

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V (NEW) EXAMINATION – WINTER 2023****Subject Code:3154204****Date:13-12-2023****Subject Name:Internet and Web 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) What is JSF? List and explain its features.	03
	(b) What do you mean by MVC architecture? Explain its role in modern applications with its advantages.	04
	(c) Write a client-server application using TCP Sockets where client can send message and server respond with the reverse of them.	07
Q.2	(a) What is Servlet? Draw and Explain the life cycle methods of it.	03
	(b) What is HQL? Write difference between HQL and SQL.	04
	(c) List and explain JDBC drivers. Also mention Which Driver should be used and when?	07
	OR	
	(c) Write a servlet code which reads the student details from web page and stores it in database.	07
Q.3	(a) Explain JSP life cycle.	03
	(b) Differentiate between a TCP socket and UDP socket? How are they created in Java?	04
	(c) Implement cookies to store first name and last name using Java server pages.	07
	OR	
Q.3	(a) Explain the following classes with their use. (1) URLConnection (2) DatagramSocket (3)DatagramPacket	03
	(b) Differentiate ServletConfig and ServletContext objects.	04
	(c) Write a jsp code to demonstrate prepare statement and callable statement to retrieve and store employee data.	07
Q.4	(a) Compare the include and forward action tags in JSP.	03
	(b) What is filter? Explain the configuration of filter using deployment descriptor.	04
	(c) Develop a web application as following to demonstrate the use of <jsp:useBean>. Create a Java Bean named Employee with attributes name and age. Create a web page to set the properties of Employee using <jsp:useBean>. Create a web page to display the properties of Employee using <jsp:useBean>.	07
	OR	
Q.4	(a) What is difference between include directive and jsp:include action tag?	03
	(b) List out all Implicit object in jsf and explain any three in detail.	04

- (c) Develop a web application as following to demonstrate the use of JSTL SQL tag library. **07**
Create a web page to store the registration detail (Name, email and contact number) of user in the database.
Create a web page for user to update registration detail in the database.
Create a web page to display the list of all registered users.
- Q.5** (a) Draw and explain Hibernate Architecture. **03**
(b) What is Spring AOP? What are Join points and Point cuts? **04**
(c) Draw the JSF request processing life cycle and briefly give the function of each phase. **07**
- OR**
- Q.5** (a) Explain about Spring Framework. Also discuss spring bean life cycle **03**
(b) Explain Object Relation Mapping in Hibernate with java code and required XML files. **04**
(c) Write Hibernate application to store customer records and retrieve the customer record including name, contact number, address. **07**
