PROGRAMMING IN JAVA

Assignment 1

TYPE OF QUESTION: MCQ

Number of questions: 10 **Total mark: 10 × 1 = 10**

QUESTION 1:

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

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

Correct Answer: b

Detailed Solution:
case is a reserved keyword in Java, which cannot be used for naming a variable or class.

QUESTION 2:

Which of the following is an incorrect array declaration?

a. int[] b = new int[10];
b. int [ ] b;
c. `int[][] b = new int[10];`
d. `int[][] b = {{7, 2, 4, 6}, {9, 8, 5}};`

Correct Answer: c

Detailed Solution:
In the left hand side, it is a declaration for two-dimensional array, whereas at the right side it uses *new* operator to allocate a memory for a one-dimensional array.

QUESTION 3:

When you compile a program written in the Java programming language, the compiler converts the human-readable source file into platform-independent code that a Java Virtual Machine can understand. What is this platform-independent code called?

a. Source code
b. Bytecode
c. Machinecode
d. Opcode

Correct Answer: b

Detailed Solution:

Byte code is an intermediate code between source code and machine code that is executed by an interpreter such as JVM. e.g., Java class files.

QUESTION 4:

Which of the following is/are TRUE regarding the string array provided as a parameter to the main method in Java?

a. It can be used to get command line arguments from the user.
b. It is mandatory to name the string array as 'args'.
c. Only one command line argument input is allowed at a time.
d. Both b and c.

Correct Answer: a

Detailed Solution:

In Java, the function of the string array provided in the main method is to get the command line arguments provided by the user during the execution of the program. This is just like any other string array and hence, its name can be set anything. Since, the command line values are passed to the main method, this can be used anywhere in the program. Users are allowed to put multiple command line arguments one after another using spaces in between.

QUESTION 5:

Consider the following program.

```
public class Question{
      public static void main(String args[]){
            for(int b=2;b<3;b+=2){
                  System.out.print(b+++b);
            }
      }
}
```

What will be the output of the program if it is executed?

a. 5
b. 2
c. 4
d. 1

Correct Answer: a

Detailed Solution: Test by run.

QUESTION 6:

Following is a piece of code where some parts of a statement is missing:

```
public class Question3{
      public static void main(String args[]){
            char nptel[]={'J','A','V','A','N','P','T','E','L'};
            System.out.print(_________);
      }
}
```

In the following, some options are given. You have to choose the correct option for the argument in *System.out.print()* function to print the second and the last characters in the array nptel.

a. nptel[nptel.length-1] + nptel[1]
b. nptel[1] + nptel[nptel.length-1]
c. "" + nptel[1] + nptel[nptel.length-1]
d. "" + nptel[nptel.length-1] + nptel[1]

Correct Answer: c

QUESTION 7:

What is the output of this program?

```
public class Question {
        public static void main(String args[])
        {
             int i = 5;
             System.out.print(--i * 5);
        }
    }
```

a. 20
b. 25
c. 32
d. 31

Correct Answer: a

Detailed Solution:
First the value of i will be decremented and then multiplication is performed and the result will be printed.

QUESTION 8:

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

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

Correct Answer: d

Detailed Solution:

The Java Debugger (JDB or jdb) is a command-line java debugger that debugs the java class.

QUESTION 9:

Which of the following is/are non-primitive data type(s) in Java?

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

Correct Answer: b,c

Detailed Solution:
A String in Java is actually a non-primitive data type, because it refers to an object.

Array is also a non-primitive datatype.

QUESTION 10:

Which of the following features are common in both Java and C++?

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

Correct Answer: a,b,c

Detailed Solution:
C++ supports multiple inheritances whereas Java does not.

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