GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–VI EXAMINATION – SUMMER 2025

Subject Code: 3160707 **Date: 30-05-2025**

Subject Name: Advanced Java Programming

Time: 10:30 AM TO 01:00 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)**	Discuss the use of execute (), executeUpdate () and executeQuery () methods.	**03**
	(b)	Explain the following classes with their use.	**04**
		I) URLConnection class II) DatagramSocket class III) DatagramPacket class IV) ServerSocket class	
	(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.2	**(a)**	Compare JSP and Servlet.	**03**
	(b)	Explain various Session tracking mechanisms in servlet with example.	**04**
	(c)	What is JDBC? List the different types of JDBC drivers. Compare the various driver types for their advantages and disadvantages.	**07**
		OR	
	(c)	What is filter? What is its use? List different filter interfaces with their important methods.	**07**
Q.3	**(a)**	What is Servlet? List and explain various stages of Servlet life cycle.	**03**
	(b)	List JSP implicit objects and explain any two in detail.	**04**
	(c)	Explain JSP page directives with example.	**07**
		OR	
Q.3	**(a)**	Explain the usage of InetAddress class.	**03**
	(b)	Explain JSP life cycle phases.	**04**
	(c)	List and Explain JSP Action Tags with example.	**07**
Q.4	**(a)**	What is the JSF facelets? Explain any two facelets tags.	**03**
	(b)	Briefly explain JSF Converter tags?	**04**
	(c)	What is Hibernate? List Advantages of Hibernate over JDBC	**07**
		OR	
Q.4	**(a)**	Write a servlet that redirect requests alternatively to JSP pages named odd and even	**03**
	(b)	What is HQL? Write difference between HQL and SQL.	**04**
	(c)	What is JSF tag library? Explain any four-html tag.	**07**
Q.5	**(a)**	What is Request Dispatcher? What is the difference between Request dispatcher's forward () and include () method?	**03**
	(b)	Briefly explain spring bean life cycle.	**04**
	(c)	What is MVC architecture? Explain Spring architecture with neat sketch.	**07**
		OR	
Q.5	**(a)**	What is difference between statement and prepared statement interface.	**03**
	(b)	Draw and explain the architecture of Hibernate.	**04**
	(c)	What is ORM? Explain object/relational mappings in hibernate.	**07**

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