

SARDAR PATEL UNIVERSITY
Programme & Subject: M.Sc (Mathematics)
Semester: IV
Syllabus with Effect from: November-2013

Paper Code: PS04EMTH23	Total Credit: 4
Title Of Paper: Advanced C++ Programming	

Unit	Description in detail	Weighting (%)
I	Basic Input/output; Boolean data type; Formatted I/O; Over loaded functions; Objects, classes, member functions, Member variables; constructor, destructor, more than one constructor, arrays of objects, static members, operator overloading, inheritances	25%
II	dynamic data construction, Linked list, Linked list operator, appending, inserting and deleting node, destroying list, Linked list templates, Stacks and queues, static and dynamic stack, dynamic stack operations, static and dynamic queues, queue operations. BIOS and DOS services; Multi file programming; header file creation; menu driven programs; string operations; external variables.	25%
III/IV	Practical based on above.	50%

Basic Text & Reference Books:-

- Tony Gaddis, Starting out with C++, Penram International Publishing 2000
- Lafore Robert; Object oriented Programming in Turbo C++, Galgotia Publ. 2002.
- P. B. Mahapatra, Thinking in C Including object orientated programming with C++, Wheeler Publishing, New Delhi
- Deitel, H.M. and Deitel, P.J. ;C++: How to program, 2001

