JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATIONS-2022

B.Tech-VI Semester (ECE)

COURSE CODE: 19B1WCI734   MAX. MARKS: 15

COURSE NAME: Object-Oriented Technologies Using Java

COURSE CREDITS: 2   MAX. TIME: 1 Hour

Note: All questions are compulsory. Marks are indicated against each question in square brackets.

Q1.

(a) What is Java Virtual Machine (JVM)? How does the use of JVM make Java a platform independent language?   [2]

(b) Describe the features of Object Oriented Paradigm. What are its advantages over the structured programming approach?   [3]

Q2.

(a) Write a Java program to count and print the number of digits in a given integer value. [2]

(b) Find the output of the following Java code snippets: [3]

(i)	(ii)	(iii)
`int x , y = 1;`	`byte x = 64, y;`	`int[] A = {0,2,4,1,3};`
`x = 10;`	`int i;`	`for(int i = 0; i < 5; i++){`
`if (x != 10 && x / 0 == 0)`	`i = x << 2;`	`a[i] = a[(a[i] + 3) % 5];`
`System.out.println(y);`	`y = (byte) (x << 2)`	`}`
`else`	`System.out.print(i + " " + y);`	
`System.out.println(++y);`		

Q3

(a) Differentiate between continue, break and labeled break statements used in Java. Give suitable examples for each of them.   [2]

(b) Write a Java program to print the pattern given below: [3]

```
* * * * * * * *
 * * * * * * *
  * * * * *
   * * *
    *
```