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**JAVA TEST**

**Time allowed: 30 minutes**

**NAME:**

**EMAIL:**

**DATE:**

**Question # 1**

Which of the following are keywords or reserved words in Java?

|  |  |
| --- | --- |
| 1. if | 1. then |
| 1. goto | 1. while |
| 1. case |  |

**Question # 2**

A byte can be of what size

1. -128 to 127
2. (-2 power 8)-1 to 2 power 8
3. -255 to 256
4. depends on the particular implementation of the Java Virtual machine

**Question # 3**

What will happen if you try to compile and run the following code?

public class Q {

public static void main(String argv[]){

int anar[]=new int[]{1, 2, 3};

System.out.println(anar[1]);

}

}

|  |  |
| --- | --- |
| 1. 1 | 1. Error anar is referenced before it is initialized |
| 1. 2 | 1. Error: size of array must be defined |

**Question # 4**

Given the following declarations

String s1=new String("Hello");

String s2=new String("there");

String s3=new String();

Which of the following are legal operations?

|  |  |
| --- | --- |
| 1. s3=s1 + s2; | 1. s3=s1 - s2; |
| 1. s3=s1 & s2; | 1. s3=s1 && s2 |

**Question # 5**

What will happen when you compile and run the following code?

public class MyClass{

static int i;

public static void main(String argv[]){

System.out.println(i);

}

}

1. Error Variable i may not have been initialized
2. null
3. 1
4. 0

**Question # 6**

Which of the following statements are true?

1. Methods cannot be overriden to be more private
2. Static methods cannot be overloaded
3. Private methods cannot be overloaded
4. An overloaded method cannot throw exceptions not checked in the base class

**Question # 7**

What will be the result of attempting to compile and run the following code?

abstract class MineBase {

abstract void amethod();

static int i;

}

public class Mine extends MineBase {

public static void main(String argv[]){

int[] ar=new int[5];

for(i=0;i < ar.length;i++)

}

}

1. a sequence of 5 0's will be printed
2. Error: ar is used before it is initialized
3. Error Mine must be declared abstract
4. IndexOutOfBoundes Error

**Question # 8**

What will be output if you try to compile and run the following code, but there is no file called Hello.txt in the current directory?

import java.io.\*;

public class Mine {

public static void main(String argv[]){

Mine m=new Mine();

System.out.println(m.amethod());

}

public int amethod() {

      try {

         FileInputStream dis=new FileInputStream("Hello.txt");

      }catch (FileNotFoundException fne) {

         System.out.println("No such file found");

         return -1;

      }catch(IOException ioe) {

      } finally{

         System.out.println("Doing finally");

      }

      return 0;

   }

}

1. No such file found
2. No such file found, -1
3. No such file found, Doing finally, -1
4. 0

**Question # 9**

Which of the following statements are true?

1. System.out.println(-1>>>2); will output a result larger than 10
2. System.out.println(-1>>>2); will output a positive number
3. System.out.println(2>>1); will output the number 1
4. System.out.println(1<<<2); will output the number 4

**Question # 10**

What will be displayed when you attempt to compile and run the following code

//Code start

import java.awt.\*;

public class Butt extends Frame{

public static void main(String argv[]){

Butt MyBut=new Butt();

}

Butt(){

Button HelloBut=new Button("Hello");

      Button ByeBut=new Button("Bye");

      add(HelloBut);

      add(ByeBut);

      setSize(300,300);

      setVisible(true);

   }

}

//Code end

1. Two buttons side by side occupying all of the frame, Hello on the left and Bye on the right
2. One button occupying the entire frame saying Hello
3. One button occupying the entire frame saying Bye
4. Two buttons at the top of the frame one saying Hello the other saying Bye

**Question # 12 - 11**

If g is a graphics instance what will the following code draw on the screen?

g.fillArc(45,90,50,50,90,180);

1. An arc bounded by a box of height 45, width 90 with a centre point of 50, 50, starting at an angle of 90 degrees traversing through 180 degrees counter clockwise.
2. An arc bounded by a box of height 50, width 50, with a centre point of 45, 90, starting at an angle of 90 degrees traversing through 180 degrees clockwise.
3. An arc bounded by a box of height 50, width 50 with a top left at coordinates of 45, 90, starting at 90 degrees and traversing through 180 degrees counter clockwise.
4. An arc starting at 45 degrees, traversing through 90 degrees clockwise bounded by a box of height 50, width 50 with a centre point of 90, 180.

