Core Java: Part 6

1.When is the Float object, created in line 3, eligible for garbage collection?

```
public Object m()
{
Object o = new Float(3.14F)
Object [] oa = new Object[l]/* Line 5 */
oa[0] = o /* Line 6 */
o = null /* Line 7*/
oa[0] = null /* Line 8 */
return o /* Line 9 */
}
```

A) just after line 5

B) just after line 6

C) just after line 7

D) just after line 8

E) just after line 9

2.Determine output

int[] x = {5,6,7,8,9};

int[] y = x;

y[2] = 10;

What is the value of x[2]?

A) 6

B) 7

C) 8

D) 10

E) 0

3.Given the following declarations, which of the assignments given in the options below would

compile. Select the two correct answers.

int i = 5;

boolean t = true;

float f = 2.3F;

double d = 2.3;

A. t = (boolean) i;

B. f = d;

C. d = i;

D. i = 5;

E. f = 2.8;

A) A,B,C

B) B,C

C) C,D

D) C,D,E

E) A,D,E

4.How will you save the above java program?

```
import App;

public class MyApp{

public static void main(String[] args){//code here;

}

}
```

A) App.java

B) App.class

C) MyApp.java

D) MyApp.class

5.What is the output of the below code:

```
class Test {

public static void main(String args[]) {
```

```
int array[] = new int [5];

for (int i = 5; i > 0; i--)

array[5 - i] = i;

Arrays.sort(array);

System.out.print(Arrays.binarySearch(array, 4));

}

}
```

A) 1

B) 1

C) 2

D) 3

6.What is the output of the below code:

```
public class Test {

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

double d=2D+2d+2.+2l+2L+2f+2F+2.f+2.D;

System.out.println(d);

}

}
```

A) 18

B) 9

C) 9.0

D) 18.0

E) Run time exception

F) Compiler error

7.What is the output of the below code:

```
class Test{
public static void main(String[] args) {
try {
int[] array = {1,2,3,4,5};
for (int i = 0; i < 7; ++i) {
System.out.print(array[i]);
}
} catch (ArrayIndexOutOfBoundsException e) {
System.out.print("0");}
}
}
```

A) 12345

B) 123450

C) 12345

ArrayIndexOutOfBoundException

D) Compilation fails

8.What is the output of the below code:

```
class X{

int a;

static int a;

int Add(){

return a;

}

}
```

A) 0

B) No Ouput

C) Compilation fails

D) Run time error

9.What is the output of the below code:

```
int[] array = {0,1,2,3};

array.clear(2);

System.out.println(array);
```

A) {0,1,3}

B) {2,3}

C) {0,1}

D) Compilation Fails

10.Write the valid code to get the month?

```
public class Test {

public static void main(String[] args) {

Calendar calendar = new GregorianCalendar();

//insert code here

System.out.println(month);

}

}
```

A) int month = calendar.get(Calendar.DAY_OF_MONTH);

B) int month = calendar.get(Calendar.MONTH);

C) int month = calendar.get(MONTH);

D) int month = calendar.get(MONTH);

11.What is the outputof the below code:

```
package com.manipal.demo;

public class DemoProgram {

public static void main(String[] args) {
```

Class cls = DemoProgram.class;

System.out.println(cls.getName());

}

}

A) DemoProgram

B) com.manipal.demo.DemoProgram

C) Compilation fails

D) runtime error

12.What is the output of the below code:

public class DemoProgram {

public static void main(String[] args) {

double x = 60984.123;

double y = -497.99;

System.out.println(Math.floor(x)+" "+Math.floor(y)+" "+Math.floor(0));

}

}

A) 60984.2 -498.0 0.1

B) 60984.2 -498.1 0.0

C) 60984.0 -498.0 0.0

D) 60984.0 -498.0 0.0

E) Compilation fails

13.Whats is the output of the below code:

```
package com.manipal.demo;

public class DemoProgram {

public static void main(String[] args) {

DemoProgram demo = new DemoProgram();

System.out.println(demo.getClass());

}

}
```

A) com.manipal.demo.DemoProgram

B) class DemoProgram

C) DemoProgram

D) class com.manipal.demo.DemoProgram

14.Which statement is valid for the below syntax:

```
while(i<10 && i >24){

}
```

A) while loop never executes always true

B) while loop never executes always false

C) Compilation fails

D) Exception thrown at run time

15.What is the value and data type for the below code:

2+3*5 = ?

