

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER– VI (NEW) EXAMINATION – WINTER 2021****Subject Code:3160707****Date:04/12/2021****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) | Explain the usage of InetAddress class. | 03 |
| (b) | Explain the use of PreparedStatement and CallableStatement with example. | 04 |
| (c) | Explain JSP page directives with example. | 07 |
- Q.2**
- | | | |
|-----|---|-----------|
| (a) | Differentiate HTTP Get and Post methods. | 03 |
| (b) | Explain any four implicit objects of JSP. | 04 |
| (c) | Write a program in which client sends string from its standard input to the server. The server reads the string, converts the string into upper case and sends back to client. Use connection-oriented communication. | 07 |
- OR**
- | | | |
|-----|---|-----------|
| (c) | Write a JDBC program for banking application in which consider bank table with attributes AccountNo, CustomerName, Phone and Address, and perform followings: | 07 |
| | 1. Insert two records using prepared statement. | |
| | 2. Display all the records. | |
- Q.3**
- | | | |
|-----|---|-----------|
| (a) | Discuss the use of execute(), executeUpdate() and executeQuery() methods. | 03 |
| (b) | Differentiate ServletConfig and ServletContext objects. | 04 |
| (c) | Write a servlet code which reads the student details from web page and stores it in database. | 07 |
- OR**
- Q.3**
- | | | |
|-----|---|-----------|
| (a) | What is Filter? List the applications of filter. | 03 |
| (b) | Discuss Servlet life cycle methods. Explain role of web container. | 04 |
| (c) | What is Request Dispatcher? What is the difference between RequestDispatcher's forward() and include() method? Explain it in detail with program. | 07 |
- Q.4**
- | | | |
|-----|--|-----------|
| (a) | What is difference between include directive and jsp:include action tag? | 03 |
| (b) | Explain any four JSTL core tags. | 04 |
| (c) | Explain the JSF request processing life cycle. | 07 |
- OR**
- Q.4**
- | | | |
|-----|---|-----------|
| (a) | What is the JSF facelets? Explain any two facelets tags. | 03 |
| (b) | List the JSF standard converter tags and explain any three in detail. | 04 |
| (c) | Write a JSP application for login module with reset password feature using database connectivity. | 07 |
- Q.5**
- | | | |
|-----|--|-----------|
| (a) | What is dependency injection? Explain in detail. | 03 |
| (b) | What is HQL? Write difference between HQL and SQL. | 04 |
| (c) | Explain Hibernate Architecture. | 07 |

OR

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|------------|------------|---|-----------|
| Q.5 | (a) | Explain the features of Spring web MVC. | 03 |
| | (b) | What is ORM? Explain object/relational mappings in hibernate. | 04 |
| | (c) | Explain architecture of Spring MVC Framework. | 07 |

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**