**Question # 11 - 12**

If you wanted to find out where the position of the letter v (ie return 2) in the string s containing "Java", which of the following could you use?

|  |  |
| --- | --- |
| 1. mid(2,s); | 1. charAt(2); |
| 1. s.indexOf('v'); | 1. indexOf(s,'v'); |

**Question # 13**

What code placed after the comment //For loop would populate the elements of the array ia[] with values of the variable i.?

public class Lin{

   public static void main(String argv[]){

      Lin l =  new Lin();

      l.amethod();

   }

   public void amethod(){

      int ia[] = new int[4];

      //Start For loop

      {

         ia[i]=i;

         System.out.println(ia[i]);

      }

   }

}

1. for(int i=0; i < ia.length() -1; i++)
2. for(int i=0; i < ia.length(); i++)
3. for(int i=1; i < 4; i++)
4. for(int i=0; i< ia.length;i++)

**Question # 15 - 14**

An Applet has its Layout Manager set to the default of FlowLayout. What code would be correct to change to another Layout manager?

1. set LayoutManager(new GridLayout());
2. set Layout(new GridLayout(2,2));
3. setGridLayout(2,2);
4. setBorderLayout();

**Question # 14 - 15**

Which of the following will output -4.0

|  |  |
| --- | --- |
| 1. System.out.println(Math.floor(-4.7)); | 1. System.out.println(Math.round(-4.7)); |
| 1. System.out.println(Math.ceil(-4.7)); | 1. System.out.println(Math.min(-4.7)); |

**Question # 16**

What will be the result when you attempt to compile and run the following code?

public class Conv{

   public static void main(String argv[]){

      Conv c=new Conv();

      String s=new String("ello");

      c.amethod(s);

   }

   public void amethod(String s){

      char c='H';

      c+=s;

      System.out.println(c);

   }

}

1. Compilation and output the string "Hello"
2. Compilation and output the String "ello"
3. Compilation and output the string elloH
4. Compile time error

**Question # 23 - 17**

What will the following code print out?

public class Oct{

   public static void main(String argv[]){

      Oct o = new Oct();

      o.amethod();

   }

   public void amethod(){

      int oi= 012;

      System.out.println(oi);

   }

}

|  |  |
| --- | --- |
| 1. 12 | 1. 012 |
| 1. 10 | 1. 10.0 |

**Question # 17 - 18**

What will be printed out if this code is run with the following command line?

java Myprog good morning

public class Myprog{

public static void main(String argv[]){

System.out.println(argv[2])

}

}

1. myprog
2. good
3. morning
4. Exception raised: "java.lang.ArrayIndexOutOfBoundsException: 2"

**Question # 18 - 19**

If you create a TextField with a constructor to set it to occupy 5 columns, what difference will it make if you use it with a proportional font (ie Times Roman) or a fixed pitch typewriter style font (Courier)

1. With a fixed font you will see 5 characters, with a proportional it will depend on the width of the characters
2. With a fixed font you will see 5 characters, with a proportional it will cause the field to expand to fit the text
3. The columns setting does not affect the number of characters displayed
4. Both will show exactly 5 characters

**Question # 19 - 20**

Given the following code:

import java.awt.\*;

public class SetF extends Frame{

public static void main(String argv[]){

SetF s=new SetF();

s.setSize(300,200);

s.setVisible(true);

}

}

How could you set the frame su

1. s.setBackground(Color.pink);
2. s.setColor(PINK);
3. s.Background(pink);
4. s.color=Color.pink

