S.NO	PRIMARY TOPICS	SUB TOPICS	POINTS TO BE COVERED	DURATION (THEORY) in MIN
1	**Introduction**			
		What is database?		180
		Why we need database?	1.Explain the general & business perspective use of database	
		History of Database	1. Data Modeling 2. File Systems 3. Hierarchical Databases 4. Network Databases 5. Relational Databases 6. Object Databases 7. Object Relational Databases	
		Database concepts	1. File Based Approach 2. Disadvantages of file based approach 3. Database Approach	
2	**DBMS**			
		What is DBMS?		60
		Advantage in using DBMS	List down & Explain the advantages of DBMS	
		Functions of DBMS	List down the main ten functions of DBMS & Explain	
		ACID properties	Atomicity Consistency Isolation Durability	20
3	**Terminologies**			
		Entity		20
		Attribute		
		Domain		
		Tuple	Define all the terminologies with an example	
		Degree		
		Cardinality		
		Relational Database		
4	**RDBMS**			
		What is RDBMS?	Difference between DBMS & RDBMS? What is table ? What is a field? What is row and column ? What is NULL value ?	45
		Entity Relationship Modeling	What is a relation? What is mean by relationship ? Relationship types What is primary key & foreign key ? Constraints Data Integrity	
		EF codd rules	All rules	90
5	**Normalization**			
		What is normalization ?	Drawback why normalization is required	120
		List of Normalization forms	1. UNF 2. 1NF 3. 2NF 4. 3NF 5. BCNF	

6	SQL			
		What is SQL?	SQL basics with joins, index and views	90
		Data Types		
		DDL	Create, Alter, Rename, Truncate, Drop	
		DML	Insert, Delete, Update, Select	
		DCL	Grant, Revoke	
		TCL	Commit, Rollback	
7	General RDBMS Architecture			
		Database Layered Architecture	1. Application Layer 2. Logical Layer 3. Physical Layer	60
		Logical Modules of RDBMS	1. Query Processing 2. Transaction Management 3. Recovery Management 4. Storage Management	
8	Different DBMS Products			
		MSSQL		30
		Ingres		
		Oracle		
		MySQL		
		NoSQL		