

# CBCS SCHEME



15CS553

## Fifth Semester B.E. Degree Examination, Jan./Feb. 2023 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 is Autoboxing? Write a java program that demonstrates how autoboxing and unboxing takes place in expression evaluation. (08 Marks)  
b. What are Annotations? Explain the following Built-in annotation with an example program :  
i) Override ii) Inherited. (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. Discuss the following collection interfaces : i) Queue ii) List. (08 Marks)  
b. Demonstrate linked list for collections with an example. (08 Marks)

OR

- 4 a. Explain how collections can be accessed using an iterator. (08 Marks)  
b. Explain the following legacy classes with an example i) `Hashtable` ii) `Treeset`. (08 Marks)

### Module-3

- 5 a. Explain why do we need strings. Briefly explain different ways of creating strings. (05 Marks)  
b. Write a program to remove duplicate character in a given string and display new string without any duplicates. (05 Marks)  
c. Explain how string can be modified in Java with different methods. (06 Marks)

OR

- 6 a. What is String Buffer? Explain how it is different from strings. (06 Marks)  
b. Explain the following String Buffer methods.  
i) `insert()` ii) `append()` iii) `substring()` iv) `replace()` (06 Marks)  
c. Explain how to check the occurrences of a substring or character in a given string. (04 Marks)

### Module-4

- 7 a. Explain the life cycle of a servlet. (04 Marks)  
b. Demonstrate how servlet can accept parameters from HTML. (06 Marks)  
c. Explain how cookies can be handled using servlets. (06 Marks)

OR

- 8 a. Explain how session trading can be done with servlets. (04 Marks)  
b. Demonstrate how parameters can be accessed from HTML using JSP. (06 Marks)  
c. Explain how cookies can be handled using JSP. (06 Marks)

Module-5

- 9 a. List and explain various JDBC driver types. (09 Marks)  
b. Explain what are the basic steps involved in database connection. (07 Marks)

OR

- 10 a. List and explain various statement objects in JDBC. (07 Marks)  
b. What is Result set? Explain types of Result sets in JDBC. (05 Marks)  
c. Explain the types of exception occurred in JDBC. (04 Marks)

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