Multiple Choice Questions

Q1 How many loops are there in C++?

A) 2

B) 3

C) 4

D) 1

Q2 What is the output of the below code?

```
int main(){
 if(0)
 {
    cout<<"Hi";
 }
 else
 {
    cout<<"Bye";
 }
return 0;
}
```

(A) Hi
(B) Bye
(C) HiBye
(D) Compilation Error

Q3 Which operator can not be overloaded?

A) +

B) -

C) *

D) ::

Q4 Which operator has more precedence in below list?

A) +

B) -

C) ++

D) *

Q5 What should be the output of below program?

```
int main()
{
int a=10;
cout<<a++;
return 0;
}
```

A) 10

B) 11

C) 12

D) Not defined

Q6 What is the output

```
#include<iostream.h>
void Execute(int &x, int y = 200)
{
 int TEMP = x + y;
 x+= TEMP;
 if(y!=200)
     cout<<TEMP<<x<<y"--";
}
int main()
{
 int A=50, B=20;
 cout<<A<<B<<"--";
 Execute(A,B);
 cout<<A<<B<<"--";
 return 0;
```

```
}
```

A) 5020--5020--
B) 5020--7012020--12020--
C) 5020--70120200--5020
D) 5020--7050200--5020—

Q7 Can we overload functions in C++?

(A)Yes
(B) No
(C) Compilation Error
(D) Runtime Error

Q8 How many times Cpp.com is printed?

```
int main()
{
    int i=0;
    lbl:
    cout<<"Cpp.com";
    i++;
    if(i<5)
    {
      goto lbl;
    }
return 0;
}
```

A) Error
B) 5 times
C) 4 times
D) 6 times

Q9 Which operator has highest precedence?

A) ()
B) =
C) *
D) ++

Q10 What is the value of a in below program?

```
int main()
{
 int a, b=20;
 a = 90/b;
 return 0;
}
```

(A) 4.5
(B) 4.0
(C) 4
(D) Compilation Error

Q11 What is the output

```
class base
{
public:
       base()
       {
           cout<<"BCon";
       }
       ~base()
       {
              cout<<"BDest ";
       }
};
class derived: public base
{
public:
       derived()
       {     cout<<"DCon ";
       }
       ~derived()
       {     cout<<"DDest ";
       }
};

int main()
{
derived object;
return 0;
}
```

(A) Dcon DDest
(B) Dcon DDest BCon BDest
(C) BCon DCon DDest BDest
(D) BCon DCon BDes DDest

Q12 Can a Structure contain pointer to itself?

(A) Yes
(B) No
(C) Compilation Error
(D) Runtime Error

Q13 What should be the output of below program?

```
int main()
{
    int a = 1;
    switch(a)
    {
    case 1: cout<<"One";
    case 2: cout<<"Two";
    case 3: cout<<"Three";
    default: cout<<"Default";
    }
    return 0;

}
```

(A) One
(B) Compilation Error
(C) Default
(D) OneTwoThree

Q14 What is the output

```
class Mycpp
{
    int Mycpp()
    {
       cout<<"Constructor";
       return 0;
     }
};

int main()
{
    Mycpp obj;
    return 0;
}
```

(A) Constructor
(B) 0
(C) Compilation Error
(D) Runtime Error

Q15 What is the output

```
#include <iostream>
using namespace std;

class X
{
public: X()
        { cout<<"X"; }
        ~X()
        { cout<<"~X"; }
};

class Y : public X
{
public: Y()
        { cout<<"Y"; }
        ~Y()
        { cout<<"~Y"; }
};

int main()
{
    Y obj;
    return 0;
}
```

(A) XY~X~Y
(B) XY~Y~X
(C) X~XY~Y
(D) X~X~YY

Q16 What is abstract class?

(A) A class with abstract keyword
(B) A class with no functions in it
(C) A class with atleast one pure virtual function
(D) Empty Class

Q17 Is it good idea to return an address or a reference of a local variable?

(A) Yes
(B) No

Q18 What is the output

```
int main()
{
```

```
int i=0,x=0;

for(i=1;i<10;i*=2)
{
    x++;
    cout<<x;
}
cout<<x;

return 0;
}
```

(A) 1234567899
(B) 12345678910
(C) 123455
(D) 12344

Q19 What is the output

```
int main()
{
for(int i=1;i<=2;i++)
{
for(int j=i;j<=2;j++)
cout<<i<<@;
}
}
```

(A) 1@2@
(B) 1@2@1@
(C) 1@1@2@
(D) 1@2@2@

Q20 Which part of memory is used for the allocation of local variables declared inside any function.
(A) Heap
(B) Stack
(C) Address Space
(D) Depends on Compiler

Programming

Program 1:

Create a dynamic array of employees.
Private Members –

Name char*
Age int
Salary float

Constructor should allocate memory to Name.
Ask user for size of the employee list
Member functions – void AcceptData()
Void DisplayData()

Program 2:

Create Class Complex with following private member data

Flaot x, float y

Overload operator + so main program can create two objects of complex, add them and then display the values.

Program 3:

Class alpha :

- Private member data x
- Parameterize constructor to initialize x
- Member function to display x

Class beta:

- Private member data y
- Parameterized constructor to initialize y
- Member function to display y

Class gamma - inherit from alpha and beta

- Private data member u, v
- Constructor to initialize all data
- Member function to display u, v

Create object of gamma and call member function to display all the data of itself and parents.

Program 4:

Write a program to find a list of prime numbers using constructor.

Accept from user the number till which prime numbers are to be printed

Program 5:

Class Point

Private Member data int x, y

Create a friend function to Point to exchange the values of x and y