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S.E. (Computer) Semester- IV (Revised Course 2007-08)
EXAMINATION Aug/Sept 2019
Object Oriented Programming and Design Using C++

[Duration : Three Hours]**[Max. Marks : 100]****Instructions:** Answer **any five** questions by selecting at least **one** from **each** module.**MODULE - I**

1.
 - a) Write a note on*overloading ‘__’ as pre decrement and post decrement operator giving examples. 6
 - b) Explain the concept of dynamic binding using V table with the help of an example. 8
 - c) Explain the concept of inheritance in C++ giving any suitable example. 6
 - a) List and explain various restrictions on operator overloading. 5
 - b) Write a C++ program to find the largest of three numbers using inline function. 5
 - c) Create a base class called ‘SHAPE’ having: 10
 - two data members of type double
 - member function get-data () to initialize base class data members
 - pure virtual member function display-area () to compute and display the area of the geometrical object.
 Derive two specific classes ‘TRIANGLE’ and ‘RECTANGLE’ from the base class. Using these three classes design a program that will accept dimension of a triangle / rectangle interactively and display the area.

MODULE - II

3.
 - a) Write a C++ program to handle divide-by-zero exception. 5
 - b) Write a program to explain class template by creating a template T for a class named pair having two data members of type T which are inputted by a constructor and a member function get-max() return the greatest of two numbers to main. Note: the value of T depends upon the data type specified during object creation. 8
 - c) A file contains a list of names and telephone numbers in the following form: 7

Name	Tel. No.
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 Write a C++ program to read the file and output the list in the tabular format.
4.
 - a) Consider a flat text file “students.csv” containing student records with RNo, Name and Semester separated by ‘,’ delimiter. Write C++ program to read and display the contents of the “students.csv” file. 7
 - b) Write a short note on the following with examples. 8
 - i) Template arguments
 - ii) Exception specification
 - c) Differentiate between sequential & random access file. 5

