17. (a) Explain about the basic, derived and user defined data types in C++.

Or

(b) Explain about the while and do-while statement with examples.

18. (a) What are friend functions and friend classes? Write down the properties of friend functions.

Or

(b) Explain the characteristics of constructors and destructors.

19. (a) Write a C++ program to overload = = operator. Compare two objects using overloaded operator.

Or

(b) Explain the advantages and disadvantages of inheritances.

20. (a) Write a C++ program to invoke member functions of base and derived classes using pointer of base class.

Or

(b) What are templates? Explain the need of function templates and class templates.

Reg. No. : .....

Code No. : 7625 **Sub. Code : HCAM 12**

M.C.A. (CBCS) DEGREE EXAMINATION, NOVEMBER 2012.

First Semester

Computer Application

OBJECT ORIENTED PROGRAMMING USING C++

(For those who joined in July 2012 onwards)

Time : Three hours Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

1. What is an object and a class.

2. Distinguish between count() and printf()

3. What is the use of the keyword void?

4. Differentiate between break and continue statement?

5. What are default arguments?

6. What is the difference between call by value and call by reference?

7. Differentiate between operator overloading and function overloading.

8. What do you mean by virtual classes?

9. In which situation does the pointer become harmful?

10. Define: Compile time binding.

PART B — (5 × 5 = 25 marks)

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

11. (a) What are the disadvantages of conventional programming languages?

Or

(b) Describe bit fields required in setf() function.

12. (a) Explain the different parts of C++ program.

Or

(b) Write a C++ program to enter age and display message whether the user is eligible for voting or not. Use if-else statement.

13. (a) What are inline functions? Discuss its advantages and disadvantages.

Or

(b) Write a C++ program to exchange values between two classes. Use Friend function.

14. (a) Describe the rules for operator overloading.

Or

(b) Explain hierarchical inheritance.

15. (a) What are virtual destructors? Explain.

Or

(b) Write a C+ program to find the length of a file.

PART C — (5 × 8 = 40 marks)

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

16. (a) Discuss the features of Object-Oriented Programming.

Or

(b) Write a C++ program to display octal and hexadecimal equivalent of decimal number ranging from 100 to 200.