Java Programming
Practice mcqs

1. Number of primitive data types in Java are?

- [ ] 6
- [ ] 7
- [ ] 8
- [ ] 9

2. What is the size of float and double in java?

- ✔ **32 and 64**
- ☐ 32 and 32
- ☐ 64 and 64
- ☐ 64 and 32

13. When is the object created with new keyword?

- ☑ **At run time**
- ☐ At compile time
- ☐ Depends on the code
- ☐ None

1) Which of the following is true?

    a. Java uses only interpreter.
    b. Java uses only compiler.
    c. Java uses both interpreter and compiler.
    d. None of the above.

A Java file with extension '.class' contains

    a. Java source code
    b. HTML tags
    c. Java Byte code
    d. A program file written in Java programming language

Which of the following features are **not** common in both Java and C++?

    a. The class declaration.
    b. The access modifiers.
    c. The encapsulation of data and methods.
    d. Multiple inheritancefrom class

A platform is the hardware or software environment in which a program runs. Which of the following is/are Java platform component(s)?

a. HTML
b. Java Virtual Machine
c. Java Application Programming Interface (API)
d. HotJava

20) What do you mean by nameless objects?

    a. An object created by using the new keyword.

    b. An object of a superclass created in the subclass.

    c. An object without having any name but having a reference.

    d. An object that has no reference.

Which of the following **cannot** be used for a variable name in Java?

a. identifier
b. final
c. malloc
d. calloc

Which of the following is an incorrect array declaration?

a. int[] a = new int[20];

b. int [ ] a;

c. int[][] a = new int[20];

d. int[][] a = {{1, 2, 4}, {1, 2, 4}};

Which of the following is an invalid method overloading?

a. `static double add(int a, double b){return a*b;}`
   `static double add(double a, int b){return a*b;}`

b. `static int add(int a, int b){return a*b;}`
   `static int add(int a, int b, int c){return a*b*c;}`

c. `static int add(int a, int b){return a*b;}`
   `static double add(int a, int b, double c){return a*b*c;}`

d. `static int add(int a,int b){return a*b;}`
   `static double add(int a,int b){return a*b;}`

Which of the following can be used to take input from user during the execution of a program?

a. Using the string array provided as a parameter to the main method.
b. getText() method can be used to get user input from the command line.
c. Scanner class can be used by passing the predefined object System.in
d. Once the execution starts, there is no way to provide user input.

Which of the following is/are TRUE about print() and println() methods?

a. `print()` prints in a single line only and multiple lines cannot be printed in any way.
b. `println()` prints and then appends a line break.
c. `println()` prints in a single line only and multiple lines cannot be printed.
d. `print()` prints and then appends a line break.

Which of the following is called when a method having the same name as that the name of the class where it is defined?

a. abstract
b. this
c. constructor
d. final

10. **Which of the following is a Class in Java?**

    a. int
    b. String
    c. short
    d. double

Which of these is used by operating system to manage the Recursion in Java?

a. Array
b. Stack
c. Queue
d. Tree

2) Which inheritance in Java programming is not supported?

    a. Multiple inheritance using classes.
    b. Multiple inheritance using interfaces.
    c. Multilevel inheritance.
    d. Single inheritance.

If there is an abstract method in a class, then which of the following is/are NOT true.

a. The class should be declared abstract.
b. No object of the class can be created.
c. Any subclass of the class may or may not be abstract class.
d. A final class can have abstract method(s) and an abstract class can be declared final.

Which of the following statement is true regarding the order of execution of constructors in an inheritance hierarchy?

a. Base class constructor will be called followed by the derived class constructor.
b. Derived class constructor will be called followed by the base class constructor.
c. Only Base class constructor will be called.
d. Only derived class constructor will be called.

