

Oop's with C++

K1 Level Questions

UNIT- 1

1. What is the size of `wchar_t` in C++?

- a) 2
- b) 4
- c) 2 or 4

d) Based on the number of bits in the system

2. Pick the odd one out

- a) array type**
- b) character type
- c) boolean type
- d) integer type

3. Which data type is used to represent the absence of parameters?

- a) `int`
- b) `short`
- c) `void`**
- d) `float`

4. What does '\a' escape code represent?

- a) alert**
- b) backslash
- c) tab
- d) form feed

5. Which type is best suited to represent the logical values?

- a) integer
- b) boolean**
- c) character
- d) all of the mentioned

6. Identify the user-defined types from the following?

- a) enumeration
- b) classes

c) both enumeration and classes

d) int

7. Which of the following statements are true?

```
int f(float)
```

a) f is a function taking an argument of type int and returning a floating point number

b) f is a function taking an argument of type float and returning an integer

c) f is a function of type float

d) none of the mentioned

8. Which of the following belongs to the set of character types?

a) char

b) wchar_t

c) only a

d) both wchar_t and char

9. Which of the following is not one of the sizes of the floating point types?

a) short float

b) float

c) long double

d) double

10. Which of the following is a valid floating-point literal?

a) f287.333

b) F287.333

c) 287.e2

d) 287.3.e2

UNIT- 2

1. In which type do the enumerators are stored by the compiler?

a) string

b) integer

c) float

d) none of the mentioned

2. To which of these enumerators can be assigned?

a) integer

- b) negative
- c) enumerator

d) all of the mentioned

3. The operator used for dereferencing or indirection is _____

- a) ***
- b) &
- c) ->
- d) -->>

4. Choose the right option

`string* x, y;`

a) x is a pointer to a string, y is a string

- b) y is a pointer to a string, x is a string
- c) both x and y are pointers to string types
- d) none of the mentioned

5. Which one of the following is not a possible state for a pointer.

- a) hold the address of the specific object
- b) point one past the end of an object
- c) zero

d) point to a type

6. Which of the following is illegal?

- a) `int *ip;`
- b) `string s, *sp = 0;`
- c) `int i; double* dp = &i;`**
- d) `int *pi = 0;`

7. Which of the following correctly declares an array?

a) `int array[10];`

- b) `int array;`
- c) `array{10};`
- d) `array array[10];`

8. What is the index number of the last element of an array with 9 elements?

- a) 9
- b) 8**

c) 0

d) Programmer-defined

9. What is the correct definition of an array?

a) An array is a series of elements of the same type in contiguous memory locations

b) An array is a series of element

c) An array is a series of elements of the same type placed in non-contiguous memory locations

d) None of the mentioned

10. Which of the following accesses the seventh element stored in array?

a) array[6];

b) array[7];

c) array(7);

d) array;

UNIT- 3

1. Identify the correct sentence regarding inequality between reference and pointer.

a) we can not create the array of reference

b) we can create the Array of reference

c) we can use reference to reference

d) none

2. What will be used when terminating a structure?

a) :

b) }

c) ;

d) ::

3. What will happen when the structure is declared?

a) it will not allocate any memory

b) it will allocate the memory

c) it will be declared and initialized

d) none of the mentioned

4. The declaration of the structure is also called as?

a) structure creator

b) structure signifier

c) structure specifier

d) none of the mentioned

5. Which of the following is a properly defined structure?

- a) struct {int a;}
- b) struct a_struct {int a;}
- c) struct a_struct int a;
- d) struct a_struct {int a;;}**

6. Which of the following accesses a variable in structure *b?

- a) b->var;**
- b) b.var;
- c) b-var;
- d) b>var;

7. Which operator is having the highest precedence?

- a) postfix**
- b) unary
- c) shift
- d) equality

8. What is the use of dynamic_cast operator?

- a) it converts virtual base class to derived class**
- b) it converts the virtual base object to derived objects
- c) it will convert the operator based on precedence
- d) none

9. How many sequences of statements present in c++?

- a) 4
- b) 3
- c) 5**
- d) 6

10. The switch statement is also called as?

- a) choosing structure
- b) selective structure**
- c) certain structure
- d) none of the mentioned

UNIT- 4

1. How many can max number of arguments present in function in the c99 compiler?

- a) 99

- b) 90
- c) 102
- d) 127**

2. How many minimum number of functions should be present in a C++ program for its execution?

- a) 0
- b) 1**
- c) 2
- d) 3

3. How many ways of passing a parameter are there in c++?

- a) 1
- b) 2
- c) 3**
- d) 4

4. What will happen when we use void in argument passing?

- a) It will not return value to its caller**
- b) It will return value to its caller
- c) Maybe or may not be return any value to its caller
- d) None of the mentioned

5. How many types of returning values are present in c++?

- a) 1
- b) 2
- c) 3**
- d) 4

6. Which of the following permits function overloading on c++?

- a) type
- b) number of arguments
- c) type & number of arguments**
- d) none of the mentioned

7. In which of the following we cannot overload the function?

- a) return function**
- b) caller

c) called function

d) none of the mentioned

8. Function overloading is also similar to which of the following?

a) operator overloading

b) constructor overloading

c) destructor overloading

d) none of the mentioned

9. Overloaded functions are

a) Very long functions that can hardly run

b) One function containing another one or more functions inside it

c) Two or more functions with the same name but different number of parameters or type

d) None of the mentioned

10. What should be passed in parameters when function does not require any parameters?

a) void

b) blank space

c) both void & blank space

d) none of the mentioned.

