DO NOT WRITE ANYTHING ON QUESTION PAPER EXCEPT ROLL NO.

CHITKARA UNIVERSITY

2022-2023

Sessional Test II – MAY, 2023

Roll No: …… [Total No. of Pages:4]

Programme: B.E. (CSE) **Time: 90 minutes**

Course Title: Core Java

Course Code: CS109 **Max. Marks: 40**

General Instructions:

- Follow the instructions given in each section.

Section – A

(Q 1 to 10: Each question carries 1 mark)

Question 1. What is the result of attempting to compile and run the program?

```
class A {
  public static void main (String[] args) {
    Error error = new Error();
    Exception exception = new Exception();
    System.out.print((exception instanceof Throwable) + ",");
    System.out.print(error instanceof Throwable);
}}
```

- [ ] false,true
- [ ] true,false
- [x] true,true
- [ ] Compile-time error

Question 2. Which keyword is used to handle exceptions in Java?

- [ ] try
- [ ] catch
- [ ] throw
- [x] all of the above

Question 3. Which of the following is the correct way to compare two strings for equality in Java?

- [ ] str1 == str2
- [x] str1.equals(str2)
- [ ] str1.compareTo(str2)
- [ ] all of the above

Question 4. What is the output of the following code?

```
String str = "Hello World";
System.out.println(str.substring(6, 11));
```

- [x] World
- [ ] Hello
- [ ] ld
- [ ] Runtime error

Question 5. Which of the following methods can be used to remove whitespace from the be ginning and end of a string?

- [x] trim()
- [ ] replace()
- [ ] substring()
- [ ] indexOf()

Question 6. Which of these keywords is used to define interfaces in Java?

- [x] interface
- [ ] Interface
- [ ] intf
- [ ] Intf

Question 7. Can we create an object of an abstract class in Java?

- [ ] Yes
- [x] No
- [ ] Both Yes and No
- [ ] None of the given

Question 8. Which JDK 1.1 interface is the Iterator interface intended to replace?

- [ ] Runnable
- [ ] Throwable
- [x] Enumeration
- [ ] List

Question 9. Which of the following classes fail to compile?

```
class X { }
abstract class Y { }
abstract class Z { abstract void method(); }
```

- [ ] Y
- [ ] Y, Z
- [ ] X, Y
- [ ] X, Y, Z
- [x] All classes compile

Question 10. Compile time error will occur in which method?

```
public class Test {
   public static void main(String[] args) {
    m1();
   }
   public static void m1() {
    m2();
   }
   public static void m2() {
      Thread.sleep(1000);
   } }
```

- [ ] main()
- [ ] m1()
- [x] m2()
- [ ] Compiled Successfully

Section – B

(Q 11 to 15: Each question carries 2 mark)

Question 1. What will be the output of the following Java program?

```
class Exception {
            public static void main(String args[])
        {
            try
           {
                int a, b;
                b = 0;
                a = 5 / b;
                System.out.print("A");
            }
            catch(ArithmeticException e)
            {
                      System.out.print("B");
            }
        } }
```

- [ ] A
- [x] B
- [ ] Compilation Error
- [ ] Runtime Error

Question 2. Which of the following is a way to prevent race conditions in multithreading?

- [x] Synchronization
- [ ] Deadlock
- [ ] Yielding
- [ ] Sleeping

Question 3. Consider the following program and predict the output:

```
class MyThread extends Thread {
    public MyThread(String name) {
        this.setName(name);
        start();
        System.out.println("in constructor " + getName());
    }
    public void start() {
        System.out.println("in start " + getName());
    }
    public void run() {
        System.out.println("in run " + getName());
    }
}
public class ThreadTest {
    public static void main(String[] args) {
        new MyThread("oops");
    }
}
```

- [x] in start oops in constructor oops
- [ ] in start oops in run oops in constructor oops
- [ ] in start oops in constructor oops in run oops
- [ ] in constructor oops in start oops in run oops

Question 4. Choose the correct oputput

```
class Test {
   public static void main(String[] args) {
      Test obj = new Test();
```

```
        obj.start();
    }
    void start() {
        String stra = "do";
            String strb = method(stra);
        System.out.print(" : "+stra + strb);
    }
    String method(String stra) {
        stra = stra + "good";
        System.out.print(stra);
        return "good";
    }
}
```

- [x] dogood : dogood
- [ ] dogood : dogoodgood
- [ ] dogood : gooddogood
- [ ] dogood : dodogood

Question 5. Which of the following is a way to implement multithreading in Java?

- [ ] Extending the Thread class
- [ ] Implementing the Runnable interface
- [x] Both A and B
- [ ] None of the above