

# 18CSC303J DBMS UNIT I - Practice mcqs and long answers

Database Management Systems (SRM Institute of Science and Technology)



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# SRM Institute of Science and Technology,

# Kattankulathur.

# **School of Computing**

# **Database Management System**

# Cycle Test - 1

# Part - A

1.	users are users who interact with the system by invoking one of the application programs that have been written previously.
	Answer: Naive, Unsophisticated
2.	are the most form of integrity constraint.
	Answer: Domain constraints, Elementary
3.	restore database to original since the last COMMIT.
	Answer: ROLLBACK

- 1. Suppose university creates database for storing student academic details and hostel details. Academic\_details stores the following information – Reg\_No, Name, year, department, CGPA. And Hostel\_details stores following information – Reg\_no, Name, Room\_no. Which of the information is not redundant? a. Reg\_No b. Name c. Room\_no d. CGPA
- 2. Network schema is an example of \_\_\_\_\_ relationships. a. One to one b. One to many c. Many to many d. Many to one
- \_\_\_ command deletes the structure also in the table. a. Delete

  - b. Truncatec. Drop

  - d. Remove

# **CT-I questions**

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## MCQ:

- 1. The users who use easy -to-use menu are called
  - A. Stand-alone users.
  - B. Naïve Users.
  - C. Casual end user.
  - D. Sophisticated end users.

## **Answer: B**

- 2. Which one is the false statement?
  - A. The data dictionary is normally maintained by the database administrator.
  - B. Data elements in the database can be modified by changing the data dictionary.
  - C. The data dictionary contains the name and description of each data element.
  - D. The data dictionary is a tool used exclusively by the database administrator.

## **Answer: B**

- 3. The database environment has all of the following components except
  - A. Database
  - B. Database Administrator
  - C. Separate files.
  - D. Users.

## Answer: C

# MCQ:

- 1. A collection of inter related records is called
  - a. Database
  - b. Spread sheet
  - c. Management Information system
  - d. Text file

Answer: a

- 2. The relational database management (RDBM) system manages data in more than one file at once. How does it organize these files?
  - a. relations
  - b. tables
  - c. tuples
  - d. both a and b

Answer: d

- 3. A command that lets you change one or more fields in a record is
  - a. Look-up
  - b. insert
  - c. modify
  - d. update

Answer: c

# **DBMS - MCQ**

1. An Entity-Relationship (ER) Model represents:

# The various entity types of interest and the relationships among them in the domain being modeled.

Various tables and links among them in the domain being modeled.

The various entity types of interest and the relationships among them in the domain being modeled along with operations to be performed on data.

Various tables and links among them in the domain being modeled along with operations to be performed on data.

2. The people playing the following role need **NOT** have an understanding of the complete logical schema of the database:

# **Data-entry Operator**

**Application Programmer** 

Data Analyst

Database Administrator

3. Complete the sentence: Physical Data Independence is the ability to modify...

# physical-level schema without affecting the logical-level schema

the logical-level schema with no effect on view-level schema

view-level schema without affecting logical-level schema

logical-level schema without affecting physical-level schema

- 1. Which is type of DDL Command
  - a) Update
  - b) Create
  - c) Merge
  - d) Delete
- 2. To solve integrity problems in database systems, the data values must satisfy
  - a) Consistency constraints
  - b) Query process
  - c) Data indices
  - d) Naïve users
- 3. ----- used to describe the database at various levels
  - a) Database
  - b) Instance
  - c) Data models
  - d) Schema

#### **DATABASE MANAGEMENT SYSTEMS**

## **PART A**

- 1. The procedural language belongs to ......
  - a. Query language
  - **b.** Relational algebra
  - c. Tuple relational calculus
  - **d.** Domain relational calculus

