1.a

Abstract Class is a class which contains atleast one Pure Virtual function in it. Abstract classes are used to provide an Interface for its sub classes. Classes inheriting an Abstract Class must provide definition to the pure virtual function, otherwise they will also become abstract class. Abstract class cannot be instantiated, but pointers and references of Abstract class type can be created.

1.b

Inline functions are actual functions, which are copied everywhere during compilation, like preprocessor macro, so the overhead of function calling is reduced. All the functions defined inside class definition are by default inline,

1.c

Overloading a method (or function) in C++ is the ability for functions of the same name to be defined as long as these methods have different signatures (different set of parameters). Method overriding is the ability of the inherited class rewriting the virtual method of the base class.

1.d

Copy Constructor is a type of constructor which is used to create a copy of an already existing object of a class type. It is usually of the form **X (X&)**, where X is the class name.The compiler provides a default Copy Constructor to all the classes

2

 Members of a class are private by default and members of struct are public by default.

When deriving a struct from a class/struct, default access-specifier for a base class/struct is public. And when deriving a class, default access specifier is private

|  |  |
| --- | --- |
| **Structure** | **Class** |
| Its object is created on the stack memory. | Its object is created on the heap memory. |
| It does not support inheritance. | It supports inheritance. |
| The member variable of structure cannot be initialized directly. | The member variable of class can be initialized directly. |
| It can have only parameterized constructor. | It can have all the types of constructor and destructor |

3:- B

4:- B