

SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

Ramapuram Campus, Bharathi Salai, Ramapuram, Chennai-600089

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

UNIT-3 QUESTION BANK

SUBJECT : Subject Code: 18CSC303J- Database Management Systems

SEM/YEAR: VI/III

Course Outcomes

CO3: Apply the method to convert the ER model to a database schemas based on the conceptual relational model

Q.No.	Questions	Course Outcome	Competence BT Level
1	Full form of DDL is – A. Data Describe Language B. Definition Data Language C. Data Definition Language D. Data Distinct Language	CO3	BT1
2	Commands that comes under DDL is/are – A. CREATE B. DROP C. TRUNCATE D. All of the above	CO3	BT2
3	Full form of DML is – A. Data Multiplication Language B. Data Manipulation Language C. Data Modify Language D. Data Mapping Language	CO3	BT1

4	<p>Command that comes under DML is/are –</p> <p>A. ROLLBACK</p> <p>B. GRANT</p> <p>C. UPDATE</p> <p>D. All of the above</p>	CO3	BT1
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5	<p>Select the correct statement.</p> <p>A. With the DDL commands, any structural changes can be made to the table, including creation, deletion, and alteration.</p> <p>B. With the DML commands, any structural changes can be made to the table, including creation, deletion, and alteration.</p> <p>C. With the DCL commands, any structural changes can be made to the table, including creation, deletion, and alteration.</p> <p>D. With the TCL commands, any structural changes can be made to the table, including creation, deletion, and alteration.</p>	CO3	BT1
6	<p>Full form of DCL is -</p> <p>A. Data Control Language</p> <p>B. Data Commit Language</p> <p>C. Data Common Language</p> <p>D. Data Concatenate Language</p>	CO3	BT1
7	<p>Full form of TCL is -</p> <p>A. Transaction Common Language</p> <p>B. Transaction Commit Language</p> <p>C. Transaction Concatenate Language</p> <p>D. Transaction Control Language</p>	CO3	BT2

8	<p>What is TRUE about SAVEPOINT?</p> <p>A. Following the completion of a transaction, it must be executed to save all the operations performed in the transaction.</p> <p>B. A transaction can be rolled back to its last saved state.</p> <p>C. A specific part of a transaction can be given a name</p> <p>D. None of the above</p>	CO3	BT3
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9	<p>Following the completion of a transaction, it must be executed to save all the operations performed in the transaction. Here we are talking about which command?</p> <p>A. REVOKE B. COMMIT C. ROLLBACK D. SAVE</p>	CO3	BT1
10	<p>Difference between GRANT & REVOKE command is/are?</p> <p>A. The GRANT command can be used to grant a user access to databases and tables whereas The REVOKE command can be used to revoke all access privileges already assigned to the user. B. The REVOKE command can be used to grant a user access to databases and tables whereas The GRANT command can be used to revoke all access privileges already assigned to the user. C. A transaction can be rolled back to its last saved state. D. None of the above</p>	CO3	BT1
11	<p>The table records can be retrieved using which command?</p> <p>A. RETRIEVE B. SELECT C. CREATE D. ALTER</p>	CO3	BT1

12	<p>Which command will remove the records from the table, but not affect the structure of the table?</p> <p>A. REMOVE B. DELETE C. DROP D. TRUNCATE</p>	CO3	BT2
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13	<p>The records and structure of a table may be removed or deleted from the database using which command?</p> <p>A. REMOVE B. DELETE C. DROP D. TRUNCATE</p>	CO3	BT1
14	<p>Select the correct statement.</p> <p>A. DDL consist of 4 commands B. DCL consist of 2 commands C. TCL consist of 5 commands D. DML consist of 3 commands</p>	CO3	BT1
15	<p>Which of the following is TRUE about TCL?</p> <p>A. Transactions can be saved to the database and rolled back with the help of TCL commands in SQL. B. There will be certain privileges that each user has; consequently, the data can be accessed by them using TCL. C. Our data is stored in a table that is described by the schema, thus TCL commands deal with the schema. D. SQL TCL commands can be used to perform any kind of retrieval or manipulation of the data present in SQL tables.</p>	CO3	BT1

