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COMPUTER ENGINEERING DEPARTMENT
RELATIONAL DATABASE MANAGEMENT SYSTEMS (4330702)

QUESTION BANK

UNIT 1: Introduction to Database System and SQL commands (CO1)

1)	Explain ROLLBACK & SAVEPOINT command with example. OR Write short note on TCL commands
2)	Define following terms: Database, DBMS, Metadata, data, Information, Fields, records and data dictionary.
3)	Discuss the concept of database system environment
4)	Explain data dictionary and its components.
5)	Define : Schema, Sub schema and Instance
6)	Write the advantages & disadvantages of DBMS
7)	What are the applications of DBMS?
8)	What are DDL and DML commands? Explain with proper syntax and example
9)	Explain GRANT and REVOKE commands by example. OR Explain DCL commands with example
10)	Differentiate Data and Information

UNIT 2: SQL Inbuilt functions and Joins (CO2)

1)	Explain following functions of SQL*PLUS (1)AVG (2) INITCAP (3) ADD-MONTHS (4) TO_CHAR (5) ROUND (6) RTRIM (7) SUM (9) SUBSTRING (11) NEXT_DAY (12) ABS (13) CEIL (14) SQRT (15) LTRIM (16) RTRIM (17) GREATEST (18) POWER (19) COUNT (20) LOWER (21)TRIM (22) LENGTH (23) MOD (24) TO_NUMBER() (25) MONTHS_BETWEEN (26)ASCII (27) FLOOR (28)ADD_MONTHS (29) LAST_DAY (30) LEAST (31) TO_DATE
2)	Explain with example Group by, Having & Order by Clause.
3)	List different SQL operators. Explain Logical (AND, OR, NOT) and Range Searching operators (BETWEEN) with example.
4)	Explain Set Searching Operator (IN) and Character Operator (LIKE) with example.
5)	Explain Sub queries and correlated sub queries with examples
6)	What are different types of Joins in SQL? Explain with suitable example. OR Explain Inner Joins and different types of Outer Joins with examples. OR Differentiate working of Inner Joins and Outer Joins
7)	Explain Set operators (Union, Union all, Minus, Intersect) with examples.
8)	Explain Self Join with example.

UNIT 3: Database Integrity Constraints and Objects(CO3)

1)	Explain **key constraints** (Unique, Primary Key) with example. OR Explain **Entity Integrity constraint** (Unique, Primary Key) with example
2)	Discuss following concepts of a relational model. (i) Relation (ii) Attribute (iii) Cardinality (iv) Domain (v) Keys (vi) Arity
3)	What is a constraint? Explain check & not null (domain integrity) constraints of SQL * Plus.
4)	Explain foreign key (Referential Integrity) constraint with ON Delete Cascade option using example.
5)	What is VIEW? Give syntax of Create View command and explain with advantages.
6)	Write and explain command to create sequence with all options.
7)	What is indexing? Explain types of Indexes with advantages.
8)	Explain Synonym with example.
9)	Draw the symbols used in E-R Diagram and also write their meanings

UNIT 4 : PL/SQL and Triggers (CO5)

1)	Define and explain with syntax: Function, Procedure, package and Trigger
2)	Draw and explain generic PL/SQL block and Give advantages of PL/SQL.
3)	Write difference between SQL and PL/SQL.
4)	Explain different attributes of cursor.
5)	Explain different types (Explicit and Implicit) cursor in detail.
6)	Explain Conditional Control Structure in PL/SQL with example (IF, IF …ELSIF, CASE)
7)	Define Trigger. What are different types of it.? Explain trigger in PL/SQL with example.
8)	Explain error handling using example. OR What is Exception ? Explain Pre-Defined and User-Defined Exception.
9)	Differentiate: LOOP, WHILE and FOR. OR Explain Iterative Control Structure in PL/SQL with example.

UNIT 5 : Normalization (CO4)

1)	Explain with example 1NF, 2NF, 3NF
2)	What is the need/Goal of normalization? Give advantages and disadvantages of it. OR Define Normalization and State requirement of normalization