

MCA (Revised)
Term-End Examination
June, 2014

**MCS-051 : ADVANCED INTERNET
 TECHNOLOGIES**

Time : 3 hours

Maximum Marks : 100

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

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| 1. | (a) | What is SSL ? Describe briefly the two way SSL authentication mechanism. | 5 |
| | (b) | Describe the life cycle of a Java servlet explaining the events that happen at each stage. | 5 |
| | (c) | Can an EJB send a synchronous notifications to its clients ? How ? | 5 |
| | (d) | Discuss the life cycle of a Message Driven Bean. | 7 |
| | (e) | Outline the life cycle differences between the session and entity bean objects. | 6 |
| | (f) | There is a file "logo. jpg" in your computer in /user/etc. How will you include this in an XML document as an external entity ? | 6 |
| | (g) | (i) If data is altered during transit, what aspect of security has been breached ? | 6 |
| | | (ii) A is not allowed to view other people's salary. If he is able to do so, what aspect of security is compromised ? | |

- (iii) What security problem arises if a server is loaded so much that it does not respond to requests ?
2. (a) What is EJB ? Discuss the architecture of EJB. 10
- (b) Discuss the different interfaces associated with the EJB class files. 5
- (c) List the restrictions on what the EJB's can do. 5
3. (a) What is a message driven bean ? What are its transactional capabilities ? When do we use it ? 10
- (b) Illustrate the following with suitable examples for the XML document. 10
- (i) XML Prolog
- (ii) Processing Instructions
4. A student academic record database "STUDENT" has roll numbers, subject and marks stored in a table "RESULT". Write a Java Program to connect to this database and point out a merit list of students based on the total marks across all subjects. 20
5. (a) Discuss the HTTP Basic authentication with suitable example program. 10
- (b) Discuss the java.security.acl class with suitable example program. 10
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