

Code No. : 7823

Sub. Code : C 1 A 2

M.C.A. (CBCS) DEGREE EXAMINATION,

NOVEMBER 2008

First Semester

COMPUTER APPLICATIONS

OBJECT ORIENTED PROGRAMMING USING C++

(For those who joined in July 2008 onwards)

Time : Three hours

Maximum : 75 marks

Part A – (10 x 1 = 10 marks)

Answer ALL questions

1. What do you mean by object?
2. Give an example for member function.
3. Give the structure of the C++ program.
4. What do you mean by Inline function?
5. What are the basic data types in C++?
6. What are the applications of void data type in C++?
7. What is a constructor? Is it mandatory to use constructor in a class?
8. What do you mean by abstract class?
9. Write a short note on "This Pointer".
10. Define template in C++.

Part B – (5 x 5 = 25 marks)

Answer ALL questions choosing either (a) or (b)

11. (a) Differentiate the terms data abstraction and data encapsulation.
(or)
(b) Distinguish the Data binding and Message passing.
12. (a) Why is an array called as derived data type?
(or)
(b) What do you mean by reference variable? Explain it.
13. (a) Discuss two different methods of passing parameters to a function.
(or)
(b) Why is it necessary to overload an operator?

14. (a) What is virtual function? Explain.
(or)
(b) What are the advantages of inheritance?
15. (a) Explain array of objects with an suitable example.
(or)
(b) What are abstract classes? Explain it.

Part C – (5 x 8 = 40 marks)

Answer ALL the questions choosing either (a) or (b)

16. (a) Discuss in detail about basic concepts of object oriented programming.
(or)
(b) Discuss in detail about unformatted I/O operations.
17. (a) Discuss in detail about the operators in C++.
(or)
(b) Explain about conditional control structures in C++.
18. (a) Explain function overloading with a suitable example.
(or)
(b) Discuss in detail about constructor with a suitable example.
19. (a) What is inheritance? Explain multiple and hierarchical inheritance with an example.
(or)
(b) Explain the rules for overloading operators.
20. (a) Write a C++ program to illustrate the array of pointers to object.
(or)
(b) Discuss in detail about function template with a suitable example.