16	<p>In how many parts are the SQL functions are divided into?</p> <p>A. 1 B. 2 C. 3 D. 4</p>	CO1	BT1
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17	<p>_____value is returned by the SQL Aggregate functions?</p> <p>A. Single B. Twice C. NULL D. Infinite</p>	CO1	BT1
18	<p>What does AVG() function returns?</p> <p>A. First value of the column B. Last value of the column C. Sum of rows of the table D. Average value of the column</p>	CO3	BT1
19	<p>Which function returns the largest value of the column?</p> <p>A. MIN() B. MAX() C. LARGE() D. AVG()</p>	CO3	BT1
20	<p>By constraining a SQL statement, we limit the _____according to certain conditions or restrictions.</p> <p>A. Row B. Column C. Table D. Database</p>	CO3	BT1

21	<p>What is TRUE about NOT NULL Constraint?</p> <p>A. In columns that are subject to the NOT NULL constraint, duplicate values are not allowed.</p> <p>B. When a table's column is declared as NOT NULL, no record in the table can have an empty value for that column.</p> <p>C. By applying the NOT NULL constraint, we will always ensure that the column contains a unique value and won't allow nulls.</p> <p>D. The value will first be checked for certain conditions before inserting it into the column when a NOT NULL constraint applies to a column in the table.</p>	CO3	BT1
22	<p>You can also _____ the existing tables by using the UNIQUE constraint.</p> <p>A. Change</p> <p>B. Delete</p> <p>C. Modify</p> <p>D. Drop</p>	CO3	BT1
23	<p>A Sub query is an SQL expression that is placed _____ another SQL statement.</p> <p>A. Before</p> <p>B. After</p> <p>C. Inside</p> <p>D. Outside</p>	CO3	BT1
24	<p>Which of the following clause cannot be used in SQL sub queries?</p> <p>A. GROUP BY</p> <p>B. ORDER BY</p> <p>C. DELETE</p> <p>D. FROM</p>	CO3	BT1

25	<p>In order to prevent multiple records from being returned by the sub query, _____ must be used before the sub query.</p> <p>A. Many Value Operators B. Multiple Value Operators C. Single Value Operator D. Unique Value Operator</p>	CO3	BT1
26	<p>Which of the following exception is globally available?</p> <p>A. Internal, User-defined and Pre-defined exceptions B. Pre-defined exceptions only C. Internal and pre-defined exceptions D. User defined exceptions only</p>	CO1	BT1
27	<p>Where are exceptions used in PL/SQL?</p> <p>A. Only in an anonymous block B. Only in the body of a subprogram C. Only in a package D. Only in an anonymous block and the body of a subprogram</p>	CO1	BT1
28	<p>Which of the following function gives the error code of the recently occurred exception?</p> <p>A. SQLERRCODE B. SQLERROR C. ERRCODE D. SQLCODE</p>	CO1	BT1
29	<p>Can the PL/SQL block process more than one exception at a time?</p> <p>A. Yes B. No C. Depends upon</p>	CO1	BT1

30	<p>What is the output for SELECT SAL INTO V_SAL FROM EMP;</p> <p>A. All rows selected B. First record only printed C. Error as “exact fetch returns more than requested number of rows” D. All columns selected</p>	CO1	BT1
31	<p>Point out the correct statement.</p> <p>A) Triggers are database object B) Three types of triggers are present in SQL Server C) A DDL trigger is an action programmed to execute when a data manipulation language (DML) event occurs in the database server D)) Two types of triggers are present in SQL Server</p>	CO1	BT1
32	<p>How many types of triggers are present in SQL Server?</p> <p>a) 4 b) 5 c) 8 <u>d) 9</u></p>	CO1	BT1
33	<p>AFTER trigger in SQL Server can be applied to _____</p> <p>a) Table b) Views c) Table and Views d) Function</p>	CO1	BT1
34	<p>Which of the following is not a limitation of view? a) ORDER BY Does Not Work b) Index Created on View Used Often c) Cross Database Queries Not Allowed in Indexed View d) Adding Column is Expensive by Joining Table Outside View</p>	CO1	BT1
35	<p>Point out the wrong statement.</p> <p>a) We can have an INSTEAD OF insert/update/delete trigger on a table that successfully executed b) DML Triggers are used to evaluate data after data manipulation using DML statements c) INSTEAD OF triggers cause their source DML operation to skip d) AFTER triggers cause their source DML operation to skip</p>	CO1	BT1

