

Roll No. ....

Total No. of Questions : 07]

[Total No. of Pages : 02

## Paper ID [B0212]

(Please fill this Paper ID in OMR Sheet)

BCA (Sem. - 3<sup>rd</sup>)

OBJECT ORIENTED PROGRAMMING USING C++ (BC - 304)

Time : 03 Hours

Maximum Marks : 60

Instruction to Candidates:

- 1) Section - A is **Compulsory**.
- 2) Attempt any **Four** questions from Section - B.

### Section - A

Q1)

(10 x 2 = 20)

- a) Differentiate between class and object.
- b) Explain the various control structures of C++.
- c) What do you mean by header file?
- d) What are function prototypes?
- e) What are some advantages / disadvantages of using friend functions?
- f) How many ways are there to initialize an int with a constant?
- g) What do you mean by data hiding in C++?
- h) Explain the role of file iostream.h in C++.
- i) What do you mean by new and delete operator?
- j) Differentiate between macros and functions.

## Section - B

(4 x 10 = 40)

- Q2)** What are the main characteristics of an object oriented programming? Compare them with the structured programming?
- Q3)** Can we use the same function name for a member function of a class and outside function in the same program file? If yes how are they distinguished? If no, give reasons.
- Q4)** What do you mean by recursion? Write a program in C++ to find the GCD of two numbers using recursion.
- Q5)** What is multiple inheritance? How it is realized in C++? Give suitable examples.
- Q6)** Explain the use of virtual and static functions. Give at least example in each case.
- Q7)** Write a C++ program that prompts the user to enter the name of two files, and copies the contents of the first file into the second file. Your program should be able to handle any kind of error that occurs during the course of program execution.

