



Reg. No. :

Name :

**Fourth Semester B.Tech. Degree Examination, July 2015
(2008 Scheme)**

08.404 : OBJECT ORIENTED TECHNIQUES (RF)

Time : 3 Hours

Max. Marks : 100

PART – A

Answer **all** questions.

1. In OOPs, objects are members of class. Discuss.
2. Assuming temp starts with the value 40, what will the following code fragment print out ?

Discuss your answer

```
cout << temp--;
```

```
cout << ++temp;
```

3. Explain scope resolution operation with suitable examples.
4. Discuss default function arguments.
5. Explain how an object is created and destructed in C++.
6. Explain the purpose of the term 'this' in C++.
7. What is function overriding ?
8. Discuss virtual functions.
9. What is data conversion in C++ ?
10. What is polymorphism ? **(10x4=40 Marks)**



PART – B

Answer **any one** question from **each** Module.

Module – I

11. a) Describe the difference among passing an array to a function by using call by value, call by address and using call by reference by writing the relevant C++ code. 10
- b) Distinguish between the following terms : 10
- i) References and pointers.
 - ii) Data abstraction and data encapsulation.

OR

12. a) Write a comparison between the following concepts. 10
Static members and protected members.
- b) Explain how a member function is defined in C++. Discuss with examples. 10

Module – II

13. a) In C++, how does a static member function differs form the other member functions ? Explain with suitable examples. 10
- b) What is dynamic constructor ? Explain with an example. 10

OR

14. a) Write a C++ program to perform multiplication between an integer and complex number object using friend operator function. Why can't we use member operator function in this case ? 12
- b) Explain public and private inheritance with examples. 8

Module – III

15. a) What is inheritance ? What are its benefits ? What are different types of inheritance ? Give an example for each type that will fit in their structure. 12
- b) Explain unary operator overloading with examples. 8

OR

16. a) Describe the various classes available for file operations. 10
- b) What is virtual base class ? When do we make a class virtual ? Explain with examples. 10