2011

M.Sc.

2nd Semester Examination

DATABASE SYSTEM

PAPER—CS-201

Full Marks : 40

Time : 2 Hours

The questions are of equal value.

The figures in the right-hand margin indicate full marks.

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

Illustrate the answers wherever necessary.

MODULE—1

(ADVANCED DISTRIBUTED)

(*Marks : 20*)

Answer any *four* questions.

1. What is timestamp ? How timestamp ordering protocol ensures that any conflicting read and write are executed ?
   $1+4$

2. What is conflict and view serializability ? Explain cascadeless schedules. $1\frac{1}{2}+1\frac{1}{2}+2$

3. Check if the decomposition is loss-less or not.

   Given R(A, B, C, D, E) with the FDs F = {AB→CD, A→F, C→D} verify the decomposition of R into R_1 (A, B, C), R_2 (B, C, D), R_3 (C, D, E) is loss-less or not.

   What is the need of shadow copy ?

4. What is multivalued dependency ? Describe 4NF with example. 1+4

5. (a) Define "Query Tree". What is the purpose of query Tree ?

(b) Define 5NF. Write the necessary condition for 5NF.

$1+1\frac{1}{2}$

6. (a) Define DKNF. 2

(b) What are the advantages of Normalization ? What is Foreign Key ? 2+1

7. What is Check point ? What do you mean by data fragmentation ? $2\frac{1}{2}+2\frac{1}{2}$

MODULE—2

(PHP, MY SQL & ASP.NET, ADO.NET)

(*Marks : 20*)

Answer any *four* questions.

1. (a) Define seassion ? 1

(b) Draw and explain ADO. Net architecture. 2

(c) What is Active Server Page ? 2

2. (a) What is WAMP ?

(b) Write a PHP script for generate n term fibonaci series.

(c) What is server side programming ? 1+2+2

3. (a) What is cookie ?   1

   (b) Define the following term— $\frac{1}{2} \times 4$

      (i) Data Reader.

      (ii) Data Adapter.

      (iii) Data set.

      (iv) Data Gridview.

   (c) What is CLR ? Write the features of CLR.   2

4. (a) Write down the PHP syntex of following tools —   2

      (i) Radio button.

      (ii) Text area.

   (b) What purpose we use POST method in web application ?   1

   (c) What is validation control ?   2

5. (a) How to send an email using ASP-Net ?   2

   (b) Write a PHP script that calculate GCD of two given number ?   2

   (c) What is OLEDB ?   1

6. (a) Design the following web page using PHP script—

Vidyasagar University	☐ ☐ ☐
Publisher Name :	[_____]
Type of book :	⦿ Technical
	◯ Non technical
Location :	☑ Kolkata
	☐ Mumbai OK

(b) Write down the advantage of dot net. 2

7. (a) What is the function of MSIL ? 2

(b) Write a PHP script that illustrate the connection with MYSQL database. 2

(c) What is assembly ? 1

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