

05407

**MCA (Revised)**  
**Term-End Examination**  
**June, 2012**

**MCS-051 : ADVANCED INTERNET  
TECHNOLOGIES**

*Time : 3 hours*

*Maximum Marks : 100*

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

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1. (a) Explain how cookies can be used for session tracking in servlets. 5
- (b) Explain the types of JDBC drivers ; tabulating the advantages of each. 4
- (c) What are the major goals of the EJB specifications ? 6
- (d) What is the difference between session beans and entity beans ? Give examples of where each would be used. 6
- (e) What is the difference between SGML and XML ? Why is SGML not used much, on the web ? 4
- (f) What is SSL ? Describe briefly the two way SSL authentication mechanism. 4

- (g) Suppose there is a table named as student in MS-Access with fields : std\_id, name, course, ph\_no. Write a Java program to insert and display the records of this table using JDBC. 11
2. (a) Explain how two servlets can communicate through a shared object. How can you ensure that the garbage collection mechanism does not derail this approach ? 10
- (b) How do you use JDBC to query and modify a database ? Explain with example programs. 10
3. (a) What is a custom tag in JSP ? What are the components that make up a tag library in JSP ? 10
- (b) Describe with suitable program fragments how you can include files and applets in a JSP page. 10
4. (a) Explain the life cycle of stateless and stateful session bean. 10
- (b) (i) List the restrictions on what EJBs can do ? 5
- (ii) Distinguish between Bean Managed and Container Managed persistence for Entity Beans. 5

5. (a) Explain SSL authentication with encryption and handshake. 10
- (b) How do you use JNDI authentication to authenticate clients ? Explain with example program. 10
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