1) #include<userdefined.h>

Which of the following is the correct syntax to add the header file in the C++ program?

a. #include<userdefined>
b. #include "userdefined.h"
c. <include> "userdefined.h"
d. Both A and B

Show Answer Workspace

---

2) Which of the following is the correct syntax to print the message in C++ language?

a. cout <<"Hello world!";
b. Cout << Hello world! ;
c. Out <<"Hello world!;
d. None of the above

Show Answer Workspace

---

3) Which of the following is the correct identifier?

a. $var_name
b. VAR_123
c. varname@
d. None of the above

Show Answer Workspace

---

4) Which of the following is the address operator?

a. @
b. #
c. &
d. %

Show Answer Workspace

---

5) Which of the following features must be supported by any programming language to become a pure object-oriented programming language?

a. Encapsulation
b. Inheritance
c. Polymorphism
d. All of the above

Show Answer Workspace

---

6) The programming language that has the ability to create new data types is called___.

a. Overloaded
b. Encapsulated
c. Reprehensible
d. Extensible

Show Answer Workspace

---

7) Which of the following is the original creator of the C++ language?

a. Dennis Ritchie
b. Ken Thompson
c. Bjarne Stroustrup
d. Brian Kernighan

Show Answer Workspace

---

8) Which of the following is the correct syntax to read the single character to console in the C++ language?

a. Read ch()
b. Getline vh()
c. get(ch)

d. Scanf(ch)

Show Answer Workspace

---

9) Which of the following statements is correct about the formal parameters in C++?

a. Parameters with which functions are called
b. Parameters which are used in the definition of the function
c. Variables other than passed parameters in a function
d. Variables that are never used in the function

Show Answer Workspace

---

10) The C++ language is _____ object-oriented language.

a. Pure Object oriented
b. Not Object oriented
c. Semi Object-oriented or Partial Object-oriented
d. None of the above

Show Answer Workspace

---

11) Which of the following features is required to be supported by the programming language to become a pure object-oriented programming language?

a. Encapsulation
b. Inheritance
c. Polymorphism
d. All of the above

Show Answer Workspace

---

12) Which of the following comment syntax is correct to create a single-line comment in the C++ program?

a. //Comment
b. /Comment/

c. Comment//

d. None of the above

Show Answer Workspace

---

13) C++ is a ___ type of language.

a. High-level Language

b. Low-level language

c. Middle-level language

d. None of the above

Show Answer Workspace

---

14) For inserting a new line in C++ program, which one of the following statements can be used?

a. \n

b. \r

c. \a

d. None of the above

Show Answer Workspace

---

15) Which one of the following represents the tab?

a. \n

b. \t

c. \r

d. None of the above

Show Answer Workspace

Set of MCQ Based on Arrays of the C++

1) Which of the following refers to characteristics of an array?

a. An array is a set of similar data items
b. An array is a set of distinct data items
c. An array can hold different types of datatypes
d. None of the above

Show Answer Workspace

---

2) If we stored five elements or data items in an array, what will be the index address or the index number of the array's last data item?

a. 3
b. 5
c. 4
d. 88

Show Answer Workspace

---

3) Which of the following is the correct syntax for declaring the array?

a. init array []
b. int array [5];
c. Array[5];
d. None of the above

Show Answer Workspace

---

4) Which of the following is the correct syntax for printing the address of the first element?

a. array[0];
b. array[1];
c. array[2];
d. None of the above

Show Answer Workspace

---

5) Which of the following gives the 4th element of the array?

a. Array[0];

b. Array[0];

c. Array[3];

d. None of the above

Show Answer Workspace

---

6) What is the output of the given program?

```
#include < stdio.h >
using namespace std;
int main()
{
int array[] = {10, 20, 30};
cout << -2[array];
return 0;
}
```

a. -15

b. -30

c. Compiler error

d. Garbage value

Show Answer Workspace

---

7) Which type of memory is used by an Array in C++ programming language?

a. Contiguous

b. None-contiguous

c. Both A and B

d. Not mentioned

Show Answer Workspace

---

8) Which of the following is the correct definition of sorting?

