

## Assignment 28

Q1] Can an abstract method have static qualifier?

No, an abstract method cannot have a static qualifier. Static methods belong to the class while abstract methods are meant to be overridden by subclasses.

Q2] What kind of thread is the garbage collector thread?

The garbage collector is a daemon thread.

It runs in the background & automatically frees memory by removing unreferenced objects.

Q3] What is a daemon thread?

It is a low priority thread that runs in the background.

It provides support services to user threads.

It terminates when all user threads finish execution.

Q4] What is use of finally block?

It executes the code regardless of exceptions.

It is mainly used for cleanup operations such as closing files or releasing resources.

Q5] What is mutable & immutable object?

Mutable: Its state can be changed after creation.

Immutable: its state cannot be changed after creation.



Q6] Difference b/w String & StringBuffer object?

String: Immutable (cannot be changed after creation)

StringBuffer: Mutable (can be modified)

StringBuffer is more efficient for frequent string modifications

Q7] What is the base class for error & Exception?

The base class for both Error & Exception is the Throwable class

It handles all exceptional cond<sup>n</sup>s in Java.

Q8] What are the inbuilt packages in Java?

java.lang: Core classes (String, Math, etc)

java.util: Data structures, collections

java.io: i/p - o/p operations

java.sql: Database connectivity

Q9] Is JVM a compiler or interpreter?

JVM is both:

Interpreter: Executes bytecode line by line

JIT compiler: Compiles bytecode into native machine code for faster performance.



Q10] What is the use of final keyword:

final is used to restrict modifications:

final variable: makes variable constant

final method: cannot be overridden

final class: cannot be inherited.