

[Time:2.30 Hrs]

[Marks:75]

Please check whether you have got the right question paper.

- N.B:**
1. All question are compulsory.
 2. Figures to the right indicate full marks.

- Q.1 Attempt **any three** of the following: 15
- a. What is Java Enterprise Application? Explain its Architecture.
 - b. Explain the Lifecycle of servlet.
 - c. Describe the Java EE Container with its types.
 - d. Differentiate between servlet & CGI.
 - e. Write a servlet program for Display entered Username.
 - f. List and explain four types of JDBC Drivers.
- Q.2 Attempt **any three** of the following: 15
- a. Explain the methods of Request Dispatcher interface.
 - b. What is Cookies? Explain setting of Cookie in java servlet.
 - c. Define the session ID. Explain the session life cycle.
 - d. Write a program to create a servlet application to download a file.
 - e. How does the HTTP session work? Explain with the diagram.
 - f. Explain the working of Non-Blocking I/O.
- Q.3 Attempt **any three** of the following: 15
- a. Describe the various scope of JSP application in detail.
 - b. Differentiate between Servlet and JSP.
 - c. State advantages and disadvantages of using JSP for developing web applications?
 - d. Explain JSTL core Tag Library.
 - e. How is action tag used to set and access properties of a JavaBean?
 - f. What is Immediate and Deferred Evaluation? Explain with an example.
- Q.4 Attempt **any three** of the following: 15
- a. What is EJB? Explain its Architecture in detail.
 - b. How to access No-Interface View and Local Business Interface?
 - c. Explain EJB Container with its types.
 - d. Write a short note on Interceptors.
 - e. Explain in detail life cycle of session bean.
 - f. Describe Java Naming and Directory Interface in detail.
- Q.5 Attempt **any three** of the following: 15
- a. What is Persistence in Java? Explain Serialization in detail.
 - b. List and explain various advantages provided by Object Relational Mapping.
 - c. What is The Impedance Mismatch? How it can be solved?
 - d. Create simple JPA application to store and retrieve Book details.
 - e. Draw and explain the architecture of Hibernate.
 - f. Explain software development approach of Hibernate?
