

2C8121

Roll No. _____

Total No. of Pages : **2****2C8121**

M.C.A. II-Sem. (Main/Back) Examination, June/July - 2025
MCA-201 Java Technologies

Time : 3 Hours**Maximum Marks : 70****Instructions to Candidates:**

Attempt all Ten questions from Part A. All Five questions from Part B and Three questions out of five questions from Part C.

Schematic diagrams must be shown wherever necessary. Any data missing may suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.

Use of following supporting material is permitted during examination. (As Mentioned in form No. 205).

PART - A**(Word Limit 25)****Attempt all Ten questions.****(10×2=20)**

1. What are the key features of Java that make it platform-independent?
2. Define method overloading with an example.
3. What is the role of a web.xml file in a J2EE application?
4. List any two types of JDBC drivers.
5. What is an abstract class in Java? How is it different from an interface?
6. Explain the servlet life cycle briefly.
7. What is a ResultSet in JDBC?
8. Mention any two implicit objects in JSP.
9. Define Dependency Injection in the context of Spring.
10. What is the use of the DispatcherServlet in Spring MVC?

PART - B**(Word Limit 100)****Attempt all Five questions.****(5×4=20)**

1. How does Java achieve exception handling? Explain with example for try-catch-finally?
2. Explain the architecture of J2EE and the need of J2EE.
3. Describe the steps to establish a JDBC connection with a database.
4. What are JSP directives? Explain with examples.
5. Differentiate between BeanFactory and Application Context in Spring.

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PART - C

Attempt any Three questions.

(3×10=30)

1. Explain the complete process of creating, starting, and managing threads in Java. Explain with example.
 2. Explain the J2EE API's, J2EE Container and Session Tracking and Management.
 3. Describe the JDBC Connectivity Model and Creating and Executing SQL statements with example.
 4. Explain the Basic JSP Architecture, Life Cycle of JSP and Tag Libraries with example.
 5. Explain the Spring MVC Architecture, Spring MVC Layering and Spring Configuration File.
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