

# **Advanced Java (MCPCC2024)**

## **Assignment questions**

- Unit 1
  1. How many layers are there in OSI model? Explain.
  2. Explain socket programming in details.
  3. Write a note on InetAddress and Factory Methods.
  4. Explain the steps to create RMI application with example.
  5. Differentiate between RMI and RPC.
- Unit 2
  1. What is Servlet? What is its need? Explain Its lifecycle.
  2. What is Web Container? Explain all 3 modules.
  3. What is Servlet Chaining? How it can be achieved?
  4. Explain SSI in details.
  5. Explain about session management using servlets.
- Unit 3
  1. What is JSP? Explain basic tags in it.
  2. Explain about basic objects in JSP.
  3. Explain action tags in JSP.
  4. What is MVC? Explain MVC architecture.
  5. List down popular MVC frameworks.
- Unit 4
  1. Write the difference between hibernate and JDBC.
  2. Explain architecture of hibernate.
  3. Write down steps to configure hibernate & give example.
  4. What is Spring? Explain.
  5. Explain about Spring web MVC module.
- Unit 5
  1. Explain Maven & it's architecture in details.
  2. Explain Maven life cycle in details.
  3. What is Maven pom.xml file? Give example.
  4. What is Maven Repository?
  5. Differentiate between ANT and Maven.

## **Extra questions**

- Unit 1
  1. Differentiate between IPV4 and IPV6.
  2. Explain multicast socket with example.
  3. What are distributed systems? Explain.
  4. Write a note on URL class.
  5. What are different types of numbers or addresses used in networking?

- Unit 2
  1. What are the advantages and features of a servlet?
  2. Compare Servlet with CGI.
  3. What is deployment Descriptor? Explain in details.
  4. How servlet communicates with JDBC?
  5. Give directory structure when Servlet is used with HTML.
  6. Mention 5 methods of HttpServlet class.
  7. Give information about: HTTP Protocol, HTTP Methods & HTTP Status Codes.
- Unit 3
  1. Write advantages and disadvantages of MVC.
  2. Explain the role of MVC in JSP with example.
  3. What are the design principles of MVC?
  4. List down 10 features of JSP.
  5. Explain JSP architecture.
- Unit 4
  1. What is strut? Mention it's features and explain workflow of strut in details.
  2. What is HQL? Mention the need and features of it.
  3. With the help of example explain implementation steps of strut with JDBC.
  4. What is strut? Mention features and explain workflow of struts.
  5. With the help of example, explain struct interaction with JDBC.
  6. Explain Spring Framework Architecture.
  7. Give an example of Struts interaction with Spring.
- Unit 5
  1. What is Maven? Explain its architecture & also Explain Maven repositories.
  2. What is Maven POM.XML file. Give example & components of it.
  3. Differentiate between SOAP and REST.
  4. What are different components of web services. Explain each in details.
  5. Discuss the significance of assert classes in Junit testing. Provide code examples demonstrating the use of assert class.