

GUJARAT TECHNOLOGICAL UNIVERSITY**BE- SEMESTER-VI (NEW) EXAMINATION – WINTER 2024****Subject Code:2160707****Date:25-11-2024****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) List advantage of JSP over Servlet.	03
	(b) What is ORM? Explain object/relational mappings in hibernate.	04
	(c) List different types of JDBC drivers and explain any two of them.	07
Q.2	(a) Write a java program to find an IP address of the machine on which the current program is executing.	03
	(b) What is Servlet? Explain Servlet Life Cycle.	04
	(c) Write a client-server application using TCP Sockets where client can send message and server respond with the reverse of it.	07
	OR	
	(c) Write a Servlet Program that takes an Enrolment number as an input from HTML page and display result of it from “ database ”. Assume : Student_Master(s_id,s_name,s_per)	07
Q.3	(a) Explain DataBaseMetaData with example.	03
	(b) List the JSTL core tags and explain any two with example.	04
	(c) What is “PreparedStatement”? Show that how to use it to call a stored procedure running at database layer.	07
	OR	
Q.3	(a) Explain ResultSetMetaData with suitable program.	03
	(b) Explain any two page directive of JSP with suitable example.	04
	(c) Write a JSP page, which uses “PreparedStatement”, to insert a new record in database. Assume : Student_Master(s_id,s_name,s_per)	07
Q.4	(a) What is Session? Write a code snippet to use session in JSP page.	03
	(b) List and mention use of different implicit objects of JSP.	04
	(c) What is MVC architecture? Explain Spring architecture with neat sketch.	07
	OR	
Q.4	(a) Differentiate between GenericServlet and HttpServlet	03
	(b) Explain JSP life cycle phases.	04
	(c) Draw and explain hibernate architecture.	07
Q.5	(a) Write a code snippet to create session in JSP.	03
	(b) Define Dependency Injection and Inversion of Control.	04
	(c) Draw the JSF request processing life cycle and briefly write function of each phase.	07

OR

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| Q.5 | (a) | List the JSF facelets tags and explain any two. | 03 |
| | (b) | Briefly explain spring bean life cycle. | 04 |
| | (c) | List the JSF validation tags and explain any two. | 07 |
