

Java MCQ -1

- 1 Which of the following are not java keywords
A interface B package C default D
virtual

- 2 Which of the following are illegal

- A float x=10;
B **float y=3.14;**
C double x=45;
D double g=4.56;

- 3 Given the following,

```
public class Test {  
    public static void main(String [] args) {  
        signed int x = 10;  
        for (int y=0; y<5; y++, x--)  
            System.out.print(" " + x);  
    }  
}
```

what is the result? (Choose one.)

- A. 10 9 8 7 6
B. 9 8 7 6 5

C. Compilation fails

- D. An exception is thrown at runtime

4

Which three are valid declarations of a char? (Choose three.)

- A. **char c1 = 064770;**
B. char c2 = 'face';

- C. `char c3 = 0xbeef;`
- D. `char c4 = \u0022;`
- E. `char c5 = '\iface';`
- F. `char c6 = '\uface';`

5. Which two are valid declarations of a String? (Choose two.)

- A. `String s1 = null;`
- B. `String s2 = 'null';`
- C. `String s3 = (String) 'abc';`
- D. `String s4 = (String) '\ufeed';`
- E. `String s5 = "strings rule";`

6

What is the numerical range of a char? (Choose one.)

- A. -128 to 127
- B. $-(2^{15})$ to $(2^{15}) - 1$
- C. 0 to 32767
- D. Platform dependent
- E. `0 to 65535`

7

Which three are valid declarations of a float? (Choose three.)

- A. `float f1 = -343;`
- B. `float f2 = 3.14;`
- C. `float f3 = 0x12345;`
- D. `float f4 = 42e7;`
- E. `float f5 = 2001.0D;`
- F. `float f6 = 2.81F;`

8

Which three are legal array declarations? (Choose three.)

- A. `int [] myScores [];`
- B. `char [] myChars;`
- C. `int [6] myScores;`
- D. `Dog myDogs [];`
- E. `Dog myDogs [7];`

9

Which two will declare an array and initialize it with five numbers? (Choose two.)

- A. `Array a = new Array(5);`

- B. `int [] a = {23,22,21,20,19};`
- C. `int [] array;`
- D. `int array [] = new int [5];`
- E. `int a [] = new int(5);`
- F. `int [5] array;`

10

Which will legally declare, construct, and initialize an array? (Choose one.)

- A. `int [] myList = {"1", "2", "3"};`
- B. `int [] myList = (5, 8, 2);`
- C. `int myList [] [] = {4,9,7,0};`
- D. `int myList [] = {4, 3, 7};`
- E. `int [] myList = [3, 5, 6];`
- F. `int myList [] = {4; 6; 5};`

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Which four describe the correct default values for array elements of the types indicated?

(Choose four.)

- A. `int -> 0`
- B. `String -> "null"`
- C. `Dog -> null`
- D. `char -> '\u0000'`
- E. `float -> 0.0f`
- F. `boolean -> true`

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```
1. public class X {
2. public static void main(String [] args) {
3. String names [] = new String[5];
4. for (int x=0; x < args.length; x++)
5. names[x] = args[x];
6. System.out.println(names[2]);
7. }
8. }
```

and the command line invocation is

`java X a b`

what is the result? (Choose one.)

- A. names
- B. `null`
- C. Compilation fails
- D. An exception is thrown at runtime

13

Given the following,

```
1. public class CommandArgsTwo {  
2. public static void main(String [] argh) {  
3. String [] args;  
4. int x;  
5. x = argh.length;  
6. for (int y = 1; y <= x; y++) {  
7. System.out.print(" " + argh[y]);  
8. }  
9. }  
10. }
```

and the command-line invocation,

```
java CommandArgsTwo 1 2 3
```

what is the result?

- A. 0 1 2
- B. 1 2 3
- C. 0 0 0
- D. null null null
- E. Compilation fails
- F. An exception is thrown at runtime

14

What is the most restrictive access modifier that will allow members of one class to have access to members of another class in the same package?

- A. public
- B. abstract
- C. protected
- D. synchronized
- E. default access

15

Given a method in a class, what access modifier do you use to restrict access to

that method to only the other members of the same class?

- A. final
- B. static
- C. private
- D. protected
- E. volatile
- F. default access

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Which of the following variables do not have default values:

- A instance
- B static
- C **local**
- D None

17

Guess the output:

```
class Demo{  
    int x;  
    public static void main(String abc[])  
    {  
        System.out.println(x);  
    }  
}
```

- A 0
- B 1
- C **Compile time error**
- D Runtime error

18 __static_____ are shared variables.

19 A Top Level class can have which of the following Access specifiers.

- a) **default** b) private c) protected d) all

20. Which of the following are not Wrapper classes.

- A Integer
- B Char
- C Boolean
- D **String**

21 A character datatype in java occupies __2____bytes.

22 Which package is available by default to all classes.

- A java.util B **java.lang** C java.io D java.net

23

