SUBJECT : COMPUTER SCIENCE		
CLASS : XII		
MONTH	**CHAPTER**	**TOPICS**
APRIL	POINTERS	INTRODUCTION, C++ MEMORY MAP, FREE STORE, DECLARATION AND INITIALIZATION OF POINTERS, POINTERS AND ARRAYS, POINTERS AND CONST, POINTERS AND FUNCTIONS, POINTERS AND STRUCTURES, OBJECTS AS FUNCTIONS ARGUMENTS, POINTERS AND OBJECTS.
	OBJECT ORIENTED PROGRAMMING, CLASSES AND OBJECTS	INTRODUCTION, VARIOUS PROGRAMMING PARADIGMS, OOP CONCEPTS, BASIC CONCEPTS OF OOP, IMPLEMENTING OOP CONCEPTS IN C++, ADVANTAGES AND DISADVANTAGES OF OOP. INTRODUCTION, CLASSES, DATA HIDING AND ENCAPSULATION, FUNCTIONS IN A CLASS, USING OBJECTS, STATIC CLASS MEMBERS.
MAY	CONSTRUCTORS AND DESTRUCTORS	INTRODUCTION, CONSTRUCTORS: NEED, DECLARATION AND DEFINITION, TYPES, DYNAMIC INITIALIZATION OF OBJECTS, CONSTRUCTOR OVERLOADING, SPECIAL CHARACTERISTICS; DESTRUCTORS: NEED, DECLARATION AND DEFINITION, CHARACTERISTICS;
	FUNCTION OVERLOADING	INTRODUCTION, NEED, DECLARATION AND DEFINITION, RESTRICTIONS ON OVERLOADED FUNCTIONS, CALLING OVERLOADED FUNCTIONS
JULY	C++ REVISION TOUR	INTRODUCTION, C++ BASICS, DATA HANDLING, OPERATORS AND EXPRESSIONS, FLOW OF CONTROL, CONSOLE I/O OPERATIONS, ARRAYS, FUNCTIONS, STANDARD LIBRARY AND HEADER FILES, STRUCTURES.
	INHERITANCE	INTRODUCTION, NEED, DIFFERENT FORMS, DERIVED AND BASE CLASSES, INHERITANCE AND ACCESS CONTROL, MULTIPLE INHERITANCE REVISITED, MULTILEVEL INHERITANCE, NESTING OF CLASSES
	DATA FILE HANDING	INTRODUCTION, FSTREAM.H HEADER FILE, DATA FILES, OPENING AND CLOSING FILES, STEPS TO PROCESS A FILE, CHANGING THE BEHAVIOUR OF STREAMS, SEQUENTIAL I/O WITH FILES, DETECTING EOF, FILE POINTERS AND RANDOM ACCESS, BASIC OPERATIONS ON BINARY FILES, ERROR HANDING DURING FILE I/O.
AUGUST	ARRAYS & STRING	INTRODUCTION, ELEMENTARY DATA REPRESENTATION, DIFFERENT DATA STRUCTURES, OPERATIONS ON DATA STRUCTURES, NEED FOR ARRAYS, TYPES OF ARRAYS, IMPLEMENTATION OF ONE-DIMENSIONAL ARRAYS, BASIC OPERATIONS ON ONE-DIMENSIONAL ARRAYS, IMPLEMENTATION OF TWO-DIMENSIONAL ARRAYS, BASIC OPERATIONS ON TWO-DIMENSIONAL ARRAYS
SEPTEMBER	LINKED LISTS, STACKS AND QUEUES	INTRODUCTION, NEED FOR LINKED LISTS, SINGLY LINKED LIST, STACK: STACK AS AN ARRAY, STACK AS A LINKED LIST, APPLICATION; QUEUE: QUEUE AS AN ARRAY, LINKED QUEUES;
	DATABASE CONCEPTS	INTRODUCTION, PURPOSE, DATABASE ABSTRACTION, DIFFERENT DATA MODELS, THE RELATIONAL MODEL, COMPARISON OF DATA MODELS.

OCTOBER	STRUCTURED QUERY LANGUAGE	INTRODUCTION, SQL, DATA DEFINITION LANGUAGE, DATA MANIPULATION LANGUAGE, SQL PROCESSING.
	BOOLEAN ALGEBRA	DEVELOPMENT OF BOOLEAN ALGEBRA, BINARY VALUED QUANTITIES, LOGICAL OPERATIONS, BASIC LOGIC GATES.
NOVEMBER	BOOLEAN ALGEBRA	BASIC POSTULATES, PRINCIPLE OF DUALITY, BASIC THEOREMS, DEMORGAN'S THEOREMS, DERIVATION, MINIMIZATION, MORE ABOUT LOGIC GATES, USE OF BOOLEAN OPERATORS IN SEARCH ENGINE QUERIES.
	COMMUNICATION TECHNOLOGIES	INTRODUCTION, NETWORK, NEED, EVOLUTION, SWITCHING TECHNIQUES, DATA COMMUNICATION TERMINOLOGIES, TRANSMISSION MEDIA, TYPES OF NETWORKS, NETWORK TOPOLOGIES, NETWORK DEVICES, LAN DESIGN, COMMUNICATION PROTOCOLS, WIRELESS/MOBILE COMPUTING, INTERNETWORKING TERMS AND CONCEPTS, NETWORK SECURITY, VIRUSES.
DECEMBER	PROJECT WORK	
HOLIDAY HOMEWORK	C++ REVISION TOUR	
TEST – I	C++ REVISION TOUR, OBJECT ORIENTED PROGRAMMING, CLASSES AND OBJECTS, CONSTRUCTORS AND DESTRUCTORS, FUNCTION OVERLOADING, INHERITANCE.	
HALF YEARLY EXAMINATION	C++ REVISION TOUR, OBJECT ORIENTED PROGRAMMING, CLASSES AND OBJECTS, CONSTRUCTORS AND DESTRUCTORS, FUNCTION OVERLOADING, INHERITANCE, POINTERS, ARRAYS, LINKED LIST, STACKS AND QUEUES.	
PRE-BOARD-I	C++ REVISION TOUR, OBJECT ORIENTED PROGRAMMING, CLASSES AND OBJECTS, CONSTRUCTORS AND DESTRUCTORS, FUNCTION OVERLOADING, INHERITANCE, POINTERS, ARRAYS, LINKED LIST, STACKS AND QUEUES, DATABASE CONCEPTS, STRUCTURED QUERY LANGUAGE, BOOLEAN ALGEBRA, COMMUNICATION TECHNOLOGIES.	
PRE-BOARD-II	C++ REVISION TOUR, OBJECT ORIENTED PROGRAMMING, CLASSES AND OBJECTS, CONSTRUCTORS AND DESTRUCTORS, FUNCTION OVERLOADING, INHERITANCE, POINTERS, ARRAYS, LINKED LIST, STACKS AND QUEUES, DATABASE CONCEPTS, STRUCTURED QUERY LANGUAGE, BOOLEAN ALGEBRA, COMMUNICATION TECHNOLOGIES.	

SUBJECT: COMPUTER SCIENCE – PRACTICAL	
MONTH	**CHAPTER**
APRIL - SEPTEMBER	POINTERS, OBJECT ORIENTED PROGRAMMING, CLASSES AND OBJECTS CONSTRUCTORS AND DESTRUCTORS, FUNCTION OVERLOADING C++ REVISION TOUR, INHERITANCE, DATA FILE HANDING, ARRAYS & STRING LINKED LISTS, STACKS AND QUEUES
OCTOBER - NOVEMBER	STRUCTURED QUERY LANGUAGE