

Database

SOURCE: 01 Database Management System (GATE EXAM)

- 01 [DBMS Syllabus](#)
- 02 [Introduction to DBMS \(Database Management system\) with Real Life Example](#)
- 03 [File System vs DBMS | Disadvantages of File System | DBMS Advantage](#)
- 04 [Tier and 3 Tire Architecture with Real Life Examples](#)
- 05 [What is Schema | How to Define Schema](#)
- 06 [Three Schema Architecture | Three Level of Abstraction](#)
- 07 [What is Data Independence | logical vs Physical Independency](#)
- 08 [Integrity Constraints in Database with Examples](#)
- 09 [What is CANDIDATE KEY and PRIMARY Key | Full Concept | Most Suitable Example](#)
- 10 [What is Primary Key in DBMS | Primary Key with Examples](#)
- 11 [Foreign Key in DBMS | Full Concept with Examples](#)
- 12 [Insert, Update and Delete from Foreign Key Table | Referential Integrity](#)
- 13 [Question on Foreign Key](#)
- 14 [Super Key in DBMS](#)
- 15 [Introduction to ER Model](#)
- 16 [Types of Attributes in ER Model | Full Concept](#)
- 17 [One to One Relationship in DBMS](#)
- 18 [One to Many Relationship in DBMS | 1-M Relationship](#)
- 19 [Many to Many Relationship in DBMS | M-N Relationship](#)
- 20 [Question on Minimize Table in ER Mode](#)
- 21 [Introduction to Normalization | Insertion, Deletion, Updating Anomaly](#)
- 22 [First Normal form in DBMS | 1st Normal form](#)
- 23 [Finding Closure of Functional Dependency in DBMS | Easiest and Simplest Way](#)
- 24 [Functional Dependency and Its Properties in DBMS](#)
- 25 [Second Normal Form | 2NF](#)
- 26 [Third Normal Form in DBMS with Examples | Normalization](#)
- 27 [Boyce Codd Normal Form | BCNF | DBMS | Normalization with Best Examples](#)
- 28 [BCNF Always Ensures Dependency Preserving Decomposition and Normalization Examples](#)
- 29 [Lossless and Lossy Decomposition | Fifth Normal Form](#)
- 30 [All Normal Forms with Real Life Examples | 1NF 2NF 3NF BCNF 4NF 5NF All in One](#)
- 31 [Minimal Cover in DBMS with Cample | Canonical Cover](#)
- 32 [Question on Normalization](#)
- 33 [How to Find Our the Normal Form Out The Normal Form of A Relation](#)
- 34 [Cover and Equivalence of Functional Dependencies](#)
- 35 [Dependency Preserving Decomposition with Example 1](#)
- 36 [Dependency Preserving Decomposition with Example 2](#)
- 37 [Introduction to Joins and Its Types | Need of Joins with Examples](#)
- 38 [Natural Join Operation with Example](#)
- 39 [Self-Join Operation with Example](#)
- 40 [Equal Join Operation with Example](#)
- 41 [Left Outer Join Operation with Example](#)
- 42 [Right Outer Join Operation with Example](#)
- 43 [Introduction to Relational Algebra](#)
- 44 [Projection in Relational Algebra](#)
- 45 [Selection in Relational Algebra](#)

46	Cross/Cartesian Product in Relational Algebra
47	Set Difference in Relational Algebra
48	Union Operation in Relational Algebra
49	Division Operation in Relational Algebra
50	Tuple Calculus in DBMS with Examples
51	Introduction to Structured Query Language All Points Regarding its Features
52	All Types of SQL Commands with Example DDL, DML, DCL, TCL and CONSTRAINTS
53	Create Table in SQL with Execution SQL for Beginners Oracle LIVE
54	ALTER Command (DDL) in SQL with Implementation on Oracle
55	Difference Between ALTER and UPDATE in SQL with Examples
56	Difference Between Delete, Drop and Truncate in SQL
57	Constraints in SQL
58	SQL Queries and Subqueries (Part-1)
59	SQL Queries and Subqueries (Part-2) 2nd Highest Salary Nested Query
60	SQL Queries and Subqueries (Part-3) Group By Clause
61	SQL Queries and Subqueries (Part-4) Having Clause
62	SQL Queries and Subqueries (Part-5)
63	SQL Queries and Subqueries (Part-6) Use of IN and NOT IN
64	SQL Queries and Subqueries (Part-7) Use of IN and NOT IN in Subquery
65	EXIST and NOT EXIST Subqueries (Part-8)
66	SQL Aggregate Functions – SUM, AVG(n), COUNT, MIN, MAX Functions
67	Correlated Subquery in SQL with Example
68	Difference Between Joins, Nested Subquery and Correlated Subquery
69	Find Nth (1st, 2nd, 3rd,N) Highest Salary in SQL
70	Question on SQL Basic Concepts
71	Introduction to PL-SQL in DBMS
72	Introduction to Transaction Concurrency
73	ACID Properties of a Transaction
74	Transaction States
75	What is Schedule Serial vs Parallel Schedule
76	All Concurrency Problems Dirty Read Incorrect Summary Lost Update Phantom Read
77	Write-Read Conflict or Dirty Read Problem
78	Read-Write Conflict or Unrepeatable Read Problem
79	Irrecoverable vs Recoverable Schedules in Transactions
80	Cascading vs Cascade-less Schedule with Example Recoverability
81	Introduction to Serializability Transactions Concurrency and Control
82	Conflict Equivalent Schedules with Example Transaction Concurrency and Control
83	Conflict Serializability Precedence Graph Transaction
84	Why View Serializability is Used Introduction to View Serializability
85	Shared Exclusive Locking Protocol with Example Concurrency Control Part-1
86	Drawback in Shared/Exclusive Locking Protocol with Example Concurrency Control Part-2
87	Phase Locking (2PL) Protocol in Transaction Concurrency Control
88	Drawbacks in 2 Phase Locking (2PL) Protocol with Example Concurrency Control
89	Strict 2PL, Rigorous 2PL and Conservative 2PL Schedule 2 Phase Locking in DBMS
90	Basic Timestamp Ordering Protocol with Example Concurrency Control
91	How to Solve Question on Timestamp Ordering Protocol Concurrency Control
92	Why Indexing is Used Indexing Beginning
93	Numerical Example on I/O Cost in Indexing Part-1

