Roll No. ⬚⬚⬚⬚⬚⬚⬚⬚⬚⬚⬚⬚⬚ **Total No. of Pages : 02**

Total No. of Questions : 07

BCA (2013 & Onward)/B.Sc. (IT) (2015 & Onward)
(Sem.–2)
OOPS USING C++
Subject Code : BSBC/BSIT-203
Paper ID : [B1115]

Time : 3 Hrs.   **Max. Marks : 60**

INSTRUCTION TO CANDIDATES :
1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains SIX questions carrying TEN marks each and a student has to attempt any FOUR questions.**

SECTION-A

Q1   Answer briefly :

a) List various features of object oriented programming language.

b) What is early and late binding?

c) Define structure and union.

d) What is object and class?

e) What are various characteristics of a pointer variable?

f) What is static member function?

g) Write a C++ program to swap two numbers without using third variable.

h) Differentiate union and class.

i) Define binary operator overloading.

j) What is pure virtual function?

SECTION-B

Q2   What is data hiding and encapsulation? How it is implemented using C++? Explain with example.

Q3   Define Constructor. What are its different types? Explain with suitable example.

Q4   What is function and operator overloading? Write and explain a C++ program to demonstrate the concept of unary operator overloading.

Q5   Discuss the role of streams, buffers and files by taking suitable example in C++.

Q6   Write notes on the following :

a) Array of structure

b) Need and types of inheritance

Q7   What are friend and inline functions? Explain with example.