Question 2

0.5 Points

What does sleep(1000) do?(Lab #5 – Java Basics)

- A - A) Stops program
- **B** - B) Delays thread for 1 second — Selected
- C - C) Ends thread
- D - D) Creates thread

Clear selection

Question 1

0.5 Points

What is the output?(Lab #7 – Multithreading)

```
class Test implements Runnable {
  public void run() {
    System.out.println("Thread running");
  }

  public static void main(String[] args) {
    Test t = new Test();
    Thread th = new Thread(t);
    th.start();
  }
}
```

- A - A) Nothing
- B - B) Thread running — Selected
- C - C) Error
- D - D) main thread running

Question 3

0.5 Points

What will this print?(Lab #6 – Java Threads.)

```
class Test {
  public static void main(String[] args) {
    Thread t = Thread.currentThread();
    t.setName("A");
    t.setName("B");
    System.out.println(t.getName());
  }
}
```

- A - A) A
- B - B) B — Selected
- C - C) main
- D - D) Error

Question 4

0.5 Points

What is a deadlock?(Lab #10Avoiding Deadlocks)

- A - A) Program crash
- B - B) Threads waiting forever for each other — Selected
- C - C) Syntax error
- D - D) Memory leak

Question 5

0.5 Points

Which is NOT true about synchronized?(Lab #9-Dealing with Race Conditions)

- A - A) Prevents race condition
- B - B) Allows one thread at a time
- C - C) Improves speed always — Selected
- D - D) Uses lock

Question 6

0.5 Points

What happens if synchronized is removed?(Lab #9-Dealing with Race Conditions)

- A - A) No change
- B - B) Faster program
- C - C) Race condition returns — Selected
- D - D) Compile error

Question 7

0.5 Points

6. What does notifyAll() do?(Lab #10Avoiding Deadlocks)

- A - A) Stops all threads
- **B - B) Wakes all waiting threads** — Selected
- C - C) Deletes threads
- D - D) Locks object

Question 8

0.5 Points

3. Why is the final balance incorrect sometimes?(Lab #8 – Race Conditions)

- A - A) Syntax error
- B - B) Compiler issue
- C - C) Race condition — Selected
- D - D) Wrong loop

Question 9

0.5 Points

What is the entry point of a thread?(Lab #7 – Multithreading)

- A - A) main()
- B - B) start()
- C - C) run() — Selected
- D - D) init()

Question 10

0.5 Points

What does currentThread() return?(Lab #5 – Java Basics)

- A - A) New thread
- B - B) Current thread object — Selected
- C - C) Thread ID only
- D - D) Null

Question 11

0.5 Points

17. Which keyword prevents race condition?(Lab #8 – Race Conditions)

- A - A) static
- B - B) final
- C - C) synchronized — Selected
- D - D) volatile

Question 12

0.5 Points

Which is true about main thread?(Lab #5 – Java Basics)

- A - A) Created manually
- B - B) Created automatically — Selected
- C - C) Cannot be accessed
- D - D) Cannot be controlled

Question 13

0.5 Points

5. Which methods are synchronized?(Lab #9-Dealing with Race Conditions)

- A - A) main()
- B - B) deposit() and withdraw() — Selected
- C - C) getBalance()
- D - D) constructor

Question 14

0.5 Points

What happens if wait() is replaced with sleep()?(Lab #10Avoiding Deadlocks)

- A - A) Works fine
- **B - B) Deadlock occurs** — Selected
- C - C) Faster execution
- D - D) Compile error

Question 15

0.5 Points

Which thread finishes last?(Lab #7 – Multithreading)

- A - A) Child thread
- B - B) Main thread — Selected
- C - C) Depends
- D - D) None

Question 16

0.5 Points

What happens if start() is not called?(Lab #7 – Multithreading)

- A - A) Thread runs normally
- B - B) run() executes automatically
- C - C) Thread never runs — Selected
- D - D) Compile error

Question 17

0.5 Points

What is printed?(Lab #7 – Multithreading)

```
Thread t = new Thread(new NewThread(), "Test");
System.out.println(t.getName());
```

- A - A) main
- B - B) Test — Selected
- C - C) Demo Thread
- D - D) Error

Question 18

0.5 Points

What is the meaning of the following statement?(Lab #4 – System Calls)

creat("cs222.txt", 0777);

- A - A) Opens an existing file
- B - B) Creates a file with read-only permission
- C - C) Creates a file named *cs222.txt* with full permissions — Selected
- D - D) Deletes the file

Question 19

0.5 Points

What is the output pattern?(Lab #7 – Multithreading)

```
for(int i=5;i>0;i--){
  System.out.println("Child: "+i);
  Thread.sleep(500);
}
```

- A - A) Child 1 → Child 5
- **B - B) Child 5 → Child 1** Selected
- C - C) Random
- D - D) Error

Question 20

0.5 Points

How many processes are created?(Lab #4 – System Calls)

```
fork();
fork();
```

- A - A) 2
- **B - B) 3** Selected
- C - C) 4
- D - D) 5