

MCA (Revised)
Term-End Examination
December, 2007

**MCS-051 : ADVANCED INTERNET
TECHNOLOGIES**

Time : 3 hours

Maximum Marks : 100

Note : *Question number 1 is **compulsory**. Attempt any **three** questions from the rest.*

1. (a) What is Java Servlet ? Explain its life cycle. 6
- (b) Briefly describe the JDBC drivers available to connect a Java application with database. 5
- (c) How are business logic and presentation layer separated using server pages ? Explain the relationship between Applet, Servlet and JSP. 10
- (d) What is the difference between Stateless session bean and Stateful session bean ? 5
- (e) What do you mean by XML parsing ? Briefly describe the parsers involved with XML. 5
- (f) What is HTTPS Authentication ? 5
- (g) Compare and contrast SSL and TLS. 4

2. (a) Why do we need Inter-Servlet communication ?
Write the steps involved in Inter-Servlet communication. 10
- (b) Explain the working of EJB with a suitable diagram. Describe 5 benefits of EJB architecture to an application developer. 10
3. (a) What is the difference between XML and SGML ?
Explain the structure of an XML document. 10
- (b) With the help of a sample code, describe the use of SSL Authentication in Java clients. 10
4. (a) How do you use JDBC to modify a database ?
Explain with example. 10
- (b) What is the use of message driven bean ? Explain its life cycle. 10
5. (a) Explain the process of installing and running application server for EJB. 10
- (b) What is JNDI Authentication ? Explain with suitable example. 10