ASSIGNMENT-I

1.Mention five differences between c and c++.

2.The process of wrapping up data and functions into a single unit is called _____.

3.What is the output of the following code?

```
#include <iostream>
using namespace std;
int main()
{
int p;
bool a = true;
bool b = false;
int x = 15;
int y = 5;
p = ((x | y) + (a + b));
cout << p;
return 0;
}
```

4. _____ refers to the act of representing essential features without including the background details or explanations.

A) abstraction
B) inheritance
C) polymorphism
D) encapsulation

5. Which of the following is the scope resolution operator?

A) *
B) :
C) ::
D) ~

6.What is the output of the following code?

```
#include<iostream>
using namespace std;
int x = 10;
int main()
{
   int x = 20;
   {
      int x = 30;
```

```
        {
      cout << x << endl;
      cout << ::x << endl;
        }
  }
  return 0;
}
```

7.What is the use of scope resolution operator.

8.Which statement regarding C++ namespaces is true?

A) Namespaces provide a way to define global variables in C++.
B) Namespaces prevent variable names from being used multiple times in a program.
C) Namespaces avoid naming conflicts by encapsulating code into a named scope.
D) Namespaces restrict access to functions within a program.

9.What is the value of a in this code.

```
#include <iostream>
  using namespace std;
  namespace A
  {
    int var = 5;
  }
  namespace B
  {
    double var = 6.5;
  }
  int main ()
  {
    int a;
    a = A::var + B::var;
    return 0;
  }
```

10. What is std in C++?

A) std is a standard class in C++
B) std is a standard namespace in C++
C) std is a standard header file in C++
D) std is a standard file reading header in C++

11.
```
#include <iostream>
  using namespace std;
  namespace first
```

```
    {
       int a = 4;
    }
    int main ()
    {
       int a = 16;
       first::a;
       cout << a;
       return 0;
}
```

The output of the above code is ____

12.What is the output of the following code?

```
#include <iostream>
using namespace std;
int main()
{
char s1[10] = "Hello";
char s2[10] = "World";
char s3[15] = s1 + " " + s2;
cout<<s3;
return 0;
}
```

13.What is a reference variable in c++?

A) A variable that can refer to other variables.
B) A variable that holds the memory address of another variable.
C) An alias for another variable.
D) A variable that is declared in a different scope.

14.What is the output of the following code?

```
#include<iostream>
using namespace std;
int main()
{
int a=20;
int &b=10;
b++;
cout<<b<<endl;
}
```

15.Which of the following is called insertion operator?

A) <<
B) >>
C) >
D) <

16.Which statement about references is true?

A)A reference can be null
B)A reference must always be initialized.
C)A reference can change which variable it refers to.
D)A reference takes more memory than a pointer.

17.What is the difference between structure in c and structures in c++?

18.Which of the following concept of oops allows compiler to insert arguments in a function call if it is not specified?

A) Call by value
B) Call by reference
C) Default arguments
D) Call by pointer

19.What is the output of the following code?

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

void fun(int a, int b = 15, int c = 25)
{
   cout << a << "  " << b <<  "  " << c << endl;
}

int main()
{
   fun(5);
   fun(5, 12);
   fun(5, 12, 17);
   return 0;
}
```

20.What is inline function.

21.Which among the following function can be called without arguments?

a) void fun(int x, int y=0)
b) void fun(int=0)

c) void fun(int x=0, int y=0)
d) void fun(float x)

22.What is the output of the following code?

```
#include<iostream>
using namespace std;
void func(int *&,int *&);
int main()
{
int w=4,v=5;
int *a=&w;
int *b=&v;
func(a,b);
cout<<w<<" "<<v;
}
void func(int *&p,int *&q)
{
*p = *p + --*q;
*q = *p + ++*q;
}
```

23.Choose the correct statements regarding inline functions.

A. It speeds up execution
B. It slows down execution
C. It decreases the code size
D. Both A and C

24.What is the output of the following code?

```
#include <iostream>
   using namespace std;
   int func(int p = 10, int q )
   {
      int a;
      a = p + q;
      return a;
   }
   int main()
   {
      int x=func(5,6);
      cout << x;
      return 0;
}
```

25.Which of the following is correct about function overloading?

A) The types of arguments are different.
B) The order of argument is different.
C) The number of argument is same.
D) Both A and B.

26.What is the difference between new and malloc.

27.Which of the following is true ?

A) class can have member functions while structure cannot.
B) class data members are public by default while that of structure are private.
C) Pointer to structure or classes cannot be declared.
D) class data members are private by default while that of structure are public by default

28.Consider this line of code int *p=new int. What this statement will achieve in c++.

29.Write a program to allocate memory for 2D array using DMA in c++.

30.Function cannot be overloaded based on

A) Number of arguments
B) Type of argments
C) Return type
D) Order of arguments

31.The _____ manipulator is used in an output statement which causes a linefeed to be inserted.