What is a Graphics object?

- 1 The Graphics object represents the part of the Frame that you can draw on.
- 2 The Graphics object represents the entire monitor.
- 3 The Graphics object represents the whole Frame.
- 4 The Graphics object represents the graphics board.

Ans:1

What method must a button listener implement?

- 1 actionMethod().
- 2 buttonAction().
- 3 eventAction().
- 4 actionPerformed().

Ans:4.

In Java, what do you call an area on the screen that has nice borders and various buttons along the top border?

- 1 A box.
- 2 A window.
- 3 A screen.
- 4 A frame

Ans:4.

What method changes the color of a content pane?

- 1 setBackground()
- 2 setBackgroundColor()
- 3 setForegroundColor()
- 4 setColor()

```
How should a command string be compared with a literal string?
1 equals()
2 =
3 equalsIgnoreCase()
4 ==
Ans:1
How can the user be prevented from entering text into a text field?
1 By using setVisible(false)
2 By using setEditable(false)
3 By using setEditable( true )
4 By using setNotEditable()
Ans:2
The three software parts of a GUI program are:
1 Windows, Buttons, Mice
2 Frames, Code, Events
3 GUI Components, Event Listeners, Application Code
4 GUI Components, Graphics, Code
Ans:3
```

When is the paint() method of a frame object called?

- 1 The Java system calls it once when the program starts.
- 2 The main() method calls it once when the program starts.
- 3 The user calls it to display the frame.

4 The Java system calls it every time it decides to display the frame.
Ans:4.
From what immediate base class is JTextField derived? 1 JText 2 JComponent 3 JTextComponent 4 JField
Ans:3
When the user clicks on a button, what is generated? 1 A Button object. 2 A Container 3 An Event. 4 A Listener.
Ans:3
What type of object determines where GUI components go in the content pane? 1 The layout manager. 2 The layabout programmer. 3 The frame hanger. 4 The layer organizer.

Which of the following are correct event handling methods

- 1 MousePressed(MouseClick e){}
- 2 mousePressed(MouseEvent e){}
- 3 functionKey(KeyPress k){}
- 4 componentAdded(ContainerEvent e){}

Ans:2,4

The size of a frame on the screen is measured in:

- 1 nits
- 2 dots
- 3 inches
- 4 pixels

Ans:4

What is the name for a method that responds to events?

- 1 An application method.
- 2 A snoop method.
- 3 A container method.
- 4 A listener method.

The fundamental classes for GUI programming are contained in the:

- 1 Java Enhancement Toolkit
- 2 Abstract Windowing Toolkit
- 3 Graphics Event Toolkit
- 4 GUI toolkit

Ans:2

Which of the following statements are true?

- 1 The collection interface contains a method called enumerator
- 2 The interator method returns an instance of the Vector class
- 3 The Set interface is designed for unique elements
- 4 At the root of the collection hierarchy is a class called Collection

Ans:3

How do you indicate where a component will be positioned using Flowlayout?

1 North, South, East, West

- 2 Assign a row/column grid reference
- 3 Do nothing, the FlowLayout will position the component
- 4 Pass a X/Y percentage parameter to the add method

Why does an applet have no main() method?

- 1 The paint() method is like the main method for an applet.
- 2 The browser acts as the main. The applet provides methods for the browser.
- 3 Programs that do graphics don't need a main.
- 4 Only simple programs need a main.

Ans:2

What is the role of the Graphics object?

