

MCA (Revised)
Term-End Examination
June, 2008

**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) How does Session Bean differ from the Entity Bean in terms of object sharing, object state and failure recovery ? 6
- (b) Differentiate between validating and non-validating parser. 4
- (c) Explain different types of system vulnerabilities. 6
- (d) Assume that there is a table named as PRODUCT in MS-Access with the following fields (PROD_ID, PROD_NAME, PRICE, VENDOR_NAME). Write a Java program to insert and then display the records of this table using JDBC. 10
- (e) Explain the different development goals of XML document. 4
- (f) What is a well formed tag ? Name two HTML tags that are not well formed. 5
- (g) Write an XML DTD to represent the grade card of

- an IGNOU student which contains 5
- (i) Name – Last, Middle and First
 - (ii) Subjects – Five subjects
 - (iii) Assignment marks
 - (iv) Total marks
 - (v) Result (pass/fail)
2. (a) Explain different circumstances under which message-driven bean can be used. 4
- (b) Explain six different types of services offered by EJB container. 6
- (c) Explain the life cycle of Servlet. Write a code for demo Servlet to explain all the three stages of Servlet life cycle. 10
3. (a) Explain all five basic types of implicit objects of JSP with syntax. 10
- (b) Explain different types of restrictions on EJB. 5
- (c) What are the advantages of XML over HTML ? 5
4. (a) Explain the need/use of entities of XML document. Describe all three types of entities with the help of an example. 10
- (b) Explain the differences between session and cookie. 4
- (c) Explain three different types of JDBC SQL statements. 6

5. (a) Briefly explain the advantages/disadvantages of different types of drivers of JDBC. 8
- (b) Explain four basic mechanisms through which a web client can authenticate a user to a web server during HTTP Authentication. 8
- (c) Explain briefly the functionality provided by the home and remote interfaces of an EJB. 4