

Roll No. ....

**97675**

**BCA 4th Semester (Re-Appear)**

**Examination – October, 2020**

**OBJECT ORIENTED PROGRAMMING USING C++**

**Paper : BCA-208**

**Time : 1.45 hours ]**

**[ Maximum Marks : 80**

*Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.*

**Note:** Attempt any *three* questions. All questions carry equal marks.

1. Answer the following questions briefly :
  - (a) What is copy constructor ?
  - (b) Describe *two* major uses of Abstraction.
  - (c) Explain new with an example in C++.
  - (d) Discuss derived class in C++ briefly.
  - (e) Describe iostreams in C++ in few lines.
  - (f) Differentiate between private and protected in C++.
  - (g) Write the use and advantages of recursion in C++.
  - (h) Explain multiple inheritance in C++.
  
2. (a) Define function ? How is it useful and called ?  
Discuss with C++ examples.  
(b) Explain encapsulation and its uses in C++ with an example.

3. Explain the following briefly with suitable examples :
  - (i) Merits of Object-Oriented Approach
  - (ii) Data types in C++
4. (a) Define references. How these are useful and used ? Explain with examples in C++.  
(b) Explain destructors and its types, uses with examples in C++.
5. Describe the following with examples :
  - (i) Use and advantages of constructors in C++
  - (ii) Memory management in C++
6. (a) Define friend function. How is it used and useful ? Explain with C++ examples.  
(b) Explain Inheritance and its types, advantages with suitable examples in C++.
7. Explain the following with examples :
  - (i) Overriding member function in C++
  - (ii) Static functions and its uses and advantages
8. (a) Define template classes. How these are used and useful ? Discuss their applications with examples in C++.  
(b) Explain unexpected exception in C++ with suitable examples.
9. Explain the following with examples :
  - (i) Exception handling in C++
  - (ii) Strings and its uses in C++