

Java Examination

JAVA EXAMINATION

This examination is for student to assess his/her understanding of Java language and it's API. The exam contains 50 questions.

Find answers for these questions at

<http://www.srikanthtechnologies.com/books/javabook2014/answers.html>

Q1: Given the following program:

```
class Test {  
    public static void main(String...args) {  
        // some code  
        print();  
        // some code  
    }  
    // insert code here  
}
```

Which of the following statements will complete the code?

- A. public void print() { }
- B. public abstract void print() { }
- C. public static void print() { }
- D. public final void print() { }

Q2: Which of the following statements is correct?

- A. If A extends B then A is a class and B must be abstract class
- B. If A extends B then A is a class and B must be interface
- C. If A extends B then both A and B must be classes
- D. If A extends B then both A and B may be classes or interfaces

Q3: Which of the following is NOT correct?

- A. public abstract class Test { public void print() { } }
- B. public abstract class Test { public abstract void print(); }
- C. public abstract class Test { public final void print() { } }
- D. public class Test { public abstract void print(); }

Q4: What is the output of the following program?

```
public class Test {  
    int v = 10;  
    public static void main(String [] args) {  
        int v = 20;  
        System.out.printf("%d", this.v);  
    }  
}
```

- A. 10
- B. 20
- C. Compilation Error
- D. Runtime exception

Q5:

```
class A {  
    public static void print() { System.out.printf("A"); }  
}  
class B extends A{  
    public static void print() {  
        System.out.printf("B");  
    }  
}  
public class Test {  
    public static void main(String [] args) {  
        A obj = new B();  
        obj.print();  
        A.print();  
    }  
}
```

What is the output of the above program?

- A. AA
- B. BA
- C. Compilation Error
- D. Runtime exception

Q6:

```
class Employee { }
class Manager extends Employee { }

public class Test {
    public static void main(String args[]) {
        Employee e = new Manager();
        Manager m = new Manager();
        // insert code here
    }
}
```

Which of the following lines can be inserted in the above code?

- A. m = new Employee();
- B. m = e;
- C. m = (Manager) e;
- D. All above lines can be inserted

Q7: Given the following class:

```
class Employee {
    String name;
    public Employee(String name) {
        this.name = name;
    }
}
```

Which of the following statements can create an object of Employee class correctly?

- A. Employee e;
- B. Employee e= new Employee();
- C. Employee e= new Employee("Roman");
- D. None of the above can be used to create an object

Q8:

```
class Employee {
    String name;
    public Employee(String name) {
        this.name = name;
    }
}
public class Test {
    public static void main(String args[]) {
        Employee e1 = new Employee("Roman");
        Employee e2 = new Employee("Roman");
        System.out.print( e1 == e2 );
        System.out.print( e1.equals(e2));
    }
}
```

What is the output of the above program?

- A. false false
- B. false true
- C. true true
- D. Compilation error as equals is not a method of Employee class

Q9:

```
class Product {
    String name = "Unknown";
    public void print() {
        System.out.println(name);
    }
}
public class Test {
    public static void main(String args[]) {
        Product pl [] = new Product[3];
        pl[0].print();
    }
}
```

What is the output of the above program?

- A. Unknown
- B. Empty string followed by new line
- C. Compilation error at `pl[0].print()`
- D. Exception at runtime

Q10:

```
public class Test {  
    public void main() {  
        // code  
    }  
    public void main(String args[]) {  
        // code  
    }  
}
```

What happens when you compile the above program?

- A. Compilation error as main method cannot be present more than once
- B. Compilation error as main is created without parameter
- C. Compilation error as main is defined as instance method
- D. No error program compiles

Q11: Which interface a class should implement to be used with Automatic Resource Management feature of Java 7.0?

- A. `AutoCloseable`
- B. `CanClose`
- C. `Closeable`
- D. `Close`

Q12:

```
class A {
    final int v;
    public A() {
        v = 10;
    }
}
class Test {
    public static void main(String args[]) {
        A o = new A();
    }
}
```

What happens when you compile and run the above program?