- 1 It contains a list of commands from the browser to your applet.
- 2 It can be omitted, but is sometimes used for file i/o.
- 3 It represents the area the applet can draw in and provides drawing methods.
- 4 It represents the entire screen of the computer monitor.

```
Which of the following puts "Hello" starting at X=20 Y=50? Assume that graph holds a Graphics object reference.

1 graph.drawString( 20, 50, "Hello" );

2 drawString( "Hello", 20, 50 );

3 graph.drawString( "Hello", 20, 50 );

4 graph.println( "Hello" );
```

Ans:3

```
Which of the following draws a circle with a radius of 50 at X=10, Y=20? 1 graph.drawCircle( 50, 50, 10, 20 ); 2 graph.drawCircle( 50 ); 3 graph.drawOval( 50, 50 ); 4 graph.drawOval( 10, 20, 50, 50 );
```

Ans:4

What must be imported to get class Applet

```
1 java.awt.*
```

- 2 java.java
- 3 java.applet.Applet
- 4 java.util

What must be imported to get most graphics components?

- 1 java.*
- 2 java.util.*
- 3 java. Graphics
- 4 java.awt.*

Ans:4

```
What method call is used to draw a line from X=20, Y=30 to X=70, Y=50
1 gr.drawLine( 20, 30, 70, 50 );
2 gr.drawLine((20, 30), (70, 50));
```

- 3 gr.drawLine(20, 70, 30, 50);
- 4 gr.drawLine(20, 30, 50, 70);

What method of your applet is called by the browser when it wishes to display it on the monitor?

- 1 setColor()
- 2 setBackground()
- 3 drawLine()
- 4 paint()

Ans:4

Can the source code for your applet be compiled by the usual javac compiler?

- 1 Yes---if you are going to run it from the DOS prompt.
- 2 Yes---an applet is just another class as far as the compiler is concerned.
- 3 No---because applets have no main()
- 4 No---the web browser compiles the code.

Ans:2.

Can two or more applets appear on the same web page?

- 1 No, applets can't appear on web pages.
- 2 Yes, but there must be <applet> and </applet> for each one.
- 3 Yes, put them all between <applet> and </applet>
- 4 No, only one per page.

Ans:2

The syntax of drawstring() method is.....

- 1 void drawstring(String x,int x)
- 2 void drawstring(String s)
- 3 void drawstring(intx,inty,string s)
- 4 void drawstring(String s,intx,int y)

Ans:4

The syntax of paint()method is.....

- 1 public void paint(Graphics g)
- 2 public void paint(String s)
- 3 public void paint(Graphics g,String s)
- 4 public void paint()

Ans:1.

The constructor for Font class is.....

- 1 Font(String name,int style)
- 2 Font(string name,intstyle,int size)
- 3 Font(String name)
- 4 Font(String name,int size)

Ans:2

To display text in the applet status bar.....method is used.

- 1 showStatus()
- 2 drawStatusBar()
- 3 drawStatus()
- 4 showStatusBar()

Ans:1

which of the following is an optional attribute of applet tag?

- 1 Code
- 2 Name
- 3 Height
- 4 Width

Which method is called first by an applet?

- 1 run()
- 2 init()
- 3 paint()
- 4 start()

Ans:2

What should be done to invoke the run() method on a thread for an object derived from the Thread class. Select the one correct answer.

explanation

The start() method invokes the run() method when the thread is ready to execute.

- 1 The start() method should be directly invoked on the Object.
- 2 The init() method should be directly invoked on the Object.
- 3 The run() method should be directly invoked on the Object.
- 4 The creation of the object using the new operator would create a new thread and invoke its run() method.

What is the default priority of a newly created thread.

explanation

The start() method invokes the run() method when the thread is ready to execute.

- 1 MAX_PRIORITY (which is defined as 10 in the Thread class.)
- 2 A thread inherits the priority of its parent thread.
- 3 NORM_PRIORITY (which is defined as 5 in the Thread class.)
- 4 MIN_PRIORITY (which is defined as 1 in the Thread class.)

Ans:2

The class Hashtable is used to implement which collection interface. Select the one correct answer.

- 1 SortedSet
- 2 List
- 3 Map
- 4 Set

Which of the following statements are true. Select the two correct answers.

