

(FOR THE CANDIDATES ADMITTED
DURING THE ACADEMIC YEAR 2024-25 ONLY)

SUBJECT CODE

24 UCT 307

REG.NO.

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI

END-OF-SEMESTER EXAMINATIONS : NOVEMBER – 2025

B.Sc. – Computer Technology

MAXIMUM MARKS: 75

III SEMESTER

TIME : 3 HOURS

PART – III

ADVANCED JAVA PROGRAMMING

SECTION – A

(10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.

(K1)

1. _____ is the top-level container for Swing applets.
(a) JApplet (b) Applet (c) JFrame (d) JPanel
2. _____ method of a servlet is called only once during its lifecycle.
(a) service() (b) doGet() (c) init() (d) destroy()
3. _____ method is used to add a cookie in JSP/Servlet.
(a) setCookie() (b) addCookie() (c) createCookie() (d) putCookie()
4. _____ EJB type is best for asynchronous message handling.
(a) Session Bean (b) Entity Bean (c) Message-Driven Bean (d) Statefull Bean
5. Three-tier architecture consists of _____
(a) Client, Application Server, Database Server (b) Client, Middleware, Cache
(c) Client, Database, Cache (d) Client, API, Database

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES

(K2)

6. List the uses of JTabbedPane.
7. Define the term Java Servlet.
8. Define Session Tracking in a java programming.
9. Point out the different types of EJB.
10. Describe the JDBC.

SECTION – B

(5 X 5 = 25 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.

(K3)

11. a) Explain the use of JScrollPane with an example

(OR)

- b) Discuss the JComboBox. Give example.

(CONTD 2)

12. a) Summarize the concepts of servlet life cycle with a neat diagram

(OR)

- b) Write the HTML code required to invoke a servlet.

13. a) Illustrate JSP implicit variables with an example.

(OR)

- b) Demonstrate the URL rewriting for session tracking.

14. a) List and explain the types of Enterprise Java Beans

(OR)

- b) Define the term servlet chaining. Explain with an example

15. a) Describe the different JDBC driver types,

(OR)

- b) Summarize how JDBC is used in RMI applications.

SECTION - C (5 X 8 = 40 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.

(K4/K5)

16. a) Explain the creation and use of JTable and JTree with code examples

(OR)

- b) Discuss how to add scroll functionality to components using JScrollPane.

17. a) Discuss servlet architecture and its components in detail.

(OR)

- b) Develop a servlet that takes user input from an HTML form and displays it

18. a) Analyze session tracking using cookies with an example program

(OR)

- b) Point out and explain the use of directives in JSP with examples

19. a) Explain the architecture of Enterprise Java Beans with a diagram

(OR)

- b) Make use the working of Server-Side Includes in web applications.

20. a) Summarize the working procedure of JDBC with a neat diagram.

(OR)

- b) Develop a JDBC program using Prepared Statement to update a record.