- 1a) Write a C++ program to read and display employee details (employee number,name,doj..etc) using access specifiers and scope resolution operator.
- b) Write a C++ program to read and print student details with in the class and outside the class using access specifiers and scope resolution operator.
- 2a) Write a C++ program to implement static data members and member

functions with an example.

b) Write a C++ program to calculate the division of marks obtained by the

student using array of objects under given conditions:

I . Percentage above or equal to 60 ? First division

- II. Percentage between 50 and 59 ?Second division
- III. Percentage between 40 and 49 ? Third division
- IV. Percentage less than 40- Fail
- 3a) Write a C++ program to swap 2 numbers using inline function
 - b) Write a C++ program find maximum and minimum number using friend

function

4a) Write a C++ program to find factorial of a given number using function

overloading.

b) Write a C++ program to calculate powers of numbers from 1 to 5 using

overloading constructor functions

- 5a) Write a C++ program to overload unary and binary operators.
 - b) Write a C++ program to overload special operators
- 6a) Write a C++ program to calculate gross salary using different types of

inheritance under given conditions:

- I. If salary is less than 10000 then HRA is 15% of basic salary.
- II. If salary is equal to or above 10000 then HRA is 1800 and DA is 80% of

basic salary.

b)Write a C++ menu driven program for the following using constructors and

destructors.1. prime or not 2. perfect or not 3. palindrome or not

7a) Write a C++ program to convert Fahrenheit to Celsius using virtual functions.

- b) Write a C++ program to implement pure virtual functions for decimal hexadecimal, octal values.
- 8a) Write a C++ program to implement manipulators to formulate I/O.
- b) Write a C++ program to implement using own inserters and extractors.
- 9a) Write a C++ program to read and display text file line by line.
- b) Write a C++ program to create a text file using command line arguments
- 10a) Write a C++ program to sort the given array of numbers using templates.
 - b) Write a C++ program to handle divide by zero and array size exception using exception handling
 - 11a) Write a C++ program to read and convert the given number using

conversion functions.

- b) Write a C++ program for expanding the size of vetor using vector functions.
- 12a) Write a C++ program to access vector through an iterator.
 - b) Write a C++ program to insert and delete elements in an vector.