Online Test
Instructor and Examiner:
MD. ABDUL BARI

Test Results

surname	name	user	points
ialam	Md.Idris Alam	1138671	9.750 (29%)

test: R-18 Advanced Java-1 mock test 3

start time:	2013-09-28 04:01:05
end time:	2013-09-28 04:41:03
time:	00:39:58
test time [min]:	40
basic points:	1.000
points for wrong answer:	0.000
points for no answer:	0.000
max score:	34.000
correct:	10 (29%)

R-18 Advanced Java-1 mock test 3

#	points	IP	start [hh:mm:ss]	end [hh:mm:ss]	time [mm:ss]	reaction [sec]
1 S	0.000	281473913979147	04:09:53	04:10:06	00:13	13.836

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

2 S	0.000	281473913979147	04:07:02	04:07:18	00:16	16.241

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

3 S	0.000	281473913979147	04:06:41	04:38:26	31:45	105.327

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

-	1	SortedSet
	2	Map
	3	Set
	4	List

4 M	0.500	281473913979147	04:05:57	04:36:36	30:39	14.445

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

+	1	The wait(), notify(), and notifyAll() methods must be executed in synchronized code.
-	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 method defined in the Thread class, can be used to convert a thread from Running state to Waiting state.

5 S	0.000	281473913979147	04:10:16	04:40:21	30:05	5.557

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	Collection
	3	List
-	4	Set

6 S	0.000	281473913979147	04:08:35	04:39:21	30:46	10.648

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

	1	TreeSet
	2	TreeMap
-	3	HashMap
	4	Hashtable

7 S	0.000	0	04:05:17	--:--:--	--:--	0

A number of threads of the same priority have relinquished the lock on a monitor and are in a waiting state after having called the wait() method of the object. A new thread enters the monitor and calls the notifyAll() method of the monitor. Which of these threads will be the first one to resume?

explanation

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

	1	The the first thread that called the wait() method
	2	The thread that has been waiting the longest.
	3	You can never be sure which thread will get to run first.
	4	The thread that was the last one to to exit the monitor.

8 S	0.000	281473913979147	04:14:16	04:40:37	26:21	5.972

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

```
public class Holt extends Thread{
private String sThreadName;
public static void main(String argv[]){
Holt h = new Holt();
h.go();
}
Holt(){}

Holt(String s){
sThreadName = s;
}
public String getThreadName(){
return sThreadName;
}

public void go(){
Holt first = new Holt("first");
first.start();
Holt second = new Holt("second");
second.start();
}

public void start(){
for(int i = 0; i < 2; i ++){
System.out.println(getThreadName() +i);
try{
Thread.sleep(100);
} catch(InterruptedException e){System.out.println(e.getMessage());}
}
}
}
```

explanation

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

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

9 S	0.000	281473913979147	04:14:35	04:15:19	00:44	43.676

Which of the following statements about this code are true?

```
public class Morecombe{
public static void main(String argv[]){
Morecombe m = new Morecombe();
m.go(new Turing(){});
}
public void go(Turing t){
t.start();
}

}
class Turing extends Thread{
public void run(){
for(int i =0; i < 2; i++){
System.out.println(i);
}
}

}
```

explanation

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

-	1	Compilation error, class Turing has no start method
	2	Compilation error due to malformed parameter to go method
	3	Compilation and output of 0 followed by 1
	4	Compilation but runtime error

10 S	0.000	281473913979147	04:10:12	04:40:16	30:04	4.386

You need to create a class that will store unique object elements. You do not need to sort these elements but they must be unique.

What interface might be most suitable to meet this need?

