

## Core Java: Part 4

1. What is the output of the below code:

```
interface A{  
    void method();  
}  
  
class Test{  
    public void method(){  
        System.out.println("call from a method");  
    }  
    public static void main(String[] args) {  
        A a =(A) new Test();  
        a.method();  
    }  
}
```

- A) call from a method
- B) No output at console
- C) Compilation fails
- D) Exception is thrown at Runtime

**ANS:D) Exception is thrown at Runtime**

2. Which of the following lines will allow the code to execute the program?

```
abstract class MyClass{  
    abstract int m();  
}  
  
interface MyInterface{  
    public int m();  
}  
  
public class Test extends MyClass implements MyInterface{  
    //code to execute  
}
```

- A) int m(){}

int m(){}

B) int m(){}

int MyInterface.m(){}

C) int m(){}

D) None of the above

**3. What is the output for the below code ?**

```
public interface TestInf {  
    int i =10;  
}  
public class Test {  
    public static void main(String... args) {  
        TestInf.i=12;  
        System.out.println(TestInf.i);  
    }  
}
```

A) 10

B) 12

C) compile time error

D) run time error

**ANS:D) run time error**

**4. Which Man class properly represents the relationship "Man has a best friend who is a Dog"?**

A) class Man extends Dog { }

B) class Man implements Dog { }

C) class Man { private BestFriend dog; }

D) class Man { private Dog bestFriend; }

E) class Man { private Dog<bestFriend>; }

**ANS:D) class Man { private Dog bestFriend; }**

5. Which three are true? (Choose three.)

10. interface Jumper { public void jump(); } ...

20. class Animal {} ...

30. class Dog extends Animal {

31. Tail tail; 32. } ...

40. class Beagle extends Dog implements Jumper{

41. public void jump() {}

42. } ...

50. class Cat implements Jumper{

51. public void jump() {}

52. }

A. Cat is-a Animal

B. Cat is-a Jumper

C. Dog is-a Animal

D. Dog is-a Jumper

E. Cat has-a Animal

F. Beagle has-a Tail

G. Beagle has-a Jumper

A) A,B,D

B) AF,G

C) B,F,G

D) B,C,F

E) E,F,G

6.What will be the output

```
public void divide(int a, int )
```

```
{
```

```
Try{
```

```
Int c = a/b;
```

```
}
```

```
Catch(Exception e)
```

```
{  
SOP(Exception);  
}  
Finally{  
SOP("finally")  
}  
}
```

a)error

b)compile successfully

c)compile time error with finally will work.

**ANS:a)error**

**7. Determine the output**

```
Class exception_Handling{  
Public static void main(String args[]){  
Try{  
SOP("Hello"+" "+1/0);  
}  
Catch(ArithmeticException e)  
{  
SOP("World");  
}  
}}
```

a) World

b)Hello World

c)Hello

d)none of the above

**ANS:a) World**

```

8. class exception_handling {
public static void main(String args[]) {
try {
int a, b;
b = 0;
a = 5 / b;
System.out.print("A");
}
catch(ArithmeticException e) {
System.out.print("B");
}
}
}

```

- a) A
- b) B
- c) Compilation Error
- d) Runtime Error

**ANS:b) B**

9. Which of these handles the exception when no catch is used?

- a. Default handler
- b. Finally
- c. Throw handler
- d. Java run time system

**ANS:c. Throw handler**

```

5. class exception_handling {
public static void main(String args[]) {
try {

```

```

int a, b;
b = 0;
a = 5 / b;
System.out.print("A");
}
catch(ArithmeticException e) {
System.out.print("B");
}
finally {
System.out.print("C");
}
}
}

```

- a) A
- b) B
- c) AC
- d) BC

**ANS:d) BC**

**10. Determine the output**

```

class exception_handling {
public static void main(String args[]) {
try {
int a = args.length;
int b = 10 / a;
System.out.print(a);
try {
if (a == 1)
a = a / a - a;
if (a == 2) {
int c = {1};

```

```

c[8] = 9;
}
}
catch (ArrayIndexOutOfBoundsException e) {System.out.println("TypeA");
}
catch (ArithmeticException e) {
System.out.println("TypeB");
}}}}

```

- a) TypeA
- b) TypeB
- c) 0TypeA

**ANS:b) TypeB**

**11. What is the output of the below code:**

```

public class Test {
public static void main(String[] args) {
double x = 0, y = 5.4324;
try {
System.out.println( (y/x) );
}
catch (Exception e) {
System.out.println("Exception");
}
catch (Throwable t) {
System.out.println("Error");
} } }

```

- A) Exception
- B) Error
- C) Infinity
- D) Exception Error

**ANS:C) Infinity**

**12. Pick runtime exception?....**

- A. ClassCastException**
- B. FileNotFoundException**
- C. NullPointerException**
- D. SecurityException**
- E. Above all**

