CBCS SCHEME

USN ☐☐☐☐☐☐☐☐☐☐   18CS644

Sixth Semester B.E. Degree Examination, July/August 2022
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. What are enumerations? Explain values( ) and valueOf( ) methods with example program.
                                                                  (08 Marks)
   b. What is autoboxing? Write a Java program that demonstrates autoboxing/unboxing occurs inside expressions.   **(06 Marks)**
   c. What are annotations? Explain the following built-in annotations:
       (i) override   (ii) inherited   (iii) retention   **(06 Marks)**

OR

2 a. Explain the various type wrappers used in Java.   **(08 Marks)**
   b. Explain the following methods of Java.lang.Enum with example:
       (i) ordinal   (ii) compareTo   (iii) equals( )   **(08 Marks)**
   c. Demonstrate marker annotations with example.   **(04 Marks)**

Module-2

3 a. What is collection framework? Explain the methods define by the collection interface.
                                                                  (07 Marks)
   b. Demonstrate ArrayList class collection with an example.   **(06 Marks)**
   c. Explain any four legacy collection of framework.   **(07 Marks)**

OR

4 a. Explain the following map classes: (i) HashMap   (ii) TreeMap   **(08 Marks)**
   b. Explain ArrayList class and explain the following methods:
       (i) binarySearch   (ii) copy   (iii) equals   (iv) fill   **(08 Marks)**
   c. Explain Queue interface. List different methods defined in Queue. **(04 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. Explain the following StringBuffer methods with an example:
       (i) insert   (ii) append   (iii) replace   (iv) substring   **(08 Marks)**
   c. Differentiate between equals( ) and = = with respect to string comparison.   **(04 Marks)**

OR

6 a. Explain the following StringBuffer class with examples:
       (i) capacity( )   (ii) reverse( )   (iii) charAt( )   (iv) deleteCharAt( )   **(08 Marks)**
   b. Write a program to remove duplicate characters from a given string and display the resultant string.   **(08 Marks)**
   c. How compareTo( ) method differs from compareToIgnoreCase ( ) method?   **(04 Marks)**

Module-4

7 a. Explain the life cycle of Servlet.
   b. Explain the difference between servlets and CGI pro...
   c. Describe the core interfaces that are provided in Java S...

OR

8 a. What is JSP? Explain the various types of JSP tags w...
   b. What are cookies? How cookies are handled in JSP...
     a cookie.

Module-5

9 a. What are database drivers? Explain the different JDBC...
   b. Describe the various steps of JDBC with code snipp...
   c. Write any two syntax of established a connection to...

OR

10 a. What is connection pooling? Explain connection p...
    snippets.
   b. Describe the following concepts:
    (i)   Scrollable result set
    (ii) Callable statement
    (iii) Transaction processing
    (iv) Updatable result set

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