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MCS-051

**MASTER OF COMPUTER
APPLICATIONS (MCA) (Revised)
Term-End Examination
December, 2019**

MCS-051 : ADVANCED INTERNET TECH.

*Time : 3 Hours**Maximum Marks : 100*

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

1. (a) (i) What is the function of an XML parser ? 2
- (ii) What is the difference between a well formed and valid XML document ? 2
- (iii) How does an XML parser process each of them ? 2
- (iv) What is the output of an XML parser and what kind of program uses it ? 2
- (b) Consider a relational database table customer. The fields of the table are name,

mobile_number, address and email_id.
Write a servlet program to connect to this database and insert 5 records in the table.
You are required to connect the database using JDBC driver. 10

- (c) Describe *four* properties that can be configured for JMS based message driven beans. 7
- (d) What is SSL ? Describe the two-way SSL authentication mechanism. 5
- (e) Briefly describe the components that make up the EJB architecture. What are the advantages of using EJB, for an application? 10
2. (a) Explain the different types of JDBC drivers along with their advantages and disadvantages. 10
- (b) What are the cookies and why are they used ? Explain the mechanism of how cookies work. 5
- (c) Explain the two-ways used for servlet collaboration. 5

3. (a) What is jsp scriptlet ? Write a jsp program using scriptlets which take your name as input and display its length. 10
- (b) What is Web Security ? Explain the following in context of web security : 10
- (i) Integrity
- (ii) Confidentiality
- (iii) Authentication
- (iv) Authorisation
4. (a) What is a Servlet ? How is it initialised ? Explain servlets doPost and doGet methods. 8
- (b) Explain JNDI authentication with code snippet. 5
- (c) What are the steps involved in using custom JSP tags ? 7
5. (a) Consider the following list of attributes : 5
- Boo_Title max 100 characters
- Author_Name (Last, middle, first)
- Publisher_Name
- Price (Different for Hardcover, Paperback, Online)
- Edition_DNo
- Addition_Date } can be repeated
- Write an XML DTD for the above.

- (b) Explain the different kinds of recovery procedures that can be used after the failure of a trusted system. 5
- (c) What is an entity bean ? Write and describe any *four* required methods of entity beans. 10