- A) A,B,C
- B) C,D,E
- C) A,D,E
- D) A,C,D

**ANS:A) A,B,C**

**13. Determine the output**

```
public class Test {  
    public static void main(String[] args) {  
        try{  
            System.out.println("String "+1/0);  
        }catch(ArithmeticException ae){  
            System.out.println("Catch block");  
        }  
    }  
}
```

**What is the output of the program?**

- A) String Infinity Catch block
- B) String Catch block
- C) Catch block
- D) Infinity



**ANS:C) Catch block**

**14. In multiple catch clause which of the following statements are valid?**

- A) Super class block will execute first
- B) Sub class catch block will execute first
- C) Super class catch block will never execute
- D) Sub class catch block will never execute

**ANS:A) Super class block will execute first**

**15. class SuperClass {**

**public int dolt(String str, Integer... data)throws ArrayIndexOutOfBoundsException{**

**String signature = "(String, Integer[])";**

**System.out.println(str + " " + signature);**

**return 1;**

**}}**

**public class Test extends SuperClass{**

**public int dolt(String str, Integer... data) throws Exception**

**{**

**String signature = "(String, Integer[])";**

**System.out.println("Overridden: " + str + " " + signature);**

**return 0;**

**}**

**public static void main(String... args)**

**{**

**SuperClass sb = new Test();**

**try{**

**sb.dolt("hello", 3);**

**}catch(Exception e){**

**}**

**}**

**}**

**What is the output of the above code?**

- A) Overridden:hello(String, Integer[])
- B) hello (String, Integer[])
- C) This code throws exception at run time
- D) compile time error

**ANS:C) This code throws exception at run time**

**16. Choose the incorrect statement about SingleThreadModel.**

- A. It is used to ensure that servlet can handle only one request at a time.
- B. It is a marker interface
- C. It solves all the thread-safety issues

- A) A
- B) B
- C) C

**ANS:C) C**

**17. What will be the output of the program?**

```
public class Animal
{
    public static void main(String [] args)
    {
        Dog [][] theDogs = new Dog[3][]
        System.out.println(theDogs[2][0].toString())
    }
    class Dog { }
```

- A) null
- B) theDogs
- C) Compilation fails

D) An exception is thrown at runtime

**ANS:D) An exception is thrown at runtime**

18. What will be the output of the below code

```
class Employee{  
    Employee(){  
        System.out.println(1);  
    }  
    void test(){  
        this();  
        System.out.println(2); }  
    }  
class Manager  
{  
    public static void main(String args[]){  
        Employee e1=new Employee();  
    }  
}
```

- A) 1
- B) 2
- C) compile time error
- D) run time error

**ANS:D) run time error**

19. What is the output of the above code ?

```
import java.io.*;  
public class Test {  
    public static void main(String[] args) {  
        String s1 = "abc";
```

```
String s2 = "def";
String s3 = s1.concat(s2.toUpperCase());
System.out.println(s1+s2+s3);
}
}
```

- A) abcDEF
- B) abcdefabcdef
- C) abcdefDEF
- D) abcdefabcDEF

**ANS:D) abcdefabcDEF**

20. What is the output of the program?

```
public class Test {
    public static void main(String[] args) {
        String a = "hello i love java";
        System.out.println(a.indexOf('i')+" "+a.lastIndexOf('o')+" "+a.lastIndexOf('i')+" "+a.indexOf('o'));
    }
}
```

- A) 6 9 6 7
- B) 6 9 6 4
- C) 5 9 6 4
- D) 5 9 5 4

**ANS:B) 6 9 6 4**

21. What is the output of the below code:

```
class Test
{
    public static void main(String[] s)
    {
        String s1="Hello",s2="World";
        System.out.println(s1+s2);
    }
}
```

```
System.out.println(s1.concat(s2));  
}  
}
```

- A) HelloWorld
- B) HelloWorld  
HelloWorld
- C) Compilation fails
- D) Runtime error

**ANS:B) HelloWorld**

**HelloWorld**

**22. What is the output of the below code,**

```
public class Test {  
    public static void main(String[] args) {  
        System.out.println("String "+new Integer("4")+5);  
    }  
}
```

- A) String 9
- B) String 45
- C) compilation error
- D) run time error

**ANS:B) String 45**

**23. What will be the output of the below code:**

```
if( "Welcome".trim() == "Welcome".trim() )  
    System.out.println("Equal");  
else  
    System.out.println("Not Equal");
```

- A) compile and display "Equal"
- B) compile and display "Not Equal"
- C) cause a compiler error

D) compile and display NULL

**ANS:C) cause a compiler error**

24. Which are the legal String operations

A) `s3= s1+s2;`

B) `s3= s1-s2;`

C) `s3= s1&s2;`

D) `s3= s1&&s2;`

A) A

B) B

C) C

D) D

**ANS:A) `s3= s1+s2;`**

25. What is the output of the below code

```
class Test{  
    public static void main(String[] args) {  
        System.out.println(5.45+"3,2");  
    }  
}
```

A) 5

B) 5.4

C) 5.453,2

D) Compilation Fails

**ANS:C) 5.453,2**