	1	Set
-	2	Vector
	3	Map
	4	List

11 S	1.000	281473913979147	04:06:52	04:38:40	31:48	13.09

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

	1	Vector v=new Vector(); v.addElement(99);
+	2	Vector v=new Vector(100); v.addElement("99");
	3	Vector v=new Vector(); v.add(99);
	4	Vector v=new Vector(99); v[1]=99;

12 S	1.000	281473913979147	04:01:45	04:18:44	16:59	117.144

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

```
public class Bground extends Thread{
public static void main(String argv[]){
Bground b = new Bground();
b.run();
}
public void start(){
for (int i = 0; i <10; i++){
System.out.println("Value of i = " + i);
}
}
}
```

explanation

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

	1	A run time error indicating that no run method is defined for the Thread class
	2	Clean compile and at run time the values 0 to 9 are printed out
+	3	Clean compile but no output at runtime
	4	A compile time error indicating that no run method is defined for the Thread class

13 S	0.000	0	04:05:06	--:--:--	--:--	0

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	An interface that ensures that implementing classes cannot contain duplicate keys
	4	A class for containing unique vector elements

14 S	0.000	281473913979147	04:08:05	04:38:55	30:50	8.735

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

15 M	0.750	281473913979147	04:08:50	04:09:07	00:17	17.437

What can cause a thread to stop executing?

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

16 S	0.000	281473913979147	04:10:07	04:40:11	30:04	8.696

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

17 M	0.750	281473913979147	04:01:05	04:40:51	39:46	6.839

Which of the following are methods of the Thread class?

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

18 S	0.000		281473913979147	04:03:37	04:41:00	37:23	4.36
	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	addElement				
	-	2	append				
		3	insert				
		4	addItem				

19 M	0.750		281473913979147	04:04:45	04:05:06	00:21	20.612
	Which of the following are methods of the Collection interface?						
	-	1	toArray				
	+	2	iterator				
	+	3	isEmpty				
	+	4	setText				

20 S	0.000		281473913979147	04:03:48	04:41:03	37:15	0
	SortedMap is a/an?						
		1	Class				
	-	2	Abstract Class				
		3	Method				
		4	Interface				

21 S	1.000		281473913979147	04:06:22	04:06:41	00:19	18.445
	How can you prevent a member variable from becoming serialized?						
		1	By marking it private				
		2	By marking it volatile				
		3	You can not.				
	+	4	By marking it transient				

22 S	0.000		281473913979147	04:09:39	04:40:01	30:22	13.29
	Which method must be defined by a class implementing the java.lang.Runnable interface?						
	explanation						
	The start() method invokes the run() method when the thread is ready to execute.						
		1	public void run()				
		2	public start()				
		3	void run (int priority)				
	-	4	void run();				

23 S	0.000		281473913979147	04:05:54	04:36:22	30:28	19.951
	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 notify method on an object.				
		2	Calling the wait method on an object.				
	-	3	Exiting from a synchronized block				
		4	Calling the notifyAll method on an object.				

24 S	0.000		281473913979147	04:09:13	04:39:38	30:25	5.663
	Declare and construct a Vector with 20 initial slots and an increment size of 5.						
	-	1	Vector[] v = new Vector(20,5)				
		2	Vector v(20) = new Vector(5)				
		3	Vector v = new Vector(20)				
		4	Vector v = new Vector(20, 5)				

25 S	0.000		0	04:05:34	--:--:--	--:--	0
	A Vector object acts like:						
		1	An array of references to objects of class Object.				
		2	An array of references to objects of a particlar class.				
		3	An array of primitive values.				
		4	An array of primitive values or of object references.				

26 S	1.000		281473913979147	04:03:22	04:03:37	00:15	15.847
	Which of the following opens the file "myData.stuff" for Input?						
	+	1	FileInputStream fis = new FileInputStream("myData.stuff")				
		2	DataInputStream dis = new DataInputStream("myData.stuff")				
		3	FileInputStream fis = new FileInputStream("myData.stuff", true)				
		4	FileInputStream fis = new FileInputStream(new BufferedInputStream("myData.stuff"))				

27 S	1.000		281473913979147	04:05:43	04:05:54	00:11	10.14
	What is the name of the printed output of a program that shows the byte-by-byte contents of a binary file?						
	+	1	Hex Dump				

	2	Binary Refuse
	3	Pattern Listing
	4	Charmed Display

28 S	1.000	281473913979147	04:08:18	04:39:10	30:52	15.233

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

```
public class Tux extends Thread{

static String sName = "vandeleur";
public static void main(String argv[]){
Tux t = new Tux();
t.piggy(sName);
System.out.println(sName);

}
public void piggy(String sName){
sName = sName + " wiggy";
start();
}
public void run(){

for(int i=0;i < 4; i++){
sName = sName + " " + i;

}
}

}
```