36	<p>SQL Server allows for Transact-SQL stored procedures, triggers, and batches to refer to tables that don't exist at compile time. This ability is called?</p> <p>A. Indeferrred Name Resolution B. Deferred Name Permissions C. Deferred Name Resolution D. Indeferrred Name Permissions</p>	CO3	BT3
37	<p>Temporary stored procedures are stored in _____ database.</p> <p>a) Master b) Model c) User specific d) Tempdb</p>	CO3	BT3
38	<p>What command use to see the errors from a recently created stored procedure?</p> <p>A. SHOW MISTAKES; B. DISPLAY MISTAKES; C. DISPLAY ERRORS; D. SHOW ERRORS;</p>	CO4	BT2
39	<p>In the PL/SQL, the package specification contains declarations.</p> <p>A) Public B) Private C) Friend D) Protected</p>	CO4	BT2

40	<p>..... contain a pointer that keeps track of current row being accessed, which enables your program to process the rows at a time.</p> <p>A) Tracker</p> <p>B) Cursor</p> <p>C) Accesser</p> <p>D) Trigger</p>	CO3	BT2
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41	<p>..... provide a way for your program to select multiple rows of data from the database and then process each row individually.</p> <p>A) PL/SQL Cursors</p> <p>B) PL/SQL Trigger</p> <p>C) PL/SQL Select</p> <p>D) PL/SQL Process</p>	CO4	BT2
42	<p>Which option in view is to ensure that all UPDATE and INSERTs satisfy the condition(s) in the view definition?</p> <p>A. Uncheck</p> <p>B. With Check</p> <p>C. Check</p> <p>D. With</p>	CO3	BT3
43	<p>_____ views help to keep the database up-to-date.</p> <p>A. View materialization</p> <p>B. View isolation</p> <p>C. View updating</p> <p>D. View maintenance</p>	CO3	BT3
44	<p>Temporary stored procedures are stored in _____ database. a) Master b) Model c) User specific d) Tempdb</p>	CO4	BT2

45	Which of the following exception raised when an arithmetic, conversion, truncation, or size constraint error occurs? A. ZERO_DIVIDE B. VALUE_ERROR C. TOO_MANY_ROWS D. SELF_IS_NULL	CO4	BT2
46	Which statements can be checked for handling errors? A. DDL B. TCL C. DML D. TTL	CO4	BT3

47	When creating a function, in which section will you typically find a return key word? A. Header Only B. Declarative C. Executable and Header D. Executable and exception handling	CO4	BT3
48	Exception handling is possible in SQL Server using _____ A. FINAL B. FINALLY C. THROW D. THROWS	CO3	BT2
49	The variables in the triggers are declared using a) – b) @ c) / d) /@	CO3	BT2
50	Triggers _____ enabled or disabled a) Can be b) Cannot be c) Ought to be d) Always	CO4	BT3

PART B (4 Marks)

1	<p>What is SQL?</p> <p>SQL is a database language designed for the retrieval and management of data in a relational database.</p> <p>SQL is the standard language for database management. All the RDBMS systems like MySQL, MS Access, Oracle, Sybase, Postgres, and SQL Server use SQL as their standard database language. SQL programming language uses various commands for different operations. We will learn about the like DCL, TCL, DQL, DDL and DML commands in SQL with examples.</p> <p>CO3</p>	BT1
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2	<p>What is DDL?</p> <p>Data Definition Language helps you to define the database structure or schema. Let's learn about DDL commands with syntax.</p> <p>CREATE</p> <p>DROP</p> <p>ALTER</p> <p>CO3</p>	BT1
3	<p>TRUNCATE:</p> <p>What is Data Manipulation Language?</p> <p>Data Manipulation Language (DML) allows you to modify the database instance by inserting, modifying, and deleting its data. It is responsible for performing all types of data modification in a database.</p> <p>There are three basic constructs which allow database program and user to enter data and information are:</p> <p>Here are some important DML commands in SQL:</p> <ul style="list-style-type: none"> • INSERT • UPDATE • DELETE <p>CO3</p>	BT1

