

## TERNA ENGINEERING COLLEGE, NERUL

<b>Class: T. E</b>	<b>Branch: Computer</b>	
<b>Semester: VI</b>	<b>Subject: CPL</b>	
<b>Periods per Week</b>  <b>(each 60 mins)</b>	<b>Practical</b>	<b>02</b>
<b>Objective: This course is designed to prepare the students for technical tests and interviews.</b>		
<b>Prerequisite: Computer Programming –I &amp; II Knowledge</b>		

### DETAILED SYLLABUS

Module	Topics
<b>01</b>	<b>Basic Concepts</b>  I/O Statements, data types, control structures, loop structures, memory management using Malloc, Calloc
<b>02</b>	<b>Arrays, String</b>  1-d Array, Multi-dimensional array, String in-built function
<b>03</b>	<b>Functions:</b>  Function prototype, definition, call  Call by value, Call by reference  Overloading, Overriding, Recursion,, Virtual Function, Friend Function,
<b>04</b>	<b>Pointers :</b>  Pointer declaration, pointer to data types, arrays, structure, pointer, function,  Function returning a pointer, Pointer as a argument to function
<b>05</b>	<b>Structure, Union,</b>  Static Member

<b>06</b>	<b>Class</b> Define class with data members and member functions, Create Objects Constructor: Types of constructor Destructor/Finally, Abstract class
<b>07</b>	<b>Inheritance</b> Types of inheritance, Interfaces
<b>08</b>	<b>Exception handling:</b> Try, catch & finally
<b>09</b>	<b>Thread</b> Synchronized Single & multi threading by implementing Runnable interface & extending Thread Class
<b>10</b>	<b>Applets</b> Graphics using AWT and Swings
<b>11</b>	<b>File Handling:</b> Opening, closing, reading & writing
<b>12</b>	<b>Advanced Topics:</b> Java Script, databases, Batch file

**References:**

1. Let us C, by Yashwant Kanetkar
2. Programming with C++, Balguruswamy
3. Complete Reference, Herbert Schildt
4. How to program Java, Deital & Deital