Model Question Paper-I/II with effect from 2023-24 (CBCS Scheme)

USN

Third Semester B.E. Degree Examination
Object Oriented Programming with JAVA

TIME: 03 Hours   **Max. Marks: 100**

Note: 01. Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.
02. Use a JAVA code snippet to illustrate a specific code design or a purpose.

		Module -1	***Bloom's Taxonomy Level**	**Marks**
Q.01	a	Explain different lexical issues in JAVA.	L2	7
	b	Define Array. Write a Java program to implement the addition of two matrixes.	L3	7
	c	Explain the following operations with examples. (i)<< (ii)>> (iii)>>>	L2	6
		OR		
Q.02	a	Explain object-oriented principles.	L2	7
	b	Write a Java program to sort the elements using a for loop.	L3	7
	c	Explain different types of if statements in JAVA	L2	6
		Module-2		
Q. 03	a	What are constructors? Explain two types of constructors with an example program.	L3	7
	b	Define recursion. Write a recursive program to find nth Fibonacci number.	L3	7
	c	Explain the various access specifiers in Java.	L2	6
		OR		
Q.04	a	Explain call by value and call by reference with an example program	L3	7
	b	Write a program to perform Stack operations using proper class and Methods.	L3	7
	c	Explain the use of **this** in JAVA with an example.	L2	6
		Module-3		
Q. 05	a	Write a Java program to implement multilevel inheritance with 3 levels of hierarchy.	L3	7
	b	Explain how an interface is used to achieve multiple Inheritances in Java.	L3	7
	c	Explain the method overriding with a suitable example.	L2	6
		OR		
Q. 06	a	What is single-level inheritance? Write a Java program to implement single-level inheritance.	L3	7
	b	What is the importance of the **super** keyword in inheritance? Illustrate with a suitable example.	L3	7
	c	What is abstract class and abstract method? Explain with an example.	L2	6
		Module-4		
Q. 07	a	Define package. Explain the steps involved in creating a user-defined package with an example.	L2	7
	b	Write a program that contains one method that will throw an IllegalAccessException and use proper exception handles so that the exception should be printed.	L3	7
	c	Define an exception. What are the key terms used in exception handling? Explain.	L2	6
		OR		
Q. 08	a	Explain the concept of importing packages in Java and provide an example demonstrating the usage of the import statement.	L2	7
	b	How do you create your own exception class? Explain with a program.	L3	7
	c	Demonstrate the working of a nested try block with an example.	L2	6

		Module-5		
Q. 09	a	What do you mean by a thread? Explain the different ways of creating threads.	L2	7
	b	What is the need of synchronization? Explain with an example how synchronization is implemented in JAVA.	L3	7
	c	Discuss values() and value Of() methods in Enumerations with suitable examples.	L2	6
		OR		
Q. 10	a	What is multithreading? Write a program to create multiple threads in JAVA.	L2	7
	b	Explain with an example how inter-thread communication is implemented in JAVA.	L3	7
	c	Explain auto-boxing/unboxing in expressions.	L2	6