

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

Six Semester of B.Tech. Examination (CE/IT)

May 2014

CE 307/307.01 Advanced Java Programming

Date: 15.05.2014, Thursday

Time: 10:00 a.m. To 01:00 p.m.

Maximum Marks: 70

Instructions:

1. The question paper comprises of two sections.
2. Section I and II must be attempted in separate answer sheets.
3. Make suitable assumptions and draw neat figures wherever required.
4. Use of scientific calculator is allowed.

SECTION – I

Q - 1 (a) Do as Directed. [08]

- 1 Differentiate between ServletContext and ServletConfig. [02]
- 2 List out Java Standard Tag Library tags and show advantages of it. [02]
- 3 What is role of stub in RMI? [02]
- 4 Differentiate DDL and DML statements which are either performed by executeQuery() or executeUpdate() in JDBC? [01]
- 5 State True or False that in JDBC-ODBC bridge supports multiple concurrent open statements per connection. [01]

(b) Differentiate functionalities between Application Server and Web Server. [02]

Q - 2 (a) Explain every phases of JSP life cycle. Also compare with Servlet life cycle. [06]

(b) Explain different types of JDBC Drivers. [05]

(c) What are the different methods of session management in servlets? [04]

OR

Q - 2 (a) Explain every phases of Servlet life cycle. Also compare with JSP life cycle. [06]

(b) What is JDBC Statement? Explain steps to get Database connection in a simple java program. [05]

(c) What is servlet filter? List out various servlet filter and explain any one with example. [04]

Q - 3 (a) List and explain JSP action elements or action tags with example. [04]

(b) Write a java client-server application in which [06]

- i) A client reads a character from the keyboard and sends the character out of its socket to the server.
- ii) The server reads the characters from its connection socket.
- iii) The server finds the ASCII values of the character.
- iv) The server sends the ASCII value out of its connection socket to the client.
- v) The client reads the result from its socket and prints the result on its standard output device.

OR

(b) Perform following tasks using java socket [06]

- i) Find the IP address of website [Pass website name from command line].
- ii) Find the host name from IP address.
- iii) Find the IP address of local machine.

SECTION - II

- Q - 4 (a) Do as Directed [08]
- 1 What is marshalling and Unmarshalling in RMI? [02]
 - 2 Define XSLT and also show the importance of it. [02]
 - 3 Create deployment descriptor which includes two servlet along with necessary elements. [02]

- 4 Which of the following methods can be used to get information about parameters applied to entire application? [01]

- A. ServletConfig.getParameter();
- B. ServletContext.getAttributeNames();
- C. ServletContext.getParameterNames();
- D. ServletContext.getInitParameterNames();

- 5 By creating object of _____ we can get all raw information of your database or table. [01]

- (b) Why should you use PreparedStatement in Java and What are the major advantages of using PreparedStatement? [02]

- Q - 5 (a) What is xml? Which are the rules to follow strictly to create well-formed xml file? [06]
Create xml file of online Bookstore.

- (b) List out various java TCP socket along with necessary class and function which are used at client side and server side to set up reliable connection. [05]

- (c) Give the step to send email using Gmail SMTP server. [04]

OR

- Q - 5 (a) Explain J2EE design pattern [06]

- (b) List out various java UDP socket along with necessary class and function which are used at client side and server side. [05]

- (c) Using Java Mail API send email along with one attachment which include simple document file. [04]

- Q - 6 (a) Explain RMI Architecture. [04]

- (b) Create RMI application in which server invoke method which authenticate user by username and password.[Take username and password as "admin"] [06]

OR

- (b) Create RMI application which perform basic arithmetic operation. [06]

OR