4	<div data-bbox="1101 195 1162 226" data-label="Text">CO3</div> <div data-bbox="240 233 519 281" data-label="Section-Header"> <h2>What is DCL?</h2> </div> <div data-bbox="240 319 1058 415" data-label="Text"> <p>DCL (Data Control Language) includes commands like GRANT and REVOKE, which are useful to give “rights & permissions.” Other permission controls parameters of the database system.</p> </div> <div data-bbox="240 485 667 525" data-label="Section-Header"> <h3>Examples of DCL commands:</h3> </div> <div data-bbox="240 560 594 590" data-label="Text"> <p>Commands that come under DCL:</p> </div> <div data-bbox="289 625 391 688" data-label="List-Group"> <ul style="list-style-type: none"> • Grant • Revoke </div>	BT2
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5	<div data-bbox="1101 840 1162 871" data-label="Text">CO3</div> <div data-bbox="240 877 519 926" data-label="Section-Header"> <h2>What is DQL?</h2> </div> <div data-bbox="240 963 1026 1031" data-label="Text"> <p>Data Query Language (DQL) is used to fetch the data from the database. It uses only one command:</p> </div>	BT1
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6	<p style="text-align: right;">CO3</p> <p>What are SQL Constraints?</p> <p>SQL Constraints are used to specify the rules for the data in a table. These are used to limit which type of data must be stored in the database, and aims to increase the accuracy and reliability of the data stored in the database.</p> <p>So, constraints make sure that there is no violation in terms of a transaction of the data, yet there is any violation found; the action gets terminated.</p> <p><i>There are two types of constraints which can be applied:</i></p> <ol style="list-style-type: none"> 1. Column-level constraints – These constraints are applied to a single column 2. Table-level constraints – These constraints are the application to the complete table 	BT2
7	<p style="text-align: right;">CO3</p> <p>List out Aggregate functions:</p> <p>These functions are used to do operations from the values of the column and a single value is returned.</p> <ol style="list-style-type: none"> 1. AVG() 2. COUNT() 3. FIRST() 4. LAST() 5. MAX() 6. MIN() 7. SUM() 	BT2

8	<p>List out Scalar functions:</p> <p>These functions are based on user input; these too returns single value.</p> <ol style="list-style-type: none"> 1. UCASE () 2. LCASE () 3. MID () 4. LEN () 5. ROUND () 6. NOW () 7. FORMAT () 	CO3	BT2
9	<p>Write about trigger.</p> <p>A trigger is a special type of stored procedure that automatically runs when an event occurs in the database server.</p> <p>DML triggers run when a user tries to modify data through a data manipulation language (DML) event.</p> <p>DML events are INSERT, UPDATE, or DELETE statements on a <u>table or view</u>.</p> <p>Write an example for nested queries.</p> <p>A nested query is a query that has another query embedded within it. The embedded query is called a subquery.</p>	CO1	BT1
10	<p>A subquery typically appears within the WHERE clause of a query. It can sometimes appear in the FROM clause or HAVING clause.</p> <p>Let's learn about nested queries with the help of an example. CO1</p> <p>Find the names of employee who have regno=103</p> <p>The query is as follows –</p> <pre>select E.ename from employee E where E.eid IN (select S.eid from salary S where S.regno=103);</pre>		BT1
11	<p>what are the transaction control language commands?</p> <ul style="list-style-type: none"> ● COMMIT. This command is used to make a transaction permanent in a database. ● ROLLBACK. ● SAVEPOINT. 	CO1	BT2
PART C (12 Marks)			

1	Explain in detail in structure creation with example. CO3	BT2
2	Explain in detail about constraints. CO3	BT2

3	Discuss in details about functions. CO3	BT2
4	Explain in detail about Sub Queries, correlated sub queries CO3	BT2
5	Explain in detail about Nested Queries, Views and its Types	CO3 BT2
6	Explain Query processing with neat diagram CO1	BT2