# CS-601 (Advance Java)

B.Tech. 6th (CBCS)

Time: 3 Hours

Max. Marks: 60

The candidates shall limit their answers precisely within the answerbook (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note: Attempt five questions in all, selecting one question each from section A, B, C, and D. Section - E is compulsory.

#### SECTION - A

- 1. Explain the evolution of Java and its importance to the internet. (10)
- 2. Describe the object-oriented approach in Java. (10)

#### SECTION - B

- 3. Write a detailed note on Swing components and explain their role in developing user interfaces. (10)
- Discuss the difference between AWT and Swing in Java. Explain why Swing is considered more advanced than AWT.
   (10)

### SECTION - C

- 5. Discuss the lifecycle of a servlet and explain the role of different methods in the servlet lifecycle. (10)
- 6. How are HTTP requests and HTTP responses handled in servlets? Explain. (10)

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### SECTION - D

- Define JDBC. Mention all the steps involved in JDBC connectivity. List and explain all the JDBC components. (10)
- 8. Define JDBC drivers. Mention all four types of JDBC drivers and list their advantages and disadvantages. (10)

## SECTION - E (Compulsory question)

- 9. Attempt the following:
  - (a) What is MVC?
  - (b) What is the servlet API?
  - (c) Define ODBC.
  - (d) What is JDK?
  - (e) What is the purpose of ResultSet interface in JDBC?
  - (f) What is the purpose of JList component?
  - (g) What is JSP scriptlet tag used for?
  - h) What is a layout manager?

 $(8 \times 2\frac{1}{2} = 20)$