

2111040103030003
EXAMINATION NOVEMBER 2024
MASTER OF COMPUTER APPLICATIONS
(THIRD SEMESTER)
ADVANCED JAVA PROGRAMMING- LEVEL 3

[Time: As Per Schedule]

[Max. Marks: 70]

Instructions:

1. Fill up strictly the following details on your answer book

- a. Name of the Examination : **MASTER OF COMPUTER APPLICATIONS (THIRD SEMESTER)**
 - b. Name of the Subject : **ADVANCED JAVA PROGRAMMING-LEVEL 3**
 - c. Subject Code No : **2111040103030003**
2. Sketch neat and labelled diagram wherever necessary.
 3. Figures to the right indicate full marks of the question.
 4. All questions are compulsory.

Seat No:

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Student's Signature

Q.1 Do as directed (Any 2)

14

- [A] What is 'Statement' in JDBC API? Explain types of Statement provided by JDBC.
- [B] Explain ResultSet object in JDBC. Write code segments to connect with database and display records of a database table on console using ResultSet.
- [C] Discuss - How to use Transaction control Language in JDBC. Also discuss 'Levels of Isolation for Transaction' provided by JDBC.

Q.2 Do as directed (Any 2)

14

- [A] Explain the request-response model in Servlet and how it differs from traditional programming models. List and briefly explain the lifecycle methods for Servlet.
- [B] Explain difference between include and forward mechanism for request dispatching concept giving appropriate example.
- [C](1) Discuss difference between web server and application server.....
(2) What is deployment descriptor? Discuss its role in web application.....

Q.3 Do as directed 14

[A]What is JSP? Discuss JSP life cycle.

[B] Write a code and explain how to manage the user's session in web application.

Q.4 Do as directed (Any 2) 14

[A]Define Web Service. Discuss process to create RESTful web services with JAX-RS API.

[B]Explain 'asynchronous request in AJAX' and give example code to demonstrate it.

[C]Differentiate between Servlet and JSP.

Q.5 Do as directed (Any 2) 14

[A]What Java Persistence API? Explain difference between working of 'JPA' and 'JDBC API' giving example.

[B] What is session bean? Explain stateful and stateless session bean.

[C] Discuss the basic characteristics of spring MVC framework.
