Roll No…….. **Total No. of Printed Pages: 1**

Total No. of Questions: [09]

B. Sc. (Graphics and Web Designing) (Semester – 2nd)
OBJECT ORIENTED PROGRAMMING USING C++
Subject Code: BGWDS1-203
Paper ID: [21132608]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A **(2 marks each)**

Q1. Attempt the following:

a Define data abstraction.
b Define procedure oriented programming.
c Distinguish between class and object.
d What is the role of constructor?
e Define inheritance.
f Which operators can't be overloaded?
g How memory is allocated in C++?
h Define hybrid inheritance?
i What is an abstract class?
j What are the different modes of opening a file?

Section – B **(5 marks each)**

Q2. What are the main features of object oriented programming?
Q3. What are the different access specifiers? Write the purpose of each of these.
Q4. What are the different types of constructors? Explain giving examples.
Q5. Write a code to overload unary "++" operator.
Q6. Define dynamic polymorphism. How is it implemented? Explain giving example.

Section – C **(10 marks each)**

Q7. Define and distinguish between procedures oriented and object oriented programming paradigms.
Q8. How ambiguity is removed in multiple and hybrid inheritance? Explain giving examples.
Q9. Write a program to compute frequency of alphabets from a text file.