

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI (NEW) EXAMINATION – SUMMER 2023****Subject Code:3160707****Date:14-07-2023****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.

- Q.1** (a) Demonstrate the use of ResultSetMetadata. **03**
 (b) Implement the client server program using UDP Sockets. Client will request to download the file from server and server will send it to client. **04**
 (c) What do you mean by session tracking? Discuss different session tracking **07**
- Q.2** (a) Compare ServerSocket with Socket. **03**
 (b) Differentiate ServletConfig and ServletContext. **04**
 (c) Demonstrate the use of ServletRequestDispatcher and its methods include and forward. **07**
- OR**
- (c) Demonstrate the use of JSP action tags include and forward. **07**
- Q.3** (a) Write a code snippet to show the use of PreparedStatement. **03**
 (b) What is filter? How will you configure filter using deployment descriptor? **04**
 (c) Develop a web application as following to demonstrate the use of <jsp:useBean>. **07**
 1) Create a Java Bean named Student with attributes name and age.
 2) Create a web page to set the properties of Student using <jsp:useBean>.
 3) Create a web page to display the properties of Student using <jsp:useBean>.
- OR**
- Q.3** (a) What is FilterConfig? How will you use it? **03**
 (b) Write a code snippet to explain the use of CallableStatement. **04**
 (c) Develop a web application as following using JSP. **07**
 1) Create a web page (HTML) to submit the registration detail (Name, email and contact number) of user to jsp page.
 2) Create a jsp page to enter the registration detail in the table of database.
 3) Create a jsp page to display the list of all registered users.
- Q.4** (a) What is EL? Write a code snippet to show the use of method expressions in JSP page. **03**
 (b) Create a custom tag to print current date and time in JSP page. **04**
 (c) Discuss JSF request processing life cycle. **07**
- OR**
- Q.4** (a) Write a code snippet to show the use of JSF action event. **03**
 (b) Create a JSF custom convertor and use it in JSP page. **04**
 (c) Discuss the tags of JSTL SQL tag library. **07**
- Q.5** (a) Explain the role of IoC container in Spring. **03**
 (b) Explain AOP concepts of Spring. **04**
 (c) Discuss Hibernate architecture in detail. **07**
- OR**
- Q.5** (a) What is Hibernate? What are the features of it? **03**
 (b) Explain OR mapping using hibernate mapping file. **04**
 (c) Discuss Spring framework architecture in detail. **07**