OOPJ: CCEE Practice Quiz 1

Total points 20/30

Duration: 30 Mins

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0 of 0 points

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Questions 20 of 30 points

✓ **What will the output of the code be?** * 1/1

```
public class PrintTest {
public static void main(String[] args) {
System.out.print("Hello ");
System.out.println("World!");
System.out.printf("Number: %d", 10);
}
}
```

- ○ Hello World!Number: 10
- ○ Hello World! Number: 10
- ◉ Hello World! \n Number: 10 ✓
- ○ HelloWorld!Number: 10

✓ **What is the significance of using String... args instead of String[] args in the main method?** *1/1

- ○ It is an invalid syntax.
- ○ It allows passing multiple string arguments in the command line.
- ◉ It does not affect functionality; both are equivalent. ✓
- ○ It prevents passing arguments to the program.

✗ **What will happen when the code at Line 1 is executed? *** 0/1

```
public class Test {
public static void main(String[] args) {
String str = "abc";
int num = Integer.parseInt(str); // Line 1
System.out.println(num);
}
}
```

- (●) It will compile and print abc. ✗
- ( ) It will compile and print 0.
- ( ) It will throw a NumberFormatException.
- ( ) It will throw a NullPointerException.

Correct answer

- (●) It will throw a NumberFormatException.

✗ **What will happen when the code at Line 1 is executed? *** 0/1

```
public class Test {
public static void main(String[] args) {
String[] arr = new String[3];
arr[0] = "Java";
System.out.println(arr[1].toUpperCase()); // Line 1
}
}
```

- ○ It will compile and print null.
- ○ It will compile and print JAVA.
- ◉ It will throw an ArrayIndexOutOfBoundsException. ✗
- ○ It will throw a NullPointerException.

Correct answer

- ◉ It will throw a NullPointerException.

✓ **Which of the following is a correct example of Widening Conversion in Java?** *1/1

- ○ int i = 10; byte b = i;
- ○ double d = 10.5; int i = d;
- ◉ float f = 10; double d = f; ✓
- ○ long l = 100; int i = l;

✓ **Which of the following requires an explicit cast for Narrowing Conversion in Java?** *1/1

- (●) double d = 100.25; int i = (int) d; ✓
- ( ) int i = 50; long l = i;
- ( ) byte b = 100; int i = b;
- ( ) float f = 10.5F; double d = f;

✗ **Which of the following statements is true about the memory storage of a and b in the given code?** *0/1

```
public class Test {
public static void main(String[] args) {
int a = 10; // Line 1
String b = "Hello"; // Line 2
}
}
```

- (●) Both a and b are stored in the heap memory. ✗
- ( ) a is stored in the stack memory, while b is stored in the heap memory.
- ( ) Both a and b are stored in the stack memory.
- ( ) a is stored in the heap memory, while b is stored in the stack memory.

Correct answer

- (●) a is stored in the stack memory, while b is stored in the heap memory.

✓ **What are the default values of primitive and non-primitive data types in Java?** *1/1

- ○ Primitive types have default values of null, and non-primitive types have default values of 0.
- ◉ Primitive types have default values based on their type (e.g., 0 for int, false for boolean), and non-primitive types have null as their default value. ✓
- ○ Both primitive and non-primitive types have null as their default value.
- ○ Both primitive and non-primitive types have 0 as their default value.

✓ **What will be the output of this code?** * 1/1

```
public class Test {
public static void main(String[] args) {
double d = 9.78;
int i = (int) d; // Line 1
System.out.println(i);
}
}
```

- ◉ 9 ✓
- ○ 9.78
- ○ 10
- ○ Error

✓ **Given the following Java class:** *1/1

```
public class Customer {
String customerName;
double accountBalance;

void deposit(double amount) {
if (amount > 0) {
accountBalance += amount;
}
}

static void setDefaultBalance(double defaultBalance) {
// This method should set a default balance for all customers
}
}
```

Which of the following statements is correct about customerName, accountBalance, and setDefaultBalance?

- ○ customerName and accountBalance are static variables; setDefaultBalance is a non-static method.
- ◉ customerName and accountBalance are instance variables; setDefaultBalance is a static method. ✓
- ○ customerName is a static variable, accountBalance is a non-static variable, and setDefaultBalance is an instance method.
- ○ Both customerName and accountBalance are static variables; setDefaultBalance is an instance method.

✓ **Given the following code snippet:** * 1/1

```
public class Test {
public static void main(String[] args) {
System.out.print("Hello, ");
System.out.print("World!");
}
}
```

What is the role of out in this context?

- (●) out is an instance of the PrintStream class used for printing output to the console. ✓
- ( ) out is a method that formats the output before printing it to the console.
- ( ) out is a variable that stores the current state of the system.
- ( ) out is a class that handles file operations in Java.

✓ 1. The JVM divides memory into different regions such as the Heap, Stack, and Method Area. *1/1

2. The Garbage Collector (GC) primarily manages the Stack memory.

3. The Method Area stores class metadata and static variables.

Which of the following statements is correct?

