

MCA (Revised)
Term-End Examination
December, 2012

**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) Explain the three principal stages in the life of a Java Servlet through a program that causes the servlet to print "Here I am!" when invoked. 6
- (b) Write a servlet program to print a Welcome Message every time an old user visits the page. 6
- (c) What is the difference between JDBC and ODBC? 4
- (d) Name the various implicit object used with JSP? 3
- (e) Describe briefly any three services offered by EJB. 6
- (f) Explain two interfaces associated with EJB class files. 4

- (g) What is a message-driven bean ? How do you implement it ? Write a program to illustrate flag an employee as “resigned” whenever the appropriate message is received. **11**
2. (a) Write an example program to show how two servlets can share information using the system property list. **5**
- (b) A database contains an employee table named EMPLOYEE with at least two fields: NAME, PHONE-NO and ADDRESS. Write a servlet program to connect to the database and a query that retrieves the names and phone nos. of every employee and display the list to the user. **15**
3. (a) (i) Describe the JSP syntax and XML syntax used for scripting elements in JSP. **2**
- (ii) What is a scriptlet?
- (iii) Write a scriptlet in a JSP page to print the current data. **8**
- (b) How do you integrate servlet and JSP ? Explain with example. **10**

- 4 (a) Explain with a block diagram the architecture of an EJB/ client system. What are its advantages. 10
- (b) How do you deploy JAR file on JBOSS server? Explain the steps involved with example. 10
5. (a) Explain the contents of a digital certificate. How does it help in proving security? 10
- (b) How do you execute. FORM based authentication? Explain with a sample program. 10
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