- A. Compilation error as final variable is not initialized at the time of declaration
- B. final variables cannot be initialized in constructor
- C. Program is compiled successfully
- D. Compiled successfully but throws exception at runtime

Q13:

```
class A {
    public static void main() {
        System.out.println("A");
    }
}
class B extends A {
    public static void main(String args[]) {
        B o = new B();
        o.main();
    }
}
```

What is the output of the above program?

- A. A
- B. Compilation error as main() method is overridden in class B
- C. Compilation error as main() method is overloaded in class B
- D. Compilation error as main() in class A has no parameter

Q14: Which of the following statements is NOT true?

- A. Subclass object can be assigned to superclass object reference
- B. Implementing class object can be assigned to object references of interface
- C. Superclass object can be assigned to object reference of subclass
- D. Subclass object can be assigned to superclass object reference only after type casting

Q15: Which of the following cases is not valid case for overloading?

- 1. `public void print() { }`
`public void print(String msg) { }`
- 2. `public void print(String m, int c) { }`
`public void print(int c, String m) { }`
- 3. `public int print() { }`
`public void print(String msg) { }`
- 4. `public int print() { }`
`public void print() { }`

- A. 2
- B. 2 and 4
- C. 2,3 and 4
- D. 4

Q16: Which of the following methods in Objects class is used to throw exception when the given object reference is null?

- A. isNull()
- B. hasNull()
- C. requireNotNull()
- D. requiredNull()

Q17: What is the difference between StringBuffer and StringBuilder?

- A. StringBuffer is mutable and StringBuilder is immutable
- B. StringBuffer is immutable and StringBuilder is mutable
- C. StringBuffer is synchronized and StringBuilder is not Synchronized
- D. StringBuffer is final and StringBuilder is not final

Q18: Which of the following classes was introduced in java.nio.files package in Java 7.0?

- A. PrintStream
- B. File
- C. Paths
- D. None of the above

Q19: Which of the access modifiers can be used with top-level class?

- A. Only public
- B. Either public or protected
- C. Either public or private or default
- D. Either public or default

Q20: Identify which statement does NOT compile successfully.

- A. Integer i = 10;
- B. Object o = 10;
- C. int i = "10";
- D. int i = new Integer(305);

Q21: Given the code below

```
class Test {  
    public static void main(String args[]) {  
        int a[] = new int[10];  
        // insert code here  
    }  
}
```

Which of the following statements is used to sort array a?

- A. a.sort()
- B. Array.sort(a)
- C. Arrays.sort(a)
- D. java.util.Arrays.sort(a)

Q22: Identify the correct statement.

- A. Objects are passed by value and primitive types are passed by value
- B. Objects are passed by reference and primitive types are passed by value
- C. Objects are passed by reference and primitive types are passed by reference
- D. Objects are passed by value and primitive types are passed by value

Q23: Which of the following operations are automatic?

- A. Boxing
- B. Unboxing
- C. Both
- D. None

Q24: If a class is created with default access then from where this class can be accessed?

- A. It can be accessed from anywhere
- B. It can be accessed only from the package in which the class is created
- C. It can be accessed only from classes in any package with default access
- D. It can be accessed only from other classes of the same package with default access

Q25: In which order the class, package and import statements can appear?

- A. class, import, package
- B. import, package, class
- C. package, class, import
- D. package, import, class

Q26:

```
class Test {
    public static void main(String args[]) {
        try {
            int v = Integer.parseInt(args[0]);
            return;
        }
        catch (Exception ex) {
            System.out.print("Error");
        }
        finally {
            System.out.print("Finally");
        }
        System.out.print("Over");
    }
}
```

What will be the output of the above program when run as

java Test 100

- A. Finally
- B. Finally Over
- C. Over
- D. compilation error as return statement given in a function that returns void

Q27: Which of the following is correct about assertions?

- A. Assertions are enabled by default
- B. Assertions are used to handle runtime errors
- C. Assertions are implemented using assertion statement
- D. When an assertion fails it throws an error and not exception

Q28: Which of the following statements related to multithreading is correct?

