

Date: 30/09/15

VCD- 300915 -SYCS- COMP II-SEM III-75Mks-2 1/2 Hrs.

Note: All Questions are Compulsory.

**Q.1: Attempt Any Four From the Following:** (20 M)

1. Explain benefits of using OOP in comparison with procedure oriented language.
2. How memory can be allocated for objects? Explain.
3. Write a note on Destructor in C++.
4. What is parameterised constructor? List some properties of constructor.
5. How we can construct two dimensional array?
6. Explain Friend function with proper example.
7. Write a note on copy constructor.
8. What is class? How does it accomplish data hiding?

**Q.2: Attempt Any Four From the Following:** (20 M)

1. Explain the concept of binary operator overloading using friend function.
2. Explain multiple and multilevel inheritance.
3. Write a C++ program to illustrate how pointers to a derived object are used.
4. Write a note on C++ stream classes.
5. What are the rules for virtual function?
6. Explain getline() and write() function with proper example.
7. Write a note on this pointer.
8. How polymorphism can be achieved at compile time and run time?

**Q.3: Attempt Any Four From the Following:** (20 M)

1. Explain following file stream classes: 1. ifstream 2. ofstream 3. fstream
2. Explain write() and read() function.
3. What is file mode? Describe the various file mode options available.
4. Write a C++ program to implement bubble sort algorithm using template function.
5. What are the member function template?
6. Explain try... and catch.. block with proper example.
7. Describe various classes available for file operation.
8. List the three types of container.

**Q.4: Attempt Any Three From the Following:** (15 M)

1. What is an algorithm? How STL algorithms are different from conventional algorithm?
2. What are the input and output streams ?
3. What are the benefits of OOPS?
4. Write a note on User defined data types.
5. Explain the concept of pure virtual class.
6. What is mean by re-throwing of exception.

\*\*\*\*\*