

B. C. A. DEGREE EXAMINATION, APRIL 2024
FOURTH SEMESTER

COURSE : MAJOR ELECTIVE
PAPER : ADVANCED JAVA PROGRAMMING
SUBJECT CODE: 19CS/ME/AJ45
TIME : 1 ½ HOURS

MAX. MARKS : 50

SECTION A

ANSWER ALL QUESTIONS: (10 X 1 = 10)

Choose the best answer:

1. _____ is the primary purpose of a PreparedStatement in JDBC.
 - a) To execute a stored procedure on the database
 - b) To execute a dynamically generated SQL query
 - c) To execute a precompiled SQL statement with parameters
 - d) To retrieve metadata information about the result set
2. _____ class is used to represent an image in JavaFX.
 - a) Image
 - b) ImageView
 - c) Node
 - d) Control
3. _____ JavaFX transition is used to gradually change the opacity of a node over a specified duration.
 - a) TranslateTransition
 - b) RotateTransition
 - c) FadeTransition
 - d) ScaleTransition
4. _____ HTTP method is primarily used for retrieving data from a server.
 - a) PUT
 - b) DELETE
 - c) POST
 - d) GET.
5. _____ is the primary function of a JSP Cookie.
 - a) Managing user sessions
 - b) Storing client-side data
 - c) Generating dynamic content
 - d) Controlling the JSP life cycle

Fill in the blanks:

6. ResultSetMetadata provides information about the _____ of the result set returned by a query.
7. The _____ class is responsible for defining the main window of a JavaFX application.
8. _____ is a JavaFX control suitable for displaying a collection of items in a scrollable list.
9. _____ component of a web application is responsible for managing client requests and generating dynamic responses.
10. JSP sessions are used to manage _____ state.

SECTION B

ANSWER ALL THE QUESTIONS: (5 X 2 = 10)

11. What is the purpose of XML Schema in XML validation?
12. What is JavaFX? List its advantages.
13. Name one class from the javafx.animation package used for basic animation.
14. Differentiate between GET and POST HTTP methods.
15. What are the components of a JSP page?

SECTION C**ANSWER ANY SIX OF THE FOLLOWING QUESTIONS:****(6 X 5 = 30)**

16. Explain the steps involved in establishing a JDBC connection to a database.
17. Differentiate between Statement, PreparedStatement and CallableStatement in JDBC.
18. Describe the JavaFX Application Life Cycle.
19. Discuss the functionality and usage of ComboBox, ListView, TableView and TreeView in JavaFX,
20. Explain the basics of CSS styling in JavaFX, including how selectors are used to style JavaFX controls.
21. Describe the life cycle of a Servlet.
22. Explain the JSP implicit objects.
23. Elaborate the scripting elements in JSP.
