FINAL TERM EXAMINATION SPRING 2010
CS403- DATABASE MANAGEMENT SYSTEMS
(10 Aug 2010)

Question No: 1 (Marks: 1) - Please choose one

Which of the following statements is true about the views?

- ► view is always a complete set of all the tables in a database
- ► View can not be used for retrieving data
- ► The results of using a view are not permanently stored in the database.
- ► **Rows can not be updated or deleted in the view**

Question No: 2 (Marks: 1) - Please choose one

What is the alternate name of Data Dictionary?

- ► Index
- ► **Metadata**
- ► Data
- ► System Catalog

Question No: 3 (Marks: 1) - Please choose one

IN function helps reduce the need to use multiple AND conditions.

- ►True
- ► False

Question No: 4 (Marks: 1) - Please choose one

Browser based forms are developed in the following tools EXCEPT

- ► HTML
- ► Scripting language
- ► Front Page
- ► **Web-based Forms**

Question No: 5 (Marks: 1) - Please choose one

Which of the following are the general activities, which are performed during the development of application programs?

- ► Data input programs
- ► Editing
- ► Display
- ► **All of given**

Question No: 6 (Marks: 1) - Please choose one

Which of the following is not true about De-normalization?

- ► It is the process of attempting to optimize the performance of a database
- ► **De-normalization is a technique to move from lower to higher normal forms of database modeling**
- ► In de-normalization it is required to add redundant data.
- ► It enhances the performance of DB

Question No: 7 (Marks: 1) - Please choose one

Which of the following gives all the fields from employee table named as EMP?

- ► **SELECT * from EMP;**
- ► SELECT emp* from EMP'

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- ► SELECT emp_id where EMP;
- ► SELECT * where EMP;

Question No: 8 (Marks: 1) - Please choose one

Which of the following types of partitioning reduces the chances of unbalanced partitions?

- ► Vertical
- ► **List**
- ► Hash
- ► Range

Question No: 9 (Marks: 1) - Please choose one

While recovering data, which of the following files does a recovery manager examines at first?

- ► A system file
- ► **Log file**
- ► Data dictionary
- ► Metadata

Question No: 10 (Marks: 1) - Please choose one

Which of the following is NOT a feature of Indexed sequential files?

- ► Records are stored in sequence and index is maintained.
- ► Dense and nondense types of indexes are maintained.
- ► **Track overflows and file overflow areas can not be ensured.**
- ► Cylinder index increases the efficiency

Question No: 11 (Marks: 1) - Please choose one

Consider the given relations *Student* and *Instructor* as given below. Please note that Fname and Lname also denote the First Name and Last Name respectively.

Student

First Name	Last Name
Saman	Perera
Romesh	Dias
Jeeva	Silva
Nadee	Alwis
Kumari	Costa
Geetha	Zoysa
Prasad	Fernando

Instructor

Fname	Lname
Ajith	Gamage
Sujith	Hewage
Saman	Perera
Kasun	Peiris
Romesh	Dias

Question No: 12 (Marks: 1) - Please choose one

Which of the following statements is correct with respect to the two relations given above?

- ► The two relations are not union-compatible since their attribute names differ.
- ► The two relations are union-compatible since they have the same type of tuples.
- ► **The set operations such as CARTESIAN PRODUCT and DIVISION can be applied on these two relations.**
- ► To find out the students who are not instructors, it is necessary to perform the Operation Student ÷ Instructor.

Question No: 13 (Marks: 1) - Please choose one

ALTER TABLE exams
RENAME COLUMN Q_description TO Question_Descp, Std_ID to Student_ID.
Syntax of ALTER TABLE is NOT correct.

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► True
► **False**

Question No: 14 (Marks: 1) - Please choose one

Which of the following SQL commands deletes a record of an employee with the employee_id 12345, from a table named PERSON.

► **DELETE FROM person WHERE employee_id = '12345'**
► DELETE WHERE person FROM employee_id = 12345
► DROP FROM person WHERE employee_id = 12345
► DELETE WHERE person WHERE employee_id = 12345

Question No: 15 (Marks: 1) - Please choose one

Which of the following is not a form of optical disk?

► CD ROM
► WORM
► Erasable Optical
► **EEPROM**

Question No: 16 (Marks: 1) - Please choose one

Which of the following is the correct description of *cache hit?*

► **When data is found in the cache**
► When data is removed in the cache
► The number of times the cache is accessed directly by the processor
► When data is lost from the cache

Question No: 17 (Marks: 1) - Please choose one

In which of the following situations, Clustering is suitable:

► Frequently updating
► **Relatively static**
► Relatively deletion
► Relatively dynamic

Question No: 18 (Marks: 1) - Please choose one

Which of the following is disadvantage of **chaining** technique to handle the collisions?

► **Unlimited Number of elements**
► Fast re-hashing
► Overhead of multiple linked lists
► Maximum number of elements must be known

Question No: 19 (Marks: 1) - Please choose one

Which of the following is NOT a component of a DFD?
Select correct option:

►Dataflow
►Datastore
►**External entities**
►Relationship between external entities

Question No: 20 (Marks: 1) - Please choose one

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_____ records data by burning microscopic holes in the surface of the disk with a laser.

- ► Hard disk
- ► RAM
- ► **Optical disk**
- ► Floppy disk

Question No: 21 (Marks: 1) - Please choose one

Which of the following concepts is applicable with respect to 3NF?

- ► Full functional dependency
- ► Any kind of dependency
- ► **Transitive dependency**
- ► Partial functional dependency

Question No: 22 (Marks: 1) - Please choose one

Which of the following is NOT a feature of a good interface?

- ► Consistency
- ► Process based
- ► **Data structure based**
- ► User friendly

Question No: 23 (Marks: 2)

Give 2 similarities between Materialized views and indexes.

Question No: 24 (Marks: 2)

What are the forms of cache normally used in desktop computers

Question No: 25 (Marks: 3)

Write the properties of Sequence File

Question No: 26 (Marks: 3)

What is meant by database recovery services?

Question No: 27 (Marks: 5)

Write four steps to recover from a deadlock between the transactions

Question No: 28 (Marks: 5)

Consider a table named COMPANY with fields COMPANY_NAME, DESCRIPTION, ORDER_NUMBER. Write an SQL statement to display company names in reverse alphabetical order.

Question No: 29 (Marks: 5)

Write five advantages of using VIEWS.

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