

**MASTER OF COMPUTER
APPLICATIONS (MCA) (REVISED)**

Term-End Examination

June, 2025

**MCS-051 : ADVANCED INTERNET
TECHNOLOGIES**

Time : 3 Hours

Maximum Marks : 100

Note : *Question No. 1 is compulsory. Attempt any **three** questions from the rest.*

1. (a) What is servlet ? Explain the use of doGet() and doPost() methods. Also write a servlet program to display "Welcome to MCA". 10
- (b) What is JDBC-API ? Explain the use of different types of JDBC SQL statements with the help of examples. 10

- (c) What is XML ? Compare XML with HTML. 5
 - (d) Explain JNDI authentication with the help of an example. 5
 - (e) Explain any *two* system recovery procedures. 5
 - (f) Explain JSP scriptlets and expressions with examples. 5
2. (a) Create a database of Account holders of a Bank. Write a program using JSP and JDBC to display details of the account holders including the type of account they have in the Bank. 10
- (b) What is SSL authentication ? Explain SSL encryption and SSL handshake in detail. 10
3. (a) Explain why we need different types of JDBC drivers. Briefly explain different types of JDBC drivers. 10

- (b) What is the need of session tracking in web applications ? Briefly explain any *two* mechanisms of session tracking in servlet. 10
4. (a) What is EJB ? Explain any *three* advantages of EJB. 8
- (b) Write a scriptlet in JSP to print the current date and time. 8
- (c) Explain servlet chaining and its advantages. 4
5. (a) Differentiate between the following :
2×5=10
- (i) Session bean and Entity bean
- (ii) Authentication and Authorization
- (b) Write short notes on the following :
2×5=10
- (i) XML document
- (ii) Integrating servlet and JSP

× × × × ×