A) 17 int

B) 25 int

C) 17 byte

D) 25 byte

16.Determine the output

```
class Base {}

class Derived extends Base {

public static void main(String args[]){

Base a = new Derived();

System.out.println(a instanceof Derived);

}

}
```

A) true

B) false

17.Given the declaration

Circle x = new Circle(), which of the following statement is most accurate.

A. x contains an int value.

B. x contains an object of the Circle type.

C. x contains a reference to a Circle object.

D. You can assign an int value to x.

A) A

B) B

C) C

D) D

18.Given:

class Mammal { }

class Raccoon extends Mammal {

Mammal m = new Mammal();

}

class BabyRaccoon extends Mammal { }

Which four statements are true? (Choose four.)

A. Raccoon is-a Mammal.

B. Raccoon has-a Mammal. C. BabyRaccoon is-a Mammal.

D. BabyRaccoon is-a Raccoon.

E. BabyRaccoon has-a Mammal.

F. BabyRaccoon is-a BabyRaccoon.

A) A,B,D,C

B) C,D,E,A

C) A,D,E,F

D) A,B,C,F

19.Given:public interface A{public void m1();}

class B implements A{}

class C implements A {public void m1(){}}

class D implements A{public void m1(int x){}}

abstract class E implements A{}

abstract class F implements A{public void m1(){}}

abstract class G implements A{public void m1(int x){}}

What is the result

A) compilation succeeds

B) Exactly one class does NOT compile

C) Exactly two classes do NOT compile

D) Exactly four classes do NOT compile

E) Exactly three classes do NOT compile

20.Given:

```
interface Foo { int bar(); }

public class Test {

public static int fubar( Foo foo ) { return foo.bar(); }

public void testFoo() {

fubar(/*Insert Code here*/);

}

}
```

Which code allows the class Test to compile?

A. Foo { public int bar() { return 1; }

B. new Foo { public int bar() { return 1; }

C.new Foo() { public int bar() { return 1; }}

D. new class Foo { public int bar() { return 1; }

A) A

B) B

C) C

D) D

21.

In Junit @Rule

TestName is invoked when _____

A) to mark public fields of a test class

B) test is about to start

C) test method is running.

D) All of the above

22.public class ArrayTest {

int[] one; int[] two;

@Before

public void first(){one= new int[]{1,2}; two= new int[]{1,2};}

@Test

public void test() { assertArrayEquals(one, two);}

}What is the result of executing the above JUnit Test?

A) Test fails as references of both the arrays are not equal

B) Test passes

C) Compilation fails as there is no method assertArrayEquals in Junit

D) Runtime exception occurs

23.

```
class Test{

public static void main(String[] args) {

int a=6,b=12;

for(int i=0;i<3;i++){

a++;b--;

if(a>b){

System.out.println("line of code");

}

else{

System.out.println("else block");

}

}

}

}
```

How many times "line of code" will execute ?

A) 0 times

B) 1 time

C) 2 times

D) 3 times

E) Compilation fails

24.How is an abstract class represented in a class diagram?

A) Class Name is Underlined

B) Class Name is in Italics

C) Class Name is in Bold

D) Class Name is in uppercase

25. What is the syntatical error in the below code:

```
abstract class Sum{

abstract abc(int m,int n);

}
```

A) body of the method is missing

B) class modifier needs to be changed to public

C) method return type is missing

D) abstract modifier near the method should be changed to public