Consider the composition of two classes as given below.

```java
Public class Question5{
    public static void main(String args[]){
        String question= "Which course have you opted?";
        System.out.print(Answer.submit(question));
    }
}

class Answer{
    static String answer = "Programming with Java";
    static String submit(String question){
    return ("The answer to the question, "+question+" is "+answer);
    }
}
```

Which of the following option is true about the above program?

a. Error: *String cannot be a method return type like void, int, char, etc.; as it is a class.*
b. Error: *Non-static variable 'answer' cannot be referenced from a static context.*
c. Output: The answer to the question, Which course have you opted? is Programming with Java
d. Error: *Compilation error as variable 'question' is not static.*

Which of the following can be used for a variable name in Java?

a. byte
b. throw
c. this
d. extend

Which of the following is used to find and fix bugs in the Java programs?

a. JVM
b. JRE
c. JDK
d. JDB

What is the output of the following program?

```
public class Main{
        public static void main(String args[]){
                char a = '8';
                int b=010;
                System.out.println(a+b);
        }
}
```

a. 88
b. 8010
c. 64
d. 810

What was the initial name of Java when it was first developed for embedded systems?

    a. Greentalk
    b. Oak
    c. Java
    d. Javac

Which of the following is a valid declaration of an object of class, say Foo?

a. Foo obj = new Foo;
b. obj = new Foo();
c. Foo obj = new Foo();
d. new Foo obj;

If a class inheriting an abstract class does not define all of its functions then it will be known as?

a) Default
b) Abstract
c) A simple class
d) Static class

Which among the following best describes polymorphism?

a) It is the ability for many messages/data to be processed in one way
b) It is the ability for a message/data to be processed in only 1 form
c) It is the ability for a message/data to be processed in more than one form
d) It is the ability for undefined message/data to be processed in at least one way

Disadvantage(s) of inheritance in Java programming is/are

a) Code readability
b) two classes (base and inherited class) get tightly coupled
c) Code maintainability
d) Code reusability

.

Correct Answer: b

15. Identify the correct restriction on static methods.

1. They must access only static data
2. They can only call other static methods.
3. They cannot refer to this or super.

- [ ] I and II
- [ ] II and III
- [ ] Only III
- [x] I, II and III

All the variables of the interface should be?
a) default and final
b) default and static
c) public, static and final
d) protect, static and final

When does method overloading is determined?

a) At run time
b) At coding time
c) At compile time
d) At execution time

```
public class Test1{
    Test1() {
        Test1 obj1 = new Test1();
}

public static void main(String []args) {
    Test1 obj = new Test1();
     System.out.println("Hello");
 }
}
```

Which of the following statements is/ are true?

a. Output : Hello
b. Program will compile successfully.
c. There will be a compile-time error.
d. The program will give a runtime error.

Correct Answer: b, d

Which of the following statement(s) is/are true?

a. Hiding internal data from the outside world, and accessing it only through publicly exposed methods is known as data **encapsulation**.
b. Common behavior can be defined in a **superclass** and inherited into a **subclass** using the **extends** keyword.
C. The term "class variable" is another name for **static field**.
d. A local variable stores temporary state; it is declared inside a **method**.

Correct Answer: a,b,c,d

Detailed Solution: The term "class variable" is another name for **static field**.

Which of these is a mechanism for naming and visibility control of a class and its content?

a. Objects.
b. Interfaces.
c. Packages.
d. Both a and b.

Correct Answer: c

Which of the following packages is used to includes utility classes like Calendar, Collections, Date?

a. java.lang
b. java.util
c. java.net
d. java.awt

Correct Answer: b

Which of the following statement(s) is/are true ?

a. A class can extend more than one class.
b. An interface can extend many interfaces.
c. An interface can implement many interfaces.
d. A class can extend one class and implement many interfaces.

Correct Answer: b,d

Which of these access specifier(s) can be used for an interface?

a. Public
b. Protected
c. Private
d. Both b and c

Correct Answer: a

QUESTION 9:

All classes in Java are inherited from which class?

a. java.lang.class
b. java.class.inherited
c. java.class.object
d. java.lang.Object

Correct Answer: d

Which of the following control expressions are valid for an if statement?

    a. Any integer expression.

    b. Any Boolean expression.

    c. A String object.

    d. Any expression with mixed arithmetic.

Correct Answer: b

Which package provides many event classes and Listener interfaces for event handling?

a. java.awt.activeevent
b. java.awt.event
c. java.awt.listener
d. none of these

Correct Answer: b

Which of the following displays components row-by-row in the order in which they were added to the JFrame?

a. CardLayout
b. FlowLayout
c. BorderLayout
d. GridLayout

Correct Answer: b

Which of the following is/are NOT Standard Stream(s)?

a. System.in
b. System.out
c. System.err
d. System.console

Correct Answer: d

Which of the following can be used to create an instance of Thread?

   a. By implementing the Runnable interface.
   b. By extending the Thread class.
   c. By creating a new class named Thread and calling method run().
   d. By importing the Thread class from package.

