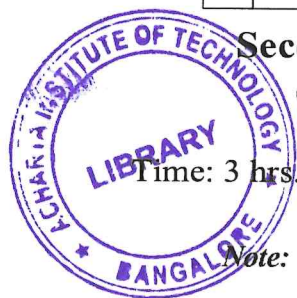


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Second Semester MCA Degree Examination, June/July 2026
Object Oriented Programming using JAVA

Time: 3 hrs.

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.	Explain the key principles of object-oriented programming with an example for each.	10	L2	CO1
	b.	Write a Java program to find the sum of two complex numbers by using classes and objects concept.	10	L3	CO1
OR					
Q.2	a.	Define array and explain its different types with an example for each.	10	L2	CO1
	b.	Explain different parameter passing mechanisms with an example for each.	10	L2	CO3
Module – 2					
Q.3	a.	Explain any five string in-built functions with an example.	10	L2	CO3
	b.	Explain different usages of “final” keyword with an example for each.	10	L2	CO3
OR					
Q.4	a.	What is overriding? Why it is required? Illustrate with an example.	10	L2	CO1
	b.	Write a Java program to swap the contents of two integers and two characters using generic classes.	10	L3	CO5
Module – 3					
Q.5	a.	Write a Java program to demonstrate the keywords used for exception handling.	10	L3	CO3
	b.	Explain the concept of nested interfaces with an example.	10	L2	CO1
OR					
Q.6	a.	Write a Java program to demonstrate multiple inheritance using interfaces.	10	L3	CO1
	b.	Explain the steps involved in creating user-defined packages with an example.	10	L2	CO5
1 of 2					

Module – 4

Q.7	a.	Why is the “main” thread important? Write a java program to demonstrate the same.	7	L3	CO2
	b.	Explain DataInputStream and DataOutputStream with an example.	10	L2	CO3
	c.	Analyze the following code and identify any issues: <pre>FileInputStream fis = new FileInputStream("input.txt"); int data; while (data != -1) { data = fis.read(); System.out.print((char) data); } fis.close();</pre> Will this code compile and work correctly? If not, explain the error.	3	L4	CO4

OR

Q.8	a.	Explain thread priorities with an example.	10	L2	CO2
	b.	Explain the life cycle of a thread with a diagram.	5	L2	CO2
	c.	Write a Java program to write the contents into a file using FileOutputStream.	5	L3	CO3

Module – 5

Q.9	a.	Describe in detail about two event handling mechanisms.	5	L2	CO2
	b.	Write a Java program to demonstrate various mouse handling events.	10	L3	CO2
	c.	Write a Java program to create a simple AWT window using Frame.	5	L3	CO2

OR

Q.10	a.	Write a Java program to draw a line, rectangle and filled oval.	10	L3	CO2
	b.	Write a Java program to demonstrate keyboard events.	10	L3	CO2
