2. The compiler translates the code into machine language immediately and performs the instruction (1 Point)

- ○ True
- ◉ False

3. The static members in a class can be used in static Methods of the same class only (1 Point)

- ○ True
- ◉ False

4. The switch statement can deal with integer and character types. (1 Point)

- ◉ True
- ○ False

5. We use the inheritance for extending the base class and increasing more member functions and member variables. (1 Point)

- ◉ True
- ○ False

6. Control always return to the caller when the function terminates normally (1 Point)

- ◉ True
- ○ False

7. The class contains virtual function is called abstract class (1 Point)

- ○ True
- ◉ False

- [x] False

9. A class D can be derived from a class C, which is derived from a class B, which is derived from a class A. (1 Point)

- [x] True
- [ ] False

10. All elements in the array must be of the same data type (1 Point)

- [x] True
- [ ] False

11. A pointer to a derived class can point to objects of a base class. (1 Point)

- [x] True
- [ ] False

12. The do..while loop, executes at least once. (1 Point)

- [x] True
- [ ] False

13. The derived class can access protected member of the base class only (1 Point)

- [ ] True
- [x] False

14. We can change the array size during the program execution. (1 Point)

- [ ] True
- [x] False

15. When you run the following piece of code, the output will be:

```
for (i=10 ; i >=0 ;  i -= 5)
{
   Cout<<"i = "<<10-(i-1);
}
```

(2 Points)

- a) i = 1 i = 5 i =10
- b) i =1 i = 6 i = 11
- c) i =1 i = 6
- d) i =1 i =2 i =3

16. A destructor is: (2 Points)

- a) A member function removes object from memory.
- b) A member function called automatically when an object is being removed from the memory.
- c) A private member function can never be called.
- d) None of the above.

17. You have the following piece of code:

```
int x = 0 , y = 4 ;
 while ( x < 11)
{
   y --;
   x + = 2 * y ;
}
```

when the loop has finished the value of x is :

(2 Points)

- 1
- 12
- 13
- 14

18. In the array below, how can you access the element which has the value 4:

```
int Arr[3][3] = {  {1, 2, 3} , {4, 5, 6} , {7, 8, 9}  };
```

(2 Points)

- Arr[0][0]
- Arr[0][1]
- Arr[1][0]

19. Consider the following class:

```
class XX
{
int i;
char c;
public:
void seti(int r){}
char getc(){return c;}
void printITI(){cout<<"ITI";}
};

void printITI(){"Information Technology Institute";}
void main()
{
XX x;
x.printITI();
}
```

The previous code prints:
(2 Points)

- ○ Information Technology Institute
- ◉ ITI
- ○ ITI then Information Technology Institute
- ○ None of the above

20. The constructor of base class called automatically: (2 Points)

- ○ When any member function of the derived class called.
- ○ After the constructor of the derived class started.
- ◉ Before the constructor of the derived class started.
- ○ We do not know when exactly will be started.

21. When you run the following piece of code, the output will be:

```
int x=35;
switch(x)
{
 case 20:
   cout<<"value of X < 20 and equal: "<< x;
   break;
 case 30:
   cout<<"value of X > 30 and equal: "<< x;
   break;
 default:
   cout<<"value of X is: "<< x;
   break;
}
```

(2 Points)

- ○ value of X > 30 and equal: 35

- [ ] value of X is: 35
- [ ] none of the above.

22. We use the pure virtual function for: (2 Points)

- [ ] Overriding the function inherited from the base class by a function in the derived class with the same name but different arguments.
- [ ] Overriding the function from the derived class by a function in the base class with the same name and the same arguments
- [x] Overriding the function inherited from the base class by a function in the derived class with the same name and the same arguments.

23. How many times will the statement x = 1 be executed?

```
for(j = 1; j <= n ; j++)
{
for(j = 1; j <= n ; j++)
{
x = 1;
}
}
```

(2 Points)

- [ ] 1 time
- [ ] 0 times
- [x] n times
- [ ] n*n times

24. To expose a data member to the program, you must declare the data member in the _____ section of the class (2 Points)

- [ ] a) Common
- [ ] b) Exposed
- [x] c) Public
- [ ] d) Private
- [ ] e) Protected

25. A C++ program contains a function with the header int function(double d, char c). Which of the following function headers could be used within the same program? (2 Points)

- a) char function(double d, char c)
- b) int function(int d, char c)
- c) both (a) and (b)
- d) neither (a) nor (b)

26. When you pass a variable _____, C++ passes only the contents of the variable to the receiving function (2 Points)

- a) by reference
- b) by value
- c) globally
- d) locally

a. Total is: 2.

b. Total is: 7.

c. Total is: 9.

d. x = 7 and y = 2.

e. None of the above

28. Consider the following code:

```
class myclass
{
        int x;
protected:
        int y;
};
void main()
{
        myclass c1;
        c1.x=100;
        c1.y=500;
}
```

The above code generates:

(2 Points)

a) An error, x is private.

b) An error, y is protected.

c) No error

d) An error, myclass is an abstract class

e) both a and b