

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER-VI EXAMINATION – WINTER 2025

Subject Code:2160707

Date:17-11-2025

Subject Name:Advanced Java

Time:02:30 PM TO 05:00 PM

Total Marks:70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

		MARKS
Q.1	(a) Draw and explain MVC architecture	03
	(b) Write difference between statement and prepared statement interface.	04
	(c) Describe JDBC components and architecture.	07
Q.2	(a) Write difference between doGet and doPost	03
	(b) Write a java program to find an IP address of the machine on which the program runs.	04
	(c) Write a client-server application using TCP Sockets where client can send messages and server respond with the reverse of them.	07
OR		
	(c) Write a client-server program using UDP socket. Client sends list of N numbers to server and server responds to the sum of N numbers.	07
Q.3	(a) Explain Spring Bean life cycle phases	03
	(b) Explain UseBean action tag in JSP with appropriate code.	04
	(c) Write a TCP Client-Server program to get the Date & Time details from Server on the Client request.	07
OR		
Q.3	(a) What is Dependency Injection?	03
	(b) Discuss URL and URL Connection class with java code snippets	04
	(c) Design a form to input details of an employee and submit the data to a servlet. Write code for servlet that will save the entered details as a new record in database table Employee with fields (EmpId, EName, Email, Age)	07
Q.4	(a) Differentiate between GenericServlet and HttpServlet.	03
	(b) What is ORM? Explain object/relational mappings in hibernate	04
	(c) List and explain various phases of JSP life cycle?	07
OR		
Q.4	(a) What is Filter? List the applications of filter	03
	(b) Explain ResultSetMetaData with suitable program	04
	(c) What is MVC architecture? Explain Spring architecture with a neat sketch.	07
Q.5	(a) List advantages of JSP over Servlet	03
	(b) List the JSF facelets tags and explain any two.	04
	(c) What is Servlet? Explain Servlet Life Cycle .	07

OR

- Q.5**
- (a) Explain DataBaseMetaData with example **03**
 - (b) List JSP implicit object? Explain any two with example. **04**
 - (c) Write a Servlet that takes two numbers as an input and display all the prime numbers between them. Also write web.xml description for the servlet. **07**
