

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI (NEW) EXAMINATION – WINTER 2023****Subject Code:3160707****Date:13-12-2023****Subject Name: Advanced Java Programming****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.

- Q.1** (a) Explain the usage of Socket class with example. **03**
(b) Differentiate Statement and PreparedStatement. **04**
(c) Explain JSP Action tags with example. **07**

- Q.2** (a) What is HTTP? Explain any two HTTP request methods in detail. **03**
(b) Explain scripting elements of JSP. **04**
(c) Write a program in which client sends string from its standard input to the server. The server reads the string, finds number of words, characters and digits of received string and sends result back to client. Use connection-oriented communication. **07**

OR

- (c) Write a JDBC Program for Employee Management application in which Consider Employee table with attributes Emp_ID, EmpName, Phone and Address, and perform followings: **07**
i) Insert multiple records using prepared statement.
ii) Display all the records in reverse order.

- Q.3** (a) Discuss the use of CallableStatement. **03**
(b) Differentiate attributes and parameters of servlet. **04**
(c) Write a servlet code for login application using database connectivity. **07**

OR

- Q.3** (a) Explain the lifecycle of filter. **03**
(b) Compare JSP with Servlet. **04**
(c) What is Session Management in servlet? Write a servlet application that demonstrates the use of cookie. **07**

- Q.4** (a) What is difference between JSTL tag `<c:import>` and `<jsp:include>` action tag? **03**
(b) Explain any four JSTL function tags with example. **04**
(c) Explain the JSF request processing life cycle. **07**

OR

- Q.4** (a) What is faces-config.xml? Explain it with code. **03**
(b) List the JSF standard validator tags and explain any three in detail. **04**
(c) Write a JSP application for student registration application using database connectivity. **07**

- Q.5** (a) List the Hibernate annotations and explain any two Hibernate annotations in detail. **03**
- (b) What is ORM? Explain object/relational mappings in hibernate. **04**
- (c) Explain the architecture of Spring web MVC. **07**

OR

- Q.5** (a) Compare Hibernate and JDBC. **03**
- (b) Explain Spring bean life cycle. **04**
- (c) Explain Hibernate Architecture. **07**
