

MCA (Revised)

Term-End Examination

June, 2019

04952

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) What is JDBC driver ? Explain different methods to load the drivers in JDBC. 10
- (b) Write a program using servlet and JDBC for developing an online submission of request form to get details of a newly launched smartphone from XYZ Company Ltd. You need to create a database comprising of the following fields : 10
- (i) Name
 - (ii) Email_id
 - (iii) Mobile_No.
 - (iv) Gender
 - (v) Address

- (c) Briefly explain any three system recovery procedures. 6
- (d) Explain any two types of attributes that can be declared in an XML DTD. 4
- (e) What is Secure Socket Layer (SSL) ? Explain SSL working in detail. 10
2. (a) What is servlet collaboration ? Explain how servlet collaboration takes place through a shared object. 5
- (b) Write a JSP program to display the current date. 5
- (c) What is EJB ? Explain two interfaces associated with EJB class files. 5
- (d) Explain any five XML design and development goals in brief. 5
3. Differentiate between the following : 20
- (a) GET method and POST method
- (b) Covert storage channel and Covert timing channel
- (c) Session bean and Entity bean
- (d) Session and Cookies

4. (a) Consider the following list of attributes of a Book : 6

| | | |
|--------------|---|-----------|
| Title | – | Mandatory |
| Author | – | Mandatory |
| Publisher | – | Optional |
| Price | – | Mandatory |
| No. of Pages | – | Mandatory |
| ISBN | – | Mandatory |

Write the XML DTD for the Book.

- (b) Explain the following servlet methods : 4

- (i) getSession
- (ii) getParameter

- (c) Write a JSP and JDBC program to deposit and withdraw money from a saving account. Make necessary assumptions required. 10

5. (a) An organization is planning to develop an enterprise application. This application will be deployed on the web. There are three categories of users of this application — user, admin and manager. Explain how a role based authentication mechanism may be developed for this application. 10

- (b) List any eight JSP implicit objects and describe the use of any three of these. 10