

# NPTEL Online Certification Courses

### Indian Institute of Technology Kharagpur



#### PROGRAMMING IN JAVA

### **Assignment4**

TYPE OF QUESTION: MCQ

Number of questions: 10 Total mark:  $10 \times 1 = 10$ 

#### **QUESTION 1:**

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** 

**Detailed Solution:** 

Packages are both naming and visibility control mechanism.

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#### **QUESTION 2:**

Which of the following is false statement about packages in java?

- a. Packages are used to organize a set of related classes and interfaces.
- b. Packages are used for preventing naming conflicts.
- c. Packages provide code reusability.
- d. Packages cannot be considered as data encapsulation.

Correct Answer: d

**Detailed Solution:** 

Packages can be considered as data encapsulation (or data-hiding)



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#### **QUESTION 3:**

#### Which of the following is/are interface(s) of java.awt package?

- a. CardLayout
- b. Checkbox
- c. Choice
- d. MenuContainer

**Correct Answer: d** 

#### **Detailed Solution:**

MenuContainer is an interface of java.awt package, all others are class.

#### **QUESTION 4:**

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

- a. The default package in the Java language is java.lang.
- b. String is a final class and it is present in java.lang package.
- c. Cloneable is a class present in java.lang package.
- d. Thread is a class present in java.lang package.

**Correct Answer: c** 

#### **Detailed Solution:**

Cloneable is an interface in java.lang package.



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#### **QUESTION 5:**

Consider the program given below.

```
import static java.lang.Math.*;
public class Main{
   public static void main(String args[]){
        System.out.println(cos(2*PI));
   }
}
```

#### What will be the output if the above program is executed?

- a. It will give compile-time error
- b. It will give run-time error
- c. 1.0
- d. 3.14

#### **Correct Answer: c**

#### **Detailed Solution:**

#### Test by run.

The static import statement is used to import the static members(e.g. ,PI) of java.lang.Math. import static java.lang.Math.\*;

#### **QUESTION 6:**

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

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

#### **Correct Answer: b**

#### **Detailed Solution:**



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java.util is used to includes utility classes like Calendar, Collection, Date.

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#### **QUESTION 7:**

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

- a. Comparable interface is present in java.lang package
- b. Iterator interface is present in java.util package.
- c. Compare() is a method used in Comparable interface.
- d. Serializable interface is present in java.io package.

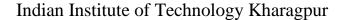
**Correct Answer: c** 

#### **Detailed Solution:**

Comparable interface provides compareTo() method to sort elements in Java whereas Comparator interface provides compare() method to sort elements in Java.



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#### **QUESTION 8:**

#### Which of the following is/are valid declaration(s) of an interface?

```
a. public interface Question {
    void method(int value) {
        System.out.println("Nptel");
    }
}
b. public interface Question {
    void method(int value) {
    }
}
c. public interface Question {
    default void method(int value) {
        System.out.println("Nptel");
    }
}
```

Correct Answer: b,c,d

#### **Detailed Solution:**

In option a , It has a method implementation in it. Only default and static methods have implementations. So option a is not a valid interface. All others are valid.

#### **QUESTION 9:**

#### Which of the following is false statement about interface in java?

- a. An interface can extend other interfaces.
- b. The interface body can contain abstract methods, default methods, and static methods.
- c. All constant values defined in an interface are implicitly public, static, and final.
- d. A static method in an interface are implicitly private.

#### **Correct Answer: d**



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#### **Detailed Solution:**

static methods in an interface are implicitly public. So you can omit the public modifier.

### **QUESTION 10:**

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** 

**Detailed Solution:** 

\*\*\*\*\*\*\*\*\*\*END\*\*\*\*\*\*\*\*