- (●) Only statements 1 and 3 are correct; the Garbage Collector manages the Heap memory, not the Stack. ✓
- ( ) All statements are correct.
- ( ) Only statement 1 is correct; the Garbage Collector does not manage the Method Area.
- ( ) Only statement 3 is correct; the Stack and Heap memory are not managed by the Garbage Collector.

✓ **Which of the following accurately describes the role of the JVM Execution Engine?** *1/1

- ○ It compiles Java bytecode into native machine code for execution on the host system.
- ○ It translates Java source code into bytecode, which is then executed by the Java Compiler.
- ◉ It interprets or compiles Java bytecode into native machine code for execution, and manages runtime optimizations such as Just-In-Time (JIT) compilation. ✓
- ○ It handles network communication and database interactions during Java application execution.

✗ **Which of the following statements about Java data types is correct? *** 0/1

- ○ The float data type has a higher precision than the double data type.
- ○ char can hold any Unicode character and is stored as a 16-bit integer.
- ○ The boolean data type can store multiple values like true, false, and null.
- ◉ The long data type is used to store decimal numbers with higher precision than float. ✗

Correct answer

- ◉ char can hold any Unicode character and is stored as a 16-bit integer.

✓ **Which of the following option leads to the portability and security of Java?** *1/1

- (●) Bytecode is executed by JVM ✓
- ( ) The applet makes the Java code secure and portable
- ( ) Use of exception handling
- ( ) Dynamic binding between objects

✓ Which component of Java is responsible for running the compiled Java bytecode? *1/1

- ( ) JDK
- (●) JVM ✓
- ( ) JRE
- ( ) JIT

✗ What is the default value of a boolean variable in Java? * 0/1

- ( ) false
- ( ) true
- ( ) 0
- (●) 1 ✗
- ( ) None of the above

Correct answer

- (●) false

✓ What is the range of the short data type in Java? * 1/1

- (●) -32768 to 32767 ✓
- ( ) -128 to 127
- ( ) -2147483648 to 2147483647
- ( ) 0 to 65535

✓ What is the output of this pseudocode? * 1/1

```
SET x = 10
IF x > 5
THEN PRINT "Greater"
ELSE PRINT "Lesser"
```

- (●) Greater ✓
- ( ) Lesser
- ( ) Error
- ( ) No output

✓ Identify the error in this code. * 1/1

```
int[] nums = new int[2];
nums[0] = 1;
nums[1] = 2;
nums[2] = 3;
```

- (●) Array index out of bounds ✓
- ( ) Incorrect array declaration
- ( ) No error
- ( ) Compile time error

✗ Spot the mistake in this code snippet. * 0/1

int i = 0; while(i < 5) { i++; } System.out.println(i);

- (●) Infinite loop ✗
- ( ) Syntax error
- ( ) No error
- ( ) Prints 0

Correct answer

- (●) No error

✓ In a 'switch-case' statement, what is the role of the 'break' keyword? * 1/1

- ( ) To pause the execution
- (●) To terminate the case block ✓
- ( ) To skip to the next case
- ( ) To repeat the case block

✗ What is the default value of a local variable in Java? * 0/1

- (●) 0 ✗
- ( ) null
- ( ) Undefined
- ( ) Compiler error

Correct answer

- (●) Compiler error

✗ Which of the following can be a valid value for a char data type? * 0/1

- a) "A"
- b) 'A' ✗
- c) 65
- d) Both b and c

Correct answer

- d) Both b and c

✓ Char data type cannot store the following value: * 1/1

- 'A'
- 65 ✓
- '\u0041'
- All of the above values can be stored in char data type

✓ What is the output of the following program? * 1/1

```
class Main {
public static void main(String[] args) {
int x = 7;
        int y = 3;
System.out.println(x > y ? "x is greater" : "y is greater");
}
}
```

- (●) x is greater ✓
- ( ) y is greater
- ( ) true
- ( ) false

✗ What is the output of the following program? * 0/1

```
class MyClass {
public static void main(String[] args){
 int a = 10;
 System.out.println(++a++);
}
}
```

- ( ) 10
- ( ) 11
- (●) 12 ✗
- ( ) Compilation Error

Correct answer

- (●) Compilation Error

✗ What is the output of the following program? * 0/1

```
class Demo{
public static void main(String[] args){
  int a = 10;
  System.out.println(a++);
  a++;
}
}
```

- ○ 10
- ◉ 11 ✗
- ○ 12
- ○ 13

Correct answer

- ◉ 10

✓ What is the output of the following program? * 1/1

```
class Demo{
public static void main(String[] args){
 int a = 0;
 a +=5;
 switch(a){
  case 5: System.out.print("5");
  case 10: System.out.print("10");break;
  default: System.out.print("0");

 }

}
}
```

- ○ 5
- ○ 10
- ◉ 510 ✓
- ○ Compilation error

✓ What is the output of the following program? * 1/1

```
class Main{

public static void main(String[] args){

 int a = 5;
 a +=5;
 switch(a){
  case 5: System.out.print("5");break;
  case 10: System.out.print("10");
        System.out.println(((a%2 ==0) ? "-even-" : "-odd-"));
        break;

  default: System.out.print("0");
 }

}
}
```

- (●) 10-even- ✓
- ( ) 10-even-0
- ( ) 10-odd
- ( ) Compilation Error