a. Sorting is a type of process in which the data or information is ordered into a specific order. Example increasing orders, decreasing.

b. Sorting information or data only in increasing order

c. Sorting is a type of process in which data elements are modified or manipulated

d. None of the above

Show Answer Workspace

---

9) How many types of the array are there in the C++ programming language?

a. In the C++ programming language, there are three types of arrays

b. In the C++ programming language, there are four types of arrays

c. In the C++ programming language, there are two types of arrays

d. Both A and B

Show Answer Workspace

---

10) In C++, for what purpose the "rank()" is used?

a. It returns the size of each dimension

b. It returns the maximum number of elements that can be stored in the array

c. It returns the dimension of the specified array

d. None of the above

Show Answer Workspace

---

11) Which one of the following is the correct definition of the "is_array();" function in C++?

a. It checks that the specified variable is of the array or not

b. It checks that the specified array of single dimension or not

c. It checks that the array specified of multi-dimension or not

d. Both B and C

Show Answer Workspace

---

12) Observer the given C++ program carefully and choose the correct output from the given options:

Program

```
#include <iostream>
#include <string>
using namespace std;
int main()
{
    cout<<is_array<int>::value; // case A
    cout<<is_array<char[10]>::value; // case B
    cout<<is_array<string>::value;  // case c
    return 0;
}
```

a. 110

b. 001

c. 010

d. None of the above

Show Answer Workspace

---

13) Read the given C++ program carefully and choose the correct output from the given options:

Program

```
#include <iostream>
#include <string>
using namespace std;
int main()
{
    cout<<rank<int[10]>::value; // Case A
    cout<<rank<char[10][10]>::value;   // Case B
    cout<<rank<string[10][10][10]>::value; //Case C
    return 0;
}
```

a. 121

b. 321
c. 123
d. 010

Show Answer Workspace

---

14) What did we call an array of the one-dimensional array?

a. Single Dimensional array
b. Multi-Dimensional array
c. 2D Array (or 2-Dimensional array)
d. Both A and B

Show Answer Workspace

---

15) Which types of arrays are always considered as linear arrays?

a. Single-dimensional
b. Multi-dimensional
c. Both A and B
d. None of the above

Show Answer Workspace

---

16) Which of the following can be considered as the object of an array?

a. Index of an array
b. Elements of the Array
c. Functions of the Array
d. All of the above

Show Answer Workspace

---

17) How many types of elements can an array store?

a. Same types of elements

b. Char and int type

c. Only char types

d. All of the above

Show Answer Workspace

---

18) Elements of a one-dimensional array are numbered as 0,1,2,3,4,5, and so on; these numbers are known as ____

a. Subscript of Array

b. Members of Array

c. Index values

d. Both A and C

Show Answer Workspace

MCQ Based on the Oops Concepts of the C++

1) Which of the following statement is true about the new and malloc?

I. The "new" is a type of operator while "malloc" is a kind of function
II. "new" invokes a constructor, whereas "malloc" does not invoke the constructor
III. "malloc" returns void pointer and also needed to typecast whereas "new" returns required the pointer

a. Only I

b. Both I and II

c. I, II, III

d. None of the above

Show Answer Workspace

---

2) Which of the following statement is true about the new and malloc?

I. The pointer object initialization of a specific class using "malloc" also needs to include constructor calls; on the other hand, doing so with the "new" keyword does not include any constructor calls.

II. The pointer object initialization of a specific class using the "new" keyword also needs to include a constructor call. On the other hand, doing so with the "malloc" does not need to include any constructor calls.
III. Pointer object initialization of a specific class using either "new" or "malloc" involves the constructor call.

a. Only II
b. Both II and III
c. Only I
d. None of the above

Show Answer Workspace

---

3) Which of the following statement is correct about Virtual Inheritance?

a. It is a technique to ensure that a private member of a base class can be accessed
b. It is a technique to optimize the multiple inheritances
c. It is a technique to avoid the multiple inheritances of the classes
d. It is a C++ technique to avoid multiple copies of the base class into the derived or child classes

