



Third Semester MCA Degree Examination, Dec.2023/Jan.2024
Advanced in Java

Max. Marks: 100

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

Module-1

- 1 a. Explain lifecycle of servlet with a neat diagram. (05 Marks)
- b. Differentiate between GET and POST methods with respect to servlets. (05 Marks)
- c. What is Cookie? And also explain with sample code how to add a cookie and read a cookie. (10 Marks)

OR

- 2 a. What is request header? Explain some request headers with example. (04 Marks)
- b. Explain major range of status codes along with their purpose. (06 Marks)
- c. Write a java servlet program to track Http session by accepting user name and password using html. (10 Marks)

Module-2

- 3 a. Define JSP. Explain need of JSP. List advantages of JSP over servlets. (06 Marks)
- b. Demonstrate JSP program to generate a random number within hundred. (04 Marks)
- c. Demonstrate with JSP code that adds two numbers entered through html form. (10 Marks)

OR

- 4 a. Explain the following:
 - i) JSP scriptlets
 - ii) JSP expressions
 - iii) JSP declarations
 - iv) JSP directives
 - v) JSP comments. (10 Marks)
- b. Demonstrate with JSP program to get student information through html. Validate the user credentials on successful login and display the information in another JSP file. (10 Marks)

Module-3

- 5 a. Explain the following page directives:
 - i) import
 - ii) session
 - iii) buffer
 - iv) errorPage
 - v) isErrorPage. (10 Marks)
- b. What is JAR file? Give its benefits. Explain different operations performed on JAR file with syntax. (10 Marks)

OR

- 6 a. Differentiate between <jsp:include> action tag and include directive. (04 Marks)
- b. Explain the following:
 - i) Introspection
 - ii) Customizers
 - iii) Bean and its properties with their types. (06 Marks)
- c. Define javabeen and state its advantages. Explain javabeen with an example 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-4

- 7 a. What are annotations? Explain built-in annotations with an example. (10 Marks)
b. Explain different types of JDBC drivers with diagram and also give their advantages and disadvantages. (10 Marks)

OR

- 8 a. What are prepared statement and callable statement object? When do we use them? Give example of each. (10 Marks)
b. Explain scrollable result sets. (05 Marks)
c. Explain with example usage of methods setxxx() and getxxx(). (05 Marks)

Module-5

- 9 a. Explain EJB architecture with a neat diagram. List the characteristics of EJB. (06 Marks)
b. Explain the types of EJB. (04 Marks)
c. Explain the life cycle of entity bean. (10 Marks)

OR

- 10 a. Explain the lifecycle of stateful session bean. (10 Marks)
b. Explain the container services provided by the component model of EJB. (10 Marks)

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