C++ Question Paper

Crack It!

1 The memory address of the first element of an array is called

1. floor address
2. foundation address
3. first address
4. **base address**
5. Which of the following is not the required condition for binary search algorithm?
6. The list must be sorted
7. there should be the direct access to the middle element in any sublist
8. **There must be mechanism to delete and/or insert elements in list**
9. None of the mentioned
10. A variable P is called pointer if
11. **P contains the address of an element in DATA.**
12. P points to the address of first element in DATA
13. P can store only memory addresses
14. P contain the DATA and the address of DATA
15. The term "push" and "pop" is related to the
16. array
17. list
18. **stacks**
19. all of the mentioned

1. The complexity of Binary search algorithm is
   1. O(n)
   2. **O(log n)**
   3. O(n2)
   4. O(n log n)

1. The elements of an array are stored successively in memory cells because
2. **by this way computer can keep track only the address of the first element and the addresses of other elements can be calculated**
3. the architecture of computer memory does not allow arrays to store other than serially
4. Both of the mentioned
5. None of the mentioned
6. Which of the following data structure is not linear data structure?
7. Arrays
8. Linked lists
9. Both of the mentioned
10. **None of the mentioned**
11. The operation of processing each element in the list is known as
12. Sorting
13. Merging
14. Inserting
15. **Traversal**

1. Arrays are best data structure
2. **for relatively permanent collections of data**
3. for the size of the structure and the data in the structure are constantly changing
4. for both of above situation
5. for none of above situation

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ enables you to hide, inside the object, both the data fields and the methods that act on that data.
2. **Encapsulation**
3. Polymorphism
4. Inheritance
5. Overloading
6. \_\_\_\_\_\_\_\_\_ is an abstract idea that can be represented with data structures and functions.
7. **class**
8. object
9. loop
10. data type
11. A class can allow non-member functions and other classes to access its own private data, by making them as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
12. private
13. protected
14. **Friend**
15. Public
16. \_\_ is the process of creating new classes, called derived classes, from existing classes called base class
17. **Inheritance**
18. Encapsulation
19. Polymorphism
20. Overloading

1. Which of the following statements is correct?
2. **Base class pointer cannot point to derived class.**
3. Derived class pointer cannot point to base class.
4. Pointer to derived class cannot be created.
5. Pointer to base class cannot be created.

1. Which of the following concepts means waiting until runtime to determine which function to call?
2. Data hiding
3. Dynamic casting
4. Dynamic binding
5. **Dynamic loading**

1. Which of the following concepts provides facility of using object of one class inside another class?
2. Encapsulation
3. Abstraction
4. **Composition**
5. Inheritance
6. Which of the following statement is correct?
7. **A constructor is called at the time of declaration of an object.**
8. A constructor is called at the time of use of an object
9. A constructor is called at the time of declaration of a class.
10. A constructor is called at the time of use of a class.

1. To ensure that every object in the array receives a destructor call, always delete memory allocated as an array with operator \_\_\_\_\_\_\_\_\_\_
2. destructor
3. **delete[]**
4. delete
5. kill[]

1. Which of the following statement is correct about constructors?
2. A constructor has a return type.
3. A constructor cannot contain a function call.
4. **A constructor has no return type**.
5. A constructor has a void return type
6. Which of the following statement is correct whenever an object goes out of scope?
7. The default constructor of the object is called.
8. The parameterized destructor is called.
9. **The default destructor of the object is called.**
10. None of the above
11. How many times a constructor is called in the life-time of an object?
12. Only once
13. Twice
14. Thrice
15. **Depends on the way of creation of object**

1. How to declare operator function?
2. Operator
3. **operator sign operator**
4. operator sign
5. None of the mentioned
6. Operator overloading is
7. making c++ operator works with objects
8. giving new meaning to existing operator
9. making new operator
10. **both a & b**

1. What is the Run-Time Type Information?
2. **Information about an object’s datatype at runtime**
3. Information about the variables
4. Information about the given block
5. None of the mentioned
6. What is meant by ofstream in c++?
7. **Writes to a file**
8. Reads from a file
9. Both a & b
10. None of the mentioned

**Design a solution by identifying all the classes and relationships from the problem statements.**

1. A customer can hold a savings and current account. A Corporate customer can additionally hold an Overdraft account. (5 marks)
2. Every Project has a Project Manager and a manager can manage many projects. Many Project Leads work on a single project and report to a Project Manager. (5 marks)

**Write Program for the below problem statements**

1. Print the Series 1, -4, 9, -25, 36, -49, 81, -100, … N (5 marks)
2. Write a Program to display the 1st, 2nd and 4th multiple of 7 which also gives the remainder 1, when divided by 2, 3, 4, 5, and 6. (10 marks)