Show Answer Workspace

---

4) Which one of the following statements correctly refers to the Delete and Delete[] in C++ programming language?

a. Delete is syntactically correct although, if the Delete[] is used, it will obtain an error.
b. The "Delete" is used for deleting the standard objects, while on the other hand, the "Delete[]" is used to delete the pointer objects
c. The "Delete" is a type of keyword, whereas the "Delete[]" is a type of identifier
d. The "Delete" is used for deleting a single standard object, whereas the "Delete[]" is used for deleting an array of the multiple objects

Show Answer Workspace

---

5) Consider the following given program and choose the most appropriate output from the given options:

```
#include <iostream>
using namespace std;
class A{
public:
    A(){
       cout<<"Constructor called\n";
      }
    ~A(){
       cout<<"Destructor called\n";
       }
};
int main(int argc, char const *argv[])
{
    A *a = new A[5];
    delete[] a;
    return 0;
}
```

a. Segmentation failure.
b. Error.
c. The Constructor will be invoked five times, and after that destructor will be invoked only once.
d. The Constructor will be invoked five times, and after that destructor will also be invoked five times.

Show Answer Workspace

---

6) Consider the following given program and choose the most appropriate output from the given options:

```
#include<iostream>
using namespace std;
class Base {
public:
    Base()
```

```
6.      { cout<<"Constructing Base \n"; }
7.      ~Base()
8.      { cout<<"Destructing Base \n"; }
9.  };
10. class Derived: public Base {
11. public:
12.     Derived()
13.     { cout<<"Constructing Derived \n"; }
14.     ~Derived()
15.     { cout<<"Destructing Derived \n"; }
16. };
17.
18. int main(void)
19. {
20.     Derived *d = new Derived();
21.     Base *b = d;
22.     delete b;
23.     return 0;
24. }
```

a. Constructing base, Constructing Derived, Destructing Base, Destructing Derived
b. Constructing base, Constructing Derived, Destructing Base
c. Constructing base, Constructing Derived, Destructing Derived, Destructing Base
d. None of the above

Show Answer Workspace

---

7) Which of the following can be considered as the correct syntax for declaring an array of pointers of integers that has a size of 10 in C++?

a. int arr = new int[10];
b. int *arr = new int*[10]
c. int **arr = new int*[10];
d. int *arr = new int[10];

Show Answer Workspace

---

8) Which of the following can be considered as the members that can be inherited but not accessible in any class?

a. Public
b. Protected
c. Private
d. Both A and C

Show Answer Workspace

---

9) Which of the following can be used to create an abstract class in the C++ programming language?

a. By using the pure virtual function in the class
b. By declaring a virtual function in the base class
c. By declaring the virtual keyword afterward, the class Declaration
d. None of the above

Show Answer Workspace

---

10) Which of the following statements is correct about the class?

a. An object is an instance of its class
b. A class is an instance of its object
c. An object is the instance of the data type of that class
d. Both A and C

Show Answer Workspace

---

11) Which of the following statements is correct about the friend function in C++ programming language?

a. A friend function is able to access private members of a class
b. A friend function can access the private members of a class
c. A friend function is able to access the public members of a class
d. All of the above

Show Answer Workspace

---

12) Which of the following statement is not true about C++?

a. Members of a class are public by default
b. A class cannot have the private members
c. A structure can have the member functions
d. All of the above

Show Answer Workspace

---

13) Which of the following given statement is completely true?

I. In an object-oriented programming language, all the function calls are resolved at compile-time.
II. In a procedure programming language, all the function calls are resolved at compile-time

a. Only II
b. Only I
c. Both I & II
d. None of the above

Show Answer Workspace

---

14) Which one of the following cannot be used with the virtual keyword?

a. Constructor
b. Destructor
c. Member function
d. None of the above

Show Answer Workspace

---

15) Which of the following is used for implementing the late binding?

a. Operator Functions

b. Constant Functions
c. Virtual Functions
d. Both A and B

Show Answer Workspace

---

16) Which of the following statements supports that reusable code should be one of the desirable features of any language?

