C. U. SHAH UNIVERSITY
Summer Examination 2019

Subject Name:- **Advanced Java Programming (AJP)**

Subject Code: **5CS04MJV1**   Branch: **MCA**

Semester: **4**   Date: **26/04/2019**   Time: **2:30 To 5:30**   Marks: **70**

Instructions:

(1) Use of Programmable calculator and any other electronic instrument is prohibited.

(2) Instructions written on main answer book are strictly to be obeyed.

(3) Draw neat diagrams and figures (if necessary) at right places.

(4) Assume suitable data if needed.

SECTION-I

Q. 1	**Answer the following questions.**	07
(a)	What is JSP Scriptlet?	03
(b)	What is the difference between a Scrollbar and a JScrollPane?	02
(c)	What is the purpose of Class.forName method?	02
Q. 2	**Attempt all questions.**	
(a)	Explain life cycle of the Servlet.	07
(b)	Explain cookies with example using Servlet.	07

OR

Q. 2	**Attempt all questions.**	
(a)	Enlist and explain the purpose and use of action tags in JSP.	07
(b)	Compare Java Servlet and JSP.	07
Q. 3	**Attempt all questions.**	
(a)	What is RMI? Give the architecture of RMI and discuss the functions of each layer. What is the role of RMI registry?	07
(b)	What are the differences between Java Bean and basic Java class? Explain Java Bean architecture.	07

OR

Q. 3	**Attempt all questions.**	
(a)	Write a swing program to display multiplication of two numbers. Use Label, Text Box and Button.	07
(b)	Develop a program to perform the database driven operations like delete, update and select. To perform these operations, assume that table named "EMPLOYEE" with the fields EMP_TYPE, EMP_ID, EMP_NAME, EMP_DESIG, EMP_JOINING_DATE and EMP_SALARY.	07

SECTION-II

Q. 4	**Answer the following questions.**	**07**
(a)	What is JSP directives?	**03**
(b)	Why Swing components are called lightweight component?	**02**
(c)	Servlet can be implemented in code by extending the _____ or _____.	**02**

Q. 5   **Attempt all questions.**

(a)	Give the advantages of n-tier architecture and discuss the objectives of the Enterprise applications.	**07**
(b)	List the Servlet session level events and show that how servlet destroy event is handled?	**07**

OR

Q. 5   **Attempt all questions.**

(a)	Explain Java handlers and listeners used in Web Application.	**07**
(b)	Explain MVC Architecture in details with figure.	**07**

Q. 6   **Attempt all questions.**

(a)	List and explain various swing layouts and components with examples.	**07**
(b)	What is sendRedirect( ) in Servlet? Differentiate between sendRedirect( ) and forward( ) method.	**07**

OR

Q. 6   **Attempt all questions.**

(a)	Explain the following classes with their use: (1) URLConnection class (2) DatagramSocket and DatagramPacket class	**07**
(b)	Explain the following classes with their use: (1) HttpServlet Class (2) GenericServlet Class.	**07**