USN ⬚⬚⬚⬚⬚⬚⬚⬚⬚⬚ **15CS553**

Fifth Semester B.E. Degree Examination, Dec.2017/Jan.2018
Advanced Java and J2EE

Time: 3 hrs. Max. Marks: 80

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

Module-1

1   a.   What are Enumerations? Explain values ( ) and value of ( ) methods with an example program. **(04 Marks)**
   b.   What is Autoboxing? Write a Java program that demonstrates autoboxing or unboxing. **(04 Marks)**
   c.   What are Annotations? Explain the following Built – in annotations with program as an example @Override @inherited @Retention. **(08 Marks)**

OR

2   a.   Explain the following methods of java.lang.Enum with an example program.
        i)   ordinal ( )
        ii) compareTo
        iii) equals ( ) **(08 Marks)**
   b.   Explain how to obtain Annotations at Run Time by use of Reflection. **(08 Marks)**

Module-2

3   a.   What is a collection Framework? And explain the methods defined by collection interface. **(08 Marks)**
   b.   Explain the methods defined by List Iterator interface. **(08 Marks)**

OR

4   a.   Explain the constructors of TreeSet class and write a java program to create TreeSet collection and access it via an Iterator. **(08 Marks)**
   b.   Explain any four legacy classes of Java's collection Framework. **(08 Marks)**

Module-3

5   a.   What is string in Java? Write a Java program that demonstrates any four constructors of string class. **(08 Marks)**
   b.   Differentiate between equals ( ) and = = with respect to string comparison. **(04 Marks)**
   c.   Explain the following character Extraction methods.
        i)   Chart A + ( )
        ii) tochar Array ( ) **(04 Marks)**

OR

6   a.   Explain how to modify a string by using following methods.
        i)   substring ( )
        ii) concat ( )
        iii) replace
        iv) trim ( ) **(08 Marks)**

b. Explain the following methods of stringBuffer class.
   i) append ( )
   ii) insert ( )
   iii) reverse ( )
   iv) replace. **(08 Marks)**

Module-4

7 a. Explain the Life cycle of Servlets. **(04 Marks)**
   b. List and explain core classes and interfaces in javax.servlet pakage. **(08 Marks)**
   c. Write short note on HTTP request and response. **(04 Marks)**

OR

8 a. What is a Cookie? List out methods defined by Cookie? Write a java program to add a Cookie. **(08 Marks)**
   b. Define JSP. Explain different types of JSP tags by taking suitable example. **(08 Marks)**

Module-5

9 a. Explain the four types of JDBC drivers. **(06 Marks)**
   b. Describe the various steps of JDBC with code snippets. **(10 Marks)**

OR

10 a. Write a Java program to execute a database transaction. **(08 Marks)**
    b. Explain :
       i) Callable statement object
       ii) Prepared statement object **(08 Marks)**

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