Correct Answer: a, b

1)

Which one is correct declaration for implementing two interfaces?

a. class C implements A, B { }
b. class C implements A, implements B { }
c. class C implements A extends B { }
d. class C extend A, B { }

Which access type data gets derived as private member in derived class?

a. private
b. public
c. protected
d. default

All interface methods are implicitly

a. public and final
b. public and abstract
c. protected and abstract
d. private and abstract

Which of the following method can be used to know the priority of a thread?

a. getPriority()
b. priority()
c. isRunning()
d. getThreadPriority()

Which of these keywords must be used to monitor for exceptions?

a. try
b. finally
c. throw
d. catch

Which one of these keywords must be used to handle the exception thrown by try block in some rational manner?

a. try
b. finally
c. throw
d. catch

6) **Which of the following will contain the body of the thread?**

    a. run();
    b. start();
    c. stop();
    d. main();

Which of these keyword(s) is used to manually throw an exception?

    a.   try

    b.   finally

    c.   throw

    d.   catch

In which Java APIs the classes for handling all IO-streams are defined?

a. java.lang
b. java.util
c. java.io
d. java.awt

Which of the following methods is/are must and to be override?

    a. init()
    b. start()
    c. stop()
    d. paint()

Which of the following methods help in clearing the contents of the buffer:

a. flush()
b. clear()
c. close()
d. exit()

23. What does the following string do to given string str1.

String str1 = "Interviewbit".replace('e','s');

- [ ] Replaces single occurrence of 'e' to 's'.

- [✓] **Replaces all occurrences of 'e' to 's'.**

- [ ] Replaces single occurrence of 's' to 'e'.

- [ ] None.

26) In which memory a String is stored, when we create a string using **new** operator?

a. Stack

b. String memory

c. Heap memory

d. Random storage space

30) Which keyword is used for accessing the features of a package?

    a. package

    b. import

    c. extends

    d. export

4. **What is method overloading in Java?**

A. ○ Defining multiple methods with the same name in the same class

B. ○ Calling methods from another class

C. ○ Using methods to load data from a file

D. ○ Running methods in parallel threads

9. Which keyword is used to prevent method overriding in Java?

A. ○ final

B. ○ abstract

C. ○ static

D. ○ override

What is the primary focus of Java programming?

    a. Low-level optimizations

    b. Hardware-specific operations

    c. Platform independence

    d. Assembly language programming

Correct Answer:

    c. Platform independence

Which of the following programming principles is a key aspect of Java?

a. Code obfuscation

b. Platform dependence

c. Object-oriented programming

d. Global variables

Correct Answer:

c. Object-oriented programming

What is the last step in the Java programming process?

a. Java Program Execution

b. Java Program Editing

c. Java Program Compilation

d. C/C++ versus Java

Correct Answer:

a. Java Program Execution

Which of the following is NOT a Java programming tool?

    a. Eclipse

    b. NetBeans

    c. IntelliJ IDEA

    d. GCC

Correct Answer:

    d. GCC

What does the term "Write Once, Run Anywhere" (WORA) imply in Java?

a. Code reusability

b. Platform independence

c. Cross-compilation

d. Dynamic typing

Correct Answer:

b. Platform independence

In Java, what is used to store multiple values of the same type?

    a. Structures

    b. Pointers

    c. Arrays

    d. Lists

Correct Answer:

    c. Arrays

Which of the following is a valid identifier in Java?

    a. 123identifier

    b. _identifier

    c. #identifier

    d. identifier-123

Correct Answer:

    b. _identifier

What is the purpose of Java Language Subset?

    a. To limit the capabilities of Java

    b. To make Java code compatible with other languages

    c. To define a smaller set of Java features for specific purposes

    d. To enhance the performance of Java programs

Correct Answer:

    c. To define a smaller set of Java features for specific purposes

What is the primary purpose of the Java Virtual Machine (JVM) in the Java programming language?

a. Code optimization

b. Platform independence

c. Memory management

d. Hardware-specific operations

Correct Answer:

b. Platform independence

In Java programming an object can take many forms. This feature called _____.

a. Abstraction
b. Polymorphism
c. Encapsulation
d. Inheritance

Correct Answer:

b. Polymorphism

A default constructor:

a. has no arguments
b. has no return type
c. has one argument but no return type
d. has two arguments

