NPTEL Online Certification Courses

Indian Institute of Technology Kharagpur

PROGRAMMING IN JAVA

Assignment 5

TYPE OF QUESTION: MCQ

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

QUESTION 1:

Consider the following program.

```
class Question
{
    int i;

    public Question(int i)
    {
        this.i = i--;
    }
}

class Question1 extends Question
{
    public Question1(int i)
    {
        super(++i);

        System.out.println(i);
    }
}

public class Check
{
    public static void main(String[] args)
    {
        Question1 n = new Question1(20);
    }
}
```

If the program is executed, then what will be the output?

a. 20
b. 21
c. 19
d. 22

Correct Answer: b

Detailed Solution:
The output can be checked by execution.

QUESTION 2:

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

1. A class can extend more than one class.

2. An interface can extend many interfaces.

3. An interface can implement many interfaces.

4. A class can extend one class and implement many interfaces.

a. 1
b. 2
c. 3
d. 4

Correct Answer: a, c

Detailed Solution:

An interface can extend many interfaces. A class can extend one class and implement many interfaces. These statements are true.

QUESTION 3:

What is the output of the following code?

```
class Question
{
    static int x;

    static
    {
        x++;
    }

    {
        ++x;
    }
}

class Question1 extends Question
{
    static
    {
        --x;
    }

    {
        x--;
    }
}

public class Check
{
    public static void main(String[] args)
    {
        System.out.println(new Question1().x);
    }
}
```

a. 1
b. 2
c. 0
d. Compiler error

Correct Answer: c

Detailed Solution:
The output can be checked by execution.

QUESTION 4:

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

a. Interface can provide the implementation of an abstract class.
b. The variables defined inside an interface are static and final by default.
c. An interface is used to achieve full abstraction.
d. Inside an interface, a constructor can be called using the super keyword with hierarchy.

Correct Answer: a, d

Detailed Solution:

A constructor cannot be called inside an interface using the super keyword with hierarchy.
Interface can't provide the implementation of an abstract class.

QUESTION 5:

What is the output of the following code?

```
class Q
{
    public void disp()
    {
        System.out.println("java");
    }
}

class P extends Q
{
    public void disp()
    {
        System.out.println("nptel");
    }
}

class C extends P
{
    public void disp()
    {
        super.super.disp();
        System.out.println("course");
    }
}

public class Question
{
    public static void main(String[] args)
    {
        C c = new C();
        c.disp();
    }
}
```

a. java
b. java
   course
c. nptel
   course
d. Compiler error

Correct Answer: d

Detailed Solution:
The output can be checked by execution. In Java, it is not allowed to do super.super.

QUESTION 6:

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

Detailed Solution:
Exceptional handling have 5 keywords – try, catch, throws, throw and finally.

QUESTION 7:

Consider the following piece of code.

```
interface X
{
    void display();
}

class Y implements X
{
   ____________ display()
    {
        System.out.println("Java");
    }
}

public class MainClass
{
    public static void main(String[] args)
    {
        Y r = new Y();
        r.display();
    }
}
```

Fill the blank in the above program to print the output "Java".

a. public void
b. void
c. private void
d. static void

Correct Answer: a

Detailed Solution:

Interface methods must be implemented as public. Because, interface methods are public by default and you should not reduce the visibility of any methods while overriding.

QUESTION 8

Exception class exist in which of the following package?

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

Correct Answer: c

Detailed Solution:

QUESTION 9:

Consider the following code .

```
interface X
{
    class Question
    {
        int i;

        public Question(int i)
        {
            this.i = ++i;
        }

        int disp()
        {
            return ++i;
        }
    }
}

public class Question1
{
    public static void main(String[] args)
    {
        ____________________________    // fill in the blank

        System.out.println(c.disp());
    }
}
```

Fill in the blank with appropriate syntax for creating an object "c" to run the above program successfully.

a. X c = new X(1);
b. X c = new X( );
c. X.Question c = new X.Question(0);
d. X.Question c = new X.Question(1);

Correct Answer: c, d

Detailed Solution:
The output can be checked by execution.

QUESTION 10:

```
class X
{
    static
    {
        Y.display();
    }
}

class Y extends X
{
    static void display()
    {
        System.out.println("Java");
    }
}

public class MainClass
{
    public static void main(String[] args)
    {
        Y.display();
    }
}
```

If the program is executed, then how many times "Java" will print?

a. 0
b. 1
c. 2
d. 3

Correct Answer: c

Detailed Solution:

The output can be checked by execution.

**********END**********