- 1 The notify() and notifyAll() methods can be used to signal and move waiting threads to ready-to-run state.
- 2 The wait(), notify(), and notifyAll() methods must be executed in synchronized code.
- 3 The Thread class is an abstract class.
- 4 The wait method defined in the Thread class, can be used to convert a thread from Running state to Waiting state.

Ans:1,2

What is the name of the Collection interface used to represent elements in a sequence (in a particular order). Select the one correct answer.

- 1 Map
- 2 Set
- 3 List
- 4 Collection

Which of these classes implement the Collection interface SortedMap. Select the one correct answers.

- 1 TreeMap
- 2 Hashtable
- 3 HashMap
- 4 TreeSet

Ans:1

The start() method invokes the run() method when the thread is ready to execute.

- 1 Output of first0, first1, second0, second1
- 2 Compile time error
- 3 Output of first0, second0, first0, second1
- 4 Runtime error

Ans:1

Which most closely matches a description of a Java Map?

- 1 A class for containing unique array elements
- 2 A vector of arrays for a 2D geographic representation
- 3 A class for containing unique vector elements

4 An interface that ensures that implementing classes cannot contain duplicate keys

Ans:4

How does the set collection deal with duplicate elements?

- 1 Duplicate values will cause an error at compile time
- 2 An exception is thrown if you attempt to add an element with a duplicate value
- 3 The add method returns false if you attempt to add an element with a duplicate value
- 4 A set may contain elements that return duplicate values from a call to the equals method

Ans:3

What can cause a thread to stop executing?

- 1 A call to the thread's stop method.
- 2 Another thread is given a higher priority
- 3 The program exits via a call to System.exit(0);
- 4 A call to the halt method of the Thread class?

Ans:1,2,3

Under what circumstances might you use the yield method of the Thread class?

explanation

The start() method invokes the run() method when the thread is ready to execute.

- 1 To call from the currently running thread with a parameter designating which thread should be allowed to run
- 2 To call from the currently running thread to allow another thread of the same or higher priority to run
- 3 To allow a thread of higher priority to run
- 4 To call on a waiting thread to allow it to run

Ans:2

Which of the following are methods of the Thread class?

1 go()

2 stop()

3 yield()

4 sleep(long msec)

Ans:4,2,3

Which of the following methods are members of the Vector class and allow you to input a new element?

explanation

The start() method invokes the run() method when the thread is ready to execute.

- 1 addltem
- 2 append
- 3 addElement
- 4 insert

Which of the following are methods of the Collection interface?

- 1 isEmpty
- 2 iterator
- 3 setText
- 4 toArray

Ans:1,2,4

SortedMap is a/an?

- 1 Class
- 2 Interface
- 3 Method
- 4 Abstract Class

How can you prevent a member variable from becoming serialized?

- 1 You can not.
- 2 By marking it transient
- 3 By marking it volatile
- 4 By marking it private

Ans:2

What can cause a thread to become non-runnable?

explanation

The start() method invokes the run() method when the thread is ready to execute.

- 1 Calling the notifyAll method on an object.
- 2 Calling the notify method on an object.
- 3 Exiting from a synchronized block
- 4 Calling the wait method on an object.

Ans:4

Declare and construct a Vector with 20 initial slots and an increment size of 5.

- 1 Vector v = new Vector(20)
- 2 Vector v(20) = new Vector(5)
- 3 Vector v = new Vector(20, 5)
- 4 Vector[] v = new Vector(20,5)

- A Vector object acts like:
- 1 An array of primitive values.
- 2 An array of primitive values or of object references.
- 3 An array of references to objects of a particlar class.
- 4 An array of references to objects of class Object.

Ans:4

Which of the following opens the file "myData.stuff" for Input?

- 1 FileInputStreamfis = new FileInputStream(new BufferedInputStream("myData.stuff"))
- 2 FileInputStream("myData.stuff", true)
- 3 FileInputStream(is = new FileInputStream(imyData.stuffi)
- 4 DataInputStream dis = new DataInputStream("myData.stuff")

Ans:2

Which of the following best describes the use of the synchronized keyword?

