

Additional  
Exam  
2019

SYCS  
Comp-II

Sem-IV

VCD-240315

SYCS- COMP II-SEMIII-75Mks-2 1/2 Hrs.

Date-24/3/15

Note: All Questions are Compulsory and Carry Equal Marks.

**Q.1: Attempt Any Four From the Following:**

(20 M)

1. What are the features of OOP?
2. Explain following features of OOP: 1.Inheritance 2.Polymorphism 3.Encapsulation
3. What are the applications of the scope resolution operator in C++?
4. Explain the concept of "call by reference" with proper example.
5. What are static data members and static member functions?
6. Write a note on Access specifier.
7. What is parameterised constructor? List some properties of constructor.
8. How we can construct two dimensional array?

**Q.2: Attempt Any Four From the Following:**

(20 M)

1. What are the rules for operator overloading?
2. Explain multiple and multilevel inheritance.
3. What is a virtual base class? When do we make a class virtual?
4. What is an abstract class? Give the proper programming example.
5. Write a note on put() and get() function.
6. Write a note on following manipulators: 1. Setw() 2. Setprecision() 3.setfill()
7. What are the rules for virtual function?
8. What does polymorphism mean? How it can be achieved?

**Q.3: Attempt Any Four From the Following:**

(20 M)

1. How we can open and close file? Explain by proper programming example.
2. Explain write() and read() function.
3. Describe various classes available for file operation.
4. Write a C++ program to show the use of class template.
5. What are the member function template?
6. Explain try... and catch... block with proper example.
7. List the three types of container.
8. What is an algorithm? How STL algorithms are different from conventional algorithm?

**Q.4: Attempt Any Three From the Following:**

(15 M)

1. Write a program to demonstrate the concept of rethrowing an exception.
2. What are the advantages using exception handling mechanism in a program?
3. Write a C++ program to overload - operator.
4. What is a virtual function? Why do we need virtual function?
5. Explain how class members can be accessed?
6. Write a C++ program to illustrate the application of Friend function.

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