

Dr. Babasaheb Ambedkar Open University
Term End Examination July – 2026

Course	: BSCIT	Date	: 20/08/2026
Subject Code	: BSCIT-501	Time	: 11:30am to 01:45pm
Subject Name	: Advanced Java	Duration	: 02.15 Hours
		Max. Marks	: 70

Section A

Answer the following (Attempt any three) (30)

1. Discuss the differences between Swing and AWT.
2. Discuss Event Source, Event Listener and Event Handler with suitable examples.
3. Discuss TCP/IP, UDP, Socket, ServerSocket and InetAddress classes.
4. Explain JDBC Architecture in detail.
5. Explain Servlet Life Cycle in detail.

Section B

Answer the following (Attempt any four) (20)

1. Explain Layout Managers in Java. Compare FlowLayout and BorderLayout.
2. Discuss ActionListener and ItemListener with suitable examples.
3. Explain the steps required to connect Java applications with databases using JDBC.
4. Explain Stored Procedures and Functions. State their advantages.
5. Explain Session Management in Web Applications.
6. Explain JSP Directives and Implicit Objects.

Section C

Part – A (Multiple Choice Questions) (10)

- Swing components are available in:
A) java.awt
B) javax.swing
C) java.net
D) java.sql
- Which container is commonly used as the main window in Swing applications?
A) JPanel
B) JFrame
C) JLabel
D) JButton
- Which listener handles button click events?
A) MouseListener
B) KeyListener
C) ActionListener
D) WindowListener
- Which class is used to establish a database connection in JDBC?
A) ResultSet
B) Connection
C) DriverManager
D) Statement
- Which JDBC method is used to execute SELECT queries?
A) execute()
B) executeUpdate()
C) executeQuery()
D) getResult()
- Which class is used for TCP client-side communication?
A) ServerSocket
B) Socket
C) DatagramPacket
D) URL
- Which method is called only once during the servlet life cycle?
A) service()
B) destroy()
C) init()
D) doGet()

8. JSP stands for:

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|----------------------|-------------------------|
| A) Java Source Pages | B) Java Service Pages |
| C) Java Server Pages | D) Java Servlet Program |

9. Which object is an implicit object in JSP?

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|------------|-------------|
| A) request | B) driver |
| C) socket | D) listener |

10. JSTL stands for:

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|---------------------------------|------------------------------|
| A) Java Standard Tag Library | B) Java Servlet Tag Language |
| C) Java Server Template Library | D) Java Source Tag Library |

Part – B (State whether the following statements are true or false)

(10)

- 1 Swing is platform independent.
- 2 JPanel is a lightweight container.
- 3 ActionListener is used to handle button click events.
- 4 JDBC provides database connectivity for Java applications.
- 5 ResultSet stores records returned by a query.
- 6 Socket programming is used for network communication.
- 7 Servlet init() method is executed only once.
- 8 Session Management is used to track user activities across requests.
- 9 JSP pages are translated into servlets by the web container.
- 10 JSTL reduces the use of Java code inside JSP pages.