- 1 Ensures only one thread at a time may access a method or object
- 2 Allows two process to run in paralell but to communicate with each other
- 3 Ensures that two or more Threads will start and end at the same time
- 4 Ensures that two or more processes will start and end at the same time

Ans:1

What package holds the File class?

- 1 java.file
- 2 java.io
- 3 java.lang
- 4 java.util

Ans:2

What method of File is used to test if a file or directory exists?

- 1 list()
- 2 isFile()
- 3 exists()
- 4 isDirectory()

A program uses the FileWriter constructor with the string "newFile.txt". What happens if "newFile.txt" already exists?

- 1 The constructor returns null.
- 2 The program exits.
- 3 The existing file is erased and replace with a new, empty one.
- 4 An exception is thrown.

Ans:3

What File method creates a new disk directory?

- 1 dir()
- 2 mkdir()
- 3 list()
- 4 makeDirectory()

Ans:2

In the following, what is the directory separator character? C:\MyFiles\Programs\Examples\someFile.txt 1. 2: 3\ 4/
Ans:3
How many bits per character does a Java program use? 1 16 2 4 3 32 4 8
Ans:1
What does the flush() method of a stream do?

1 It ensures that all pending output operations are completed.

2 It erases all the data in the file.

3 It summons the garbage collector.4 It initializes the output methods.

What data type does readLine() return?

- 1 String
- 2 int
- 3 char
- 4 byte[]

Ans:1

What class does readLine() belong to?

- 1 InputStreamReader
- 2 BufferedReader
- 3 FileReader
- 4 Reader

Ans:2

What abstract data type is the ancestor of all streams that output byteoriented data?

- 1 OutputStream
- 2 BinaryOutputStream
- 3 ByteStream
- 4 ByteOutputStream

What is the DataInputStream method that reads an int value?

- 1 ReadInt()
- 2 readInt()
- 3 read()
- 4 ReadInteger()

Ans:2

What happens when the constructor for FileInputStream fails to open a file for reading?

- 1 It returns null.
- 2 It throws a DataFormatException.
- 3 It throws aArrayIndexOutOfBoundsException.
- 4 It throws a FileNotFoundException.

Which of the following statements are true. Select the two correct answers.

- 1 The wait method defined in the Thread class, can be used to convert a thread from Running state to Waiting state.
- 2 The Thread class is an abstract class.
- 3 The notify() and notifyAll() methods can be used to signal and move waiting threads to ready-to-run state.
- 4 The wait(), notify(), and notifyAll() methods must be executed in synchronized code.

Ans:3,4

Which of these classes implement the Collection interface SortedMap. Select the one correct answers.

- 1 Hashtable
- 2 HashMap
- 3 TreeSet
- 4 TreeMap

Ans:4

How does the set collection deal with duplicate elements?

1 A set may contain elements that return duplicate values from a call to the equals method

- 2 The add method returns false if you attempt to add an element with a duplicate value
- 3 Duplicate values will cause an error at compile time
- 4 An exception is thrown if you attempt to add an element with a duplicate value

What can cause a thread to stop executing?

- 1 Another thread is given a higher priority
- 2 A call to the thread's stop method.
- 3 A call to the halt method of the Thread class?
- 4 The program exits via a call to System.exit(0);

Ans:1,2,4

Which of the following are methods of the Thread class?

- 1 sleep(long msec)
- 2 yield()
- 3 stop()
- 4 go()

Ans:1,2,3
Which of the following are methods of the Collection interface? 1 setText 2 iterator 3 toArray 4 isEmpty
Ans:2,3,4
How can you prevent a member variable from becoming serialized? 1 By marking it volatile 2 By marking it private 3 By marking it transient
4 You can not.
Ans:3

What is the name of the printed output of a program that shows the byteby-byte contents of a binary file?

- 1 Pattern Listing2 Binary Refuse3 Hex Dump4 Charmed Display