MCS-051

MASTER OF COMPUTER APPLICATIONS (REVISED) (MCA)

Term-End Examination

June, 2024

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) Describe the stages in the life cycle of Java Servlet. Discuss the purpose and execution of each stage. 8

   (b) Explain the difference between Servlet init parameters and Context init parameters. Discuss their scopes and how they can be accessed by servlet and JSP. 6

(c) Explain the purpose of JDBC API and its role in Java programming. Discuss the different types of JDBC drivers and their advantages.   10

(d) Describe the different types of element used in JSP. Discuss the purpose and syntax of scriplets, expression, declaration, actions and directives.   8

(e) Define DTD. Why do we use it ? Explain different components of DTD with an example.   8

2. (a) Describe the process of setting and sending cookies in servlet programming. Also, discuss limitations while working with cookies.   10

   (b) Explain the different ways of inter-servlet communication including direct servlet manipulation and servlet reuse.   10

3. (a) How can we call a servlet with parameters in the URL ? Explain with the help of example code. 10

(b) Describe architecture of an EJB client/server system with the help of a block diagram. Also, list any *three* advantages of EJB architecture. 10

4. (a) Explain the use of jsp : fallback element with an example. 5

(b) Explain call back methods of entity beans. 10

(c) Explain different types of restrictions on EJB. 5

5. (a) Explain the need of entities in XML document. Describe all the *three* types of entities with the help of an example. 10

(b) What is HTTP Authentication ? Explain HTTP Basic Authentication and HTTPS Client Authentication mechanisms.   10