USN | | | | | | | | | |

10CS/IS753

Seventh Semester B.E. Degree Examination, June/July 2018
Java and J2EE

Time: 3 hrs.   Max. Marks:100

Note: *Answer FIVE full questions, selecting at least TWO questions from each part.*

PART – A

1   a. Briefly explain any six features of JAVA language.   **(06 Marks)**
    b. Write a JAVA program to implement linear search among {10, 30, 40, 5} with key = 30, using for each in JAVA.   **(04 Marks)**
    c. Explain the following with example :
       i) Labelled continue   ii) >>>   iii) Short circuit AND operator.   **(06 Marks)**
    d. Explain the two ways of type conversion. Will the following snippet produce error? If yes how to overcome the error. byte b = 50; b = b * 2;   **(04 Marks)**

2   a. Explain the following with example :
       i) Dynamic method dispatching   ii) Two uses of super.   **(08 Marks)**
    b. Explain throw and throws statements with example.   **(06 Marks)**
    c. Write a JAVA applet that sets the background color to blue and foreground color to red and outputs a message "shown in status window" to the status window.   **(04 Marks)**
    d. Define inner class.   **(02 Marks)**

3   a. Write a program in java to implement producer consumer problem, using threads.   **(06 Marks)**
    b. What is the need for synchronization? Demonstrate a program using synchronized methods.
                                                                                          (06 Marks)
    c. Explain the mechanism of event delegation needed. Give an example for using mouse event.
                                                                                          (08 Marks)

4   a. Write a Java swing appolet that has 2 buttons named alpha and beta, when either of the button is pressed, it should display "alpha/beta was pressed" respectively.   **(06 Marks)**
    b. Explain components in swings.   **(06 Marks)**
    c. Explain following with an example for each i) Jlabel   ii) JTextfield.   **(08 Marks)**

PART – B

5   a. Describe the various steps of JDBC process with code snippet.   **(10 Marks)**
    b. Explain callable statement with example?   **(06 Marks)**
    c. Explain different types of drivers used in JDBC.   **(04 Marks)**

6   a. What is Servelet? Explain phases of servelet life cycle.   **(06 Marks)**
    b. List the advantages of servlets over CGI.   **(04 Marks)**
    c. List and explain core classes that are provided in javax.servlet.http package.   **(04 Marks)**
    d. Write a java servlet program to illustrate how to use session state.   **(06 Marks)**

7   a. Explain the different types of JSP tags with syntax.   **(05 Marks)**
    b. Write a JSP to create and read cookie named " UserID" that stores the value "AB123".
                                                                                          (05 Marks)
    c. Write a JSP to create and read session attribute named "product" that stores the value "2013".   **(05 Marks)**
    d. Describe code snippet RMI at server side.   **(05 Marks)**

8   a. Write a code skeleton of session bean.   **(06 Marks)**
    b. Explain various EJB transaction attributes.   **(06 Marks)**
    c. Write a note on JAR file   **(04 Marks)**
    d. Write a code skeleton of message driven bean.   **(04 Marks)**

* * * * *