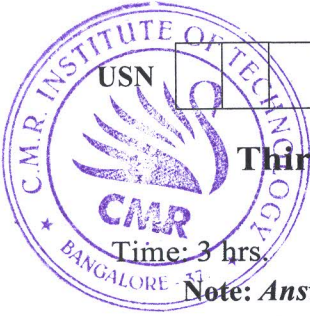


CBCS SCHEME

20MCA33



USN

Third Semester MCA Degree Examination, June/July 2023

Advances in Java

Max. Marks: 100

Time: 3 hrs.

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

Module-1

- 1 a. Explain the structure of a Servlet with an example template. (10 Marks)
- b. What are Cookies? List benefits of Cookies. Explain sending and receiving cookies. (10 Marks)

OR

- 2 a. Explain the Life cycle of a Servlet. (06 Marks)
- b. Explain basic steps for tracking a session. (08 Marks)
- c. Explain HTTP 1.1 request headers using Servlets. (06 Marks)

Module-2

- 3 a. Define JSP. Explain types of scripting elements. (04 Marks)
- b. Explain different ways of generating dynamic content in JSP. (06 Marks)
- c. Explain how expressions are evaluated in JSP. (10 Marks)

OR

- 4 a. Explain how to limit amount of Java code in JSP. (06 Marks)
- b. Explain JSP declarations with example. (10 Marks)
- c. Write short note on JSP script lets. (04 Marks)

Module-3

- 5 a. Explain the following page directive attributes
i) import ii) session iii) buffer and autoflush iv) errorPage and isErrorPage
v) isThreadSafe. (10 Marks)
- b. Explain `<jsp:include>` and `<jsp:plugin>` elements with example for each. (10 Marks)

OR

- 6 a. Demonstrate how to build Java Beans using `<jsp:useBean>` element. (10 Marks)
- b. Explain how to create manifest and JAR file. (05 Marks)
- c. Explain how to add color property to simple Bean (05 Marks)

Module-4

- 7 a. Explain the components of JDBC and ODBC. (06 Marks)
- b. Explain the types of JDBC drivers (04 Marks)
- c. Explain the steps for creating an application using JDBC API. (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.

OR

- 8 a. Define Annotations. Explain how to create annotations. Explain built in annotations. (10 Marks)
- b. Explain Scrollable ResultSets and Batch updates with example for each. (10 Marks)

Module-5

- 9 a. Explain the following : (10 Marks)
- i) Dependency Injection ii) Security iii) Instance Pooling iv) Interceptors. (10 Marks)
- b. Explain the features of JMS with example. (10 Marks)

OR

- 10 a. Explain the Life Cycle of Stateful Session Bean. (10 Marks)
- b. Demonstrate how to build a simple persistent registry of employees and to perform CRUD operations. (10 Marks)

CMRIT LIBRARY
RANGALORE - 560 037
