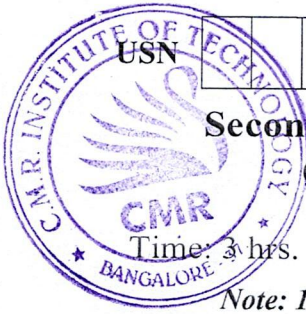


# CBCS SCHEME



USN

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

22MCA22

## Second Semester MCA Degree Examination, Dec.2025/Jan.2026 Object Oriented Programming using Java

Max. Marks: 100

*Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.  
2. M : Marks , L: Bloom's level , C: Course outcomes.*

Module – 1				M	L	C
Q.1	a.	List and explain the Java's primitive datatype.	8	L2	CO1	
	b.	Explain the key attributes of OOPs in Java.	8	L2	CO1	
	c.	Write short notes about this keyword with example.	4	L1	CO1	
OR						
Q.2	a.	What are the different types of iteration statements and jump statement? Give example.	10	L2	CO1	
	b.	Write a short notes on following : i) Garbage collection ii) Bitwise operator.	10	L2	CO1	
Module – 2						
Q.3	a.	What is Inheritance? Explain types of inheritance with example.	10	L2	CO4	
	b.	Explain access modifier with example.	10	L2	CO2	
OR						
Q.4	a.	Describe the concept of method overriding with help of an example.	8	L2	CO1	
	b.	Explain multiple usages of final keyword with example.	6	L2	CO1	
	c.	Explain abstract class with example.	6	L2	CO3	
Module – 3						
Q.5	a.	What is interface? Mention the different between interface and abstract class.	8	L2	CO3	
	b.	What is multiple inheritances? How multiple inheritance achieved in Java?	4	L2	CO4	
	c.	Write a program to calculate the area of rectangle and triangle by implementing multiple inheritances.	8	L3	CO4	
OR						
Q.6	a.	Define Packages? Explain creating and accessing a package.	10	L2	CO1	
	b.	List out and explain the access specifiers in Java and give a table for visibility of these access specifiers members with in the package and outside the package.	10	L2	CO2	

Module – 4					
Q.7	a.	What is Exception? Explain the exception handling fundamentals with syntax example.	10	L3	CO5
	b.	Explain multiple catch clauses with syntax and example program.	10	L3	CO5
OR					
Q.8	a.	Explain how to create your own exceptions give an example.	10	L3	CO5
	b.	Explain throw, throws and finally with example program and syntax.	10	L3	CO5
Module – 5					
Q.9	a.	Write down the difference between AWT and Swing.	5	L2	CO6
	b.	Explain about Two ways to create a frame in Java swing.	10	L2	CO6
	c.	Draw the Hierarchy of Java swing Class.	5	L2	CO6
OR					
Q.10	a.	Explain following with example i) Jbutton ii) Jtextfield iii) JtextArea iv) Jtable v) Jpassword field	10	L2	CO6
	b.	Explain the following with an example : i) JmenuBar ii) Jmenu iii) JmenuItem iv) JprogrammBar v) JTree.	10	L2	CO6

\*\*\*\*\*

CMRIT LIBRARY  
BANGALORE - 560 037