

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI (NEW) EXAMINATION – SUMMER 2022****Subject Code:3160707****Date:10/06/2022****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) What do you mean by MVC architecture? Explain its role in modern applications with its advantages. **03**
- (b) What is Servlet? Explain the life cycle methods of it. **04**
- (c) Explain the use of PreparedStatement with appropriate example. **07**

- Q.2** (a) Compare Socket with ServerSocket. **03**
- (b) Compare the types of JDBC drivers? **04**
- (c) Explain JSP inbuilt objects with their use in application. **07**

OR

- (c) Write a java program where client sends a string as a message and sever counts the characters in the received message from client. Server sends this value back to the client. Server should be able to serve multiple clients simultaneously. **07**

- Q.3** (a) What is a session? List out various session management techniques. **03**
- (b) Explain the purpose of RequestDispatcher using the methods forward () and include (). **04**
- (c) What are cookies? Demonstrate the use of cookies in servlet. **07**

OR

- Q.3** (a) Which action tags are used to access the JavaBeans from a JSP page? **03**
- (b) What is Expression Language EL in JSP explain with suitable example program? **04**
- (c) What is session? Demonstrate the use of Session in JSP. **07**

- Q.4** (a) What is JSF? List and explain its features. **03**
- (b) What is JSTL? Explain the core tags of the SQL tag library. **04**
- (c) Discuss various stages of JSP life cycle. **07**

OR

- Q.4** (a) What is a custom tag? Explain the life cycle of tag handler. **03**
- (b) What is filter? Explain the configuration of filter using deployment descriptor. **04**
- (c) Discuss JSF life cycle phases. **07**

- Q.5** (a) What is hibernate? What are the benefits of using it? **03**
- (b) What is HQL? How does it different from SQL? List its advantages. **04**
- (c) Explain the Spring Web MVC framework controllers **07**

OR

- Q.5** (a) What are the different bean scopes in spring? **03**
- (b) What is Spring Bean? How can you create bean in Spring boot? **04**
- (c) What is OR mapping? Explain the components of hibernate.cfg.xml file. **07**
