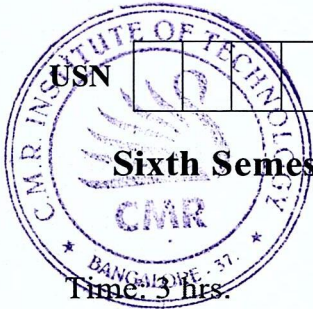


CBCS SCHEME



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21CS642

Sixth Semester B.E./B.Tech. Degree Examination, Dec.2025/Jan.2026

Advanced Java Programming

Max. Marks: 100

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

Module-1

- 1 a. Define enumerations? Explain values() and valueof() methods with syntax and example program. (07 Marks)
- b. Demonstrate the ordinal(), CompareTo() and equals() methods with example program. (07 Marks)
- c. What are types Wrappers? Explain numeric type wrappers with a java program. (06 Marks)

OR

- 2 a. Explain autoboxing/unboxing features in java. Demonstrate the same inside expression with a program. (06 Marks)
- b. What is annotation? Explain how reflection can be used at run time with annotation. (07 Marks)
- c. Write a note on Built-in Annotations. (07 Marks)

Module-2

- 3 a. What are Generics? Explain simple Generic class with example program. (08 Marks)
- b. Explain method overriding in a Generic class with an example program. (07 Marks)
- c. Write a note on Bounded Types. (05 Marks)

OR

- 4 a. Explain a Generic class with two type parameters in Java with an example program. (08 Marks)
- b. Explain Bridge methods with an example program. (07 Marks)
- c. Write a note on Generic Restrictions. (05 Marks)

Module-3

- 5 a. What is a string in Java? Explain string class constructors with an example. (08 Marks)
- b. Explain various methods available for searching strings with syntax and an example program. (07 Marks)
- c. Explain the following stringBuffer methods with syntax and an example program. (05 Marks)
i) insert() ii) append() iii) replace()

OR

- 6 a. With suitable example implement the difference between
i) length() and capacity
ii) equals() and == (08 Marks)
- b. Discuss the methods available for character Extraction. (07 Marks)
- c. Explain the methods available for modifying a string. (05 Marks)

Module-4

- 7 a. Define a Servlet? Write a note on various stages of Servlet's life cycle. (05 Marks)
- b. Illustrate handling Http-Post request with a java program. (08 Marks)
- c. What do you mean by session tracking? Write a servlet to display current date and time and also date and time when the servlet was last accessed. (07 Marks)

OR

- 8 a. What are different types of JSP tags? Describe the JSP tags with an example. (06 Marks)
- b. Define JSP? Write a JSP program to illustrate three types of looping statements in JSP. (07 Marks)
- c. Write a JSP program to create and read cookie called "EMPID" and has value "PM2695" (07 Marks)

Module-5

- 9 a. What are database Drivers? Explain different JDBC driver types. (05 Marks)
- b. Write a note on connection pool. (05 Marks)
- c. List and explain various steps involved in JDBC process with code snippet. (10 Marks)

OR

- 10 a. Illustrate three overloaded versions of getConnection() method with code snippet. (06 Marks)
- b. Write a code segment to insert a row in the resultset. Assume that the Resultset object corresponds to the query SELECT FirstName, LastName from customers (08 Marks)
- c. Write a note on MetaData. (06 Marks)