Ans: b

# 2.Which of the following command is used to issue multiple CREATE TABLE, VIEW and GRANT

- a. Create cluster
- b. Create schema
- c.Create Record
- d.Create package

Ans: b

# 3. What happens when a single piece of data is saved in two different locations in the database?

- a. Changing the data in one spot will cause data inconsistency
- b. In can be more easily accessed
- c. Changing the data in one spot will cause data inconsistency
- d. Storage space is wasted

Ans: A & D

## MCQs:

- 1. What is DBMS?
- a) DBMS is a collection of queries
- b) DBMS is a high-level language
- c) DBMS is a programming language
- d) DBMS stores, modifies and retrieves data

Answer: d

- 2. Which of the following is not a function of the database?
- a) Managing stored data
- b) manipulating data
- c) Security for stored data
- d) analysing code

Answer: d

- 3. Which of the following is a feature of DBMS?
- a) Minimum Duplication and Redundancy of Data
- b) High Level of Security
- c) Single-user Access only
- d) Support ACID Property

Answer: c

# 18CSE303J – Database Management Systems

# Cycle Test – 01 Question Bank

#### PART - A

# **Multiple Choice Questions**

- 1. An Entity-Relationship (ER) Model represents:
  - A. The various entity types of interest and the relationships among them in the domain being modeled.
  - B. Various tables and links among them in the domain being modeled.
  - C. The various entity types of interest and the relationships among them in the domain being modeled along with operations to be performed on data.
  - D. Various tables and links among them in the domain being modeled along with operations to be performed on data.
- 2. The people playing the following role need NOT have an understanding of the complete logical schema of the database:
  - A. Data-entry Operator
  - B. Application Programmer
  - C. Data Analyst
  - D. Database Administrator
- 3. Complete the sentence: Physical Data Independence is the ability to modify...
  - A. physical-level schema without affecting the logical-level schema
  - B. the logical-level schema with no effect on view-level schema
  - C. view-level schema without affecting logical-level schema
  - D. logical-level schema without affecting physical-level schema
- 4. Which of the following is not a data model?
  - A. Layer model
  - B. Hierarchical model
  - C. Object oriented model
  - D. Relational model
- 5. In which of the following is used to describe how data is stored?
  - A. logical level
  - B. View level
  - C. Physical level

# D. Conceptual level

6. Which is not the role of database administrator?

	<ul><li>A. Periodical maintenance</li><li>B. Granting authorization</li><li>C. Application development</li><li>D. Storage access method definition</li></ul>
7.	Which level of abstractions exists to simplify their interaction with the system?
	<ul><li>A. Physical Level</li><li>B. Logical Level</li><li>C. View Level</li><li>D. Internal level</li></ul>
8.	Databases change over time as information. This is done through operation.  A. Inserted  B. Deleted  C. Inserted and Deleted
9.	A data model provides a way to describe the of a database at the physical, logical, and view levels.  A. Design B. Schema C. Instance D. Structure
10	A. Structured Query Languages B. Extensible Markup Language (XML) C. Java D. Data Definition Language
11.	We specify the storage structure and access methods used by the database system by a set of statements called a language.  A. Data Storage and Definition language.  B. Data Manipulation Language  C. Query Language

# 12. The data values stored in the database must satisfy certain \_\_\_\_\_\_.A. Consistency constraintsB. Relations

# 13. What is DBMS?

C. Mapping of data

- A. DBMS is a collection of queries
- B. DBMS is a high-level language
- C. DBMS is a programming language
- D. DBMS stores, modifies and retrieves data
- 14. Which of the following is not a function of the database?
  - A. Managing stored data
  - B. manipulating data
  - C. Security for stored data
  - D. analysing code
- 15. Which of the following is a feature of DBMS?
  - A. Minimum Duplication and Redundancy of Data
  - B. High Level of Security
  - C. Single-user Access only
  - D. Support ACID Property

# **MCQ**

# 1. Views of data are

- a. View level, Logical level & Physical level
- b. View level, Logical level & External level
- c. View level, Physical level & Internal level
- d. View level, Internal level & External level

Answer: a

# 2. Applications depend on which of the following schema

- a. Physical
- b. Logical
- c. Internal
- d. External

Answer: b

# 3. Identify the component which is part of Query processor

- a. Indices
- b. Data
- c. Compiler and linker
- d. Data dictionary

Answer: c

# MCQs

Which of the following is not a data model?