```
1. abstract class A {  
2. abstract short m1() ;  
3. short m2() { return (short) 420; }  
4. }  
5.  
6. abstract class B extends A {  
7. // missing code ?  
8. short m1() { return (short) 42; }  
9. }
```

which three of the following statements are true? (Choose three.)

- A. **The code will compile with no changes.**
- B. Class B must either make an abstract declaration of method m2() or implement method m2() to allow the code to compile.
- C. **It is legal, but not required, for class B to either make an abstract declaration of method m2() or implement method m2() for the code to compile.**
- D. As long as line 8 exists, class A must declare method m1() in some way.
- E. **If line 6 were replaced with 'class B extends A {' the code would compile.**
- F. If class A was not abstract and method m1() on line 2 was implemented, the code would not compile.

25

Which two of the following are legal declarations for nonnested classes and interfaces?

(Choose two.)

- A. final abstract class Test {}

- B. public static interface Test {}
- C. final public class Test {}
- D. protected abstract class Test {}
- E. protected interface Test {}
- F. public abstract class Test {}

26

How many of the following are legal method declarations?

- 1 – protected abstract void m1();
 - 2 – static final void m1(){}
 - 3 – transient private native void m1() {}
 - 4 – synchronized public final void m1() {}
 - 5 – private native void m1();
 - 6 – static final synchronized protected void m1() {}
- A. 1
 - B. 2
 - C. 3
 - D. 4
 - E. 5
 - F. All of them

27

Which two are valid declarations within an interface? (Choose two.)

- A. public static short stop = 23;
- B. protected short stop = 23;
- C. transient short stop = 23;
- D. final void madness(short stop);
- E. public Boolean madness(long bow);
- F. static char madness(double duty);

28

Given the following,

- 1. interface DoMath {
- 2. double getArea(int rad); }
- 3.
- 4. interface MathPlus {
- 5. double getVol(int b, int h); }
- 6.
- 7.
- 8.

which two code fragments inserted at lines 7 and 8 will compile? (Choose two.)

- A. class AllMath extends DoMath {
double getArea(int r); }
- B. interface AllMath implements MathPlus {
double getVol(int x, int y); }
- C. interface AllMath extends DoMath {
float getAvg(int h, int l); }
- D. class AllMath implements MathPlus {
double getArea(int rad); }
- E. abstract class AllMath implements DoMath, MathPlus {
public double getArea(int rad) { return rad * rad * 3.14; } }

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Which three are valid method signatures in an interface? (Choose three.)

- A. private int getArea();
- B. public float getVol(float x);
- C. public void main(String [] args);
- D. public static void main(String [] args);
- E. boolean setFlag(Boolean [] test []);

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Given the following,

1. interface Base {
2. boolean m1 ();
3. byte m2(short s);
4. }

which two code fragments will compile? (Choose two.)

- A. interface Base2 implements Base { }
- B. abstract class Class2 extends Base {
public boolean m1() { return true; } }
- C. abstract class Class2 implements Base { }
- D. abstract class Class2 implements Base {
public boolean m1() { return (7 > 4); } }
- E. class Class2 implements Base {
boolean m1() { return false; }
byte m2(short s) { return 42; } }

31

Given the following,

1. import java.awt.*;
2. class Ticker extends Component {


```

3. public static void main (String [] args) {
4. Ticker t = new Ticker();
5.
6. }
7. }

```

which two of the following statements, inserted independently, could legally be inserted into

line 5 of this code? (Choose two.)

- A. boolean test = (Component instanceof t);
- B. boolean test = (t instanceof Ticker);
- C. boolean test = t instanceof (Ticker);
- D. boolean test = (t instanceof Component);
- E. boolean test = t instanceof (Object);
- F. boolean test = (t instanceof String);

32

```

1. class PassS {
2. public static void main(String [] args) {
3. PassS p = new PassS();
4. p.start();
5. }
6.
7. void start() {
8. String s1 = "slip";
9. String s2 = fix(s1);
10. System.out.println(s1 + " " + s2);
11. }
12.
13. String fix(String s1) {
14. s1 = s1 + "stream";
15. System.out.print(s1 + " ");
16. return "stream";
17. }
18. }

```

what is the result?

- A. slip stream
- B. slipstream stream
- C. stream slip stream
- D. slipstream slip stream
- E. Compilation fails
- F. An exception is thrown at runtime

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```
1. class Two {  
2. byte x;  
3. }  
4.  
5. class PassO {  
6. public static void main(String [] args) {  
7. PassO p = new PassO();  
8. p.start();  
9. }  
10.  
11. void start() {  
12. Two t = new Two();  
13. System.out.print(t.x + " "); //0  
14. Two t2 = fix(t);  
15. System.out.println(t.x + " " + t2.x); //42 42  
16. }  
17.  
18. Two fix(Two tt) {  
19. tt.x = 42;  
20. return tt;  
21. }  
22. }
```

what is the result?