UNIT- 5

1. How many specifiers are present in access specifiers in class?

a) 1

b) 2

c) 3

d) 4

2. Which is used to define the member of a class externally?

a) :

b) ::

c) #

d) none of the mentioned

3. Which other keywords are also used to declare the class other than class?

a) struct

b) union

c) object

d) both struct & union

4.The data members and functions of a class in C++ are by default _____

a) protected

b) private

c) public

d) none of the mentioned

5. When struct is used instead of the keyword class means, what will happen in the program?

a) access is public by default

b) access is private by default

c) access is protected by default

d) none of the mentioned

6.Where is the derived class is derived from?

a) derived

b) base

c) both derived & base

d) None of the mentioned

7.Which of the following can derived class inherit?

a) members

b) functions

c) both members & functions

d) none of the mentioned

8. Which keyword is used to define the user defined data types?

a) def

b) union

c) typedef

d) type

9.What does the data type defined by union will do?

a) It allow one different portion of memory to be accessed as same data types

b) It allow one same portion of memory to be accessed as same data types

c) It allow one different portion of memory to be accessed as different data types

d) It allow one same portion of memory to be accessed as different data types

10. Which interface determines how your class will be used by another program?

a) public

b) private

c) protected

d) none of the mentioned

Oop's with C++

K2 Level Questions

UNIT- 1

1. What is the size of wchar_t in C++?

Based on the number of bits in the system

2. Which data type is used to represent the absence of parameters?

void

3. What does '\a' escape code represent?

alert

4. Which type is best suited to represent the logical values?

boolean

5. The value 132.54 can be represented using which data type?

double

6. How many characters are specified in the ASCII scheme?

128

7. How do we represent a wide character of the form wchar_t?

L'a'

8. The size_t integer type in C++ is?

Unsigned integer of at least 16 bits

9. Which of three sizes of floating point types should be used when extended precision is required?

long double

10. The size of an object or a type can be determined using which operator?

sizeof operator.

UNIT-2

1. Which of the datatype will not return a value?

void

2. Which variable does equals in size with enum variable?

int variable

3. What is the dereferencing operator?

*

4. What is an array?

An array is a series of elements of the same type in contiguous memory locations

5. Which of the memory address of the first element in array?

array[0];

6. What is size of generic pointer in C++ (in 32-bit platform) ?

4

7. How are the constants declared?

both const keyword and #define preprocessor.

8. What is the difference between x and 'x' is

The first one refers to a variable whose identifier is x and the second one refers to the character constant x.

9. How to declare a wide character in the string literal?

L prefix

10. Which value can we not assign to reference?

null.

UNIT-3

1. What does a reference provide?

Alternate name for the variable

2. The data elements in the structure are also known as what?

members

3. What is the structure specifier?

The declaration of the structure is also called as structure specifier.

4. Which operator is having the right to left associativity?

Type cast

5. What is the conditional operator?

?:

6. The if..else statement can be replaced by which operator?

Conditional operator

7. Where does the execution of the program starts?

Main function

8. Which is more effective while calling the functions?

Call by reference

9. By default how the value are passed in c++?

Call by value

10. What will you use if you are not intended to get a return value?

Void

UNIT-4

1. When will we use the function overloading?

Same function name but different number of arguments

2. What will happen while using pass by reference

The location of variable in memory is passed to the function so that it can use the same memory area for its processing

3. What are the advantages of passing arguments by reference?

i) Changes to parameter values within the function also affect the original arguments

ii) There is need to copy parameter values (i.e. less memory used)

iii) There is no need to call constructors for parameters (i.e. faster)

4. What does a class in C++ holds?

i) data

ii) functions

5. What is the use of Constructors ?

Initialize the objects

6. How many types of loops are there in C++?

4

7. Which looping process is best used when the number of iterations is known?

for loop

8. What are mandatory parts in the function declaration?

return type, function name

9. What is the scope of the variable declared in the user defined function?

only inside the {} block

10. Which is used to keep the call by reference value as intact?

const

UNIT_5

1. Where does the return statement return the execution of the program?

caller function

2. How many ways of reusing are there in the class hierarchy?

2

3. What is the syntax of inheritance of class?

class name: access specifier class name

4. Which keyword is used to declare the friend function?

friend

5. What is the syntax of friend function?

friend class1 Class2;

6. What is a class?

- The entire set of data and code of an object can be made a user-defined data type with the help of a class.
- Once a class has been defined, we can create any number of objects belonging to the classes.
- Classes are user-defined data types and behave like built-in types of the programming language.

