ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY
Survey No. 2/8, 2/9 and 2/2, Kamakshipura, Hesaraghatta Hobli, Yelahanka, Bengaluru, Karnataka, 560089
Approved by AICTE, New Delhi & Affiliated to VTU, Belagavi, Govt. of Karnataka

Semester: V	Department of Electronics and Computer Engineering	AY: 2026-27
Course Code: BUE502	Course Name: Object Oriented Programming using Java	

QUESTION BANK

Q.	Module-1	M	L	C
1	Explain the eight primitive data types used in Java with suitable examples.	8	L2	CO1
2	Explain how variables are declared and initialized in Java. Illustrate dynamic initialization with an example.	8	L2	CO1
3	Explain the switch statement in Java with a suitable program.	6	L2	CO1
4	Explain arrays in Java and illustrate the declaration and initialization of a two-dimensional array.	8	L2	CO1
5	Explain the operation of the following operators with examples: (i) % (ii) && (iii) != (iv) ?: (conditional operator).	8	L2	CO1
6	Explain type conversion and type casting in Java with examples.	6	L2	CO1
7	Describe the meaning of each keyword in the declaration public static void main(String[] args).	8	L2	CO1
8	Write a Java program to sort an array of elements using a for loop.	5	L3	CO1
9	Write a Java program to find the largest element in a one-dimensional array.	5	L3	CO1
10	Explain the concept of an array in Java with a suitable program.	6	L2	CO1
	Module-02			
11	What is a class in Java? Explain the structure of a class with a suitable example.	6	L2	CO2
12	What is an object? Explain its characteristics with a suitable example.	8	L2	CO2
13	What is a constructor? Explain the two types of constructors with an example.	8	L2	CO2
14	Explain constructor overloading and method overloading with suitable examples.	8	L2	CO2
15	Explain the this keyword in Java with an example.	6	L2	CO2
16	Explain call by value in Java with a suitable program.	6	L2	CO2
17	Explain method overloading with a suitable Java program.	6	L2	CO2

18	Explain how an object can be passed as a parameter to a method with an example.	6	L2	CO2
19	Explain how a method can return an object, with a simple Java program.	6	L2	CO2
20	Write a Java program to demonstrate the use of constructors and object creation.	5	L3	CO2
Module-03				
21	What is inheritance? Discuss the different types of inheritance supported in Java with suitable examples.	10	L2	CO3
22	Explain method overriding in Java with a suitable example.	6	L2	CO3
23	Explain the super keyword in Java with an example.	6	L2	CO3
24	What is an interface? Explain how to define and implement an interface with a suitable example.	10	L2	CO3
25	Explain an abstract class and an abstract method with an example.	6	L2	CO3
26	Discuss static methods in an interface with a suitable example.	6	L2	CO3
27	Explain the role of interfaces in achieving multiple inheritance in Java.	8	L2	CO3
28	Compare an abstract class and an interface in Java.	8	L2	CO3
29	Write a Java program to demonstrate inheritance and method overriding.	5	L3	CO3
30	Explain how constructors are used in a superclass and subclass, with an example.	6	L2	CO3
Module-04				
31	What is a package in Java? Explain how to create and import a user-defined package with an example.	10	L2	CO4
32	Explain access protection with respect to packages in Java.	6	L2	CO4
33	Define an exception. Explain the exception-handling mechanism in Java with syntax and an example.	10	L2	CO4
34	Explain the use of try and catch blocks to handle multiple exceptions with a program.	8	L2	CO4
35	Explain nested try and catch blocks with a suitable program.	6	L2	CO4
36	Explain the use of throw and throws keywords with a program.	6	L2	CO4
37	Explain the purpose of the finally block with a suitable example.	6	L2	CO4
38	How do you create a user-defined exception class? Explain with a Java program.	8	L3	CO4
39	Explain the different access modifiers in Java with examples.	6	L2	CO4
40	Write a Java program to handle division by zero using try, catch, throw and finally.	5	L3	CO4
Module-05				
41	Explain enumeration in Java with a suitable program.	8	L2	CO5

42	List and explain the different wrapper classes in Java.	6	L2	CO5
43	Explain autoboxing and unboxing in Java with examples.	6	L2	CO5
44	Define a thread. Explain the different ways of creating a thread in Java.	8	L2	CO5
45	What is multithreading? Write a Java program to create multiple threads.	8	L3	CO5
46	Explain the values() and valueOf() methods in enumeration with a suitable example.	6	L2	CO5
47	Explain how synchronization can be achieved between threads in Java with an example.	6	L2	CO5
48	Explain the use of the isAlive() method in thread programming with an example.	6	L2	CO5
49	Write a Java program to create multiple threads by extending the Thread class.	5	L3	CO5
50	Write a Java program to create a thread by implementing the Runnable interface.	5	L3	CO5