

Fourth Semester B.E./B.Tech. Degree Examination, June/July 2024 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 is collection Framework? Explain the methods defined by the following Interfaces: (i) Collection (ii) List (iii) Sorted Set (iv) Queue	10	L2	CO1	
	b.	What are Legacy Classes? Explain any four legacy classes of Java's collection Framework with suitable program.	10	L2	CO1	
OR						
Q.2	a.	Explain how collectors can be accessed using an iterator with example.	5	L3	CO1	
	b.	What are the various changes that collection framework underwent recently?	5	L1	CO1	
	c.	With an example program, explain how to store user-defined classes in collections.	10	L2	CO1	
Module – 2						
Q.3	a.	Explain any two character extraction methods of string class.	5	L2	CO2	
	b.	Explain the various string constructors used in Java with examples.	10	L2	CO2	
	c.	Explain additional string methods.	5	L2	CO2	
OR						
Q.4	a.	Briefly describe special string operations with syntax and examples.	5	L2	CO2	
	b.	Explain the following methods of string buffer class with examples : (i) capacity () (ii) reverse () (iii) insert (iv) append ()	10	L2	CO2	
	c.	Explain any four string modification methods of string class.	5	L2	CO2	
Module – 3						
Q.5	a.	Explain the four types of the swing buttons, with demonstration program.	10	L3	CO3	
	b.	Explain MVC connector Architecture.	5	L2	CO3	
	c.	What are the two key swing features? Discuss.	5	L1	CO3	
OR						
Q.6	a.	Explain the following : (i) JLabel and ImageIcon (ii) JTextField	10	L2	CO3	
	b.	Write a program to demonstrate a simple swing application.	10	L3	CO3	
Module – 4						
Q.7	a.	Explain the life cycle of Servlets.	5	L2	CO4	
	b.	Describe the core interfaces that are provided in Jakarta (Javax), Servlet, http package.	5	L2	CO4	
	c.	Define JSP. Explain the different types of JSP tags by taking suitable example.	10	L2	CO4	
OR						

Q.8	a.	Explain any two cookies method.	5	L1	CO4
	b.	With a code, explain how to handle HTTP get requests and HTTP post requests.	10	L2	CO4
	c.	Explain how cookies can be handled using servlets.	5	L4	CO4
Module – 5					
Q.9	a.	Explain different steps involved in JDBC process with a code snippet.	10	L3	CO5
	b.	List and elaborate Database Metadata Object methods.	5	L2	CO5
	c.	List and explain three kinds of exception occurred in JDBC.	5	L2	CO5
OR					
Q.10	a.	Mention all steps to create the association between the database and a JDBC/ODBC bridge.	12	L3	CO5
	b.	Explain the four types of JDBC drivers.	8	L2	CO5
