

B.SC(IT) SEMESTER - 5 (REMEDIAL) (NEP-2020) Examination**March/April-2026****Advanced Java and J2EE (Theory) (Major-11)****Time: 2:00 Hours****Marks:50****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

-
- Que.1 Answer the following questions. (Any Two) (10)
- (1) Explain the different Enterprise Architecture styles with diagrams (Two-tier, Three-tier, N-tier).
 - (2) What are the types of JDBC drivers? Explain each with an example.
 - (3) Write a short note on DatabaseMetaData and ResultSetMetaData.
 - (4) Explain the CRUD Operation using JDBC with MySQL.
- Que.2 Answer the following questions. (Any Two) (10)
- (1) Describe the life cycle of a Servlet and explain each stage briefly
 - (2) What are Stub and Skeleton in RMI? Describe their roles in distributed applications.
 - (3) Explain Request and Response Methods for Handling Servlets
 - (4) Explain URL Rewriting in brief with suitable example.
- Que.3 Answer the following questions. (Any Two) (10)
- (1) Describe the life cycle of a JSP page with a suitable diagram.
 - (2) Explain the use of Directive, Scripting, and Action elements in JSP with examples.
 - (3) Compare Servlets and JSP
 - (4) What are JSP implicit objects? Explain briefly.
- Que.4 Answer the following questions. (Any Two) (10)
- (1) Explain MVC architecture in brief with diagram.
 - (2) Explain the different types of Enterprise Java Beans (EJBs) with examples
 - (3) Describe Hibernate architecture in brief.
 - (4) Explain the flow of control in the Struts framework
- Que.5 Answer the following questions. (Any Two) (10)
- (1) Why is Prepared-Statement better than Statement in Java? Explain with a simple example.
 - (2) What is Servlet? Write any two uses of Servlets
 - (3) How can you handle errors in JSP? Explain with the use of errorPage and isErrorPage.
 - (4) What is MVC? Explain it with a real-life example