a. It helps in reducing the maintenance cost
b. It helps in reducing the testing time
c. It helps in reducing both the maintenance time and testing time
d. It helps in reducing the compile time

Show Answer Workspace

---

50) Which of the following statement is correct about the C++ programming language?

a. In C++, both the Static and Dynamic type checking are allowed
b. In C++, member function are allowed to be of the type canst
c. In C++, Dynamic checking is allowed
d. None of the above

Show Answer Workspace

---

18) Which of the following is not a kind of inheritance?

a. Distributed
b. Multiple
c. Multi-level
d. Hierarchal

Show Answer Workspace

---

19) What will happen if "In a C++ program a class has no name"?

a. It is not even allowed in C++

b. It will not have the Constructor
c. It will not have the destructor
d. Both B and C

Show Answer Workspace

---

20) Which type of approach is used by the C++ language?

a. Right to left
b. Left to right
c. Top to bottom
d. Bottom-up

Show Answer Workspace

---

21) Which of the following concept refers to adding new components to the program at the run time?

a. Dynamic Loading
b. Dynamic binding
c. Data hiding
d. Both A & B

Show Answer Workspace

---

22) How can one implement the compile-time Polymorphism in the C++ programming language?

a. By using the Template
b. By using the concepts of inheritance
c. By using both the virtual functions and inheritance
d. By using only the virtual functions

Show Answer Workspace

---

23) How can one implement the run-time Polymorphism in the C++ programming language?

a. By using the Template
b. By using the concepts of inheritance
c. By using both the virtual functions and inheritance
d. By using only the virtual functions

Show Answer Workspace

---

24) Which of the following offers a programmer the facility of using a specific class object into other classes?

a. Polymorphism
b. Abstraction
c. Inheritance
d. Composition

Show Answer Workspace

---

25) Which one of the following cannot be a friend in C++ languages?

a. A Class
b. A Function
c. An Object
d. None of the above

Show Answer Workspace

---

26) How are the references different from the pointer?

a. A reference cannot be modified once it initialized
b. There is no need of an extra operator for dereferencing of a reference
c. A reference cannot be NULL
d. All of the above

Show Answer Workspace

---

27) Among the following given options, which can be considered as a member of a class?

a. Class variable
b. Member variable
c. Class functions
d. Both A and B

Show Answer Workspace

---

28) Which of the following refers to the wrapping of data and its functionality into a single individual entity?

a. Modularity
b. Abstraction
c. Encapsulation
d. None of the above

Show Answer Workspace

---

29) Which of the following refers to using the existing code instead of rewriting it?

a. Inheritance
b. Encapsulation
c. Abstraction
d. Both A and B

Show Answer Workspace

---

30) Among the following, which shows the Multiple inheritances?

a. X,Y->Z
b. X->Y->Z
c. X->Y;X->Z
d. None of the above

Show Answer Workspace

---

31) Which of the following statements is true about the C++ programming language?

a. C++ is an object-oriented programming language

b. C++ is a procedural programming language

c. C++ is a functional programming language

d. C++ is both procedural and object-oriented language

Show Answer Workspace

---

32) Among the following, which statement is correct about the Modularity?

a. Modularity means hiding the parts of the program

b. Modularity refers to dividing a program into subsequent small modules or independent parts

c. It refers to overloading the program's part

d. Modularity refers to wrapping the data and its functionality into a single entity

Show Answer Workspace

---

33) Read the following program carefully and find out which concept from the given options is not used or missing in the following program?

Program

```
1. class A
2. {
3.     int x;
4.     public:
5.     void print(){cout<<"hello"<<x;}
6. }
7.
8. class B: public A
9. {
10.    int y;
11.    public:
12.    void assign(int a){y = a;}
13. }
```

a. Polymorphism

b. Encapsulation

c. Inheritance

d. Abstraction

Show Answer Workspace

---

34) Which of the following options correctly explains the concept of Polymorphism?

a.

```
1. int func(float);
2. float func(int, int, char);
```

b.

```
1. int func(int);
2. int func(int);
```

c.

```
1. int func(int, int);
2. float func1(float, float);
```

d. None of the above