



CBGS SCHEME

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18CS644

Sixth Semester B.E. Degree Examination, Dec.2023/Jan.2024

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. Define Enumerations. Develop a Java program to implement the following built-in methods and explain : (i) values() (ii) valueOf() (iii) ordinal() (vi) compareTo() (v) equals() (10 Marks)
- b. What is Wrapper class? Explain the following with examples :
- (i) Boxing
 - (ii) Un-Boxing
 - (iii) Auto-boxing
 - (iv) Auto-unboxing
- (10 Marks)

OR

- 2 a. What are annotations? Explain the following Built-in annotations with examples:
- (i) @Override
 - (ii) @Inherited
 - (iii) @Retention
 - (iv) @Supress Warnings
- (10 Marks)
- b. Explain the following with respect to annotations :
- (i) Single member annotations.
 - (ii) Default values in annotations.
- (10 Marks)

Module-2

- 3 a. What is collection frame work? Explain the methods defined by the following interfaces :
- (i) Collection
 - (ii) List
 - (iii) Sorted Set
 - (iv) Queue
- (10 Marks)
- b. Explain how collections can be accessed using an iterator with example. (06 Marks)
- c. Explain HashMap with example. (04 Marks)

OR

- 4 a. Explain the following collection classes by constructing a JAVA program :
- (i) Linked List
 - (ii) Array List
 - (iii) Tree Set
 - (iv) Hash Set
- (10 Marks)
- b. What is Legacy classes? Explain the different Legacy classes with a Java Program. (10 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

Module-3

- 5 a. What is string in Java? Explain the different constructors of string class. Also list the difference between String Class and String Buffer class. (10 Marks)
- b. Explain the difference between equals and == with example. (05 Marks)
- c. Explain how to check the occurrence of a substring in a given string. (05 Marks)

OR

- 6 a. Explain the following built in methods with respect to string buffer class :
- (i) capacity ()
 - (ii) delete ()
 - (iii) replace ()
 - (iv) append ()
 - (v) substring ()
- b. Explain any two character handling functions in string class. (10 Marks)
- c. Write a java program to sort names in Bubble sort. (04 Marks)
- (06 Marks)

Module-4

- 7 a. Explain the life cycle of servlet. (06 Marks)
- b. Write a Servlet program to accept parameter from HTML (username & password) and display. (08 Marks)
- c. Explain the role of Tomcat server in servlets. (06 Marks)

OR

- 8 a. List the difference between JSP and Servlet. Also explain the different JSP tags with example. (10 Marks)
- b. Explain sessions and cookies in JSP. (06 Marks)
- c. How arrays are defined in JSP? (04 Marks)

Module-5

- 9 a. What is JDBC? Explain the different JDBC driver types. (10 Marks)
- b. What is statement object in JDBC? Explain the following statement objects with example :
- (i) PreparedStatement
 - (ii) CallableStatement
- (10 Marks)

OR

- 10 a. Explain ScrollableResultSet and UpdatableResultSet object in JDBC. (10 Marks)
- b. Explain transaction processing in JDBC. (06 Marks)
- c. Explain the types of exceptions occurred in JDBC. (04 Marks)
