17CS553

Fifth Semester B.E. Degree Examination, Jan./Feb.2021
Advanced Java and J2EE

Time: 3 hrs.   Max. Marks: 100

Note: *Answer any FIVE full questions, choosing ONE full question from each module.*

Module-1

1   a.   Illustrate with an example how enumerations are declared and used in Java programming. Also list out the enumeration restrictions. **(08 Marks)**
     b.   Describe Auto-boxing and Un-boxing and how it is different from boxing and unboxing. Illustrate with an example. **(06 Marks)**
     c.   Justify, Java enumerations is a class type with an example. **(06 Marks)**

OR

2   a.   With a syntax and example, explain how annotations are created and obtained at runtime. **(07 Marks)**
     b.   Discuss how reflections can be used at run time with annotations. **(06 Marks)**
     c.   What do you mean by Type wrapper and explain numeric type wrapper with an example? **(07 Marks)**

Module-2

3   a.   Demonstrate linked lists for collections with example. **(07 Marks)**
     b.   Explain how collections can be accessed using iterator. **(06 Marks)**
     c.   Write a program to explain Linked list to store address. **(07 Marks)**

OR

4   a.   Explain the following Legacy classes with example :
          (i) Hash table   (ii) Vector **(08 Marks)**
     b.   Discuss the following collection integers set and list. **(06 Marks)**
     c.   What is a Collection Frame work? Explain the methods defined by collection interface. **(06 Marks)**

Module-3

5   a.   Explain with syntax and example the different constructors available for creating string. **(08 Marks)**
     b.   Explain the following methods defined for character extraction with example,
          (i) charAt ( )   (ii) getChars ( )   (iii) getBytes ( )   (iv) toCharArray ( ) **(08 Marks)**
     c.   Write a program to remove duplicate characters from a given string and display the resultant string. **(04 Marks)**

OR

6   a.   Explain how to modify a string by using following methods:
          (i) substring ( )   (ii) concat ( )   (iii) replace ( )   (iv) trim ( ) **(10 Marks)**
     b.   Explain the following with syntax and example :
          (i)   equals ( ) and equalsIgnoreCase ( )
          (ii)   regionMatches ( )
          (iii)   startsWith ( ) and endsWith ( )
          (iv)   equals( ) versus == **(10 Marks)**

Module-4

7 a. Explain how cookies can be handled using servlets. (07 Marks)
   b. Explain different JSP tags with a program to demonstrate all tags. (08 Marks)
   c. Explain the life cycle of a servlet. (05 Marks)

OR

8 a. Write a Java Servlet program to accept two parameters from webpage, find the sum of them, display the result in webpage. Also give necessary Html script to create webpage. (10 Marks)
   b. What is the role of Tomcat server? Explain different steps involved in configuring for development of Servlet program execution. (10 Marks)

Module-5

9 a. Briefly explain the different types of JDBC drivers. (10 Marks)
   b. Explain various steps of JDBC process with code Snippets. (10 Marks)

OR

10 a. Illustrate with an example how to enable Resultset as scrollable.end describe the significance of scrollable Resultset. (08 Marks)
   b. Explain the types of exceptions occurred in JDBC with example. (04 Marks)
   c. Explain (i) PreparedStatement object.   (ii) CollableStatement object. (08 Marks)

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