

Java – Learn From Home

Quiz – Chapter 1

- 1) A _____ member is declared by using the static modifier.
- a) instance
 - b) local
 - c) class
 - d) reference

Answer : c

Explanation : class variables are declared as static, i.e static variables are also called as class variables.

- 2) Static methods can access static variables
- a) true
 - b) false

Answer : a

Explanation : static methods can access static variables but they cannot access non-static members and methods

- 3) A member, either a variable or a method, declared within a class is
- a) static member
 - b) an instance member
 - c) local member
 - d) global member

Answer : b

Explanation : A member, either a variable or a method, declared within a class is an instance member as you can call using instances after creating object by using new.

4) An instance member is initialized to its default value

- a) true
- b) false

Answer : a

Explanation : instance members will be initialized to its default values at the time of object construction. It takes null for objects and defaults values for the primitive types.

5) Static methods cannot directly access instance members

- a) true
- b) false

Answer : a

Explanation : Static methods can not directly access any instance variables or methods. But they can access them by using their object reference. Static methods may even access private instance variables via a object reference.

6) _____ are the blocks of code that execute in the order they are specified

- a) Synchronous blocks
- b) Anonymous blocks
- c) Named blocks
- d) static blocks

Answer : d

Explanation : static blocks execute in whichever the order they are specified.

7) Instance initializer blocks are used to initialize _____ each time the class is instantiated.

- a) local variables
- b) global variables
- c) static variables
- d) instance variables

Answer : d

Explanation : Instance initializer blocks initialize instance variables. It runs each time when object of the class is created.

- 8) A constructor is
- a) a method with exactly the same name as the class to which it belongs
 - b) has no return type
 - c) initializes an object immediately upon creation
 - d) can be parameterized
 - e) All of the Above

Answer : e

Explanation : All of the Above is the answer

- 9) Default constructors is created only if there are no constructors
- a) true
 - b) false

Answer : a

Explanation : By default,

- 10) Invoking System.gc may start garbage collection process
- a) true
 - b) false

Answer : a

Explanation : System.gc() when invoked programatically will start garbage collection process, but cannot be guaranteed

- 11) _____ thread runs in a low priority and may kick in when memory is too low but no guarantee
- a) Daemon
 - b) Garbage Collector
 - c) Thread.sleep()
 - d) finalize()

Answer : b

Explanation : Whenever the application experiences low on memory, garbage collector thread executes and we cannot predict when it gets executed

- 12) _____ method is used to release system resources other than memory such as file handles , network / database connections.

- a) Thread.sleep()
- b) System.Runtime()
- c) System.gc()
- d) finalize()

Answer : d

Explanation : finalize() is used to release system resources

13) _____ is a mechanism for reclaiming memory from objects that are no longer referenced by the program, and making the memory available for new objects.

- a) ByteCode Verifier
- b) Garbage Collection
- c) Class Loader
- d) None of the Above

Answer : b

Explanation : Garbage Collection is a mechanism for removing the unused objects and making the memory available for new objects.

14) It is possible to force garbage collection

- a) true
- b) false

Answer : b

Explanation : We cannot force garbage collection

15) _____ facilitates reusability of code by deriving a new class from an existing one

- a) Abstraction
- b) Encapsulation
- c) Inheritance
- d) Polymorphism

Answer : c

Explanation : Inheritance allows a class to use the properties and methods of another class. In other words, the derived class inherits the states and behaviors from

the base class. The derived class is also called subclass and the base class is also known as super-class.

16) All Java classes are extended from a common base class automatically

- a) java.lang.Class
- b) java.lang.Object
- c) java.lang.Thread
- d) None of the Above

Answer : b

Explanation : The root class for all the classes in java is java.lang.Object

17) Derived classes can access the private members of the base class

- a) true
- b) false

Answer : b

Explanation : Derived classes cannot access the private members of the base class, as the owner or class author can access them

18) _____ calls a constructor in a parent class

- a) super()
- b) this()
- c) a & b
- d) All of the Above

Answer : a

Explanation : super() calls a constructor in a parent class

19) _____ pattern ensures that one and only one object is instantiated for given class

- a) Facade
- b) Command
- c) Singleton
- d) Factory

Answer : c

Explanation : It restricts the instantiation of a class and ensures that only one instance of the class exists in the java virtual machine. The singleton class must provide a global access point to get the instance of the class. Singleton pattern is used for logging, drivers objects, caching and thread pool

20) A class can extend only one base class

- a) true
- b) false

Answer : a

Explanation : because java does not support multiple inheritance at class level