSE IN
C++ PROGRAMMING
Semester – III**

1. Concepts of OOP : (02)

Introduction to C-programming, Introduction OOP, Procedural Vs. Object Oriented Programming, Principles of OOP, Benefits and applications of OOP

2. C++ Basics :

(03+04)

Overview, Program structure, namespace, identifiers, variables, constants, enum, operators, typecasting,

3. C++ control structures-

(02+04)

Branching (If, If...Else, Nested IF.... Else, Switch), Looping (For, While, Do...While)

Semester - IV

4. Functions :

(02+02)

Simple functions, Types of functions, Call and Return by reference

5.Overloading of functions:

(03+02)

Default arguments, friend functions, virtual functions, Inline functions, Macro Vs. Inline functions

6. Classes and Objects :

(02+04)

Basics of object and class in C++, Private and public members, static data and function members, constructors and their types, destructors, operator overloading, type conversion

References:

- 1) OOP using C++ By E. Balagurusamy
- 2) Programming with C++ By D. Ravichandran
- 3) C++ Program By Yashavant Kanetkar
- 4) Let Us C++ By Yashavant Kanetkar.
- 5) Object Oriented Programming in C++ - By Thampi & Mantha - Dreamtech
- 6) Mastering C++ - By Venugopal.