	1	Compile time error
	2	Compilation and output of "vandeleur wiggy"
+	3	Compilation and output of either "vandeleur", "vandeleur 0", "vandeleur 0 1" "vandaleur 0 1 2" or "vandaleur 0 1 2 3"
	4	Compilation and output of "vandeleur wiggy 0 1 2 3"

29 S	1.000	281473913979147	04:07:18	04:08:05	00:47	46.463

Which statement is true of the following code?

```
public class Agg{
public static void main(String argv[]){
Agg a = new Agg();
a.go();
}
public void go(){
DSRoss ds1 = new DSRoss("one");
ds1.start();
}
}

class DSRoss extends Thread{
private String sTname="";
DSRoss(String s){
sTname = s;
}
public void run(){
notwait();
System.out.println("finished");
}
public void notwait(){
while(true){
try{
System.out.println("waiting");
wait();
}catch(InterruptedException ie){}
System.out.println(sTname);
notifyAll();
}
}

}
```

	1	It will cause a compile time error
	2	Compilation and output of "waiting"
	3	Compilation and output of "waiting" followed by "finished"
+	4	Runtime error, an exception will be thrown

30 S	0.000	281473913979147	04:01:59	04:20:08	18:09	74.095

Which of the following statements about this code are true?

```
public class Morecombe{
public static void main(String argv[]){
Morecombe m = new Morecombe();
m.go(new Turing(){});
}
public void go(Turing t){
t.start();
}

}
class Turing extends Thread{
public void run(){
for(int i =0; i < 2; i++){
System.out.println(i);
}
}

}
```

-	1	Compilation error due to malformed parameter to go method
	2	Compilation but runtime error
	3	Compilation and output of 0 followed by 1
	4	Compilation error, class Turing has no start method

31 S	0.000	281473913979147	04:10:22	04:40:31	30:09	9.031

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

32 S	0.000	0	04:09:07	--:--:--	--:--	0

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

```
class Background implements Runnable{
int i=0;
public int run(){
while(true){
i++;
System.out.println("i="+i);
} //End while
return 1;
}//End run

}//End class
```

	1	Compilation will cause an error because while cannot take a parameter of true.
	2	It will compile and the run method will print out the increasing value of i.
	3	The code will cause an error at compile time.
	4	It will compile and calling start will print out the increasing value of i.

33 S	0.000	0	04:09:24	--:--:--	--:--	0

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

```
import java.io.*;
class Base{
public void amethod()throws FileNotFoundException{}
}

public class ExcepDemo extends Base{
public static void main(String argv[]){
ExcepDemo e = new ExcepDemo();
}

public void amethod(){}
protected ExcepDemo(){
try{
DataInputStream din = new DataInputStream(System.in);
System.out.println("Pausing");
din.readByte();
System.out.println("Continuing");
this.amethod();
}catch(IOException ioe) {}

}
}
```

	1	Compile and run with output of "Pausing" and "Continuing" after a key is hit
	2	Runtime error caused by amethod not declaring Exception
	3	Compile time error caused by protected constructor
	4	Compile time error caused by amethod not declaring Exception

34 S	0.000	281473913979147	04:06:08	04:06:22	00:14	13.55

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	Ensures that two or more processes will start and end at the same time
	3	Ensures that two or more Threads will start and end at the same time
-	4	Allows two process to run in paralell but to communicate with each other

topics

points	correct	module	
	points	**correct**	**topic**
9.75 / 34 (29%)	**10 / 34 (29%)**	**Advanced Java**	
	1 / 10 (10%)	1 / 10 (10%)	Thread 4-1
	1 / 10 (10%)	1 / 10 (10%)	Collection Framework 4-1
	0.5 / 1 (50%)	0 / 1 (0%)	Thread 4-2
	1.5 / 2 (75%)	2 / 2 (100%)	Thread 4-3
	0.75 / 1 (75%)	1 / 1 (100%)	Collection Framework 4-3
	3 / 3 (100%)	3 / 3 (100%)	Serialization 4-1
	2 / 5 (40%)	2 / 5 (40%)	Thread new 4-1
	0 / 2 (0%)	0 / 2 (0%)	Serialization new 4-1