Roll No. .....

97675

BCA 4th Semester

Examination – May, 2019

OBJECT ORIENTED PROGRAMMING USING C++

Paper : BCA- 208

Time : Three 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 : Question No. 1 is *compulsory*. Attempt *five* questions in all by selecting at least *one* question from each Unit. All questions carry equal marks.

1. Explain the following :

(a) Data types in C++

(b) Flow control

(c) Iterators

(d) Object copying

(e) Derived class and base class

(f) Abstract class

(g) Polymorphism

(h) Namespace in C++

UNIT – I

2. What do you mean by Object Oriented Programming ? Discuss the characteristics of Object Oriented of OOP in detail. Also differentiate between Procedural Language and Object oriented Approach in detail.

3. What is C++ Programming language ? Explain its syntax, variables and operators in detail.

UNIT – II

4. (a) What are Constructors and Destructors in C++ ? What are the advantages of using constructors ? Explain in detail.

(b) What do mean by classes ? Explain Private and Public classes through suitable example.

5. Explain the following in detail :

(a) Member Function

(b) Assignment Operator

(c) Copy Constructer

(d) Static Members

UNIT – III

6. (a) What do you mean by inheritance ? Explain the need of inheritance with example.

(b) Discuss the effect of inheritance on the visibility of members in public, private and protected derivation in detail.

7. Explain the following in detail :

(a) Overriding member function

(b) Abstract Class

(c) Virtual function

(d) Friend function

UNIT – IV

8. (a) What are exceptions ? How is an exception handled in C++ ? What is the need of exception handling ? Explain in detail.

(b) What do you mean by unexpected exceptions ? How are they handled ? Explain in detail.

9. What do you mean by templates and standard template library ? Why are they needed ? Explain the different types of templates in details through suitable example.