

END TERM EXAMINATION

THIRD SEMESTER [BCA] NOV.-DEC. - 2019

Paper Code: BCA209 Subject: Object oriented programming Using C++

Time: 3 Hours

Maximum Marks: 75

**Note: Attempt any five questions including Q.no.1 which is compulsory.
Select one question from each unit.**

- Q1 Answer **any five** the following:- (5x5=25)
- a) Explain the use of new and delete operator using example.
 - b) Explain namespace with example.
 - c) What is this pointer? Explain with example.
 - d) Explain Stream classes for file operations.
 - e) Explain aggregation in OOP with example.
 - f) Differentiate between compile time and runtime polymorphism.

UNIT I

- Q2. a) What are features of Object Oriented Programming? (5)
b) Explain difference between Procedural Programming and Object Oriented Programming. (4)
c) Explain different C++ compilers. (3.5)

OR

- Q3. a) What is difference between C and C++? (5)
b) Explain C++ standard Libraries. (4)
c) What are different applications of OOP? (3.5)

UNIT II

- Q4. a) What are C++ abstract classes? Explain with example. (5)
b) Write C++ program to illustrate constructor overloading. (4)
c) What is difference between constructor and destructor? (3.5)

OR

- Q5. a) What are friend functions? Illustrate with code. Why they are not preferred? (5)
b) What is copy constructor? Explain with example. (4)
c) Explain data hiding and encapsulation with example. (3.5)

UNIT III

- Q6. a) Explain difference between Private, Public and Protected Access Mechanism with respect to Inheritance. (5)
b) What are different types of Inheritance? (4)
c) Write a code to overload Unary operator. (3.5)

OR

- Q7. a) What is difference between early and late binding? (5)
b) Explain Virtual base class with suitable example? (4)
c) Write a code to overload binary '+' operator? (3.5)

UNIT IV

- Q8. a) How is an exception handled in C++? (5)
b) What is generic programming? How it is implemented in C++? (4)
c) Explain and write syntax of put() and get () functions. (3.5)

OR

- Q9. a) What are steps involved in using a file in a C++ program? (5)
b) Write a C++ code to implement Command Line Argument? (4)
c) What are different types of exceptions? (3.5)