- A. null null 42
- B. 0 0 42
- C. 0 42 42
- D. 0 0 0
- E. Compilation fails
- F. An exception is thrown at runtime

34) If the java program **Sample** is executed as java **Sample 3 abc 5** , What will be the output in the following cases(guess the output for every statement)

- a System.out.println(args.length); // 3
- b System.out.println(args[1].length()); // 3
- c System.out.println(args[1]); //abc

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Study the following snippet code and answer the questions: (4 marks)

```
Class A{  
    void m1(int x, float f){ }    ---- A  
    void m1(int c){ }            ---- B  
}  
  
Class B extends A{  
    int m1(int x,float f){ }      ---- C  
    void m1(int x)                -----D  
}  
}
```

- a) Which method in B is not valid. C
- b) What change will you make in the invalid method to make it valid.
- c) Which are the overloaded methods.
- d) Which are the overridden methods

36 Read the following code snippet. (

```
Class Demo{  
    int data=10;  
  
    static void m(final Demo dobj){  
        dobj.data=15;    -----1  
    }  
  
    public static void main(String abc[])  
    {    Demo d=null;  
        d=new Demo();    ----- 2  
        m(d);
```

```

        System.out.println(d.data);
    }
}

```

- 1 What is the output of the above program
- 2 What is the output of the above program if final keyword is removed.
- 3 Which of the following statements if introduced after 1 will cause errors.
 - A dobj=new Demo();
 - B dobj=null;
 - C Demo d=new Demo();
- 4 What happens when statement 2 is removed.

37

Given the following,

```

1. public class Switch2 {
2. final static short x = 2;
3. public static int y = 0;
4. public static void main(String [] args) {
5. for (int z=0; z < 3; z++) {
6. switch (z) {
7. case y: System.out.print("0 ");
8. case x-1: System.out.print("1 ");
9. case x: System.out.print("2 ");
10. }
11. }
12. }
13. }

```

what is the result?

- A. 0 1 2
- B. 0 1 2 1 2 2
- C. Compilation fails at line 7.
- D. Compilation fails at line 8.
- E. Compilation fails at line 9.
- F. An exception is thrown at runtime.

38

Given the following,

```

1. public class While {
2. public void loop() {
3. int x= 0;
4. while ( 1 ) {
5. System.out.print("x plus one is " + (x + 1));
6. }
7. }
8. }

```

Which statement is true?

- A. There is a syntax error on line 1.
- B. There are syntax errors on lines 1 and 4.
- C. There are syntax errors on lines 1, 4, and 5.
- D. There is a syntax error on line 4.**
- E. There are syntax errors on **lines** 4 and 5.
- F. There is a syntax error on line 5.

39

Given the following,

```

1. System.out.print("Start ");
2. try {
3. System.out.print("Hello world");
4. throw new FileNotFoundException();
5. }
6. System.out.print(" Catch Here ");
7. catch(EOFException e) {
8. System.out.print("End of file exception");
9. }
10. catch(FileNotFoundException e) {
11. System.out.print("File not found");
12. }

```

and given that EOFException and FileNotFoundException are both subclasses of

IOException, and further assuming this block of code is placed into a class, which statement is most true concerning this code?

- A. The code will not compile.
- B. Code output: Start Hello world File Not Found.
- C. Code output: Start Hello world End of file exception.
- D. Code output: Start Hello world Catch Here File not found.

40

Given the following,

```

1. import java.io.*;
2. public class MyProgram {

```

```

3. public static void main(String args[]){
4.   FileOutputStream out = null;
5.   try {
6.     out = new FileOutputStream("test.txt");
7.     out.write(122);
8.   }
9.   catch(IOException io) {
10.    System.out.println("IO Error.");
11.  }
12.  finally {
13.    out.close();
14.  }
15. }
16. }

```

and given that all methods of class `FileOutputStream`, including `close()`, throw an

`IOException`, which of these is true? (Choose one.)

- A. This program will compile successfully.
- B. This program fails to compile due to an error at line 4.
- C. This program fails to compile due to an error at line 6.
- D. This program fails to compile due to an error at line 9.
- E. This program fails to compile due to an error at line 13.