- A. Thread class is abstract class
- B. To create a new thread extend Thread class and override start() method
- C. Thread class implements Runnable interface
- D. Thread class is serializable

Q29:

```
class Test {  
    public static void main(String args[]) {  
        Thread t = new Thread();  
        t.start();  
    }  
}
```

What is the output of the above program?

- A. Compilation error as you cannot create an object of Thread class
- B. Throws an exception when start() method is called
- C. Compiled and run successfully without any output
- D. Compiled and run successfully with message Implement run() method as run() method is not overridden

Q30: What is the super class of FileReader?

- A. BufferedReader
- B. InputStreamReader
- C. Reader
- D. FileInputStream

Q31: Which method in File class is used to delete file from file system?

- A. deleteFile()
- B. delete()
- C. remove()
- D. removeFile()

Q32: _____ method is used to create a stream from a collection of constants.

- A. Stream.get()
- B. Stream.of()
- C. Stream.parse()
- D. Stream.getInstance()

Q33: _____ is the return type of accept() method of ServerSocket class.

- A. Socket
- B. Object
- C. ServerSocket
- D. InputStream

Q34: _____ is the method used to get stream to read data from a URL.

- A. getInputStream()
- B. openInputStream()
- C. openStream()
- D. getStream()

Q35: Which of the following is the way to sort a collection of strings which may contain duplicate values?

- A. Use TreeSet
- B. Use ArrayList and call sort() method
- C. Use TreeMap
- D. Use LinkedHashSet and sort() method

Q36: Which interface is used to change the order of sorting while using TreeSet class?

- A. Sorter
- B. Comparator
- C. Order
- D. Map

Q37: headSet() is a method of _____ ?

- A. Set
- B. Vector
- C. SortedList
- D. SortedSet

Q38: _____ can be used to create an ArrayList which contains only objects of String class.

- A. Set interface
- B. Generic
- C. Restrict interface
- D. It is not possible to do so

Q39: Which of the built-in functional interface is used as parameter for **filter()** method of **Stream**.

- A. Condition
- B. Consume
- C. Predicate
- D. BiConsumer

Q40: Which of the following methods of Map interface removes an element only when its value is same as specified value.

- A. remove(key)
- B. remove(key,value)
- C. removeIf(key,value)
- D. delete(key,value)

Q41: Method **walk()** is present in which of the following classes?

- A. Files
- B. Paths
- C. File
- D. Path

Q42: Which of the following is NOT true with an interface in Java 8?

- A. It can have only one abstract method
- B. It can have only one default method
- C. It can have static variables
- D. It can have instance variables

Q43: Assuming **a** is an array of strings, which of the following is correct statement?

- A. Stream s = Arrays.stream(a);
- B. Stream s = Arrays.getStream(a);
- C. Stream s = Arrays.toString(a);
- D. Stream s = Stream.fromArray(a);

Q44: Which is true about a lambda expression?

- A. It can be used where an inner class is used
- B. It can be used where an anonymous inner class is used
- C. It can be used where the implementation of a functional interface is required
- D. It can be used where an interface with default method is required

Q45: Which is NOT correct lambda expression for Runnable interface?

- A. () -> System.out.println("Thread Code");
- B. () -> MyClass::printMethod // void printMethod() is static method
- C. () -> { System.out.println("Thread Code"); }
- D. (v) -> System.out.println(v)

Q46: _____ method is required to obtain a parallel stream from an ArrayList?

- A. stream()
- B. parallelStream()
- C. getParallelStream()
- D. stream(true)

Q47: _____ is the abstract method of Supplier functional interface?

- A. process()
- B. accept()
- C. get()
- D. accept()

Q48: Which of the following is true about lambda expression?

- A. Inside a lambda expression this reference points to outer class object
- B. Inside a lambda expression this reference points to inner class object
- C. There is no this reference in lambda
- D. Inside a lambda block, you cannot use this reference

Q49: _____ of the following is a terminal operation in a Stream?

- A. filter()
- B. distinct()
- C. skip()
- D. forEach()

Q50: _____ regular expression specifies 5 or more digits.

- A. `\d{5}`
- B. `\d+`
- C. `\d{5+}`
- D. `\d{5,}`