M.Sc. 2nd Semester Examination, 2012

COMPUTER SCIENCE

PAPER—COS-201

Full Marks : 50

Time : 2 hours

Answer any four questions

The figures in the right-hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Illustrate the answers wherever necessary

MODULE – I

(Advanced Distributed DBMS)

[ Marks : 25 ]

1. (a) What is concurrent execution? Explain with an example.
(b) Explain UNDO and REDO.

(c) What is Data Redundancy?

2. (a) What is serializable schedule? Explain it by an example.

(b) What is Read ( ) and write ( ) operation.

3. What are RAID levels? How does elevator algorithm works for optimization? Why Buffer replacement policies are needed?

4. What is the difference between parallel and distributed DBMS? What is lock de-escalation, and under what conditions is it required?

5. How does two phase commit protocol works? Explain briefly. What purpose can be fullfilled through data dictionary?

6. How does a system recover if there is a failure of a coordinator? Give the working specification of quorum consensus protocol.

7. (a) Explain the different states of transaction.
(b) Draw the flow chart of the different steps of query optimization.

[ Internal Assessment : 05 Marks ]

MODULE – II

(PHP, MYSQL & ASP.NET, ADO.NET)

[ Marks : 25 ]

1. (a) What is CSS? How many types of CSS. Explain.
   
   (b) Explain the method of creating COOKIE in PHP.  

2. (a) Create a form for uploading an image.
   
   (b) How can we extract “sagar” from “Vidyasagar”.
   
   (c) How do I add a scrolling test to my webpage. Give syntax.

3. (a) Write the difference between ADO and ADO.Net.
   
   (b) Draw the ADO.Net architecture model.  

4. (a) What is server side programming?
   
   (b) What is data adapter and data reader?

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MCA/IIS/COS-201/12

(Turn Over)
5. (a) What is the functionality of the function strstr and stristr? 1

(b) What are the different functions in sorting an array? 2

(c) What are the differences between require and include, include once? 2

6. (a) How do I make a picture as a background on my web page? 1

(b) What is difference between mysql-fetch-array(), mysql-fetch row(), and mysql-fetch assoc(). 2

(c) What is the difference between echo and print? Explain with example. 2

[Internal Assessment: 05]