

Roll No: .....

Total No. of Questions : 13]

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## Paper ID [A0214]

(Please fill this Paper ID in OMR Sheet)

BCA (304) (S05) (O) (LE) (Sem. - 3<sup>rd</sup>)

OBJECT ORIENTED PROGRAMMING USING C++

Time : 03 Hours

Maximum Marks : 75

Instruction to Candidates:

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

### Section - A

Q1)

(15 × 2 = 30)

- a) What do you mean by OOP?
- b) Explain *for* loop with example.
- c) What is the purpose of header files in C++?
- d) What are the primary data types of C++?
- e) What is a function prototype?
- f) What are the steps involved in using a data file in C++ program?
- g) What are logical operators and conditional operators in C++?
- h) What is Operator Overloading?
- i) What do you mean by Default constructors?
- j) What do you mean by Abstract class and Container class?
- k) What is Polymorphism?
- l) What is a nested class? Give example.
- m) What is a destructor? Is it mandatory that every class must have a destructor?
- n) Differentiate between text files and binary files.
- o) What is the task performed by *seekg()* function?

**Section - B**

(9 × 5 = 45)

- Q2)** Discuss *switch* statement with syntax and example.
- Q3)** Write a program to arrange the list of numbers in ascending order by using function.
- Q4)** How a friend function is different from a member function?
- Q5)** Write a program in C++ to create a file using formatted output functions.
- Q6)** Discuss various types of constructors in C++.
- Q7)** Write a program in C++ to implement the concept of Operator Overloading.
- Q8)** What are Virtual functions and Pure Virtual functions?
- Q9)** Describe different file opening modes in C++.
- Q10)** Describe the different file stream classes.
- Q11)** What is inheritance? What are its different classifications?
- Q12)** Write a program to implement multiple inheritance.
- Q13)** What are the advantages of using functions in programs? Write a program to find factorial of a number.

