# BACHELOR OF COMPUTER APPLICATION
## Third Semester
## OBJECT ORIENTED PROGRAMMING WITH C++
### (BCA - 301)

**Duration: 20 minutes**                                    **Marks – 20**

### (PART A - Objective Type)

## I. Choose the correct answer:                            1×6=6

1. Which of the following is the lifetime of a static variable?
   a. Function        b. Class
   c. Entire program      d. All files

2. In the declaration **class Test { int x; };** x is which type of member?
   a. Public        b. Private
   c. Protected      d. Any of these

3. A constructor is executed when
   a. An object is created    b. An object is used
   c. A class is declared    d. An object goes out of scope

4. Choose the operator which can be overloaded
   a. ::     b. .     c. .*     d. None of these

5. With Friend function implementation, binary operators take how many explicit parameters?
   a. 0     b. 1     c. 2     d. 3

6. A class can have how many number of Destructors?
   a. 1     b. 2     c. 3     d. Any

## II. State true or false:                                 1×5=5

1. In public inheritance, the object of the derived class can access the public member function of the derived class.

2. If both the derived and base class has constructors, the base class constructor is executed first.

3. A pointer to a base class cannot be made to point objects of derived class.

4. "This" pointer is not a part of the object itself.

5. A constructor that accepts no parameter is known as the default constructor.

## III. Fill up the blanks:                                 1×5=5

1. cout is defined in _____ class.

2. The technique of creating a new class from an existing class is called_____ .

3. When a protected member is inherited in public mode, it becomes a_____ member in the derived class.

4. Static data members are automatically initialized to_____.

5. _____is the first6 member function to be executed when an object of that class is created.

## IV. Find out the outputs of the following codes:                    1×4=4

1. Class sample
   { public:
           Sample()
           {   initialize();
           Cout<<"\n CONSTRUCTOR";
           }
           Void initialize()
           {   show_str();
           Cout<< "\n FUNCTION INITIALIZE";
           }
           Void show_str()
           {   cout<<"\n HI"
           }
   };
   Main()
   {    sample s;
   )

   Answer: _____

2. Class Test
   { public:
           Private:
           Static int count;
           Public:
           Static void show_data()
           {
           Cout<< count++;
           }
   };
   Main()
   {   Test T;
   T.show_data();
   }

   Answer: _____

3. Class sample
   ```
   {    int a=10;
       Char ch;
         Public:
                   Void set_data(char c)
                   {  ch=c;    }
                   Void show_data()
                   {   cout<< a <<" "<<ch;  }
   };
   Main()
   {sample S;
   S.set_data('A');
   S.show_data();
   }
   ```

   Answer: _____

4. Class Indiabix
   ```
   {  staticint x;
     Public:
                Static void setdata(int xx)
                {    x=xx;
                }
                Static void display()
                {    cout<<x;
                }
   };
   IntIndiabix::x=0;
   Main()
   {   Indiabix::setdata(44);
   Indiabix::display();
   }
   ```

   Answer:_____

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