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# B.C.A. (Part-II) Examination, 2022 (New Course) Paper Third PROGRAMMING IN 'C++' (BCA 203)

Time : Three Hours] [Maximum Marks:80

Note: Attempt any two parts from each unit. All questions carry equal marks.

### Unit - 1

- (a) Describe the features of object oriented programming language.
  - (b) Write short notes on the followings-
    - (i) Dynamic initialization of variable

(ii) Reference variable

(c) Explain the use of break and continue statement within loop, using example.

### Unit - II

- 2. (a) Describe call by value and call by reference with example.
  - (b) What is function overloading? Explain with example.
  - (c) How to pass structure as an argument to function?

### Unit - III

- 3. (a) What do you mean by class? How to create object? What is inline function?
  - (b) Describe copy constructor and parameterized constructor with example.
  - (c) Explain the use of new and delete operator with example.

# Unit - IV

- 4. (a) Write short notes on the followings-
  - (i) this operator
  - (ii) pointer to object
  - (b) What is inheritance? Write a program in C++ to demonstrate multiple inheritance.
  - (c) Describe public, private and protected access specifiers.

## Unit - V

- 5. (a) Explain how to implement dynamic polymorphism using virtual function? What is abstract class?
  - (b) What is operator overloading? Explain how to overload unary operator, with example.
  - (c) What is friend function and friend class?