# GUJARAT TECHNOLOGICAL UNIVERSITY
## BE - SEMESTER–VI(NEW) – EXAMINATION – SUMMER 2019

**Subject Code:2160707**                                     **Date:14/05/2019**
**Subject Name:Advanced Java**
**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..**

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|---|---|---|---|
| **Q.1** | **(a)** | Mention advantages of J2EE. | **03** |
| | **(b)** | Write a Web application using servlet to find the sum of all the digits of an input integer. | **04** |
| | **(c)** | Describe the servlet life cycle with life cycle methods | **07** |
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| **Q.2** | **(a)** | What do you mean by MVC architecture? Explain its role in modern applications with its advantages | **03** |
| | **(b)** | Write a Web application using servlet to find whether entered number is prime or not. | **04** |
| | **(c)** | Explain JSF Application Life cycle with diagram. | **07** |
| | | **OR** | |
| | **(c)** | Explain Hibernate Architecture and Object Relation Mapping in Hibernate with java code and required XML files. | **07** |
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| **Q.3** | **(a)** | Explain functionality of Cookie. | **03** |
| | **(b)** | What is session? Explain session management using HTTPSession. | **04** |
| | **(c)** | Write a client-server program using TCP sockets to echo the message send by the client. | **07** |
| | | **OR** | |
| **Q.3** | **(a)** | Discuss concept of JDBC. | **03** |
| | **(b)** | Explain JSP Object scope: (i) Page (ii) Request (iii) Session (iv) Application with example. | **04** |
| | **(c)** | Write a client-server java programs using TCP sockets to get server date on client machine. | **07** |
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| **Q.4** | **(a)** | Explain the following classes with their use. i. URLConnection class ii. DatagramSocket (iii) DatagramPacket class | **03** |
| | **(b)** | Write a JSP Page which use available java bean. Discuss functionality of used java beans. | **04** |
| | **(c)** | Develop a jsp code which reads the student detail from web page and stores it in database | **07** |
| | | **OR** | |
| **Q.4** | **(a)** | Explain JSP (i) page (ii) include (iii) taglib directive with attribute, description. | **03** |
| | **(b)** | Discuss JSP Exception Handling. | **04** |
| | **(c)** | Write a servlet code to demonstrate prepare statement and callable statement to retrieve and store employee data. | **07** |
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| **Q.5** | **(a)** | Discuss Hibernate Query Language. | **03** |
| | **(b)** | Discuss Java Bean life cycle with one example. | **04** |
| | **(c)** | Draw and explain Spring Framework Architecture. | **07** |

**Q.5** **(a)** Discuss JSF Convertor Tag. **03**

**(b)** Explain following tags in JSTL with example : (i) Core (ii)XML **04**

**(c)** Write a Java Servlet to print BE Semester Marksheet of entered **07** enrollment number and sem no by student using JDBC.

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