- A. Layer model
- B. Hierarchical model
- C. Object oriented model
- D. Relational model

# ANSWER: A

In which of the following is used to describe how data is stored?

- A. logical level
- B. View level
- C. Physical level
- D. Conceptual level

ANSWER: C

Which is not the role of database administrator?

- A. Periodical maintenance
- B. Granting authorization
- C. Application development
- D. Storage access method definition

ANSWER: C

#### PART-A

- 1. Find which is the correct SQL Statement for the table Company {cid number, cname varchar(10), location varchar(10), Manager\_id number}
  - a. Insert into Company\_Info values (1, Infosys, Chennai, 121);
  - b. Insert into Company\_Info values (&cid, &cnames, &location\_id, &manager\_id);
  - c. Insert into Company\_Info values (1, 'Infosys', 'Chennai', 121);
  - d. Insert into Company\_Info values (&cid, '&cnames', '&location\_id', &manager\_id);
    - A. a,b
    - B. b,c
    - C. c,d
    - D. d,a

#### **ANSWER: C**

2. Find the CORRECT answer after all the following SQL Statements has been executed for the table STUDENT (SID, SNAME, UNIVERSITY, CGPA)

```
SQL> Insert into STUDENT values (1, 'RAM', 'SRM', 7.5);
SQL> Insert into STUDENT values (2, 'KUMAR', 'SRM', 8.5);
SQL> Insert into STUDENT values (3, 'SELVI', 'SRM', 9.5);
SQL> Insert into STUDENT values (4, 'SHEELA', 'SRM', 6.5);
SQL> COMMIT;
SQL> Update STUDENT SET MARKS=NULL;
SQL> ROLLBACK;
```

- a. Four rows will be there in table student
- b. No change in CGPA column
- c. All CGPA will represent NULL
- d. All the values will be erased, since we use ROLLBACK
- A. a,b
- B. b,c
- C. c,d
- D. d,a

## **ANSWER: A**

- 3. Find the incorrect answers
  - a. Truncate and delete are DCL Commands
  - b. Truncate deletes the data item temporarily
  - c. Delete deletes the data item permanently
  - d. Delete is not a DDL command
  - e. Truncate is a DML Command
    - A. a, b,c,d
    - B. b, c,d,e
    - C. a,d,e,b
    - D. e,b,c,a

#### **ANSWER: D**

Efficie	nt Storage and Retrieval
Data re	ecovery and Backup
Concu	rrency and Less Inconsistency
Compa	act and Group of file data storage
Ans: C	ompact and Group of file data storage
2.	Type of Parsing execute the Query with existing Hashcode in shared Pool.
	Hard Parsing
	Soft Parsing
	Query Evaluation
	Semantic Parsing
	Ans: Soft Parsing
3.	In DBMStype of file organization method used inlevel
	Linked list, Logical
	Queue, Physical
	B+ trees, Physical
	Stack, View
	Ans: B+ trees, Physical

1. Which is not an advantage of DBMS over File system?

# MCQ

1)	Consider a DBMS three schema architecture where each user group refers only to its own external schema. DBMS transforms a request specified on an external schema into a request against the conceptual schema. These transformations are performed by
b) c)	Integration Transformation Mapping ER Model
	Ans: c
2)	a) Higher Storage and Higher Performance b) Reduced Storage and Higher Access Cost c) Higher Storage and Low Access Cost d) Higher Storage and Higher Access Cost
	ANS: d
3)	One department account (C) is debited and another department account (D) is credited, either both the credit and debit should occur, or that neither should occur is an example of  a) Durability b) Consistency c) Atomicity d) Integrity
	ANS: c

