

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.

- Q2. **UNIT I**
- 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)

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

- Q4. **UNIT II**
- 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)

- Q5. **OR**
- 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)

- Q6. **UNIT III**
- 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)

- Q7. **OR**
- 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)

- Q8. **UNIT IV**
- 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)

- Q9. **OR**
- 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)
