Assignment 4

Q.A. Answer the following questions in one or two lines :

1. Write a syntax of constructor.
2. Constructors do not have return type. State true/false.
3. Whenever an object is destroyed which function is called ?
4. "Constructors can't have all arguments as default arguments". State true / false.
5. Write a syntax for copy constructors.
6. Differentiate between copy Constructor and default Constructor.
7. A destructor can be overloaded in a class. State true or false.
8. The destructor can have different name as the class . State true/false.
9. Default Constructor is always called without any arguments. State true / false.
10. At least how many constructors contain class in CPP.

Q.B. Answer the following questions :

1. Explain new and delete operators with suitable example.
2. What is constructor? List types of constructors. Explain overloading of constructor with example.
3. What is copy constructor ? What is its purpose? Explain with example.
4. What is parameterized Constructor? Explain with example.
5. Consider a class "Game" which has data members - no_of_Players and names of players. The numbers of players can vary from each Game Object. Define a class with appropriate dynamic constructor to initialize the object and accept player names. Also write a member function to display details.
6. What are rules for defining a Constructor.

Q.C. Trace the Output :

1. What is the output of the following program: (Assume there are no syntax errors)

```cpp
#include<iostream.h>
class A
{ public :
        A()
        {
                cout<<"\n Object Created";
        }
        ~A()
        {
                    cout<<"\n Object Destroyed";
        }
};
A a1;
int  main()
{
        A a2;
        {
                A a3;
        }
```

```
            exit(0);
        }

2. Identify errors in the following :
        class A
        {
                int m,n;
        public:
                A()
                {
                        m=0;
                        n=0;
                }
                A(int m)
                {
                        this->m=m;
                        n=m;
                }
                A(int m,int n)
                {
                        this->m=m;
                        this->n=n;
                }
                A(const A & ob)
                {
                        m=ob.m;
                        n=ob.n;
                }
                void show();
        }
        void show()
        {
                cout<<m<<n;
        }
        int main()
        {
                A o1(3),o2,o3(6,9);
                A o4(o1);
                o1.show();
                o2.show();
                o3.show();
                o4.show();
                return 0;
        }
```