

**Fifth Semester B.E. Degree Examination, June/July 2019**
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? How to use an enum constructor, instance variable and method?
Explain with example. (06 Marks)
- b. What is Autoboxing? Write a Java program that demonstrates autoboxing/unboxing occurs inside expressions. (06 Marks)
- c. Demonstrate marker annotations with an example. (04 Marks)

OR

2. a. Explain the various type wrappers used in Java. (05 Marks)
- b. What is Annotation? Explain various retention policies for annotations in Java. (05 Marks)
- c. Explain how to obtain annotations at run-time by use of reflection? (06 Marks)

Module-2

3. a. Explain the following collection interfaces: i) Queue ii) SortedSet. (08 Marks)
- b. Demonstrate ArrayList class for collections with an example. (08 Marks)

OR

4. a. Explain the following Map classes : i) HashMap ii) TreeMap. (08 Marks)
- b. Define legacy class-vector. Write a Java program to demonstrate various vector operations. (08 Marks)

Module-3

5. a. Explain the following string comparison methods with examples :
i) equals() ii) regionMatches() iii) startsWith iv) endsWith(). (08 Marks)
- b. Explain the various string constructors used in Java with examples. (08 Marks)

OR

6. a. Explain the following methods of StringBuffer class with examples :
i) capacity() ii) reverse() iii) deleteCharAt() iv) charAt(). (08 Marks)
- b. How compareTo() method differs from compareToIgnoreCase() method? Write a Java program to sort an array of string in descending order by ignoring the case. (08 Marks)

Module-4

7. a. Explain the life cycle of servlets. (04 Marks)
- b. How to handle HTTP GET requests and HTTP Post requests? Explain with examples. (08 Marks)
- c. Write a servlet program that demonstrates how to use session state. (04 Marks)

OR

- 8 a. What is JSP? Explain the various types of JSP tags with examples.
b. What is a cookie? Write a JSP program to create and read a cookie,

(10 Marks)
(06 Marks)

Module-5

- 9 a. List and explain the different types of JDBC drivers types.
b. Write a Java program to execute a database transaction.
c. List and explain the three kinds of exceptions occurred in JDBC.

(06 Marks)
(06 Marks)
(04 Marks)

OR

- 10 a. Explain the various steps of JDBC with code snippets.
b. Explain the following statement objects with examples :
i) PreparedStatement object
ii) CallableStatement object.

(08 Marks)
(08 Marks)

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