The system stores permanent records in various files, and it needs different application programs to extract records from, and add records to, the appropriate files.  A. Object oriented programming B. Database management C. File processing D. Python programming ANSWER: C
A database may also have several schemas at the view level, sometimes called that describe different views of the database.  A. SubSchemas B. View schema C. Logical schema D. Physical schema ANSWER: A
The model uses a collection of tables to represent both data and the relationships among those data.  A. Relational  B. Logical  C. Object oriented  D. Entity Relationship  ANSWER: A
Identify an approach which is considered as advantage in database management A. Data being dependent on the programs B. Data redundancy increases C. Data is integrated and can be accessed by multiple programs D. Duplication of data ANSWER: C
When the specification of what data to be extracted and how to extract is specified byDML A. Descriptive B. Declarative C. Query D. Procedural ANSWER: D
The place where the structure and the information about data is stored in the schema of the database is known as
Data independence means  A. Data is defined separately and not included in programs.  B. Programs are not dependent on the physical attributes of data  C. Programs are not dependent on the logical attributes of data

D. Both B and C

ANSWER: D

# Part A:

- 1. The \_\_\_\_level is used to store data and exhibit the relationship between data in the database.
- A. Physical
- **B.** Logical
- C. View
- D. Abstract
- 2. The Collection of Information stored in a database of a particular moment is
- A. Schema
- B. View
- C. Subschema
- **D.** Instance
- 3. Which query contains the error?
- A. Select \* from customer where cust\_id=101;
- B. Select cust\_id from customer where cust\_id=101;
- C. Select cust\_id from customer;
- D. Select cust\_id where cust\_id =101 and Last name='John'.

4.

1.	ins a. b. c.	attribute declared as numeric type will lead to when a character value is erted as attribute value  Data redundancy Data inconsistency Integrity problems Atomicity problems Answer - c
2.	a. b. c. d.	petition of information & Inability to represent certain information are avoided using entity-relationship model Normalization Storage Manager Transaction manager Answer - b
3.	a. b. c.	e collection of data at any point of time in the database is called Schema Transaction Instance Data Model Answer - c

A.	Physical Level
B.	Logical Level
C.	View Level
D.	Internal level
Datal	bases change over time as information. This is done through
opera	ation.
A.	Inserted
B.	Deleted
C.	Inserted and Deleted
A da	ta model provides a way to describe the of a database at the physical,
logic	al, and view levels.
A.	Design
B.	Schema
C.	Instance
D.	Structure
The _	is widely used to represent semistructured data.
A.	Structured Query Languages
B.	Extensible Markup Language (XML)
C.	Java
D.	Data Definition Language
	pecify the storage structure and access methods used by the database system by
a set	of statements called a language.
A.	Data Storage and Definition language.
B.	Data Manipulation Language
C.	Query Language
The c	data values stored in the database must satisfy certain
A.	Consistency constraints
В	Relations

Which level of abstractions exists to simplify their interaction with the system?

Mapping of data C.

1. A command that allows one to modify the structure of a table belongs to which of the
following categories?
DML
DDL
DCL
TCL
Answer: DDL
2. Correctly identify the properties of Transactions? Atomicity, Consistency, Inconsistent, Durability Atomicity, Consistency, Isolation, Durability Atomicity, Consistency, Inconsistent, Database Automatically, Concurrency, Isolation, Database Answer: Atomicity, Consistency, Isolation, Durability
3. The key is the one in the scenario in which the primary key of one table is referenced by another table Primary Foreign Candidate Duplicate Answer: Foreign

a. Table
b. Group
c. Attributes
d. Circuit
Ans: c. Attributes
2. Find the database object which is not physically exists.
a. Master Table
b. View
c. Index
d. Meta data
Ans: b. View
3. What is the name of the query that is placed within a WHERE or HAVING clause of another query?
a. Super Query
b. Multi Query
c. Master Query
d. Sub Query
Ans: d. Sub Query

1. Find the correct properties of Entities.