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GIET UNIVERSITY, GUNUPUR – 765022

B. Tech (Fourth Semester – Regular) Examinations, June – 2021
BESEL4050 / BESEE4050 – Object Oriented Programming through JAVA
 (Common to EE and EEE)

Time: 2 hrs

Maximum: 50 Marks

Answer ALL Questions

The figures in the right hand margin indicate marks.

PART – A: (Multiple Choice Questions)

(1 x 10 = 10 Marks)

Q.1. Answer **ALL** questions

[CO#] [PO#]

- a. Write down the output of the given program.

1 2

```
class T1
{
static void test(float x)
{
System.out.println("float");
}
static void test(double x)
{
System.out.println("double");
}
public static void main(String args[])
{
test(99.9);
}
}
```

(i) float

(ii) double

(iii) Error

(iv) None of these

- b. What is the output of the given program?

1 2

```
class Use
{
public static void main(String args[ ])
{
int v1=5;
int v2=6;
if((v2=1) == v1)
{
System.out.println(v2);
}
else
{
System.out.println(++v2);
}
}
```

}

- (i) 6 (ii) 2
(iii) 7 (iv) 5
- c. Which will legally declare, construct and initialize an array? 1 2
(i) `int [] myList={"1", "2", "3"};` (ii) `int [] myList={"1", "2", "3"};`
(iii) `int myList [] []={4, 9, 7, 0};` (iv) `int myList []={4, 3, 7};`
- d. Runnable is a/an _____. 2 1
(i) interface (ii) class
(iii) abstract class (iv) None of these
- e. What is the output of the given program? 2 2
class Str
{
public static void main(String args[])
{
String s1=new String ("Hello");
String s2=new String ("Hellow");
System.out.println(s1=s2);
}
}
(i) Hello (ii) Error
(iii) Hellow (iv) None of these
- f. Which is a super class of all exception classes? 2 1
(i) Exception (ii) IOException
(iii) RuntimeException (iv) Throwable
- g. A class is declared inside a class but outside a method it is known as _____. 3 1
(i) Anonymous Inner class (ii) Local Inner class
(iii) Member Inner class (iv) Static nested class
- h. The life cycle of the thread is controlled by _____. 3 1
(i) JVM (ii) JDK
(iii) JRE (iv) None of these
- i. Which is the correct order of lifecycle in an applet? 4 1
(i) Applet is started, initialized, painted, destroyed, stopped (ii) Applet is initialized, started, painted, stopped, destroyed
(iii) Applet is painted, started, stopped, initialized, destroyed (iv) None of these
- j. In which mechanism, the following steps are required to perform: 4 1
1) Implement the Listener interface and overrides its methods
2) Register the component with the Listener
(i) Exception Handling (ii) String Handling
(iii) Event Handling (iv) None of these

PART – B: (Short Answer Questions)**(2 x 5 = 10 Marks)**Q.2. Answer **ALL** questions

[CO#] [PO#]

- | | | |
|---|---|---|
| a. What is Java Token? Outline its different types. | 1 | 1 |
| b. Why main() is static in Java? | 2 | 1 |
| c. What is constructor overloading? | 2 | 1 |
| d. Differentiate between anonymous inner class and local inner class. | 3 | 1 |
| e. Define Applet. | 4 | 1 |

PART – C: (Long Answer Questions)**(6 x 5 = 30 Marks)**Answer **ANY FIVE** questions

Marks [CO#] [PO#]

- | | | | |
|---|-----|---|-----|
| 3. Develop a menu based program for the addition, subtraction, multiplication and division of two complex numbers. | (6) | 1 | 1,2 |
| 4. Define Array? Briefly explain the declaration and initialization of 1-D and 2-D array in Java with suitable examples. | (6) | 1 | 1,2 |
| 5. Differentiate between abstract class and interface. How multiple inheritance can be implemented in Java? Explain it with the help of a suitable program. | (6) | 2 | 1,2 |
| 6. What do you mean by package? Design a program to compute the area of triangle, rectangle and circle by implementing the concept of user defined package. | (6) | 2 | 1,2 |
| 7. What do you mean by multiple threading? How to set the priority of a thread? Design a program for the execution of multiple threads. | (6) | 3 | 1,2 |
| 8. What is thread synchronization in Java? Why it is required? Explain it with a suitable example. | (6) | 3 | 1,2 |
| 9. Write down the basic steps to create Applet programs. Develop a program for the implementation of several methods involved in applet life cycle. | (6) | 4 | 1,2 |
| 10. Outline different AWT classes used in Java. Develop two separate programs to create Frame: (i)by extending Frame class (ii)by creating instance of Frame class. | (6) | 4 | 1,2 |

--- End of Paper ---