Which three are advantages of the Java exception mechanism?

- A.Improves the program structure because the error handling code is separated from the normal program function
- B.Provides a set of standard exceptions that covers all the possible errors
- **©**.Improves the program structure because the programmer can choose where to handle exceptions

D.Improves the program structure because exceptions must be handled in the method in which they occurred

E.Allows the creation of new exceptions that are tailored to the particular program being created

```
Given the following:
public static void main(String[] args){
        ArrayList lst=new ArrayList();
        String[] mr;
        try{
                while(true){
                        lst.add(new String("cad"));
                }
       }
        catch(RuntimeException ex){
                Sustem.out.println("Is a RuntimeException");
       }
        catch(Exception ex){
                Sustem.out.println("Is a Exception");
       }
        Sustem.out.println("End");
}
```

What is the result?

A.Execution terminates in the first catch statement, and caught a RuntimeException is printed to the console.

B.Execution terminates In the second catch statement, and caught an Exception is printed to the console.

#### C.A runtime error is thrown in the thread "main".

D.Execution completes normally, and "End" is printed to the console.

E.The code fails to compile because a throws keyword is required.

```
Given the following classes:
public class TestException extends RuntimeException {}
public class Test{
       public static void main(String[] args){
               try{
                       myMethod();
               }
               catch(TestException ex){
                       System.out.print("A");
               }
       }
       public static void myMethod(){ //line 1
               try{
                       throw (Math.random()>0.5)?new TestException():
                                       new RuntimeException();
               }
               catch(RuntimeException ex){
                       System.out.print("B");
               }
       }
}
   What is the result?
    A.A
    C.Either A or B
    D.AB
```

E.Compilation fails at line 1

Which two are Java System Exception classes?

# A. SercurityException

B. DuplicatePathException

## C. IllegalArgumentException

 $D.\ Too Many Arguments Exception$ 

```
Given:
public class Test {
public static void main(String[] args) {
int ax = 10, az = 30;
int aw = 1, ay = 1;
try {
aw = ax \% 2;
ay = az / aw;
} catch (ArithmeticException e1) {
System.out.println("Invalid Divisor");
} catch (Exception e2) {
aw = 1;
System.out.println("Divisor Changed");
}
ay = az /aw; // Line 14
System.out.println("Succesful Division " + ay);
}
}
What is the result?
A. Invalid Divisor
Divisor Changed
Successful Division 30
B. Invalid Divisor
Successful Division 30
C Invalid Divisor
Exception in thread "main" java.lang.ArithmeticException: / by zero
```

at test.Teagle.main(Teagle.java:14)

**D**. Invalid Divisor

Exception in thread "main" java.lang. Arithmetic<br/>Exception: / by zero

at test.Teagle.main(Teagle.java:14)

Successful Division 1

```
Given:
public class Test {
public static void main(String[] args) {
int arr[] = new int[4];
arr[0] = 1;
arr[1] = 2;
arr[2] = 4;
arr[3] = 5;
int sum = 0;
try {
for (int pos = 0; pos <= 4; pos++) {
sum = sum + arr[pos];
}
} catch (Exception e) {
System.out.println("Invalid index");
}
System.out.println(sum);
}
}
What is the result?
A. 12
B. Invalid Index
12
C. Invalid Index
```

D. Compilation fails