

CBCS SCHEME

USN

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BIS402

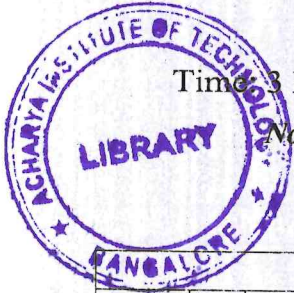
Fourth Semester B.E./B.Tech. Degree Examination, June/July 2026

Advanced 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.	What are Legacy Classes? Explain any four legacy classes of Java's collection frame work with suitable program.	10	L2	CO1
	b.	What are Comparators? Write a comparator program to sort accounts by last name.	10	L3	CO1
OR					
Q.2	a.	What is collection frame work? Explain methods defined by the following interfaces: i) Collection ii) List iii) Map iv) Queue	10	L2	CO1
	b.	Explain the following Map class with suitable program: i) Hash Map ii) Tree Map	10	L2	CO1
Module – 2					
Q.3	a.	Explain the following string comparison methods with examples: i) equals() ii) StartsWith() iii) endswith() iv) regionMatches()	10	L2	CO2
	b.	Describe the data conversion using Value of ()	6	L2	CO2
	c.	Explain String Builders.	4	L1	CO2
OR					
Q.4	a.	Explain the various string constructors used in Java with example.	10	L2	CO2
	b.	Explain any two character extraction methods of string class.	5	L2	CO2
	c.	Explain any four string modification methods of string class.	5	L2	CO2

1 of 2

Module – 3

Q.5	a.	Describe components and containers in Java swing.	10	L2	CO3
	b.	Explain the following : i) JLabel and Image Icon ii) JText Field	10	L2	CO3

OR

Q.6	a.	How does event handling work in swing?	10	L2	CO3
	b.	Explain the four types of the swing buttons with demonstration program.	10	L3	CO3

Module – 4

Q.7	a.	Explain the differences between servlets and CGI programs.	5	L1	CO4
	b.	What is Cookie? Write a JSP program to create a Cookie and read a Cookie.	10	L3	CO4
	c.	Explain the life cycle of servlets.	5	L1	CO4

OR

Q.8	a.	Explain for loop, while loop and do... while loop to load HTML tables.	10	L2	CO4
	b.	Give step wise explanation to down load and install Tomcat.	10	L2	CO4

Module – 5

Q.9	a.	Explain the different types of statement object with examples.	10	L2	CO5
	b.	Explain the four types of JDBC drivers.	10	L2	CO5

OR

Q.10	a.	Write a Java program to execute a database transaction.	10	L4	CO5
	b.	Explain different steps involved in JDBC process with a code snippet.	10	L3	CO5

Module – 5

Q.9	a.	Define the following dimensionless numbers : i) Froude number ii) Mach number iii) Euler number iv) Weber number v) Reynolds number	10	L2	CO4
	b.	Find the expression for power developed by a pump (P) when it depends on the head (H), discharge (Q) and specific weight (W) of the fluid, using Reyleigh method.	10	L4	CO4
OR					
Q.10	a.	With reference to a centrifugal pump, define: i) Manometric head ii) Manometric efficiency iii) Total head iv) Net positive section head.	10	L2	CO4
	b.	Derive an expression for minimum starting speed for a centrifugal pump.	10	L4	CO4