Correct Answer:

a. has no arguments

A top-level class may have which one of the following access modifiers?

a. package
b. private
c. protected
d. public

Correct Answer:

d. public

`Integer` in Java is a\an _____.

   a.   Adapter class
   b.   Inner class
   c.   Not a class
   d.   Wrapper class

Correct Answer:

   d.   Wrapper class

What is true about the new operator?

a. returns a pointer to a variable
b. creates a variable called new
c. obtains memory for a new variable
d. tells how much memory is available

Correct Answer:

c. obtains memory for a new variable

Which one is not supported by OOP?

    a. Abstraction
    b. Polymorphism
    c. Encapsulation
    d. Global variables

Correct Answer:

    d. Global variables

Which of the following modifiers can be used to disallow a method from being overridden?

a. final
b. transient
c. volatile
d. static

Correct Answer:

a. final

Which of the following modifiers can be used to disallow a method from being overridden?

a. final
b. transient
c. volatile
d. static

Correct Answer:

a. final

Which of the following modifiers can be used to disallow a method from being overridden?

a. final
b. transient
c. volatile
d. static

Correct Answer:

a. final

Which of the following modifiers can be used to disallow a method from being overridden?

a. final
b. transient
c. volatile
d. static

Correct Answer:

a. final

Which of the following modifiers can be used to disallow a method from being overridden?

a. final
b. transient
c. volatile
d. static

Correct Answer:

a. final

Which of the following modifiers can be used to disallow a method from being overridden?

a. final
b. transient
c. volatile
d. static

Correct Answer:

a. final

When we invoke `repaint()` for a `java.awt.Component` object, the AWT invokes which of the following method ?

    a. draw( )
    b. show( )
    c. update( )
    d. paint( )

Correct Answer: c

Detailed Solution:
The repaint() method calls automatically update() method and in turn update() method calls paint( ) method.

QUESTION 5:

Which package provides many event classes and Listener interfaces for event handling?

    a. java.awt
    b. java.lang
    c. java.io
    d. java.util

Correct Answer: a

QUESTION 7:

Which of the following is TRUE regarding check box and radio button?

a. Check box is used for single selection item whereas radio button is used for multiple selection.

b. Check box is used for multiple selection items whereas radio button is used for single selection.

c. Both are used for multiple as well as single item selection.

d. Checkbox is always preferred than radio buttons.

Correct Answer: b

QUESTION 3:

Which of the following is NOT a Standard Stream?

    a. System.in
    b. System.out
    c. System.err
    d. System.console

Correct Answer: d

QUESTION 1:

Which of the following is NOT a method of the Thread class in Java?

a. `isInterrupted()`
b. `interrupt()`
c. `joins()`
d. `sleep()`

Correct Answer: c

QUESTION 3:

Which of the following can be used to create an instance of Thread?

 a. By implementing the Runnable interface.
 b. By extending the Thread class.
 c. By creating a new class named Thread and calling method run ().
 d. By importing the Thread class from package.

Correct Answer: a, b

What is the output of the following program?

```java
public class Question
    {
     public static void main(String[] args) {

        try {
            int a=5/0;

        } catch (Exception e) {

            catch (ArithmeticException a) {

        }

        }
           System.out.println("Hello World");
        }
}
```

a. Hello World
b. 5
c. Compile time error
d. ArithmeticException

Correct Answer: c

Which one of these keywords must be used to handle the exception thrown by try block in some rational manner?

a. try
b. finally
c. throw
d. catch

Correct Answer: d

Detailed Solution:
The catch block is responsible for handling the exceptions raised by try block.

Which of these keyword(s) is used to manually throw an exception?

a. try
b. finally
c. throw
d. catch

Correct Answer: c

Which of the following keywords is/are a part of exception handling?

a. finally

b. throws

c. throw

d. thrown

Correct Answer: a, b, c

Which of the following is NOT a method of the Thread class in Java?

a. public void run()
b. public void exit()
c. public void start()
d. public final int getPriority()

Correct Answer: b

Which exception is thrown when an array element is accessed beyond the array size?

A. ArrayElementOutOfBounds
B. ArrayIndexOutOfBoundsException
C. ArrayIndexOutOfBounds
D. None of these

Answer: B