7. What is encapsulation?

Wrapping up of data and function within the structure is called as encapsulation.

8. Write the process of programming in an object-oriented language?

- Create classes that define objects and their behavior.
- Creating objects from [class definition](#).
- Establishing communication among objects.

9. What are manipulators?

setw, endl are known as manipulators.

Manipulators are operators that are used to format the display. The endl manipulator when used in an output statement causes a linefeed to be inserted and its effect is similar to that of the newline character "\n".

10. What are symbolic constants?

There are two ways for creating symbolic constants in C++:

- Using the **qualifier constant**.
- Defining a set of integer constants using **enum keyword**.

The program in any way cannot modify the value declared as constant in c++

OOP'S WITH C++

K3 LEVEL QUESTIONS

UNIT- 1

1. Explain about applications of OOP's
2. Write a C++ program using inline function.
3. Write a C++ program to illustrate the static function.
4. Discuss constant and volatile functions.
5. Explain the structure of C++ program
6. Write a program to explain the concept of array of objects
7. Write about inline function.
8. Discuss about access specifier. Write about declaring member function inside and outside a class.
9. Explain the copy constructors with an example?
10. Explain explicit Constructors, Parametrized Constructors, and multiple Constructors with suitable example.

UNIT- 2

11. How to achieve operator overloading through friend Function?
12. Explain in detail about the various run time casting in C++.
13. Explain in detail about dynamic objects. How are they created ?
14. What are the tokens and keywords used in C++.
15. Write down the different types of operators in C++.
16. Write short notes on manipulators.
17. List out the Expressions and the types in C++.
18. Discuss about declaration and reference variables.
19. Write the function prototyping with example.

UNIT- 3

20. Write about call by reference and return by reference
21. Write short notes on function overloading.
22. What is mean by friend function?
23. Write the main function in C++. With example.
24. Write short notes on private member function.
25. Write in detail about pointer to member function.
26. How we allocate memory for objects.

27. Write down the rules for overloading operators.
28. Write short notes on overloading of unary and binary operators.
29. Explain about type conversion with example.
30. Explain about hierarchical inheritance.

UNIT- 4

31. Write in detail about single inheritance
32. Distinguish multiple and multilevel inheritance
33. Write short notes on pointers.
34. Write about virtual and pure virtual function.
35. Compare procedure-oriented programming and object-oriented programming.
36. Explain data members and member function.
37. What are the differences b/w call by value and call by reference ?
38. What are constructors and destructors ? How do they differ from the normal function ?
Explain with examples ?
39. Explain overriding functions with an example.

UNIT- 5

40. Explain 'this' pointer. How do you access and return data using 'this' pointer ?
41. Explain reference variables.
42. Explain single inheritance and multiple inheritance.
43. Write the program to illustrate matrix multiplication.
44. Write the program to illustrate the use of 'new' in constructors.
45. Write the program to illustrate the use of base and derived constructors.
46. Explain hybrid inheritance with example.
47. Write a short notes on implicit conversion with example.
48. Write a short notes on special assignment expressions with example.
49. Explain constructors in derived classes.
50. Explain abstract classes with example.

OOP'S WITH C++

K4 LEVEL QUESTIONS

UNIT- 1

1. Explain in detail about Basic concepts of OOP's.
2. Explain in detail about control structure.
3. Write the program for function overloading.
4. Explain in detail about overloading binary operators using friends.
5. Discuss about i) Parameterized constructors ii) Copy constructors iii) Dynamic constructors.

UNIT- 2

6. Describe about virtual constructors and destructors.
7. List out the types of inheritance in detail.
8. Write a C++ program to overload '+' operator to perform addition of two matrices ?
9. What are the benefits of inheritance ? Explain inheritance technique with an example.
10. Write a C++ program to find sum of two complex numbers using friend function.

UNIT- 3

11. Explain the four different types of storage classes. With example.
12. Differentiate between user defined data types and derived data types.
13. What is a friend function? What are the merits and demerits of using a friend function?
14. What is a constructor? Write the syntax of declaring the constructor?
15. What are the special characteristics of constructor function?

UNIT- 4

16. Describe briefly the features of I/O system supported by C++.
17. List at least four new operators added by C++ which aid OOP and explain the application of the scope resolution operator:: in C++.
18. What is reference variable? What is its major use? Explain with an example.
19. Differentiate between multilevel inheritance and multiple inheritance with an example
20. Differentiate between hierarchical inheritance and hybrid inheritance with an example.

UNIT- 5

21. What is a destructor? Illustrate memory allocation to an object using destructor?
22. How to overload the binary operators. Explain.
23. Write the syntax for defining a derived constructor.
24. Differentiate between derived constructor and base constructor.
25. Write a program to illustrate the use of pointers to objects.