



Java Programming – Quiz I

Review of UNIT I

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Home

Question I

- What is byte code in the context of Java?
 1. The type of code generated by a Java compiler
 2. The type of code generated by a Java Virtual Machine
 3. It is another name for a Java source file
 4. It is the code written within the instance methods of a class

Answer:

1. The type of code generated by a Java compiler

Question 2

- What is garbage collection?
 1. The operating system periodically deletes all of the java files available on the system.
 2. Any package imported in a program and not used is automatically deleted.
 3. When all references to an object are gone, the memory used by the object is automatically reclaimed.
 4. The JVM checks the output of any Java program and deletes anything that doesn't make sense.

Answer:

- When all references to an object are gone, the memory used by the object is automatically reclaimed.

Question 3

- What is different between a Java applet and a Java application?

Answer:

- An applet must be executed in a browser environment.
- Application is executed by JVM

Question 4

`submarine.dive(depth);`

What can you say for sure?

1. `depth` must be an `int`
2. `dive` must be a method.
3. `dive` must be the name of an instance field.
4. `submarine` must be the name of a class

Answer:

- `dive` must be a method.

Question 5

- When method defined in subclass which has same signature as a method in a super class, it is known as?
 1. Overloading
 2. Overriding
 3. Packing
 4. none of these

Answer:

- **Overriding**

Question 6

- A class that cannot be a superclass is called as _____ class.

1. Abstract

2. parent class

3. Final

4. none of these

Answer:

- Final

Question 7

- Are JVM's platform independent?

Answer:

- JVM's are not platform independent. JVM's are platform specific run time implementation provided by the vendor

Question 8

- How to define a constant variable in Java?

Answer:

- `final int var_name=value;`

Question 9

- Does the order of public and static declaration matter in main() method?

Answer:

- No. It doesn't matter but void should always come before main().

Question 10

- Difference between final and finalize()?

Answer:

- final is a modifier which can be applied to a class or a method or a variable
- finalize() is a method of Object class used for garbage collection

Question | |

- What is an Abstract Class and what is its purpose?

Answer:

- A Class which doesn't provide complete implementation is defined as an abstract class

Question 12

- Can a abstract class be declared final?

Answer:

- Not possible. An abstract class without being inherited is of no use and hence will result in compile time error

Question 13

- Which will legally declare, construct, and initialize an array?

1. `int [] myList = {"1", "2", "3"};`

2. `int [] myList = (5, 8, 2);`

3. `int myList [] [] = {4,9,7,0};`

4. `int myList [] = {4, 3, 7};`

Answer:

4. `int myList [] = {4, 3, 7};`

Question 14

- What is the difference between a JDK and a JVM?

Answer:

- JDK is Java Development Kit – for both development and execution environment.
- But JVM is purely a run time environment. Not possible to compile source file.

Question 15

- Should a `main()` method be compulsorily declared in all java classes?

Answer:

- No not required. `main()` method should be defined only if the source class is a java application

Question 16

- Can a `main()` method be declared `final`?

Answer:

- Yes.
- Inheriting class may not have its own `main()` definition.

Question 17

- What happens when abstract variables are created?

Answer:

- Variables can't be declared as abstract. only classes and methods can be declared as abstract

Question 18

- Which one is a valid declaration of a boolean?
 1. `boolean b1 = 0;`
 2. `boolean b2 = 'false';`
 3. `boolean b3 = false;`
 4. `boolean b4 = no;`

Answer:

3. `boolean b3 = false;`

Question 19

- What is the implication of this logo?



Answer:

- Android Application Market
- A store where various android apps are purchased and downloaded

Question 20

- Infer this image



Answer:

- Using java for cloud technology
- Cloud computing is the delivery of computing as a service rather than a product, whereby shared resources, software, and information are provided to computers and other devices as a utility (like the electricity grid) over a network (typically the Internet)

Question 21

- What is platform?

Answer:

- A platform is basically the hardware or software environment in which a program runs

Question 22

- What gives Java its 'write once and run anywhere' nature?

Answer:

- The bytecode

Question 23

```
class Equals
{
    public static void main(String [] args)
    {
        int x = 100;
        double y = 100.1;
        boolean b = (x = y);
        System.out.println(b);
    }
}
```

Output?

1. True
2. False
3. Compilation Fails
4. 0

Answer:

- **Compilation fails**

Question 24

- Is Empty .java file name a valid source file name?

Answer:

- Yes, save your java file by .java only, compile it by `javac .java` and run by `java yourclassname`

Question 25

- Infer this image



Answer:

- Various Mobile Operating System

Question 26

- Can we override the overloaded method?

Answer:

- Yes

Question 27

- Can there be any abstract method without abstract class?

Answer:

- No, if there is any abstract method in a class, that class must be abstract.

