DELHI PUBLIC SCHOOL
BOKARO STEEL CITY

ASSIGNMENT FOR THE SESSION 2014-2015

Class: XII **Subject : Computer Science** **Assignment No. 2**

1. a) Answer the questions (i) and (ii) after going through the following class: 5

```
class serial
{
        int serialcode;
        char title[20];
        float duration;
        int no_of_episode;
public:
        serial()                        //function 1
        { duration = 30;
          no_of_episode = 10;
        }
        serial(int d, int noe)  //function 2
        { duration = d;
          no_of_episode = noe;
        }
        serial( &s1)            // function3
        { }
        ~serial()               // function 4
        {
                cout<<"Destroying Object"<<endl;
        }
};
```

i. Complete definition of function 3

ii. Give example how function1 and function 2 get executed when object is created.

iii. Write an explicit call to function 2

b) Define a class Bank to represent the bank account of a customer with the following specification **5**

Private Members:

- Name of type character array(string)
- Account_no of type long
- Type_of_account (S for Saving Account, C for current Account) of type char
- Balance of type float

Public Members:

A constructor to initialize data members as follows

- Name NULL
- Account_no 100001
- Type_of_account 'S'
- Balance 1000

A function **NewAccount()** to input the values of the data members Name, Account_no, Type_of_account and Balance with following two conditions

- Minimum Balance for Current account is Rs.3000
- Minimum Balance for Saving account is Rs.1000

A function **Deposit()** to deposit money and update the Balance amount.

A function **Withdrawal()** to withdraw money. Money can be withdrawn if minimum balance is as >=1000 for Saving account and >=3000 for Current account.

A function **Display()** which displays the contents of all the data members for a account.

c) Answer the questions (i) to (iv) based on the following code : **4**

```
class PUBLISHER
{
        char pub[12];
        double turnover;
        protected:
        void register( );
        public:
        PUBLISHER( );
        void enter( );
        void display( );
};
class BRANCH
{
        char city[20];
        protected:
        float employees;
        public:
        BRANCH( );
        void haveit( );
        void giveit( );
};
class AUTHOR: public BRANCH, private PUBLISHER
{
        int acode;
        char aname[20];
        float amount;
        public:
        AUTHOR( );
        void start( );
        void show( );
};
```

i) Write the names of data members, which are accessible from objects belonging to class AUTHOR.

ii) Write the names of all the member functions which are accessible from objects belonging to class BRANCH.

iii) Write the names of all the members which are accessible from member functions of class AUTHOR.

iv) How many bytes will be required by an object belonging to class AUTHOR?

2. Identify the errors with reasonin the following code fragmen . 5

```
class X {
    int x;
    static int ctr;
    public:
    X( ){x=0;}
    X( int i ) { x = i ; }
    void init ( void )
    {   c=ctr=0;  }
    inline static void prn ( void )
    {
    prn( );
    cout<<ctr<<x;
    }
    ~X(int a ){}

}; void main( ){ X X, x1,x2; X.init( );};
```

3. Write the output of the following: 5

```
#include<iostream.h>
        class item{
        static int I ;
int no;
        public  :
item( )
{
cout<< "DC"<< " ";
}
item ( item & x)
{
cout<< "CC"<<" ";
}
void  getdata( int aa )
{
no =aa ;
I ++ ;
}
void  putdata()
{
cout <<"\n"<< I<<"\n";
}
~Item()
{
 cout<<"Des"<<I-- ;
}
};
int item::I ;
void main( )
{
item  a;
item b=a ;
item c;
c=a;
a.getdata(100);
b.getdata(200);
a.getdata(300);
a.putdata();
b.putdata();
c.putdata();
}
```

3. Observe the following program carefully & choose the correct possible output (if any) from the options (i) to (iv) **2**

```
# include <iostream.h>
# include <conio.h>
# include <stdlib.h>
void main ()
{
char serial[] = {'E', 'X', 'A', 'M'};
        int number[] = { 69, 66, 67, 68};
        clrscr();
        randomize();
        cout << number[random(3)];
```

```
        for (int i = 0; i < 4; i++)
cout << serial[sizeof(int) + random(2) - 1 ];
        getch();
}
```

outputs:

(i) 67AXXA
(ii) 67AAAM
(iii) 67XXAX
(iv) 69AXXA

----------x----------