94	Numerical Example on I/O Cost in Indexing Part-2
95	Types of Indexes Most Important Video on Indexing
96	Primary Index with Example GATE, PSU and UGC NET
97	Clustered Index in Database with Example
98	Secondary Index in Database with Example Multilevel Indexing
99	Introduction to B-Tree and Its Structure Block Pointer, Record Pointer and Key
100	Insertion in B-Tree with Example
101	How to Find Order of B-Tree
102	Difference Between B-Tree and B+ Tree with Example
103	Order of B+ Tree Order of Leaf Node and Non-Leaf Node in B+ Tree
104	Immediate Database Modification in DBMS Log Based Recovery Methods
105	Deferred Database Modification in DBMS Log Based Recovery Methods
106	Like Command in SQL with Example Learn SQL in Easiest Way
107	Basic PL-SQL Programming with Execution Part-1
108	Basic PL-SQL Programming (While, For Loop) with Execution Part-2
109	Single Row and Multi Row Function in SQL
110	Character Function in SQL with Execution Oracle LIVE
111	View in Database Oracle, SQL Server Views Type of Views
112	How Aggregate Functions work on NULL Values
113	What is RAID RAID 0, RAID 1, RAID 4, RAID 5, RAID 6, Nested RAID 10 Explained
114	Various Object in Database Oracle, SQL Server
115	Question Explanation on ER Model
116	Questions on DBMS Basic Concepts and Data Modelling
117	Question on Inner, Left, Right and Full Outer Joins Explanations
118	Question on Advance DBMS BIG Data and Data Warehouse
119	Question on Normalization (Schemas) Explanation
120	Question on Relational Algebra
121	Codd's 12 Rules of RDBMS with Examples
122	CREATE Command (DDL) in SQL with Implementation on ORACLE
123	SEQUENCE in SQL with Syntax and Examples
124	How SQL Query Executes Order of SQL Query Execution
125	Introduction to Hadoop What is Hadoop Hadoop Framework
126	Introduction o BIG Data Small Data vs BIG Data Real Life Example
127	Simple vs Complex vs Materialized Views with Examples
128	Foreign Key with On Delete Cascade with Execution
129	Procedures in PL-SQL Local Procedure vs Stored Procedure
130	How to Fetch Data From Database Using Procedures PL-SQL Procedure
131	%TYPE and %ROWTYPE in PL-SQL with Examples
132	What is Cursor in PL-SQL with Example

Cybersecurity

SOURCE: 01 Google Cybersecurity Certificate

- 01 [Cybersecurity for Beginners](#)
- 02 [How to Manage Security Risks and Threats](#)
- 03 [Internet Networks and Network Security](#)
- 04 [The Basics of Computing Security: Linux and SQL](#)
- 05 [Cybersecurity Assets, Network Threats and Vulnerabilities](#)
- 06 [Cybersecurity IDR: Incident Detection and Response](#)
- 07 [Fundamentals of Python for Cybersecurity](#)
- 08 [How to Prepare for Your Cybersecurity Career](#)
- 09 [What Does An Information Security Analyst Do](#)
- 10 [Jobs You Can Qualify for By Completing Google Cybersecurity](#)
- 11 [What is A Loop in Python](#)
- 12 [What Are The 8 Cybersecurity Domains](#)
- 13 [What are The 8 Security Domains](#)
- 14 [How Do Operating Systems Work in Cybersecurity](#)
- 15 [What Are Network Tools and Protocols in Cybersecurity](#)
- 16 [What to Know Before Going Into Cybersecurity or Project Management](#)
- 17 [How to Secure Networks in Cybersecurity](#)
- 18 [How to Best Communicate as A Cybersecurity Analyst](#)