Question 28

```
class Test
{
    public static void main(String [] args)
    {
        int x=20;
        String sup = (x < 15) ? "small" : (x < 22)? "tiny" : "huge";
        System.out.println(sup);
    }
}
```

Answer:

- tiny

Question 29

- The property that keeps code and data safe from outside interference and misuse is?

Answer:

- Encapsulation or Data Hiding

Question 30

- What is Type Casting?

Answer:

- A data type conversion method, between two incompatible types.
- Supports Narrowing (Reducing) conversion.

Question 31

```
class SSBool
{
    public static void main(String [] args)
    {
        boolean b1 = true;
        boolean b2 = false;
        boolean b3 = true;
        if ( b1 & b2 | b2 & b3 | b2 ) /* Line 8 */
            System.out.print("ok ");
        if ( b1 & b2 | b2 & b3 | b2 | b1 ) /*Line 10*/
            System.out.println("dokey");
    }
}
```

Answer:

- dokey

Question 32

- Give an example (pre-defined method) for polymorphism?

Answer:

- `System.out.println()`
- `abs()`
- `sqr()`

Question 33

- Difference between Call-by-value and Call-by-reference?

Answer:

- Call-by-Value
 - changes made to the parameter of the subroutine have no effect on the argument
- Call-by-Reference
 - changes made to the parameter will affect the argument used to call the subroutine

Question 34

- The process of defining a method in terms of itself is called?

Answer:

- Recursion

Question 35

- Which of the following is true regarding “Static” declaration of a method?
 1. The method can access any variable
 2. They cannot refer to “this” or “super” keywords
 3. The method can no longer be redefined
 4. The method can be accessed by any other non-static methods

Answer:

- 2.They cannot refer to “this” or “super” keywords

Question 36

What is the widest valid returnType for methodA in line 3?

```
public class ReturnIt
```

```
{
```

```
    returnType methodA(byte x, double y)    /* Line 3 */
```

```
{
```

```
    return (long)x / y * 2;
```

```
}
```

```
}
```

a) Int

b) byte

c) Long

d) double

Answer:

- double

Question 37

- _____ is used to find the number of elements that an array can hold?
 - a) size
 - b) length
 - c) dimension
 - d) scope

Answer:

- b) length

Question 38

- In `System.out.println()`, what is `System`, `out` and `println`?

Answer:

- System is a predefined final class, out is a `PrintStream` object and println is a built-in overloaded method in the `out` object.

Question 39

- Which two cause a compiler error?
 1. `float[] f = new float(3);`
 2. `float f2[] = new float[];`
 3. `float[]f1 = new float[3];`
 4. `float f3[] = new float[3];`
 5. `float f5[] = {1.0f, 2.0f, 2.0f};`

Answer:

- 1,2

Question 40

- The _____ class does not have access to the members of the _____ class
 1. Enclosing, Nested
 2. Nested, Enclosing
 3. Derived, Base
 4. Private, Public

Answer:

- 1. Enclosing (outer), Nested (inner)

Question 41

- What is *variable-arity* method?
- Give example.

Answer:

- A method that takes variable number of arguments
- `System.out.println();`

Question 42

```
class base
{
    base() {
        System.out.print("base ");
    }
}
class sub extends base
{
    sub() {
        System.out.print("sub");
        super();
    }
}
class Sample {
    public static void main(String arg[])
    {
        sub s=new sub();
    }
}
```

Output of the program:

- a) base sub
- b) sub base
- c) sub
- d) error

Answer:

- d) Error. Super() should be the first statement inside sub class constructor

Question 43

- Java is?
 - a) Code – based programming model
 - b) Data – based programming model

Answer:

- b) Data based (Object Oriented)

Question 44

- What is Dynamic Method Dispatch?

Answer:

- Run-time Polymorphism
- call to an overridden method is resolved at run time, rather than compile time

Question 45

```
class A {  
    final void meth() {  
        System.out.println("MethodA");  
    }  
}  
class B extends A {  
    void meth() {  
        System.out.println("MethodB");  
    }  
}  
class sample {  
    public static void main(String args[]) {  
        B bb=new B();  
        bb.meth();    } }  
}
```

Output of the program:

- a) Method A
- b) Method B
- c) Both a and b
- d) Error

Answer:

- d) Error. Final Method Overridden

Question 46

- LUCKY
- Name of our Prime Minister?

Answer:

- Narendra Damodardas Modi

Question 47

- **MOST LUCKY**

Answer:

- **10 Marks**

Question 48

- Infer these personalities?



Answer:

- Founders of google
- Larry Page
- Sergey Brin

Question 49

- What is servlet?

Answer:

- A small program that executes on the server, which dynamically extend the functionality of Web Server

Question 50

- Who Developed Java? Which company owns it?

Answer:

- James Gosling, Sun Micro Systems