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```

1. public class MyProgram {
2.   public static void throwit() {
3.     throw new RuntimeException();
4.   }
5.   public static void main(String args[]){
6.     try {
7.       System.out.println("Hello world ");
8.       throwit();
9.       System.out.println("Done with try block ");
10.    }
11.    finally {
12.      System.out.println("Finally executing ");
13.    }
14.  }
15. }

```

which answer most closely indicates the behavior of the program?

- A. The program will not compile.
- B. The program will print Hello world, then will print that a `RuntimeException` has

occurred, then will print Done with try block, and then will print Finally executing.

C. The program will print Hello world, then will print that a RuntimeException has

occurred, and then will print Finally executing.

D. The program will print Hello world, then will print Finally executing, then will print that a RuntimeException has occurred.

42

Given the following,

```
1. class B extends A {  
2. int getID() {  
3. return id;  
4. }  
5. }  
6. class C {  
7. public int name;  
8. }  
9. class A {  
10. C c = new C();  
11. public int id;  
12. }
```

which two are true about instances of the classes listed above? (Choose two.)

A. A is-a B

B. C is-a A

C. A has-a C

D. B has-a A

E. B has-a C

43 Given the following,

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

}

what is the result?

A. A

B. B

C. Compilation fails.

D. An exception is thrown at runtime.

44

Given the following,

```
class Foo {
```

```
String doStuff(int x) { return "hello"; }
```

```
}
```

which method would not be legal in a subclass of Foo?

A. `String doStuff(int x) { return "hello"; }`

B. `int doStuff(int x) { return 42; }`

C. `public String doStuff(int x) { return "Hello"; }`

D. `protected String doStuff(int x) { return "Hello"; }`

E. `String doStuff(String s) { return "Hello"; }`

F. `int doStuff(String s) { return 42; }`

45

1. `class ParentClass {`

2. `public int doStuff(int x) {`

3. `return x * 2;`

4. `}`

5. `}`

6.

7. `public class ChildClass extends ParentClass {`

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

9. `ChildClass cc = new ChildClass();`

10. `long x = cc.doStuff(7);`

11. `System.out.println("x = " + x);`

12. `}`

13.

14. `public long doStuff(int x) {`

15. `return x * 3;`

16. `}`

17. `}`

What is the result?

A. `x = 14`

B. `x = 21`

C. Compilation fails at line 2.

D. Compilation fails at line 11.

E. Compilation fails at line 14.

F. An exception is thrown at runtime.

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Given the following,

```
1. class Over {  
2. int doStuff(int a, float b) {  
3. return 7;  
4. }  
5. }  
6.  
7. class Over2 extends Over {  
8. // insert code here  
9. }
```

which two methods, if inserted independently at line 8, will not compile?
(Choose two.)

- A. public int doStuff(int x, float y) { return 4; }
- B. protected int doStuff(int x, float y) {return 4; }
- C. private int doStuff(int x, float y) {return 4; }
- D. private int doStuff(int x, double y) { return 4; }
- E. long doStuff(int x, float y) { return 4; }
- F. int doStuff(float x, int y) { return 4; }

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Which two of these statements are true about constructors? (Choose two.)

- A. Constructors must not have arguments if the superclass constructor does not have arguments.
- B. Constructors are not inherited.
- C. Constructors cannot be overloaded.
- D. The first statement of every constructor is a legal call to the super() or this()method.

48

Given the following,

```
14. long test( int x, float y) {  
15.  
16. }
```

which two of the following lines, inserted independently, at line 15 would not compile?

(Choose two.)

- A. return x;
- B. return (long) x / y;
- C. return (long) y;

- D. return (int) 3.14d;
- E. return (y / x);
- F. return x / 7;

49

Given the following,

```
1. import java.util.*;
2. class Ro {
3. public static void main(String [] args) {
4. Ro r = new Ro();
5. Object o = r.test();
6. }
7.
8. Object test() {
9.
10.
11. }
12. }
```

which two of the following code fragments inserted at lines 9/10 will not compile?

(Choose two.)

- A. char [] [] c = new char [2][2];
return c;
- B. return (Object) 7;
- C. return (Object) (new int [] {1,2,3});
- D. ArrayList a = new ArrayList();
return a;
- E. return (Object) "test";
- F. return (Float) 4.3;

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```
1. class Test {
2. public static void main(String [] args) {
3. Test p = new Test();
4. p.start();
5. }
6.
7. void start() {
8. boolean b1 = false;
9. boolean b2 = fix(b1);
10. System.out.println(b1 + " " + b2);
11. }
```

12.

13. `boolean fix(boolean b1) {`

14. `b1 = true;`

15. `return b1;`

16. `}`

17. `}`

what is the result?

A. true true

B. false true

C. true false

D. false false

E. Compilation fails

F. An exception is thrown at runtime