

JUNE 2006

2006 MAHATMA GANDI UNIVERSITY
I B.TECH DEGREE EXAMINATIONS VII SEMESTER
B.TECH ELECTRICAL AND ELECTRONICS ENGINEERING
OBJECT ORIENTED PROGRAMMING (ELECTIVE 1)

TIME : 3 HOUR
MARK : 100

ANSWER ALL QUESTIONS

PART A[10*2=20]

1. What do you mean by dynamic binding? How is it useful in OOP?
2. Distinguish between the following terms Data abstraction and Data encapsulation.
3. When do we declare a member of a class static?
4. How do we invoke a constructor function?
5. What is function overloading?
6. Explain syntax of binary operator overloading? How many arguments are required in the definition of an overloaded binary operator?
7. What do you mean by multiple and multilevel inheritance?
8. What is an abstract class?
9. What does this pointer point to?
10. What are new and delete?

PART B[10*8=80]

11. Describe the features that characterize object oriented programming.
12. What are the guidelines that need to be followed for deciding whether to make the member function inline or not?
13. With an example explain how an object may be used as a function argument.
14. What are constructors and destructors? Explain how they differ from normal functions? Illustrate with an example.
15. Write a C++ program to overload arithmetic operators for manipulating vectors.
16. What are friend functions and friend classes? Write a normal function which adds objects of the complex number class. Declare this normal function as friend of Complex class.
17. With an example explain the concept of base class, derived class and visibility modes.
18. Describe the various approaches by which we can detect the end-of-file condition successfully.
19. Write a program to illustrate the use of pointers to derived class.
20. Distinguish between Virtual function and Pure Virtual function.