

M.C.A DEGREE EXAMINATIONS: APRIL/MAY 2010

Second Semester

MASTER OF COMPUTER APPLICATIONS

MCA506: Object Oriented Programming

Time: Three Hours

Maximum Marks: 100

Answer ALL Questions:-

PART A (10 x 2 = 20 Marks)

1. Define Polymorphism.
2. Differentiate between C & C++
3. Give the syntax of the reference operator.
4. What is the purpose of 'this' operator? Give an example.
5. What is parameterized constructor?
6. Define Operator Overloading.
7. What is Hybrid Inheritance?
8. What is a pure virtual function?
9. List out the various file stream classes.
10. Define container and list out their categories.

PART B (5 x 16 = 80 Marks)

11. a) Discuss in detail about Modular Programming.

(OR)

- b) Write a C++ program to implement stack operations (such as push, pop, overflow, underflow, display) using class

12. a) Explain about static data member and static member function with example.

(OR)

- b) Write a program to find the sum of two entered complex numbers and display the sum using a operator overloading.

13. a) Explain in detail different type of constructors and destructor with examples.

(OR)

b) Write a program to perform matrix addition using a common friend function to two classes.

14 a) (i) Explain about Virtual function (8)

(ii) Discuss about Templates. (8)

(OR)

b) (i) Write a program to illustrate the following using hierarchical inheritance. The base class called book is created and two new classes, Engineering Book and Novel are derived from the 'book' class. (8)

(ii) Explain the different types of inheritance. (8)

15. a) (i) Briefly describe about Standard Template Library. (8)

(ii) Explain about String Class with example. (8)

(OR)

b) (i) Describe about Exception Handling. (8)

(ii) Write a program to enter an integer array into a file using write () function and then access the numbers using read () function. (8)