**Question # 20 - 21**

Given the following code what will be output?

public class Pass{

   static int j=20;

   public static void main(String argv[]){

      int i=10;

      Pass p =  new Pass();

      p.amethod(i);

      System.out.println(i);

      System.out.println(j);

   }

   public void amethod(int x){

      x=x\*2;

      j=j\*2;

   }

}

1. Error: amethod parameter does not match variable
2. 20 and 40
3. 10 and 40
4. 10, and 20

**Question # 21 - 22**

Which of the following can you perform using the File class?

1. Change the current directory
2. Return the name of the parent directory
3. Delete a file
4. Find if a file contains text or binary information

**Question # 24 - 23**

What is the result of the following operation?

System.out.println(4 | 3);

|  |  |
| --- | --- |
| 1. 6 | 1. 0 |
| 1. 1 | 1. 7 |

**Question # 22 - 24**

What will be the result when you try to compile and run the following code?

private class Base{

   Base(){

      int i = 100;

      System.out.println(i);

   }

}

public class Pri extends Base{

   static int i = 200;

   public static void main(String argv[]){

      Pri p = new Pri();

      System.out.println(i);

   }

}

|  |  |
| --- | --- |
| 1. Error at compile time | 1. 200 |
| 1. 100 followed by 200 | 1. 100 |

**Question # 25**

What will happen when you try compiling and running this code?

public class Ref{

   public static void main(String argv[]){

      Ref r = new Ref();

      r.amethod(r);

   }

   public void amethod(Ref r){

      int i=99;

      multi(r);

      System.out.println(i);

   }

   public void mult(Ref r){

      r.i = r.i\*2;

   }

}

|  |  |
| --- | --- |
| 1. Error at compile time | 1. An output of 99 |
| 1. An output of 198 | 1. An error at runtime |

**Question # 27 - 26**

Which of the following will compile without error?

|  |  |
| --- | --- |
| A.  import java.awt.\*;  package Mypackage;  class Myclass{} | B.  package MyPackage;  import java.awt.\*;  class MyClass{} |
| C.  package MyPackage;  importjava.awt.\*;  class MyClass{} |  |

**Question # 28 - 27**

Which of the following will successfully crate an instance of the Vector class and add an element?

|  |  |
| --- | --- |
| A.  Vector v=new Vector(99);  v[1]=99; | C.  Vector v=new Vector();  v.add(99); |
| B.  Vector v=new Vetor();  v.addElement(99); | D.  Vector v=new Vector(100);  v.addElement("99"); |

**Question # 29 - 28**

What will happen when you compile and run the following code?

public class Scope{

   private int i;

   public static void main(String argv[])}

      Scope s = new Scope();

      s.amethod();

   }//End of main

   public static void amethod(){

      System.out.println(i);

   }//end of amethod

}//End of class

1. A value of 0 will be printed out
2. Nothing will be printed out
3. A compile time error
4. A compile time error complaining of the csope of the variable i

**Question # 26 - 29**

What will be the result when you attempt to compile this program?

public class Rand{

public static void main(String argv[]){

int iRand;

iRand = Math.random();

System.out.println(iRand);

}

}

1. Compile time error referring to a cast problem
2. A random number between 1 and 10
3. A random number between 0 and 1
4. A compile time error about random being an unrecognised method

**Question # 30**

What will happen when you attempt to compile and run the following code

class Base{

   private void amethod(int iBase){

      System.out.println("Base.amethod");

  }

}

class Over extends Base{

   public static void main(String argv[]){

      Over o = new Over();

      int iBase=0;

      o.amethod(iBase);

   }

   public void amethod(int iOver){

    System.out.println("Over.amethod");

   }

}

1. Runtime error complaining that Base.amethod is private
2. Output of "Base.amethod"
3. Output of "Over.amethod"
4. Compile time error complaining that Base.amethod is private

**~ The end ~**